## Table of Contents by Topic

Comments Regarding the Supreme Court of Virginia's Procedures
Communities of Interest -- Generally
Incumbents/Incumbency
Geographic Regions
Central Virginia(Albemarle/Charlottesville, Chesterfield, Colonial Heights, Culpeper, Essex, Fluvanna, Caroline,Goochland, Greene, Hanover, Henrico, King George, Lancaster, Louisa, Madison,Northumberland, Orange, Richmond, Spotsylvania, Rappahannock, Westmoreland)
Hampton Roads/Tidewater
(Accomack, Chesapeake, Franklin, Hampton, Isle of Wight, James City, Newport News, Norfolk, Portsmouth, Northampton, Southampton, Suffolk, Virginia Beach Williamsburg)
Northern Virginia
Alexandria, Arlington, Fairfax, Falls Church, Fauquier, Fredericksburg, Loudoun, Manassas, Prince William, Stafford)
Shenandoah Valley
(Alleghany, Amherst, Augusta, Bath, Bedford, Botetourt, Buena Vista, Campbell, Clarke, Covington, Frederick, Harrisonburg, Highland, Lexington, Nelson, Page, Rockbridge, Rockingham, Shenandoah, Staunton, Warren, Waynesboro, Winchester)

## Southside Virginia

(Amelia, Appomattox, Brunswick, Buckingham, Charles City, Charlotte, Cumberland, Danville, Dinwiddie, Emporia, Franklin, Gloucester, Greensville, Halifax, Henry, Hopewell, James City, King \& Queen, King William, Lunenburg, Lynchburg, Martinsville, Mathews, Mecklenburg, Middlesex, New Kent, Nottoway, Patrick, Petersburg, Pittsylvania, Poquoson, Powhatan, Prince Edward, Prince George, Surry, Sussex, York)
Southwest Virginia
(Bland, Bristol, Buchanan, Carroll, Craig, Dickenson, Floyd, Galax, Giles, Grayson, Lee, Montgomery, Norton, Pulaski, Radford, Roanoke, Russell, Salem, Scott, Smyth, Tazewell, Washington, Wise, Wythe)

## Methodology - Redistricting Criteria

## Special Masters

From: Ken Chasin [kenchasin1@gmail.com](mailto:kenchasin1@gmail.com)
Sent: Tuesday, November 2, 2021 1:26 PM
To: Internet Scclerksoffice
Subject:
Redistricting; VA-5 Congressional District

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## SUBJECT: Need to Redraw Virginia $5^{\text {th }}$ Congressional District Map

My name is Ken Chasin and I reside in Albemarle County which is located in Virginia's $5^{\text {th }}$ Congressional District.

I am requesting that the election map for Virginia's fifth congressional district be redrawn because the district has been severely gerrymandered and has resulted in the following situation:

1. The district is Virginia's largest U.S. congressional district with an area of $\mathbf{1 0 , 0 0 0}$ plus square miles and is larger in area than six US states (Vermont, New Jersey, Rhode Island, Connecticut, Delaware, and New Hampshire).
2. The 5th District contains counties located in the Piedmont and Blue Ridge Region stretching vertically across the state from the Virginia-North Carolina Border going 250 miles up to in Northern Virginia, 40 miles southwest of Washington DC.
3. As of 2019, the population of the district was approximately $\mathbf{7 3 6 , 0 0}$ residents which equates to just 72 residents per square mile.
4. The district is approximately $2 / 3$ rural and $1 / 3$ urban which tilts the playing field in favor of Republicans as rural voters almost invariably vote Republican.
5. Since 2008, only one Democrat has won this congressional seat (Tom Perriello).

In conclusion, the Virginia $5^{\text {th }}$ congressional district must and needs to be redrawn to reduce its square miles, have a more equitable voter distribution among rural and urban voters and make the district more competitive as regards elections.

## --

Ken Chasin

Mobile Phone: 508-246-6887


## Muriel Pitney

| From: | BILL HAFKER [hafbrau1@aol.com](mailto:hafbrau1@aol.com) |
| :--- | :--- |
| Sent: | Tuesday, November 2, 2021 12:24 PM |
| To: | Internet Scclerksoffice |
| Cc: | Jim LeMunyon |
| Subject: | Comment to Supreme Court concerning its development of VA Redistricting Plan |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS 

## Muriel-Theresa Pitney

Clerk, Supreme Court of Virginia
It is a sad comment on the behavior of our legislators that they can not bring themselves to respect the will of the electorate, and deliver a bipartisan and nonpartisan redistricting plan for the Commonwealth of Virginia. I am hopeful that our State Judiciary Branch, to whom this responsibility was entrusted in anticipation of just such a failure of the Commission, can step in and deliver a credible proposal.

I fully support the very reasonable, logical, and defensible methodology proposed by former State Delegate Jim LeMunyon in his letter to the Clerk of the Supreme Court, dated 11/1/2021. I hope that you will use it, or something very similar, to produce a nonpartisan and transparent redistricting plan that is responsive to the will of Virginia's voters, rather than one that operates in service of political parties and politicians.

Sincerely
Bill Hafker
12192 Brecknock St
Oakton, VA 22124
Sent from my iPad

Muriel-Theresa Pitney
Clerk, Supreme Court of Virginia
100 North $9^{\text {th }}$ Street, Fifth Floor
Richmond, Virginia 23219
Dear Ms. Pitney:
The following comments are respectfully submitted according to Rule 4(a) of the Court's rules of February 23, 2021, related to redistricting. These comments make recommendations regarding a process that could be following in defining maps for the House of Delegates, Virginia Senate, and congressional districts, with particular emphasis on the criteria of communities of interest and compactness. These comments are submitted without partisan motivation. In addition to accepting written comments, I hope public hearings would be held according to Rule 4(b).

Use existing locality boundaries to define legislative districts and complete the process with House of Delegates districts before considering state Senate or congressional districts. Doing so would help meet the "communities of interest" and "compactness" tests. It should be noted the principles underlying these tests include the practical effect of making the day-to-day operation of government more efficient, especially in the administration of voting and elections. The number of different combinations of candidates on ballots is reduced, unnecessarily small "orphan" precincts are reduced, and local governments, school boards, and civic organizations would be better aligned with the state legislators who represent them.

In the case of localities in which the population approximates $1 / 100$ of Virginia's population (86,313, or the "target population"), the House districts should be drawn to the locality lines as much as possible, so the locality has a single House member.

In the case of localities that are smaller than the target population, House district lines should circumscribe whole adjacent localities to bring the total population as close as possible to the target population and with a portion of an adjacent locality added only to the extent necessary to meet the population target. In doing so, the principle of "communities of interest" should be extended to include regions of interest. As a hypothetical example, in defining a House district in Shenandoah Valley, such district should include Valley localities rather than drawing House district lines eastward across the Blue Ridge to include the Piedmont Region.

In the case of localities that are larger than the target population, the number of House districts in such localities should be maximized to minimize the number of House districts that cross the locality's boundary, which would help ensure compactness. For example, Fairfax County, which surrounds the entirety of Fairfax City, has a combined population with Fairfax City of 1,174,455. Thirteen (plus a fraction) House districts would "fit" into Fairfax County and City. This should be goal of drawing lines, with one House district including the entirety of Fairfax City plus adjacent areas of Fairfax County, with a fourteenth district straddling the Fairfax County boundary with an adjacent jurisdiction.

Muriel-Theresa Pitney
November 1, 2021
page two

Consistent with "communities of interest" principle, House districts should be drawn to encompass entire towns within a particular county, and common interest communities as defined in the Code of Virginia. Some common interest communities are quite large, such as Reston, South Riding, Ashburn, Brambleton among many others in Northern Virginia and elsewhere.

In addition, consideration should be given to defining "communities of interest" in large localities according to public high school attendance areas. High school education and extra-curricular activities, and that of their "feeder" elementary and middle schools, define as a practical matter much of what is considered "community." Encompassing these types of communities in single House districts would also contribute to the efficient operation of government as noted above.

In taking these considerations into account, one test of compactness that could be applied is the measure of the ratio of the physical area of a district to the length of its boundary. The larger this ratio, the more compact the district and vice versa. Once an initial map of House districts is defined, the additional tests to comply with racial, language, and other federal and state laws should be applied, and adjustments made accordingly.

In considering state Senate districts, I suggest the process borrow from Wisconsin. Wisconsin has 99 House districts and 33 Senate districts. Each Senate district is defined to encompass exactly three House districts. In Virginia, with 40 Senate districts and 100 House districts, application of the Wisconsin rule would define Virginia's Senate seats as encompassing the entirety of two House districts plus half of another. This would also further the efficient operation of government for the reasons stated above, and contribute to more effective governing, as 80 of the 100 House members would be pared with a single Senator in terms of constituency, with 20 House members paired with two Senators.

In taking this approach, defining Senate districts could be done more easily than "starting from scratch," since Senate districts would substantially meet the criteria of compactness, encompass communities of interest, and meet the other legal requirements because they would be based on the House districts defined to meet these requirements. In larger jurisdictions with populations at or greater than a target Senate district $(215,785)$ one or more entire Senate districts should be defined within the boundaries of the locality while minimizing the crossing of locality lines.

For these same reasons, a similar approach could be taken to defining congressional districts.
Virginia's 11 congressional districts could be drawn so each encompasses the entirety of nine House districts and three Senate districts plus fractions of a tenth House and fourth Senate district, while applying the "regions of interest" principle.

Thank you for the opportunity to submit comments.


3965 Mountain Valley Road
Keezletown, Virginia 22832
26 October 2021
The Honorable William C. Mims, Justice


Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street
Richmond, Virginia 23218-1315

Dear Justice Mims:
As a resident of Rockingham County, Virginia, I am writing to you regarding the Court's role in the redrawing of Virginia's State Senate, State House, and, presumably, Congressional districts. I have three comments:

The first has to do with the confusion surrounding how we identify our districts. Virginia is divided into 11 Congressional Districts, 40 Senate Districts, and 100 House Districts. Each set of districts is identified numerically starting with the number one. This results in multiple districts with the same name. There are 3 districts for each number 1-11. Likewise, there are 2 districts for each number 12-40.

When a district is referred to by number only, which often occurs, it hard to know if it is a Congressional, Senate, or House district that is being referenced. It has also resulted in the unfortunate situation experienced by some in Rockingham County that they vote in two different districts \#26: House District \#26 and Senate District \#26.

One very simple solution would be to leave the Congressional districts as they are and rename the State districts as follows:
State Senate Districts would be numbered 100-139; and
State House Districts would become districts 200-299.

Not only would this system give every district a different name, it would immediately identify the districts as Congressional, Senate, or House, and it would give each category room for expansion. Clarifying our current naming system would be of great service to the Citizens of Virginia, particularly those less engaged in politics.

Secondly, as much as we like our neighbors to the East, the mountains that separate Rockingham County from Madison, Greene, and Albemarle counties are a natural boundary that put us in different communities of interest. Several maps considered by the Redistricting Commission as well as current districts, extend over the mountains, which makes no sense. The Shenandoah Valley is distinctly separate from the Pledmont. I urge the Court to respect natural boundaries, especially in the redrawing of House districts.

## The Honorable William C. Mims

26 October 2021
page two

Thirdly, Harrisonburg and the surrounding area comprise one community of interest and the rest of the county comprises another. The Harrisonburg area contains two universities, one college, and numerous $\mathrm{K}-12$ schools. There are tech companies, poultry processing plants, and several breweries and wineries as well as the homes of the people who work in these occupations. Included in this community of interest are the incorporated villages of Bridgewater, Dayton, Elkton, Grottoes, and Mount Crawford; the unincorporated villages of Edom, Keezletown, McGaheysville, Montezuma, Mt. Clinton, Ottobine, Port Republic, and Singer's Glen; and the census-designated areas of Belmont Estates, Massanetta Springs, and Massanutten. The remainder of Rockingham County is a rural community of interest that should also be kept together.

Thank you for your time. Please rename House and Senate districts, respect natural boundaries, and recognize the distinct communities of interest of the greater Harrisonburg area and the surrounding rural agricultural area.

Very truly yours,


Janet I. Trettner
(540) 383-5154
jitrettner@comcast.net
cc: The Honorable Donald W. Lemons
The Honorable Cleo E. Powell
The Honorable Teresa M. Chafin
The Honorable LeRoy F. Millette
The Honorable D. Arthur Kelsey
The Honorable Charles S. Russell
The Honorable S. Bernard Goodwyn
The Honorable Stephen R. McCullough
The Honorable Lawrence L. Koontz Jr.

| From: | Maureen Brody |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Consider using diocesan boundaries in redistricting |
| Date: | Thursday, November 04, 2021 9:14:12 PM |
| Attachments: | pastedGraphic.png |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern-
I saw one of the first redistricting maps that made quite a bit of sense in that it reflected true communities, without ridiculous considerations for race, income etc. The district lines truly represented the communities that exist in Northern Virginia, which would allow pockets of low-income neighborhoods the ability to elect someone from their area and would allow people in other locales to do the same, based on where they shop, worship, play sports, and commute most.

I encourage the committee to look at Catholic diocesan boundaries as part of the redistricting project. These frequently reflect communities in the truest sense, containing no biases regarding race or income but, rather, full integration due to where the people have chosen to live.

Maureen Brody

Maureen Brody
imitatrixmariae@mac.com
202-746-3832


| From: | Ken Chasin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting; Resources for defining communities of interest |
| Date: | Friday, November 05, 2021 9:42:46 AM |
| Attachments: | SCOVA_Letter_Redistricting_Resources.pdf |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Attached you will find a one-page .PDF document that outlines my suggestions for possible resources to be used to assist in defining communities of interest and place when redrawing Virginia's election maps.

## Ken Chasin

Mobile Phone: 508-246-6887

The Virginia Redistricting Commission has established that one of the criteria for redrawing any Virginia election map is that the map represents a "community of interest" or "community of place". The National Conference of State Legis/atures (NCSL) has also established this criterion for every state in the United States. Communities of interest share similar historical, cultural, or economic interests. However, they should not be defined by political affiliation.

## Possible Resources for Defining Communities of Interest/Place

The Virginia Supreme Court should consider using the following governmental agencies and business organizations for inputs on defining communities of interest and place:

- Local School Boards
- Geographic Information Systems (G.I.S.) departments of the major counties of Virginia
- Virginia Beach Council of Civic Organizations
- Virginia Association of Counties and Regions (VACo)
- Real Estate Associations
- Regional Chambers of Commerce
- Civic Organizations (e.g. ; Rotary Clubs)

The Virginia Association of Counties and Regions exists to support county officials and to effectively represent, and promote the interests of counties to better serve the people of Virginia. It currently represents over eighty (80) Virginia counties.

| From: | Neal Sumerlin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Masters |
| Date: | Friday, November 05, 2021 2:14:25 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have examined the credentials of all six of the nominees submitted by both Democratic and Republican legislators for your consideration. I would strongly recommend that you choose Bernard Grofman and Thomas Bryan. Dr. Grofman is already familiar with Virginia from his earlier work in redrawing racially gerrymandered districts. Mr. Bryan is a Virginia resident, and is at least not the obvious partisan hack that the other two nominees appear to be.

Neal Sumerlin
Lynchburg, VA

| From: | Betty Tabony |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public hearings |
| Date: | Friday, November 05, 2021 3:40:48 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sir or Madam:

Please encourage the map-drawers for the Supreme Court of Virginia to hold public hearings of the redistricting map drawing.

Sincerely,
Elizabeth Tabony
Rose Hill Neighborhood
Charlottesville, Virginia

| From: | Carla Heath |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Sunday, November 07, 2021 8:46:08 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: The Supreme Court of Virginia
Re: Redistricting
Date: November 7, 2021
Your Honors,
In November 2020, Republicans and Democrats alike voted overwhelmingly in favor of the Redistricting amendment because they wanted to take politics out of the redistricting process.

I urge you to instruct the Special Masters to abide by the wishes of the citizens of Virginia and draw maps that meet statutory criteria: equitable in population, compact, contiguous, and with regard to Communities of Interest and to avoid any considerations of political implications.

Thank you for the opportunity to express my opinion.
Regards,
Carla W. Heath
Lynchburg

| From: | Niro Rasanayagam |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Masters |
| Date: | Sunday, November 07, 2021 8:35:10 PM |

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Honorable Members of the Virginia Supreme Court,

I am writing regarding the Special Masters for the Redistricting process. After having researched all six candidates, I strongly urge you to choose Bernard Grofman and Thomas Bryan.

Dr. Grofman has done prior work in Virginia in redrawing previously gerrymandered districts.

Of the three Republican nominees, Mr. Bryan seems the best suited with Virginia credentials. The other two Republicans on the list are extreme partisans with vested interests to Republican party gerrymandering efforts in other states.

As part of this process, I also strongly urge you and the selected Special Masters to carefully review and consider the PUBLIC INPUT that has been given throughout this process (through emails, letters, postcards, and virtual and inperson public hearings). Please remember to keep the City of Lynchburg as ONE community of interest within one State House district, one State Senate district, and ONE Congressional House district when drawing maps.

Sincerely,

Niro Rasanayagam
Lynchburg, VA

| From: | Darius Massoudi |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please Don"t Allow Republican Gerrymandering (Comment by Virginian) |
| Date: | Monday, November 08, 2021 8:23:32 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia:
I own a home in Reston, Virginia and am a graduate of Oakton High School in our commonwealth. I am imploring this Court to prevent partisan special masters from controlling the redistricting process, regardless of what political party they represent. I am not asking for a Democratic gerrymander, but it is clear that the special masters submitted by the Republican Party of Virginia are all partisans whose main aims would be to gerrymander the commonwealth to favor one political party.

Many throughout the nation have accused this Court have having a preconceived agenda to favor the Republicans Party in this redistricting cycle. This Court has a chance to prove them wrong, and demonstrate that it is committed to the rule of law, not loyalty to a single political party. The Democratic Party of Virginia has made a good faith attempt to recommend nonpartisan academics for their special master slate. However, if they had submitted their own slate of partisan Democrats intent on gerrymandering the commonwealth that would have been unacceptable as well.

Best regards,
Darius Massoudi (1851 Stratford Park PL APT 105; Reston, VA 20190)

| From: | Bill Hartley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | southwest Virginia House district for Bristol |
| Date: | Monday, November 08, 2021 11:27:26 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable members of the Supreme Court,

As a current City Council member and former Mayor of the City of Bristol, I am writing to ask you consider a house district that includes the City of Bristol and Washington and part of Smyth counties in your deliberations. My reason for this is that these localities create a clear community of interest in terms of geography, workforce, and commerce.

The City of Bristol, along with Washington and Smyth counties, is intersected by Interstate 81, which joins these localities together. The localities share a common geography lying primarily in a valley between mountain ranges. As such the localities share a common workforce, as many residents of the City of Bristol work in businesses located in Washington and Smyth counties, and likewise the residents of those counties work and shop in Bristol. Furthermore, Virginia Highlands Community College which serves the City of Bristol, Washington County, and a portion of Smyth county, is jointly funded by these three localities and is one of the major tools for workforce development in our region. Finally, all three localities are part of the same local development district (Mount Rogers Planning District) and work together on many regional projects.

Please consider keeping this community of interest in your deliberations. Thank you for your service to the Commonwealth and best wishes in your endeavors.

Sincerely,

Bill Hartley
Councilman, City of Bristol Virginia
(276)-469-9623
bill.hartley@bristolva.org
CONFIDENTIALITY NOTICE: The information contained in this email INCLUDING ALL ATTACHMENTS is strictly confidential information intended only for the use of the individual or entity named herein. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited and you are requested not to review the attachments. If you have received this communication in error, please advise the sender by immediate reply or telephone and return the original message to us via the U.S. Postal Service. Thank you.

| From: | Lonathan Russell |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Don"t Allow a Republican Gerrymander |
| Date: | Tuesday, November 09, 2021 11:25:30 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia:
I own a home in Reston, Virginia after having lived several other places across the United States. I am asking this Court to prevent partisan special masters from controlling the redistricting process. I am not asking for a Democratic gerrymander, but it is clear that the special masters submitted by the Republican Party of Virginia are all partisans whose main aims would be to gerrymander the commonwealth to favor one political party.

Recent articles have accused this Court of having an agenda to favor the Republicans in this redistricting cycle. This Court has a chance to prove them wrong, and show they do not owe loyalty to a single political party. The Democratic Party of Virginia has made a good faith attempt to recommend nonpartisan academics for their special master slate, while the Republicans have submitted only partisans. I do not want a gerrymander by either party, and that starts with ensuring that everyone is acting in good faith in the process.

Regards,
Jonathan Russell (1851 Stratford Park PL APT 105; Reston, VA 20190)

November 9, 2021

Supreme Court of Virginia<br>100 N. 9th Street, 5th Floor<br>Richmond, VA 23219

To the Supreme Court of Virginia and its Staff:

OneVirginia2021 Foundation Board of Directors:

Sharron Kitchen Miller, President

James B. Edge, Jr, Treasurer

Sandra Canada
Vickie Williams Cullins

Christine DeRosa

Henry Doggett

Tanveer Kathawalla

Charles V. McPhillips
John Stone
Kathleen P. Utgoff
Bobby N. Vassar

## OneVirginia2021

Advocacy Board:
Anne D. Sterling, President

John Stone, Treasurer

Gregory E. Lucyk, Secretary

I write today on behalf of the $60,000+$ members of OneVirginia2021, a nonpartisan organization dedicated to fair and representative redistricting and one of many groups in Virginia who have spent years advocating for improvements to our former redistricting process.

Our organization fought hard for the passage of last year's Constitutional Amendment referendum and were hopeful that the formation of the Virginia Redistricting Commission would force entrenched partisans to come together and compromise for a final set of maps. We were disappointed when that did not happen.

That being said, we know that recent history indicates that courts across the country have drawn fair and representative maps in the past, and we remain confident that you will do so in this instance as well.

To achieve this, we believe the Court and the two Special Masters you will appoint will need full access to all of the public input collected for the last ten months.

We have worked to encourage Virginia voters to remain engaged in the process through public comments to the Commission since January. Public feedback has been chronicled through several different methods and exists in multiple formats; it includes comments submitted through the Department of Legislative Services email portal, hours of in-person and virtual testimony, and over 100 citizen-drawn maps (with over 1,500 comments left on those maps).

Looking forward, we know that you will have a number of important decisions to make as you tackle the task before you. Throughout the Commission and DLS staff deliberations in the past several months, OneVirginia2021 has worked to provide nonpartisan educational resources -- not as a way to endorse one methodology or party over another, but to allow them to have a central repository of information to make informed decisions.

To that end, we feel compelled to speak on behalf of our membership as you decide on Special Masters to assist you in the map-drawing process. As you know, selecting the correct people for these roles will determine the fairness of our electoral districts for the next decade. The most recent Virginia plans drawn by a Special Master have now been used in two legislative elections and, both times, have accurately reflected the will of the overall electorate.

The lists submitted to you by the General Assembly reflect a wide variety of philosophies and approaches regarding redistricting. Some are well-respected academics, and others
have a long track record of partisanship on their resumes. We have provided a brief summary of each below:

## Mr. Thomas Bryan:

- Is a professional demographer and head of Bryan GeoDemographics since 2001.
- Was a statistician for the U.S. Census Bureau, focusing on small area population and housing unit estimates.
- Has provided demographic analysis and support in over 30 court cases.


## Dr. Bruce Cain:

- Has taught courses and written extensively on redistricting, democracy, and partisanship from the 1980s to the present.
- Served as Redistricting Consultant, Los Angeles City Council, 1986; Attorney General of the State of Massachusetts, 1987-88; U.S. Justice Department, 1989; Los Angeles County, 1991; Oakland City Council, 1993; San Diego Citizens Commission on Redistricting, 2001; City and County of San Francisco, 2002; Special Master for three judge panel, Arizona State Legislative Redistricting, 2002; Maryland Attorney General's Office, 2011.


## Mr. Adam Foltz:

- Facilitated the drafting of the 2021 Texas legislative and congressional district plans, which are currently under litigation.
- Was the primary map drawer of the 2011 Wisconsin legislative district plan, which was the subject of the U.S. Supreme Court lawsuit Gill v. Whitford.
- Has worked exclusively for Republican legislators or the Republican Party since 2010.


## Dr. Bernard Groffman:

- Served as Special Master to redraw 11 House of Delegates districts in Virginia after a previous finding that they were racially gerrymandered (Bethune-Hill v. VA Board of Elections, 2018).
- Served as Special Master to redraw Virginia's 3rd Congressional District after a previous finding that it was racially gerrymandered (Personhuballah v. Alcorn, 2016).
- Has served in 27 court cases, consulting for both political parties, as well as many states and localities.


## Mr. Adam Kincaid:

- Serves as the current President and Executive Director of the National Republican Redistricting Trust.
- Has been employed by the Republican Party since 2005.
- Lists no relevant redistricting or GIS experience on resume.


## Dr. Nathaniel Persily:

- Served as Special Master to redraw North Carolina state legislative districts (Covington v. North Carolina, 2018).
- Served as Court-Appointed Expert to assist the Pennsylvania Supreme Court in drawing Congressional district maps (League of Women Voters v. Commonwealth, 2018).
- Has served in 12 court cases, consulting for states and municipalities.

OneVirginia2021 was founded on the mission of drawing fair districts for the next decade, and Virginia is still on track to achieve that goal -- but only if good faith negotiations are made.

In order for compromise to be reached in the coming weeks, we strongly encourage the court to select Special Masters who reflect a track record of nonpartisanship. Our hope is that the Justices will consider the gridlock of the Commission and its partisan map drawers as a cautionary tale while they make this important decision.

To conclude, we would like to thank you for the opportunity to express our thoughts today. Our organization is available as a resource for anything you might need in the coming weeks. Good luck with the task before you.

Sincerely,


| From: | Chris Buchheit |
| :--- | :--- |
| To: | Redistricting |
| Subject: | New Maps |
| Date: | Monday, November 08, 2021 6:34:40 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
With the failure of the bipartisan commission, it now falls on SCOVA to draw our new Congressional and Commonwealth maps.

As someone who voted for Amendment 1, I demand the new maps be fair and representative of the voters therein. The intent should be to represent the Commonwealth as best as possible, with no regard for political party.

If the maps are not drawn as such, it will forever scar the court's reputation, and the citizens of the Commonwealth will see it as a partisan institution, which will damage our state. Please, please keep this in mind when drawing the maps.

Very Respectfully,
Chris Buchheit
Arlington, VA

| From: | Cindy Cunningham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Masters |
| Date: | Tuesday, November 09, 2021 2:44:47 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Madame Clerk,
I write in support of the Virginia Senate Democrats’ request to disqualify Mr. Kincaid, Mr. Bryan, and Mr. Foltz from serving the Court as special masters in the redistricting process.

It would be such a violation of the expressed wishes of the voting public to allow these hyper-partisan individuals to draw the lines. Voters have demanded for at least a decade that politics be taken out of the redistricting process. The Constitutional Amendment creating the Virginia Redistricting Commission was a weak response to that demand, but voters approved it anyway-by large margins-with the hope that finally there would be an end to partisan gerrymandering nonetheless.

Once underway, the Commission itself immediately went down the road to letting partisanship interfere with their work, by choosing two sets of lawyers and map-drawers, and it's regrettable that your charge also requires you to use two sets of drawers. Nonetheless, the best hope we have of respecting the will of the voters, is for the two special masters you appoint to be as nonpartisan (or at least not hyperpartisan) as possible.

Please disqualify these partisan gerrymandering experts, and ask that the Republican leadership send back a new list that are not so unacceptable and that do not force voters to live through another decade of partisan maps.

Thank you,
Cindy Cunningham
Falls Church, Virginia

| From: | Brady Walker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | House of Delegates Map - Danville \& Martinsville |
| Date: | Monday, November 08, 2021 6:09:52 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia,
Martinsville and Danville are connected via Route 58, share SOVA Health's hospital system, and are the region's economic hubs outside of Lynchburg, Roanoke, and Greensboro, NC. Martinsville and Danville represent an area of that state that has suffered significantly from economic and population decline since the textile and tobacco industries became unsustainable. Now, as both cities pivot towards an economy with an emphasis on technology and manufacturing, Martinsville faces the incredibly difficult task of reverting from an independent city to a town. Since 1995, three independent cities, including our neighbor South Boston, have reverted to towns. Though these reversions have been successful in the long term, I feel as though it's important to anchor Martinsville to Danville with a single delegate, to ensure economic stability and growth going forward.
These two cities also have similar racial demographics, including a large minority population. According to statistics provided by the US 2020 Census, Martinsville has a 'Black alone or in combination' population of $48.2 \%$. Danville has a 'Black alone or in combination' population of $53.4 \%$. I was able to create an example district that was $48.91 \%$ minority and $51.09 \%$ White. Though this does not constitute a minority-majority district, it would ensure that minorities would be able to elect a delegate of their choosing. The Readjuster Party, a biracial coalition that formed following the Reconstruction Era, had significant success in Virginia. Danville was able to elect a majority Black council and hired an integrated police force due to expanded voting access from actions taken by the Readjuster Party. Currently, Martinsville has two minority city council members while Danville has five. Historical legacy and current racial demographics must be factors in drawing a district that gives a voice to residents of the Southside.
Please consider creating a single House of Delegates district that includes both the City of Danville and the City of Martinsville.

Thank you,
Brady Walker
Dry Fork, VA

November 8, 2021
Edu-Futuro
2110 Washington Blvd
Arlington, VA 22204
To Whom It May Concern:
My name is Jorge Figueredo and I am the executive director of Edu-Futuro, a non-profit that employs a two generational programmatic approach to break the cycle of poverty through educational empowerment in the immigrant community. The maps proposed by the Virginia Coalition on Immigrant Rights (VACIR), the Virginia Latino Leaders Council (VLLC), and the Virginia Counts Coalition (VCC) were based on extensive feedback by immigrant communities across the Commonwealth, including communities that we at Edu-Futuro directly serve.

All three of these maps uplift the interests of the communities we serve, communities that have been historically underrepresented and underserved, so that they can successfully vote on candidates and referenda of their choice. It is my hope that the Supreme Court of Virginia will take into account the immigrant support for the maps submitted by VACIR, VLLC, and VCC as it redraws district lines in the commonwealth.

Yours Sincerely,


Jorge E. Figueredo, MPP
Executive Director

| From: | Martha Miller |
| :--- | :--- |
| To: | Redistricting |
| Subject: | To the Clerk of The Supreme Court of Virginia |
| Date: | Monday, November 08, 2021 4:20:58 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Madam or Sir:

I would like to express my frustration at not being represented in Congress since moving to the Charlottesville, Virginia area nearly 40 years ago. Because of how the congressional district is drawn, a conservative Republican has represented the 5th district for as long as I can remember.

The city of Charlottesville and surrounding Albemarle County deserve a Congressman who represents their views. Please make sure we are not chopped up and lumped in with rural voters from southside, Greene, and Madison.

Thank you for your attention to this matter,
Martha Miller

| From: | Brandon Boyles |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting and Grayson County/Galax City |
| Date: | Monday, November 08, 2021 4:14:08 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good afternoon:

This email is intended to be taken as public comment to request that, to the extent possible, Grayson County, Galax City and the entire Mount Rogers Planning District be kept together within two House of Delegates Districts. The entire Mount Rogers PDC, and the counties and towns that comprises it share unique qualities and challenges that are best served by having the type of representation that we have enjoyed for the last several years. To disrupt that, in my opinion, would do great harm to our region. Having representatives who have invested their time and energy to become connected on a human level to their district results in better representation. I can say that our representatives in the House of Delegates throughout the Mount Rogers PDC, and specifically Grayson County and the CIty of Galax, have done just that. I humbly ask that you take into account my request.

Thank you for your time and consideration.

## --

Brandon R. Boyles
Grayson County Commonwealth's Attorney
129 Davis Street
P.O. Box 445

Independence, Virginia 24348
(276) 773-2421 - phone
(276) 773-0577 - fax


121 Bagley Circle, Suite 100 Marian, VA 24354
Phone: (276) 783-3298
Shawn Ult
County Administrator, Smyth County


138 W Main St, Marlon, VA 24354
Phone: (276) 378-5019 William T Rush III
Town Manager, Marion


325 E Lee Hwy, Chilhowie, VA 24319 Phone: (276) 646-3232 John E. B. Clark, Jr. Town Manager, Chilhowie


217 Palmer Ave, Saltville, VA 24370 Phone: (276) 496-5342 Brian Martin Town Manager, Soltville

October 7, 2021

## Virginia Redistricting Commission Members

## RE: Redistricting in Southwest Virginia

The Towns of Marion, Chilhowie, and Saltville, in solidarity with Smyth County, are strongly advocating that as you deliberate redistricting, you do not significantly alter the current dynamic of Smyth County being served by both Delegate Israel O'Quinn and Delegate Jeff Campbell.

Residents of Smyth County, nestled between Washington and Wythe counties along the I-81 corridor and being geographically bounded by mountain ranges to the northwest and southeast, have historically gravitated to west, with the Saltville town limits straddling the Smyth County Washington County line and the Chilhowie town limits being almost contiguous to Washington County. Because of those constraints and synergies, it has always made sense to draw the lines to include those areas in a House District. Synergies are not born through county lines; they are developed through complementary endeavors over time. Having a House Delegate that transcends county lines and supports those endeavors has proven time and again to be advantageous to Smyth County citizens. Having a House Delegate serving the eastern portion of the county, promoting synergies with Wythe County yet always in concert with the western Delegate, augments the efforts of both, and serves the citizens of Smyth County and its towns very well.

We hope you will consider our request, and will not significantly alter the dual House Delegate dynamic that has served the citizens of Smyth County judiciously for generations.

W.T. Rush III, town Manager, Marion


Brian Martin, Town Manager, Saltville

## Introduction

## Guiding Principle for Redrawing Virginia Election Maps

The overriding principle for redrawing Virginia's election maps should be that it is "data driven" not partisan driven. Key demographic factors such as ethnicity, race, industry, occupation and educational levels of residents should be the driving forces in shaping any new state election maps.

## Redistricting Criteria for Congressional Districts

## Overview

Any new Virginia congressional district map needing to be drawn should be guided by the following criteria:

1. Incorporate the concept of communities of interest/communities of place
2. Congressional district land areas must be contiguous and be of approximate equal population
3. Allow for racial fairness
4. Don't give a partisan edge
5. Preserve existing geographic boundaries of cities/towns and counties wherever possible
6. The land area chosen for each new congressional district map should be reflective of key demographics.

## Communities of Interest/Communities of Place

The Virginia Redistricting Commission has established that one of the criteria for redrawing any Virginia election map is that the map represents a "community of interest" or "community of place". The National Conference of State Legislatures (NCSL) has also established this criterion for every state in the United States. Communities of interest share similar historical, cultural, or economic interests.
However, they should not be defined by political affiliation.

## Contiguous Space and Equal Populations

Per past U.S. Supreme Court rulings, each congressional district's land area must be contiguous and each district within the same state must be of approximate equal population. In the case of Virginia, this implies that each district's population must be within a $5 \%+/$ - range of one-eleventh of Virginia's current population (currently at $\mathbf{7 8 4}, \mathbf{2 0 1}$ ). At the present time, the following Virginia congressional districts do NOT fall within a $5 \%+/$ - range of 784,201 : VA-01, VA-02, VA-05, VA-09, VA-10.

## Racial fairness

The redrawn congressional district maps should not intend to or have the effect of diluting the power of minority voters or their ability to elect candidates of their choice.

## No Political Party / Candidate Advantages

The newly redrawn Virginia congressional district maps must not give a partisan edge or advantage to any one political party, candidate or incumbent.

## Preserve Existing Geographic Boundaries

Newly redrawn Virginia congressional district maps should avoid splitting existing city, town, or county boundaries as much as possible.

## Reflective of Key Demographics

Any newly drawn congressional district maps must take into consideration percentage breakdowns of the following demographics:
a) Race/Ethnicity \% Distribution (White, Black, Hispanic, Asian, etc.)
b) Industries and Occupations
c) Urban versus Rural population distribution
d) Education (Enrollment/Level of Educational Achievement)
e) Median Household Income

## Rationale/Criteria for Redrawing a Congressional District Map

The overriding rationale for redrawing the map for any particular Virginia congressional district is to have its demographic attributes fall within a $95 \%$ to 105\% range of the averages for the abovementioned key demographic attributes for all of the state's congressional districts.

## Blueprint for Redrawing Virginia's Congressional District Maps

## Overview

Any Virginia congressional district map needing to be redrawn should be based on a hub-and-spoke architecture where the hubs are Virginia's 25 most-populated counties and the spokes are adjacent smaller populated counties. The proposed overall congressional district maps architecture is modeled after how the Virginia Association of Counties -Regions ("VACo") is organized which currently has thirteen designated state regions and a subset (80+) of all existing counties in the state of Virginia.

## District Architecture -the Hubs

Virginia's 25 most populated counties represent significant communities of interest and place and account for two-thirds of Virginia's total population. These counties can be used as the hubs for any new congressional districts because that is where:

- Most people live in Virginia
- Highest concentration of schools exists
- Highest concentration of jobs and industries exist
- The largest collection of major shopping centers occurs
- Where many major religious centers are located
- And further these counties provide a wide-array of government products and services to their residents and neighboring smaller counties (e.g.; Police , Courts, Utilities, Election Polling Locations \& Libraries).


## District Architecture - The Spokes

Each district hub will have attached to it adjacent smaller populated counties going out in wider arcs until a congressional district population of one-eleventh of the total population of Virginia is achieved. The total population of Virginia as of 2020 was: $\mathbf{8 , 6 2 6 , 2 1 0}$. The total population of the twenty-five (25) most populated counties in Virginia is: 5,756,900.

Candidates for the adjacent counties must satisfy the following criteria:

- Either be adjacent to the congressional district hub and/or each other to be in compliance with the "contiguous" rule.
- Should have similar demographics as much as possible as regards:
a) Race/Ethnicity \% Distribution (White, Black, Hispanic, Asian, etc.)
b) Industries and Occupations
c) Urban / Rural breakdown
d) Education (Enrollment/Level of Educational Achievement)

| From: | Linda Cocke |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Subject: | Virginia Redistricting |
| Date: | Tuesday, November 09, 2021 12:21:41 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please allow me to express my preferences for the two nominees.
Democratic- Bernard Grofman

Republican - Bryan Thomas
Thank you so much for your consideration!

Linda Cocke
Lcocke@comcast.net
121 Hickory Way
Madison Heights, VA. 24572

Sent from my iPad

| From: | Lise Dobrin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on redistricting upon the redistricting commission"s failure |
| Date: | Tuesday, November 09, 2021 12:26:54 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the clerk of SCOVA:

I live in the city of Charlottesville, VA, and am totally disgusted that the redistricting commission found itself unable to do the task it was charged to do and find a fair way to set up districts in Virginia so that everyone's vote would count. We could have given the task to a team of three high schoolers and they could have gotten it done in an afternoon.

It would be a travesty to see our community split into $4 / 5$ districts, or to see Albemarle county lumped into a Congressional district over the mountain.

I hope these citizen comments will be read and taken to heart.
Sincerely,
Lise M. Dobrin

2101 Tarleton Drive
Charlottesville, VA 22901

## Muriel Pitney

From: Elizabeth Robinson [vava_22304@yahoo.com](mailto:vava_22304@yahoo.com)
Sent: Tuesday, November 9, 2021 11:08 AM
To: Internet Scclerksoffice
Subject: redistricting woes

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning, Ms. Pitney.
I understand from WTOP news this morning that the Democrats and Republicans are fighting about who represents each side for redistricting.

Both sides accusing the other of selecting left or right extremists.
What if the Democrats select the Republican representatives and the Republicans select the Democrat representatives? Maybe each will then be forced to select moderates in their party.

Just a thought for the Court from a resident of Prince William County.
Current politics could certainly use more moderates who understand and value the maturity of compromise.

Thanks.

Elizabeth Robinson
vava_22304@yahoo.com
Enjoy your day ... regardless.

| From: | Charlie Paul |
| :--- | :--- |
| To: | Redistricting |
| Subject: | [VA Citizen] Comment on non-partisan special masters |
| Date: | Tuesday, November 09, 2021 2:36:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Clerk of the Supreme Court of Virginia,
I seek to provide written comment in accordance with Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia. My comment is below:

I am a citizen of Virginia, currently living in the City of Alexandria. In 2020, I voted in favor of amending the Constitution of Virginia to the end of establishing a fairer \& less partisan redistricting process.

The nominees put forward for special master by the House \& Senate minorities are wellknown partisan operatives; their presence and participation in the redistricting process would only serve to taint any proposed maps with partisan intent. While the Court has ultimate say over the selection of special master, I believe that the selection of a partisan operative will lead to maps that are less representative of Virginia, less responsive to Virginians, and perceived as less fair by both parties.

When I voted in favor of Amendment 1, I voted with the hope of establishing a redistricting process that puts Virginians first: putting communities of interest and compactness ahead of incumbent protection and partisan advantage. Instead, what I fear the process becoming is each party pushing the map in their favor, with the Court seen as the tiebreaker.

I trust the Court to lay down political concerns - and to seek special masters who will do the same.

Sincerely, Charles Paul

| From: | Sara Jamal |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistrict |
| Date: | Tuesday, November 09, 2021 2:52:38 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to you to disqualify any and all partisan 'academics' who would be involved in the redistricting effort.
It's truly a travesty that simple rules cannot be followed. I would implore the court to ensure the redistricting process be representative of the will of the people of the commonwealth to be a nonpartisan issue.

Thank you,

Sara Jamal

| From: | Mason Stoecker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Complaint about the Republican Masters |
| Date: | Tuesday, November 09, 2021 2:17:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Mrs. Pitney,
I am writing you as a concerned citizen of Virginia. I have lived in this state for 23 years and was born and raised here. It has recently come to my attention that the redistricting masters nominated by the minority leadership have severe conflicts of interest and I do not believe have the best interests of the state at heart. Kincaid, Bryan and Foltz all have massive problems to fairly redistrict the state and can't possibly be trusted to offer Virginians a fair and balanced amount of representation. It is imperative that the court, as a nonpartisan entity, allow for appropriate representation from both sides of the aisle and to disqualify these individuals. This state should not be another political playground for politicians to select their voters and instead be a state where the people elect their politicians.

Sincerely, Mason Stoecker

| From: | Danny Plaugher |
| :--- | :--- |
| To: | Redistricting |
| Subject: | No GOP operatives on redistricting panel |
| Date: | Tuesday, November 09, 2021 3:07:10 PM |

EXTERNAL EMAIL<br>THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

No GOP operatives drawing our maps.
Thanks

| From: | Tara Gibson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disqualify the GOP"s special master nominees |
| Date: | Tuesday, November 09, 2021 3:07:42 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Ms Pitney-

I respectfully ask that the Court disqualify the three nominees put forward by the VA GOP and direct the prompt submission of new nominees. Each of these nominees are clearly partisan with disqualifying conflicts of interest. In sharp contrast to the Democratic nominees, all of the nominees put forward by the minority are Republican political operatives whose conflicts of interest foreclose their appointment to assist the Court here.

Thank you for your consideration,

Tara Gibson
Richmond, VA

| From: | Benjamin Dawes |
| :--- | :--- |
| To: | Redistricting |
| Subject: | No partisan operatives |
| Date: | Tuesday, November 09, 2021 3:14:20 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Given the candidates for map drawers by Republican legislators they are not capable of serving as a disinterested special master to assist this Court in proceedings that should, by law, be nonpartisan. They are political operatives with a long track record of pushing gerrymandered maps. If you want fair district maps for our Commonwealth please tell the GOP legislature to nominate candidates who have a record of pushing for district maps that fairly represent communities.

| From: | Suja S. Amir |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 3:27:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear J ustices.
All eyes are on Virginia.
We cannot afford to continue allowing this type of charade in our democracy.
There is no way a redistricting process can be neutral if there is any partisanship involved.
Republican nominees should be disqualified from this process without question. Democratic nominees should be disqualified from this process (if there are any), but my understanding is that it is only Republican nominees. The fundamental challenge to this will expose the very protections the founders were trying to prevent, unchecked power.
If this is not done, it will only continue to disenfranchise our democracy and civic engagement. It will continue to disenfranchise and disincentivize Virginians.
It will continue to cast doubt on any hope in our elected officials and our government.
This will truly be a travesty for our state, if you do not disqualify the partisan members of this process.
Sincerely,

## Suja S. Amir, MPA

" You learn a lot about someone when you share a meal together." Anthony Bourdain

## suja.amir@gmail.com

| From: | Candace Graham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | @VASenateDems objection |
| Date: | Tuesday, November 09, 2021 3:35:28 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely,
Candace Graham
Midlothian, VA

| From: | $\underline{\text { Ken Wheeler }}$ |
| :--- | :--- |
| To: | $\frac{\text { Redistricting }}{\text { Composition of Special Masters to support the redistricting effort in Virginia }}$ |
| Subject: | Tuesday, November 09, 2021 3:31:29 PM |
| Date: |  |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms. Pitney,
I am writing to the Court to express my concerns on the Special Master nominees put forward by the GOP caucus of the Virginia Legislature. I voted in support of this amendment, and it's provision to have the Virginia Supreme Court act as a fall back to produce fair maps for the Commonwealth, in the event the Commission was unable to arrive at an agreement.

The Republican slate of proposed Special Masters, are as partisan as they come. The whole point of this exercise was to remove as much partisan bias as possible, so that communities would have fair and equitable representation, and that our voices as voters would count as much as in office politicians and political party's. The current nominees from the Delegate and Senate GOP make a mockery of that hope. The Court needs to be advised by experts in the apportionment process, not by partisan political hacks, intent on subverting free and fair elections. Please direct the legislature to submit a new slate that will be able to provide reasonably unbiased, non-partisan advice to the Court as they undertake this important duty.

Very Respectfully,
Kenneth Wheeler 9136 Wood Pointe Way Fairfax Station, VA 22039 703-655-3544

| From: | Lara Andre |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Make the map fair please |
| Date: | Tuesday, November 09, 2021 3:38:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This really needs to be non-partisan. Please reject the appointment of partisan operatives. Many thanks, Lara Andre
Boston, VA

| From: | Eve Hesselroth |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia redistricting |
| Date: | Tuesday, November 09, 2021 3:54:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of SCOVA,
I am a small business owner and mother living in Albemarle County, VA. It has come to my attention that the Virginia Redistricting Commission failed to come to an agreement which puts the responsibility of re-drawing our maps on the SCOVA. As a long-time resident of Albemarle County, I would like to weigh in that I have almost NEVER had representation in the House of Representatives. And at the state level it's even worse. Charlottesville and Albemarle County are gerrymandered to within an inch of our lives, to ensure that we don't get a representative who reflects the actual needs and wishes of our residents. Splitting us up into many districts, or lumping us in with communities over the mountain that have no similarity to us in terms of education, socio-economic status or political bent has been done in the past purely to disenfranchise us as a community and maintain the Republican party's grip on power, and should be rectified with the current redistricting efforts. I am fairly active politically, and write frequently to my elected representatives. I am a 47 year old woman who has ONLY ever gotten responses from my reps that effectively say, "Thanks for reaching out. I really like hearing from my constituents and respect your views but am going to totally ignore them and do the opposite of what you are asking." For almost 30 years. Everyone I know feels the same way. Frequently our reps won't even ever set foot in their Charlottesville offices but force us to come to their remote offices because they don't like the large protests that happen outside their offices when they come here. That wouldn't happen if we didn't all always feel like we never get a rep who cares about us or our viewpoints.

Please do the right thing and redistrict in a way that allows us to finally have someone fighting for us who represents us.

Thank you.
Warm regards,
Eve
Eve Hesselroth
Owner, Clay Fitness LLC
M.S. Applied Exercise Science

NASM CPT
USAW Level 1 Coach
DESSO Foundation, Founder \& Chair
www.clayfitness.net
www.dessofoundation.com
yogamom@gmail.com
(434) 825-1878 (c)

| From: | Cheryl Pinks |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Maps |
| Date: | Tuesday, November 09, 2021 3:54:30 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear VA Supreme Court,

Hello, my name is Daryl Gillespie Jr. from North Chesterfield County and I'm emailing you because I've just learned that the VA Supreme Court is now tasked with drawing fair and nonpartisan maps and that the GOP is trying to force the court to appoint a partisan operative to oversee the process. I wholly object to the GOP's attempt to sabotage the redistricting process! Voters deserves fair maps that are free from partisanship and we as voters deserve to choose our representatives not the other way around. I demand that the court reject the GOP's request and ensure that the redistricting lines are redrawn in a way to ensure that the new districts best reflects the population and the diversity of Virginia. The maps should be free, fair, transparent, and free from partisanship from both sides. I repeat, please reject the GOP's request and reassure voters that when they vote, their votes will count. Thank you for your time.

Sincerely, Daryl Gillespie Jr. North Chesterfield, Virginia

Sent from Mail for Windows

| From: | Anne Hayes |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Appointment of special masters |
| Date: | Tuesday, November 09, 2021 3:57:41 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Va Code sec. 30-399 (F) provides that "The persons appointed to serve as special masters shall have the requisite qualifications and experience to serve as a special master and shall have no conflicts of interest." The Republican nominees have disqualifying conflicts of interests arising from their partisan gerrymandering efforts on behalf of the Republican party. I urge the Supreme Court to reject these nominees and require the Republicans to submit special masters nominees. This action is necessary to ensure the the Supreme Court produces fair maps.

Sincerely,
Anne Hayes

| From: | Brandon Gallagher |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair, Non-Partisan Maps |
| Date: | Tuesday, November 09, 2021 3:59:22 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Supreme Court,
Please do not appoint anyone to oversee the redistricting effort, especially a singular person who will be perceived as partisan and increase distrust in the election process and the court. Any favoritism to one side would be a step away from democracy.

As the 2021 Virginia election cycle shows, increasing voting rights and making elections fair and secure has benefitted both parties.

While I recognize that no redistricting effort will be embraced universally, only districts that are drawn independent of political interest can guarantee that the rights of the citizens of Virginia are protected.

Let Virginia be the bright light of democracy and set the standard for fair redistricting.
Thank you for your consideration on this matter.
-Brandon Gallagher
Henrico, Virginia

| From: | Lohn Preston Brown |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair \& Open redistricting process |
| Date: | Tuesday, November 09, 2021 4:03:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To those overseeing the Court's redistricting efforts,
I am a resident of Fairfax County and am writing to express my support for efforts to keep the process as non-partisan and transparent as possible.

I have read news reports that the Court is considering using some extremely partisan map makers and fear that would severely undermine credibility in the eyes of Virginia's citizens. Our democracy is under a tremendous amount of stress these days, but an open and objective map-drawing process would soothe some of the enflamed passions and serve to restore public confidence in our institutions.

Very respectfully,
John P Brown
McLean VA

| From: | Kim Kirby |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Need for nonpartisanship for redistricting |
| Date: | Tuesday, November 09, 2021 4:05:16 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

All map masters must be nonpartisan and experts in their fields. The Republicans have nominated three political operatives - two of whom have been found by the courts to have engaged in partisan gerrymandering in prior roles and the third, a paid consultant for the Republican party. Enough is enough. Republicans need to engage three neutral nominees.

Sincerely,
Kimberly Kirby
Midlothian, VA
kikirby78@msn.com

| From: | Lohn R Krenzke |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 4:15:04 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,
I am a resident of Virginia Beach and would like to see fairly drawn maps for Virginia. As such I firmly support the concerns of the Virginia Democratic caucus about the three Republican nominees for the position of special master. From the evidence presented each clearly has a conflict of interest and therefore does not meet the qualifications for the position. I encourage you to reflect on the evidence and I hope that you will do your best to insure the fair maps that the citizens who voted for this amendment were expecting when they voted for it.

Sincerely,
John R Krenzke
Get Outlook for Android

| From: | Alexis Krenzke |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 4:19:34 PM |



Hello,
I understand that efforts are being made to appoint a Republican political operative to oversee the court's redistricting efforts. I strongly disapprove of this course of action. Please support a fair, non-partisan redistricting initiative. Thank you.

Alexis Krenzke

| From: | Phil Williams |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Nonpartisan Redistricting |
| Date: | Tuesday, November 09, 2021 4:56:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I am a resident of Virginia and I'm greatly concerned about the status of redistricting in our commonwealth.

After the commission failed to draw new maps in a bipartisan manner (as they were instructed to do), the responsibility now falls to the Supreme Court. It is critical that the court appoints a nonpartisan who is committed to protecting free and fair elections to oversee this process. With so much at stake, this cannot be a partisan role.

Please protect free and fair elections in our commonwealth. The responsibility now falls to you and I pray that you can overcome partisan pressures and do what's right for Virginia.

Thank you.
Phil Williams
Resident of North Chesterfield, VA

| From: | Melissa Mannon |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 5:14:36 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
I am writing in regards to the redistricting task the Vieginia Supreme Court must complete.
I implore the court to not appoint partisan people to oversee the process. Partisans already had an opportunity to develop maps in a bipartisan way and failed to complete that task.

The courts should prioritize fair and equitable representation without partisan interference.
Thank you

| From: | Macaria Scott |
| :--- | :--- |
| To: | Redistricting |
| Subject: | fair maps |
| Date: | Tuesday, November 09, 2021 5:37:16 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Supreme Court of Virginia:
I am writing in support of drawing fair, nonpartisan district maps. I agree with Majority Leader Richard Saslaw that House and Senate Republican Caucus' nominees are not qualified to act in a non-partisan way. These types of nominees are definitely not who voters had in mind when they voted for an amendment for a fair redistricting process. Please say NO to this effort to sabotage the redistricting process, and uphold the intent of voters who supported the amendment.
Thank you,
Macaria Scott Richmond, Va

| From: | Brad Neff |
| :--- | :--- |
| To: | Redistricting |
| Subject: | We need non-partisan maps |
| Date: | Tuesday, November 09, 2021 5:53:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please create fair, non-partisan maps for the Commonwealth of Virginia.

I trust the impartial courts to analyze and create fair districts.

Thank you
Brad Neff

Sent from my iPhone

| From: | Saddam Salim |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Maps |
| Date: | Tuesday, November 09, 2021 6:08:26 PM |



It has become apparent that bi-partisan attempts have failed at redistricting. However, the courts have an opportunity to the high road and not hire a partisan partner to redo the maps.

Thank you,
Saddam Azlan Salim
Ph:571-275-7995 | azlansalim@outlook.com

| From: | Brady Walker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican Special Masters |
| Date: | Tuesday, November 09, 2021 6:17:53 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Members of the Supreme Court of Virginia,
I am writing in support of the effort to disqualify the three special masters proposed by the minority party.

Bringing partisan operatives into this second attempt at redistricting will undoubtedly lead to maps that do not accurately represent the electorate of the commonwealth. The end goal is to wear down the members of the SCOVA and the Democratic special master so that they agree to 'compromised' maps that have a Republican bias.

Republicans, having nominated three partisan operatives, have brought a gun to a knife fight.
Brady Walker

| From: | Ian Lowenthal |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Regarding the decennial redistricting of Virginia |
| Date: | Tuesday, November 09, 2021 7:00:49 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,

In regards to the redistricting process. The commission has been a disappointed, in no small part as a result of some members being uninterested in a process that provides all Virginians with fair representation. This process shouldn't be tainted by those looking to keep their office by choosing their voters or those that wish to use advantage their preferred party at the expense of the electorates will.

It is my hope the Supreme Court of Virginia will draw Virginia's Congressional, state senate and house of delegates districts with communities of interest in mind first and foremost. Will avoid drawing districts that intentionally exclude voters from having a voice in their government. That the redistricting process will honor what a democracy should be, by allowing the voters to pick their elected officials.

Sincerely,

Ian Lowenthal
Chesapeake

| From: | Brooke Megan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Regarding objections to Republican nominees for redistricting special masters |
| Date: | Tuesday, November 09, 2021 7:03:18 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hi,

I support the Virginia Senate Democrats' objections to the Republican individuals nominated to serve as special masters for the redistricting commission. State law says these individuals may not have any conflicts of interest, and yet:

- One was paid $\$ 20,000$ by the Virginia Senate Republican Caucus two months ago.
- One is Executive Director of the National Republican Redistricting Trust and is paid \$5,000/month by the Republican National Committee
- One drew the 2010 Wisconsin Maps and is currently employed by Texas Republicans to draw Texas districts and has been criticized by numerous courts for lacking credibility and drawing maps that violate federal law and the U.S. Constitution

I support the Senate Democrats' proposed three independent academics who have been previously used by courts to serve in this function instead.

Thank you,
Brooke G.
Alexandria, VA

| From: | Ben Sydnor |
| :--- | :--- |
| To: | Redistricting |
| Subject: | DISQUALIFY GOP redistricting nominees |
| Date: | Tuesday, November 09, 2021 7:05:11 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The entire purpose of the new redistricting process was to remove gerrymandering bipartisan nonsense.

The GOP nominees are the antithesis of this purpose. They embody political bias.
Please disqualify them for the good of representative government in Virginia.
Ben

| From: | Rhonda Garner |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA redistricting committee |
| Date: | Tuesday, November 09, 2021 7:11:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not seat any of the Republican nominees for the Virginia redistrcting committee. Two of them have been found by courts to have engaged in partisan gerrymandering in prior roles and the third is a paid consultant for the Republican Party. This is wrong. The Republican nominees should be disqualified. Partisan operatives can't draw fair lines.

Thank you for your time and consideration.
Rhonda Garner
Herndon, VA

| From: | Gay |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 7:53:30 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to request that you disqualify the three Republican-nominated map-drawing consultants due to their conflicts of interest. All three are clearly partisan - each has strong ties to the Republican party. They cannot be considered as impartial and/or independent.

Thank you,
Gaylia Prejean
Warrenton, VA

| From: | Losh Taylor |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting appointees |
| Date: | Tuesday, November 09, 2021 8:16:32 PM |
| Attachments: | 538405990-Letter-from-Maiority-Leader-Saslaw-to-SCOVA-Obiecting-to-GOP-Special-Master-Nominees.pdf. |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please remove the partisan Republican nominees.

| From: | Annette Cashatt |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Urgent Concerns Regarding Republican Redistricting Master Canidates |
| Date: | Tuesday, November 09, 2021 8:56:54 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Greetings,
I am a mom, a registered voter, a tax payer, and a resident of Virginia in Rockingham County. I am interested in fair redistricting that is equitable and as least partisan as possible for ANYBODY's political party. I do NOT support the following choices set forth by the Republican voices:

Adam Kincaid seems awful. He had his past maps called out in Federal court in Ohio and tossed out by judges. He has no business touching Virginia maps. He has shown by his past history that he has zero ability to be neutral in any sense or follow the merit of the law which is to be more fair to everyone and not just heavily favor his party or unethically target communities that don't support republicans.

Thomas Bryan I know less about, but I do find it concerning that he’s being accused of taking 20 grand from Republican Party and not reporting it. I am not sure why he was paid so much by them.

Adam Foltz is as bad as Kincaid. His map drawing results ended up in court in Wisconsin in 2010 because his attempt at drawing a map was grossly unfair and gerrymandered.

I know I'm a single voter and I have gathered my information by looking at PDFs of their issues that are circulating and using Google to look up these candidates. I am sure you have the actual court records and information related to Foltz and Kincaid. But I really hope you listen to my voice and consider them very critically and demand better options without a track record of gerrymandering that led to court.

Best,
Annette Cashatt
Sent from my iPhone

| From: | Matt Savage |
| :--- | :--- |
| To: | Redistricting |
| Date: | Tuesday, November 09, 2021 9:05:38 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Do not appoint partisan map drawers please.

Sent from my iPhone

| From: | David Cordell |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please do the right thing |
| Date: | Tuesday, November 09, 2021 9:11:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Whoever oversees the redistricting should be impartial and do it fairly. If you appoint a partisan person, you will undermine the whole process. Do the right thing please.

David Cordell
Alexandria Virginia.

Sent from my iPhone

| From: | Chery Johnson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican nominees |
| Date: | Tuesday, November 09, 2021 9:37:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Courts are supposed to be free of politics-which is why they enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment and these candidates backgrounds do not meet the provisions. Below is why I do not want these candidates presented as nominees.

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

Cheryl Johnson
3607 Quail Meadows Place
Midlothian, VA 23112
Cheryl.Johnson115@gmail.com

| From: | Susan Ahern Marusco |
| :--- | :--- |
| To: | Redistricting |
| Subject: | democracy cannot survive w/extreme partisan masters |
| Date: | Tuesday, November 09, 2021 10:12:36 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely,
Susan Marusco

Sent from my iPhone

| From: | Debra Thacker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, November 09, 2021 10:32:06 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely, Debra Thacker
Midlothian, VA

| From: | Patti Richards |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican nominees for redistributing |
| Date: | Tuesday, November 09, 2021 10:41:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please consider not approving the Republican nominees. They are not non-partisan, and will draw unfair maps.All the nominees are on payroll of GOP organizations. This is not what I voted for.
Thank you, Patti Richards, Henrico, Virginia resident.

| From: | $\underline{\text { Erin Charles }}$ |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Subject: | No |
| Date: | Tuesday, November 09, 2021 11:19:20 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

No to hiring a partisan operative to oversee districting process.

| From: | Barbara Gehrung |
| :--- | :--- |
| To: | Redistricting |
| Subject: | NEW CONGRESSI ONAL DISTRICTS |
| Date: | Wednesday, November 10, 2021 2:31:13 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
As a resident of the City of Charlottesville and small business owner in Charlottesville and Albemarle County, I'm writing you today, to please consider the cohesion of metropolitan areas in your congressional redistricting. In this spirit, please do not split Charlottesville and Albemarle county into two districts, or combine Albemarle County with a Congressional district in the Shenandoah Valley.

While I know that our representatives do not have an easy job in a district which spans from Northern Virginia to the North Carolina Border (VA-05). I have not felt represented in the past 8 years by the congressmen which were elected in this strangely tailored district. Democracy lives from people feeling heard and the their government is working for them.

Thank you sincerely for your consideration, Barbara Gehrung
...

BARBARA GEHRUNG, Int. Assoc. AIA, CPHC
434.262.2392
barbara.gehrung@gmail.com

## GEHRUNG + GRAHAM IIc

Energy Positive Architecture
GehrungGraham.com

## 705 Graves Street

Charlottesville, VA 22902

| From: | Allen Baker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia redistricting |
| Date: | Wednesday, November 10, 2021 4:35:33 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I live in Charlottesville and do not want my community split into $4 / 5$ districts, or Albemarle county lumped into a Congressional district over the mountain. Thank you,
Allen Baker
919 Stonehenge Ave Ext
Charlottesville, VA 22902

| From: | Roland Winston |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Appointments |
| Date: | Wednesday, November 10, 2021 4:59:42 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Members of the Court,

I object to the Thomas Bryan, Adam Kincaid and Adam Foltz nominations.

I agree with Senators Locke and Surovell in labeling these individuals as 'partisan operatives'. This is not what fair people had in mind in regard to non partisan redistricting.

Caucus Chair Mamie Locke said: "Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way?"

Caucus Vice-Chair Scott Surovell said: "Courts are supposed to be free of politics—which is why we enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment, and the Republican caucuses have asked the Supreme Court of Virginia to effectively sanction partisan map drawing."

## BACKGROUND:

Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

S Roland Winston
Henrico, Va. 23231

| From: | Laura H |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 6:53:59 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Morning.
I am writing to state that I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely,
Laura Hinkle
North Chesterfield, VA

```
From: Debby Porter
To: Redistricting
Subject: Redistricting committee
Date: Wednesday, November 10, 2021 6:50:10 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Paid Republican operatives have no business participating in any efforts at redistricting that are presented as nonpartisan. Voters approved a nonpartisan redistricting constitutional amendment in 2020.

Democrats submitted special master nominees who are leading respected academics in the fields of political science, demographics, and law. All of the GOP's nominees are currently on the payroll of Republican organizations.

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

It would be an obscene betrayal of voters to allow their participation in a nonpartisan redistricting effort.

Debby Porter
13510 Heathbrook Rd
Midlothian, VA 23112

| From: | Lynn |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Stop GOP Partisans |
| Date: | Wednesday, November 10, 2021 6:58:10 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Stop the madness! Do not appoint the GOP national partisan experts to draw what is supposed to be fair redistricting maps. The GOP appointees have worked tirelessly to gerrymander the country to deny a representative vote to the people. We need a bipartisan group to work together to make Virginia maps fair. I live in Va Congressional District \#10 which was gerrymandered over time to keep Frank Wolf in office, carving out Democratic-leaning areas, so it runs from McLean to West Virginia and down to Manassas, while not including Herndon or Reston. We need to stop drawing maps to benefit political parties!

When Virginians voted for this redistricting process, we wanted fair, non- partisan maps that are not gerrymandered. Please stop this attempt by the GOP to make Virginia voting maps worse and to benefit one party over another!

Lynn Anderson
703-785-6677

| From: | PAUL BERRY |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Objection to partisan map drawers |
| Date: | Wednesday, November 10, 2021 7:10:25 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
I write to object to the list submitted from the Republican party for nominees to act as one of two special masters in the reapportionment process.

I voted against Amendment 1 because I believed then, and now, that nakedly partisan affiliations do not belong in our redistricting processes. I am Chairman of the Fairfax County Redistricting Advisory Committee - it is an uneven venture that is nonetheless possible to accomplish with bipartisan participation.

When that participation does not incentivize individuals to use their political preferences as a guide, but rather as a set of passive biases directing mapping choices, fair maps are possible.

That the leadership of one party would so obviously and deliberately offer up individuals who make it their professional business to help their chosen partisans win elections (and by extension create conditions for opposite partisans to lose) is anathema to the spirit of the Amendment not all of us voted for, but all of us honor.

Thank you,
Paul Berry

## Paul Daniel Berry

## Principal

Contra Costa Bellerose


The citizens of Virginia voted for a NONPARTISAN group to look at redistricting The GOP has not put forth unbiased operatives. They need to be removed from the committee.

I urge you to keep this fair and unbiased.
Thank you,
Marlene Meade
Midlothian, Va
Sent from the all new AOL app for iOS

| From: | Carolyn Woodard |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting experts should be non-partisan experts, with no conflicts of interest |
| Date: | Wednesday, November 10, 2021 7:40:21 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Court,

The Republican nominees for special master for redistricting as violating the state's conflict of interest rules because:
One was paid $\$ 20,000$ by the Virginia Senate Republican Caucus two months ago. One is Executive Director of the National Republican Redistricting Trust and is paid $\$ 5,000 / \mathrm{mo}$. by the Republican National Committee
The other drew the 2010 Wisconsin Maps and is currently employed by Texas Republicans to draw Texas districts and has been criticized by numerous courts for lacking credibility and drawing maps that violate federal law and the U.S. Constitution

Special Masters are judicial officers who are typically vetted for their impartiality. State law also says all nominees cannot have any conflicts of interest.

Please refuse to accept the Republican nominees and require them to nominate academics or consultants with expertise without conflicts of interest or the clear bias of their first nominees.

Thank you,
Carolyn Woodard
Fauquier County

| From: | Lohn Taylor |
| :--- | :--- |
| To: | Redistricting |
| Subject: | No to partisan oversight |
| Date: | Wednesday, November 10, 2021 7:51:19 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The redistricting process is already verging on a shambles, and the Commonwealth needs there to be a fair, orderly process. So please register my strongest opposition to the appointment of partisan operatives in any kind of oversight or policy-making role.
John Taylor
jtaylordirect@gmail.com
(804) 928-3381

| From: | Steve Baker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | No GOP Opperatives |
| Date: | Wednesday, November 10, 2021 8:41:47 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Dems gave you three good names, the R's gave you three hacks. Reject the hacks.
Steve Baker
sent from my iPhone

| From: | Frank Anderson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Selection of Special Masters |
| Date: | Wednesday, November 10, 2021 8:48:00 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Supreme Court of Virginia,
I am writing to urge the Court to reject three of the nominees for Special Master, Mr. Kinkaid, Mr. Bryan and Mr. Foltz. All three are partisan political operatives with a personal or financial stake in creating gerrymandered districts to benefit one party. This goes against both the letter of the law --- the Code states that the persons should have no conflicts of interest -- and the spirit of the law, which was originally intended to eliminate partisan gerrymandering.

Though many Virginians saw the flaws in the Constitutional amendment which would lead us to this point, most of those who voted in favor of it did not think they were approving a oneparty map-drawing process.

Thank you for your consideration.
Sincerely,
Frank Anderson
Burke, VA

| From: | Dashiell Lewis |
| :--- | :--- |
| To: | Redistricting |
| Subject: | No partisan operatives should be a part of redistricting |
| Date: | Wednesday, November 10, 2021 9:00:43 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,

I live and work in Richmond, VA.

To ensure fair redistricting, the Court should not appoint any partisan operative to draw the maps. It's that simple. The GOP is pressuring the Court to allow a partisan to draw the maps and sabotage the will of the people. That should not happen.

Thank you.
Dash Lewis

| From: | Meredith Richard |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special master comments from VA residents |
| Date: | Wednesday, November 10, 2021 9:04:06 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
I'm writing to comment on Senate Democrat requests that several individuals be disqualified from consideration for the special master position for the redistricting process.
Special masters are supposed to be judicial officers who are impartial and have a proven record of experience . They also are supposed to be vetted so as to avoid conflicts of interest. The nominees the GOP have put forth for these positions have been paid substantial sums by the RNC either at state or national level and one has even been critiqued by numerous courts for his violation of federal law when drawing maps in Wisconsin and Texas. This is unacceptable and nominees such as this should not be permitted to oversee the redistricting process here in VA. It would undermine its integrity and do a great disservice to Citizens of our commonwealth. All special master nominee should have a proven record of experience as independent experts with background in legal, statistical or academic fields. Thank you for taking the time to consider my comments as a concerned Virginian. I appreciate your hard work to make this process as fair as possible.

Best,
Meredith Richard
Fairfax County resident

| From: | Viju Singh |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting in Virginia \& Special master nominees |
| Date: | Wednesday, November 10, 2021 9:10:52 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing about the Special Masters to be appointed to redistrict Virginia based on new Census. Virginia voters wanted to eliminate past practice of partisan gerrymandering of districts and approved the constitutional amendment in 2020 to do so. Therefore, new districts must be drawn by experts who know what they are doing and not by political operatives. The three Republican nominees are currently or have been on the payroll of Republican organizations and therefore have a conflict of interest, whereas the Democrat's nominees are not on the payroll of democratic organizations but are experts in this field. Virginia Supreme Court must not allow this partisan map drawing. I respectfully ask the court to disqualify the three Republican currently proposed.
Thank you,
Mrs. Vijaylaxmi Singh
11531 Nicholas Trace Court
Midlothian, VA, 23113
Tel. \# 804-272-4622 (landline)

| From: | Zach Gitlin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | On Redistricting of the Courts |
| Date: | Wednesday, November 10, 2021 9:16:47 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good morning,

The consequences of gerrymandering for elections and the health of the Commonwealth is paramount. It is in the best interest of voters and elected to officials to compete on maps that do not disenfranchise voters by race, religion, age, or party affiliation. A competitive map that does not require a party to earn more than $50 \%$ of the votes to get $50 \%$ of the assembly is in the best interest of Commonwealth as a whole. And it is up to you now to make sure that the people's will with the vote of the new redistricting committee is upheld with a equal map that gives voters a voice in their districts, does not entrench politicians, and makes for a free and fair election for the Commonwealth.

Be the example not repeating mistakes of the past.
--
Zachary Gitlin
MA in International Studies
remmek@gmail.com

| From: | Ellen Moore Osborne |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 9:31:38 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Virginia Courts,

All we want are free and fair elections that represent ALL the people of Virginia. Sometimes my candidate wins, sometimes my candidate loses-- I can handle that. But continually rigging the system is bringing the concept of democracy down.

The 3 special master nominees offered by the Republicans have serious conflicts of interest. One guy has already been found by a federal court to have engaged in partisan gerrymandering in Ohio. One guy does paid work as a consultant for the Virginia Republicans. The other guy provided "almost laughable" testimony about his maps for redistricting in Wisconsin, and it was found to be a violation of the Voting Rights Act. No reasonable person with a lick of common sense could consider these guys nonpartisan, as the redistricting amendment requires. Please disqualify these guys and ask for new nominees to be submitted.

Thank you.

Ellen Osborne
Buck Island Road, Charlottesville, VA

```
From: Rupali Pendse
To: Redistricting
Subject: Please disqualify GOP"s special master nominees
Date: Wednesday, November 10, 2021 9:49:02 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good morning,

Redistricting committee should be non-partisan and impartial. Having GOP special master nominees on the committee is not productive to the redistricting procedure to create fair and equal maps.

All voters deserve equal chance for representation in all government elections.
I have attached the information Virginia Senate Democrats have submitted for your reference.
"Today, Virginia Senate Democrats submitted a letter asking the Supreme Court of Virginia to disqualify the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting.

Majority Leader Dick Saslaw said: "Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government."

Caucus Chair Mamie Locke said: "Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way?"

Caucus Vice-Chair Scott Surovell said: "Courts are supposed to be free of politics-which is why we enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment, and the Republican caucuses have asked the Supreme Court of Virginia to effectively sanction partisan map drawing."

## BACKGROUND:

Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on 9/3/2021, a fact that the

Senate Republican Caucus did not disclose to the Court in nominating him.
Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

Thank you
Rupali Pendse
Realtor, Notary Public
Fathom Realty VA
804-220-1905
www.rupalipendse.realtor

| From: | Maureen Seifert |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Impartial Redistricting |
| Date: | Wednesday, November 10, 2021 10:04:37 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Justices,
Map masters are to be nonpartisan and recognized experts in their field. The "special masters" nominated by the Republican Party are anything but neutral and should be disqualified.
Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Respectfully,
Maureen Seifert
Midlothian, VA

| From: | donelle@donelle.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Special Masters |
| Date: | Wednesday, November 10, 2021 10:11:30 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I write to make my objection known with regard to the three Republican-nominated map-drawing consultants currently before the VA Supreme Court.

These three nominees for special master for redistricting violate the state's conflict of interest rules. As evidence of conflict of interest, Thomas Bryan was paid $\$ 20,000$ by the Virginia Senate Republican Caucus two months ago. Adam Kincaid is Executive Director of the National Republican Redistricting Trust and is paid $\$ 5,000 / \mathrm{mo}$. by the Republican National Committee and he collaborated on Ohio legislative maps that a 3-panel federal court found to be extreme, illegal partisan gerrymandering. The 3rd, Adam Foltz, drew the 2010 Wisconsin Maps and is currently employed by Texas Republicans to draw Texas districts, even while a district court ruled the Wisconsin redistricted maps violated federal gerrymandering law and the U.S. Constitution.

Special Masters are judicial officers who are typically vetted for their impartiality, a condition of which these three have not met.

Virginia Senate Democrats proposed three independent academics who have been previously used by Courts to serve in this function, have been appropriately vetted, and raise zero conflict-of-interest flags.

I thank you for your astute consideration of rejecting Mr. Bryan, Mr. Kincaid and Mr. Foltz as special masters for the conflict of interests they represent.

Thank you,
Donelle Sawyer
Vienna, VA resident
(646) 250-9105

| From: | Craig Wilkey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disqualify GOP nominees as partisan map drawers with an agenda |
| Date: | Wednesday, November 10, 2021 10:12:33 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way? The citizens of Virginia voted to depolitize the construction of legislative districts. Democracy is subverted when the democratic process is manipulated. For that reason, I ask that you disqualify the GOP nominees as they have an agenda not to improve democracy, but to sway elections in a partisan direction.

The Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government.

Below is a short background on the Republican nominees:
Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.
Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

Sincerely, Craig Wilkey
Midlothian VA

```
From:
To:
Subject:
Date:

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Honorable Judges,
I write in support of new nominees by Republicans.
As Majority Leader Dick Saslaw recently said: "Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government."

Thank you for considering this request.
Jane
Jane Dowrick
10936 Live Oak Court, Midlothian VA \#504 Chesterfield, \#68 VA 804-334-0117
\begin{tabular}{ll} 
From: & Beth Kaiser \\
To: & Redistricting \\
Subject: & This is outrageous! \\
Date: & Wednesday, November 10, 2021 10:25:35 AM
\end{tabular}

EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
The purpose of the redistricting commission is to review the changes in demographics and adjust the districts for fair representation of ALL Virginians.

This WILL NOT happen if you allow paid Republican political operatives to serve as special masters. They must be disqualified.

Respectfully,
Beth Kaiser

Sent from my iPhone
\begin{tabular}{ll} 
From: & bob bobscottart.com \\
To: & Redistricting \\
Subject: & District Maps \\
Date: & Wednesday, November 10, 2021 10:25:53 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Supreme Court of Virginia:
I am writing in support of having fair, nonpartisan district maps. I am in agreement with Majority Leader Richard Saslaw that House and Senate Republican Caucus' nominees are not qualified to act in a non-partisan way. In my opinion these nominees are not who voters had in mind when they voted for an amendment for a fair redistricting process.

Please say NO to this effort to undermine the redistricting process, and uphold the intent of voters who supported the amendment.

Thank you,
Bob Scott
Richmond, VA
\begin{tabular}{ll} 
From: & Donna Shaunesey \\
To: & Redistricting \\
Subject: & Special Masters for Redistricting \\
Date: & Wednesday, November 10, 2021 10:29:21 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Honored Justices:

As a supporter of the bipartisan OneVirginia2021, I am asking that you disqualify the special master nominees from Delegate Todd Gilbert and Senator Tommy Norment. All three of their nominees are paid by Republicans; two have been found by federal courts to have engaged in partisan gerrymandering in other states. The Democrats have submitted leading respected academics in the fields of political science, demographics and law. I respectfully request that you ask the Republicans to do the same.

Sincerely,

Donna Shaunesey
1003 Birdwood Road
Charlottesville VA 22903
\begin{tabular}{ll} 
From: & L.H. Swanson \\
To: & Redistricting \\
Subject: & Request to Disqualify GOP Special Master Nominees \\
Date: & Wednesday, November 10, 2021 10:29:26 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Dear Honorable Members of the Virginia Supreme Court,}

I am asking that you disqualify the GOP's special master nominees. Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. The Republicans need to do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government. As a voter for the nonpartisan redistricting constitutional amendment in 2020, I did not think that maps would then be drawn by partisan operatives. As all the GOP's nominees are currently on the payroll of Republican organizations, that does not give me any confidence that they can draw fair maps in a transparent and inclusive way. The Republican caucuses are in effect asking the Supreme Court of Virginia to sanction partisan map drawing. Please make a ruling that respects the interest of Virginia voters.

Sincerely,
Julie Hanson Swanson
\begin{tabular}{ll} 
From: & Harki Singh \\
To: & Redistricting \\
Subject: & Redistricting in Virginia \& Special master nominees \\
Date: & Wednesday, November 10, 2021 10:51:22 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This letter is about the Special Masters to be appointed to redistrict Virginia based on new Census. Virginia voters wanted to eliminate past practice of partisan gerrymandering of districts and approved the constitutional amendment in 2020 to do so. Therefore, new districts must be drawn by experts who know what they are doing and not by political operatives.

The three Republican nominees are currently or have been on the payroll of Republican organizations and therefore have a conflict of interest, whereas the Democrat's nominees are not on the payroll of democratic organizations but are experts in this field. Virginia Supreme Court must not allow this partisan map drawing.

I respectfully ask the court to disqualify the three Republican currently proposed.
Thank you,
Harki Singh
479 Southlake Boulevard
North Chesterfield, VA 23236
Tel: (804) 594-7210
\begin{tabular}{ll} 
From: & Catherine Imperatore \\
To: & Redistricting \\
Subject: & Disqualify partisan special masters \\
Date: & Wednesday, November 10, 2021 10:52:56 AM \\
&
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please disqualify nominees for redistricting special masters who are on the payroll of either party or who have engaged in partisan gerrymandering in the past. Of particular concern are the nominations of Adam Kincaid and Adam Foltz, who have both been found by federal courts to have engaged in partisan gerrymandering. Thank you!

Regards,
Catherine Imperatore
10960 Harpers Square Ct
Reston, VA 20191
\begin{tabular}{ll} 
From: & Len Groves \\
To: & Redistricting \\
Subject: & Please reject the partisan GOP nominees \\
Date: & Wednesday, November 10, 2021 11:18:38 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}
\#CallToAction The VA Sup. Ct. has asked that any comments on the @VASenateDems' request to disqualify the GOP's special master nominees must in writing no later than 5 pm today November 10 to
Redistricting@VACourts.gov
"Today, Virginia Senate Democrats submitted a letter asking the Supreme Court of Virginia to disqualify the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting.
Majority Leader Dick Saslaw said: "Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government."

Caucus Chair Mamie Locke said: "Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way?"

Caucus Vice-Chair Scott Surovell said: "Courts are supposed to be free of politics—which is why we enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment, and the Republican caucuses have asked the Supreme Court of Virginia to effectively sanction partisan map drawing."

\section*{BACKGROUND:}

Thomas Bryan was paid \(\$ 20,000\) by Virginia Senate Republicans on \(9 / 3 / 2021\), a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

This is clearly a partisan power grab to nominate people who so clearly are not trying in any way for fairness but rather for unfair advantage. Please firmly reject these nominees and keep elections fair in Va.

Thank you!
Jennifer Grover
4774 Long Shop Rd.
Blacksburg, VA 24060

Sent from my iPhone
\begin{tabular}{ll} 
From: & Kellen Squire \\
To: & Redistricting \\
Subject: & Virginia Redistricting special masters \\
Date: & Wednesday, November 10, 2021 11:19:46 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
My name is Kellen Squire; I'm an emergency department nurse from Charlottesville, Virginia.
I just wanted to provide a comment about the proposed Special Masters for redistricting that have been proposed.

It appears to me that the Democratic Party of Virginia has chosen three experts who are widely regarded for their knowledge and experience in non-partisan redistricting. As far as I can ascertain from researching their CVs and experience noted on the Internet, they have bipartisan accolades, and seem to be well equipped to take politics out of the map selection process to the greatest extent that is possible.

Meanwhile, the Virginia GOP appears to have openly chose the three most partisan candidates they could find, who I see are on record saying that redistricting is a tool to be wielded as a weapon- an attitude is clearly not what the people of the Commonwealth of Virginia intended when voting for this redistricting commission.

Quite frankly, I am astounded that the Virginia GOP would so openly insult and mock the process the Court has enacted. I almost gasped aloud when I saw how blatantly they were disrespecting the judges of the Virginia Supreme Court. It's clear to me that the Republican Party or Virginia doesn't care a single whit about the experience and dedication to jurisprudence that has been the hallmark of this Court- they, instead, expect the court to be a blind rubber stamp, expecting "their" judges to simply "fall in line".

I have run for office as a Democrat before, and I say any party- Democratic, Republican, whatever- if they're afraid of being held accountable to voters, to know that the maps being draw are given weight only to the people of the Commonwealth of Virginia, that anyone who is afraid of running for office in that environment needs to not be representing the Commonwealth at all.

We have a chance here to really "stick it in the eye" of BOTH major parties here in Virginia, to show the rest of the country how this sort-of thing is supposed to work. To stand up first and foremost for the people of the Commonwealth. Please: cement your place in Commonwealth history (and the country's history!) by disqualifying the Republican special Masters and telling them to be either be serious with the Court's requests- or to stand aside.

Thank you.
Kellen Squire, RN

Justices of the Supreme Court of Virginia
Attn: The Honorable Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
November 10, 2021
Re: Senator Saslaw's recommendations to the Virginia Supreme Court: a differing view focusing on mathematics

\section*{Dear Virginia Supreme Court Justices:}

I am writing to this esteemed Court to provide a different perspective to that of Mr. Saslaw concerning appropriate advisors to this Court regarding Virginia redistricting. I am a scientist, a native Virginian with deep roots in this great Commonwealth, and, like the members of this august Court, I am primarily concerned with the best interest of all Virginians and hope not to see an extreme left or right bias in the outcome. Virginia has now returned to her former "purple" status, neither red nor blue, which is exactly as it should be. I am also a Democrat, but not of the extreme left variety, although Mr. Saslaw leans in that direction. Because his idea of appropriate advisors are 3 University of California Political Science professors, who generally have no knowledge or understanding of Virginia or her communities, or the geography and needs of the Virginians who must live with the consequences of their input, I decided I should write to you, providing a centrist Virginian's perspective, one knowledgeable of mathematics. Since some of the nominees have mathematics and statistics background, I decided I have some qualifications to give you my perspective on these nominees. I therefore want to express my views, as scientist with a PhD in Chemical Physics, and strong mathematical background, I suggest two candidates, one from each list, to become Special Masters to assist this Court.

A strongly biased, in my view, Washington Post editorial vigorously endorsing Mr. Saslaw's list as the only one to choose from is the second reason I am writing. They seek to have only the most left leaning advisors to this Court, all from California, which at present seeks to abolish math as we know it, from its classrooms. These recent election results in Virginia, New Jersey, and New York in which Democrats lost are widely believed to be a rejection of the respective state parties' and candidates' shift too far to the left. Mr. Saslaw represents that part of the Democratic Party. I must also address the false charges about this entire process by Mr. Saslaw with a review of the history the past decade. For years Democrats wanted the Commission for redistricting, not the legislature drawing the map. After regaining the majority in 2019, suddenly the Democrats did NOT want a commission and wanted to draw the map themselves. However, a Constitutional Amendment requiring a commission was already in progress, but that was opposed by the machine Democrats, Saslaw, Simon, Filler-Corn and others part of McAuliffe's Machine, once they gained control. However, allowing the people their right to be heard prevailed, the constitutional amendment passed, subject to popular will. The vote was held and the People Spoke, approving
the amendment with \(67 \%\) of the vote. It is NOT the Republicans who stoked this change to the commission, it was initiated by Democrats, and overwhelmingly ratified by Virginia's people. Having this commission is the Will of Virginia's People. However, the Machine placed a potential saboteur, Marcus Simon, who twice voted to oppose the commission, on the commission possibly to ensure it did not succeed.

In this case, Mr. Saslaw's recommendation of 3 experts, all college professors from University of California, are, in my view, biased as well. These individuals are as likely to be biased toward the extreme left of the party as Saslaw disingenuously claims the Republicans choices are to Republicans. Allowing the people to decide by ballot was adamantly opposed by the Machine Democrats. Why the Post Editorial Board blindly accepts the false narrative provided by Saslaw, McAuliffe's chieftain without bothering with facts \& the history of redistricting over a decade is also a mystery, except all seek to keep the extreme left in control despite defeats at the ballot. Post's Editorial Board also have not been in Virginia for over a decade either. Ill-informed opinions such as the Washington Post, who act as if the Commission was entirely the idea of the Republicans, ill-serve both Virginians and others who read their misconceptions. That is the political perspective from a centrist non-Machine Democrat.

My intent now is to provide you with a technical perspective that I hope will be of some value. I will comment on what I perceive to be the best qualified individuals to serve as your Special Masters, for your consideration.

Of those nominated by both parties, my view as a computational scientist, leans toward those with strong mathematical backgrounds. The two I believe best qualified are statistician Thomas Bryan, formerly of the US Census Bureau, who has served bipartisan clients in state and local redistricting as a technical consultant on redistricting, and is extremely well qualified, and Professor Bernard Grofman, with his background in mathematics and prior experience in Virginia redistricting. I believe both these individuals can provide suitable guidance for this important task, as Special Masters to the Supreme Court of Virginia to advise on the 2021 Redistricting of Virginia. I therefore respectfully submit this perspective for you to consider.

Sincerely,


Sheryl Baldwin, PhD
Richmond, Virginia
\begin{tabular}{ll} 
From: & Ron Alpern \\
To: & Redistricting \\
Subject: & Disqualify Thomas Bryan, Adam Kincaid, and Adam Foltz as Special Master Nominees \\
Date: & Wednesday, November 10, 2021 11:46:55 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Members of the Virginia Supreme Court,
I want to add my voice to those who are expressing concerns about the partisan backgrounds of the three special masters who have been put forward by submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting.

Others far more familiar than I with the backgrounds of Thomas Bryan, Adam Kincaid, and Adam Foltz have pointed out that the latter two gentlemen were found by federal courts to have been involved in partisan gerrymandering efforts in Ohio and Texas, while Mr. Bryan did not disclose to your body his employment by Virginia Senate Republicans when nominated.

These individuals bring to this effort the type of track record that runs counter to the spirit of the 2020 redistricting amendment to the Constitution. We urge you to choose fair minded experts who can ensure that legislative districts are redrawn in a fashion that aligns with wishes of voters who saw the passage of the amendment as a way to remove hyper partisanship from this process.

Sincerely,
Ron
Ron Alpern
2950 Misty Ridge Ct.
Midlothian, VA 23113
804.929.2714 (mobile)
\begin{tabular}{ll} 
From: & Selina Foreman \\
To: & Redistricting \\
Subject: & Partisan representatives \\
Date: & Wednesday, November 10, 2021 11:48:35 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I am writing to express my extreme concern and profound disappointment in the suggested appointments of redistricting representatives Thomas Bryan, Adam Kincaid and Adam Foltz. The process that Virginians voted for was supposed to be NON-PARTISAN. The fact that these obviously extreme partisans have been nominated to be on the board is absolutely unjustifiable and not in keeping with the intention of the amendment.

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

You must disqualify these nominees. To not do so violates the intention of the new amendment and therefore, Virginians' vote for a more fair redistricting process.
```

Selina Foreman
214 Oak Grove Rd.
Norfolk, VA
23505
757-237-8629

```

Sent from my iPhone
\begin{tabular}{ll} 
From: & Meg \\
To: & Redistricting \\
Subject: & Redistricting is to be unbiased and non-partisan \\
Date: & Wednesday, November 10, 2021 11:49:02 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment, sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

We cannot continue to let partisan politics invade a non-partisan process. That is not in the Constitutional Amendment the citizens of Virginia passed.

Mary Gruber
Midlothian, VA 23112
\begin{tabular}{ll} 
From: & Bea Pankoski \\
To: & Redistricting \\
Subject: & Republican operatives \\
Date: & Wednesday, November 10, 2021 11:51:34 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing today to request that you disqualify the Republican party's special master nominees to the Virginia redistricting process. Republican Delegate Todd Gilbert and Republican Senator Tommy Norment nominated partisan operatives, who are currently on the payroll of Republican organizations. It is clear that these individuals will make no effort to draw fair maps in determining future voting districts. The people of Virginia deserve fair voting maps that allow their votes to matter, and not be weakened through partisan gerrymandering. Accordingly, I hereby request that you disqualify the nominations of Thomas Bryan, Adam Kincaid, and Adam Foltz.

\section*{Beatrice Pankoski}

2330 Castle Hill Road
Midlothian, VA 23113
bnjpanko@gmail.com
\begin{tabular}{ll} 
From: & Nouma Dione \\
To: & Redistricting \\
Subject: & Request to disqualify the special master nominees submitted by the GOP to protect our State democracy \\
Date: & Wednesday, November 10, 2021 11:51:38 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I urge the Courts to please disqualify the Special Master nominees submitted by the Republicans Delegate Todd Gilbert and Senator Tommy Norment to protect our democratic process from partisan interferences and manipulations in order to redraw lines that will not reflect the will of the people of Virginia and could disenfranchise large sections of the population.
Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government

Caucus Chair Mamie Locke said: "Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way?"

Caucus Vice-Chair Scott Surovell said: "Courts are supposed to be free of politicswhich is why we enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment, and the Republican caucuses have asked the Supreme Court of Virginia to effectively sanction partisan map drawing."

I urge you to protect ALL Virginians' rights for representation.
Regards,
Nouma T. Dione

Loudoun County resident.
\begin{tabular}{ll} 
From: & Kristina Hagen \\
To: & Redistricting \\
Subject: & Echoing Majority Leader Saslaw"s letter regarding GOP Special Master nominees \\
Date: & Wednesday, November 10, 2021 11:56:02 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I write today as a concerned citizen to echo the issues raised in Majority Leader Saslaw's letter regarding GOP Special Master nominees.

Section 30-399(F) of the Virginia Code and this Court's Redistricting Rule 2(b) clearly state that " \([\mathrm{t}]\) he persons appointed to serve as special masters should have the requisite qualifications and experience to serve as a special master and should have no conflicts of interest." This language very clearly disqualifies the GOP Special Master nominees for the reasons stated in Leader Saslaw's letter (see here).

Thank you for your consideration.
Kristina Hagen
2731 Lansdale Road
Richmond, VA 23225
\begin{tabular}{ll} 
From: & Phoebe Kilgour \\
To: & Redistricting \\
Subject: & Concerns regarding GOP Special Master nominees \\
Date: & Wednesday, November 10, 2021 12:10:19 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I write today as a concerned citizen of Virginia to reinforce the issues raised in Majority Leader Saslaw's letter regarding GOP Special Master nominees.

Section 30-399(F) of the Virginia Code and this Court's Redistricting Rule 2(b) clearly state that "[t]he persons appointed to serve as special masters should have the requisite qualifications and experience to serve as a special master and should have no conflicts of interest." This language very clearly disqualifies the GOP Special Master nominees for the reasons stated in Leader Saslaw's letter (see here).

Thank you for your attention.
Phoebe Kilgour
1 W Uhler
\begin{tabular}{ll} 
From: & Miah Usmani \\
To: & Redistricting \\
Subject: & Concerns about Nominees \\
Date: & Wednesday, November 10, 2021 12:13:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Virginia Supreme Court,

I am concerned with Special Master nominees;
Thomas Bryan - was paid last month \(\$ 20,000\) by Virginia Senate Republicans, and not disclosed to the Redistricting Committee.
Adam Kincaid - is the current Executive Director of the National Republican Redistricting Trust
Adam Foltz - is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering.

These are partisan GOP operatives that don't belong overseeing the drawing of fair maps. Please consider other options.

Thank you,
VA Resident
Miah Usmani
\begin{tabular}{ll} 
From: & Millie Fife \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Wednesday, November 10, 2021 12:14:57 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good afternoon,
When the voters of Virginia supported the constitutional amendment for redistricting being handled by a non-partisan group last year, I do not believe the proposed GOP special masters would have been considered qualified as "non partisan." I encourage you to ask the GOP leadership to submit a different list of candidates who would conform to the stated will of the people to ensure that this crucial process is handled properly. If the Republican party is not concerned with the propriety of keeping politics out of this, I trust that the judiciary in our Commonwealth is and recognizes the perception that allowing these nominees to move forward would set a bad precedent. Further, that this would undermine faith in this branch as being impartial.

Sincerely,
Millie Fife
\begin{tabular}{ll} 
From: & Nate Welz \\
To: & Redistricting \\
Subject: & Redistricting in Virginia \\
Date: & Wednesday, November 10, 2021 12:18:40 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,

I urge the Court to consider disqualifying Adam Kincaid, Thomas Bryan, and Adam Foltz from being special masters in the redistricting process. Virginians deserve fair, nonpartisan legislative and congressional maps. Adam Kincaid and Thomas Bryan are both Republican Party operatives - allowing them to become special masters will be incredibly detrimental to a process that is supposed to be fair. Adam Foltz should also be disqualified. Foltz illegally cracked the latino population in Wisconsin when he drew their legislative maps in 2010. Minority populations in Virginia, such as African American communities in Richmond, Southside, and Hampton Roads, deserve a special master who has not egregiously gerrymandered minority communities in the past.

I hope you take these considerations into account,

Nate Welz
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Layna Stohlman } \\
To: & Redistricting \\
Subject: & Get politics out of the districting process \\
Date: & Wednesday, November 10, 2021 12:27:05 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

To whom it may concern,
It was not easy to decide how to vote in 2020, concerning the proposal to have a designated committee of both Democrats and Republicans work on re-drawing the maps of VA. It was obvious it was not a perfect plan and that the system as proposed had its flaws, but it seemed better than what we had, which was pretty much nothing.

I cannot believe the extent to which the Republicans that have been nominated are inappropriate for the body to which they have been nominated. Thomas Bryan.. paid by VA Senate Republicans previously and not disclosed to the court? The 2 others - Adam Kincaid and Adam Foltz - both already having been found to be participants in partisan gerrymandering by federal courts??? Is this who the VA people really wanted to be the "nonpartisan" actors in drawing "fair" district lines? No.. it is so frustrating as a citizen to put up a little bit of faith in the system.. that there seems to be an effort to do something fair for everyone.. and it is not enough for some people and they have to make every effort to take advantage. Please reject these candidates.. please do whatever possible to find representatives who will do what is fair for all, not just their side.

Thank you for your consideration,
Jayna Wiebel
Vienna, VA
\begin{tabular}{ll} 
From: & Michael Rodriguez \\
To: & Redistricting \\
Subject: & nominees for redistricting special masters \\
Date: & Wednesday, November 10, 2021 12:28:33 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\author{
Miguel A. Rodriguez, AICP
} 1740 Anderson Rd.
Falls Church, VA 22043

\author{
Ms. Muriel-Theresa Pitney \\ Clerk of CourtSupreme Court of Virginia \\ 100 N. 9th St, 5th Floor \\ Richmond, VA 23219
}

November 10, 2021
VIA E-MAIL

Dear Ms. Pittney:

I am a citizen and resident of Virginia's \(53^{\text {rd }}\) House District, located in Fairfax County and write on behalf of myself as a Virginian. It has come to my attention that the three special masters nominees offered by the minority (currently Republican) caucuses of the House of Delegates and Senate hold disqualifying conflicts of interests. I urge the court to uphold the law in Section 30-399(F) and Redistricting Rule 2(b) which underscore that nominees should have no conflicts of interest.

Mr. Adam Kinkaid is president of the National Republican Redistricting Trust and a partisan advancer of national gerrymandering efforts. Mr. Thomas Bryan has received "consulting fees" to the tune of \(\$ 20,000\) from Virginia Republicans. Mr. Adam Foltz is implicated in Wisconsin's horrendously gerrymandered districts and a partisan operator.

The people of Virginia chose to have such a redistricting commission, and enacted laws that should empower Virginians to have bipartisan and objective districts drawn. Section 24.2-304.04 of the Virginia Code flatly forbids partisan gerrymandering: "A map of districts shall not, when considered on a statewide basis, unduly favor or disfavor any political party."

In light of this, all three special master nominees proferred by Virginia statewide Republicans are patently disqualified to serve in this position. The Court should uphold the law and the desire of the people of the Commonwealth to not have this process hijacked by those who have blatant conflicts of interest. The minority party can try again, and hopefully nominate common citizens without such conflicts rather than a batch of partisan professional operators who seek to advance a blatant partisan gerrymander in the Commonwealth where the people have chosen to prevent such efforts.

Sincerely,
Miguel A. Rodriguez
Fairfax County, Virginia
\begin{tabular}{ll} 
From: & R. G. \\
To: & Redistricting \\
Subject: & We must have fair, nonpartisan maps \\
Date: & Wednesday, November 10, 2021 12:37:23 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to ask that the Court reject the partisan hacks put forth by Virginia Republicans to work on redistricting. We must have qualified, fair-minded experts. Please, demand better.

Yours,

Rachel Gatwood
Reston, VA 20191
```

From: p. a. l"herrou
To: Redistricting
Subject: Fwd: fair elections
Date:

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
---------- Forwarded message
From: p. a. l'herrou [ivycrown@earthlink.net](mailto:ivycrown@earthlink.net)
Date: Wed, Nov 10, 2021 at 12:30 PM
Subject: fair elections
To: < Redistricting@vaccourts.gov>

## To the Virginia Court Justices

The reason that redistricting for our state was called for is that in so many districts, it was clear that 'gerrymandering' to preserve clusters of voters in particular districts, had been practiced to give a particular political party the advantage for winning in the individual district.

This practice violates the concept of fairness of our citizen vote, by continuing to change the voters' district if the balance for one particular party is less likely to win. These partisan changes add and subtract geographic area boundaries if a party's majority vote is threatened to be no longer the district majority. This seems ipso facto to be unfair to what has become the majority in the district.

If our government, with our wonderful founding fathers' history of 'by, for and of the people' means fair elections to choose the leadership of a city, state or nation, then it's clear that gerrymandering needs to end and more fair means than the partisan political party practices of changing districts boundaries to have a minority vote become the winning vote.

It is up to you, the judges of fairness and what the Constitution and the founding fathers of Virginia meant justice to be, to ensure that we citizens of this state have the right to fairly choose our leaders--all those who are elected to serve and represent us !

Thank you for taking time to read this. It matters so much as our democratic systems are more threatened that before in my long lifetime.

Sincerely, Patricia L'Herrou, voter in Albemarle County...

| From: | Webster |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Cc: | ogriesgraber@gmail.com |
| Subject: | Commentf: Selection of a Special Master |
| Date: | Wednesday, November 10, 2021 12:40:11 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The appointment of technical experts to assist the Court in redrawing election districts in Virginia must adhere strictly to the statute. All such persons must be scrupulously nonpartisan and eminently qualified academically.

James C. Webster
1101 S Arlington Ridge Rd Apt 313
Arlington VA 22202
Tel 7035254512
websterj@aol.com

| From: | bonnie beckett |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Unqualified GOP special master nominees |
| Date: | Wednesday, November 10, 2021 12:43:43 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Court Officials:

The special master nominees submitted by Republicans Del. Todd Gilbert and Sen. Tommy Norment are partisan operatives rather than the nonpartisan, objective nominees envisioned by the redistricting process. In contrast, the Democrats submitted nominees who are leading respected academics in political science, demographics, and law with knowledge of redistricting principles. In contrast the Republicans have submitted nominees paid by the Republicans (Thomas Bryan $\$ 20,000$ ), who serve as the Executive Director of the publican Redistricting Trust and has previously worked for the RNC (Adam Kincaid), and who is a Republican operative who worked on map-drawing in Wisconsin that a court found to be partisan gerrymandering (Adam Foltz). Please disqualify these three Republican special master nominees as overtly partisan and antithetical to the charge of nonpartisan participation in drawing these maps.

As a Virginia voter I am deeply concerned about the biases these three Republicans bring to the process and have no confidence in a fair outcome if they are part of the process.

Sincerely,
Bonnie Beckett
4903 14th St. N.
Arlington, VA 22205

| From: | Heather Crislip |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Masters |
| Date: | Wednesday, November 10, 2021 12:44:54 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Afternoon:

I have followed with great interest Virginia's attempt to draw fairer maps in the redistricting process, which I believe is very important for our democracy. I am actually optimistic that this work has landed with the Court, through I realize it places an enormous burden on the court.

My greatest wish is for maps to emerge from this process that are viewed as fair and derived at without partisanship. I am concerned that the republican "special masters" have a verifiable partisan record, and I ask that the court reject those nominations from their process and ask for new nominations that will undertake this work in the manner and seriousness that it requires.

| From: | Ashley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 1:03:41 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The court should order the Republicans to engage neutral, nonpartisan map masters who are acknowledged experts in their field. Like the Dems did.

Please consider all of your constituents.

Ashley Taylor
23235

Sent from my iPhone

| From: | Kelly King Horne |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on redistricting: partisan gerrymandering |
| Date: | Wednesday, November 10, 2021 1:04:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms. Abernathy,
I am very concerned about the nomination of partisan individuals as special masters in the Supreme Court's redistricting efforts. Virginians deserve fair representation. The nominees submitted by Del. Gilbert and Sen. Norment include an individual who received an undisclosed payment from the Virginia Senate Republicans and two individuals with a history of partisan gerrymandering identified by a federal court.

Thank you for your attention to this urgent and important matter, Kelly King Horne

| From: | BJ Mabie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 1:08:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

```
>
```

> To Whom It May Concern,
$>$
$>$ I am writing to request that the redistricting please be nonpartisan and i request that those selected are experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.
$>$
> Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their fields.
$>$ Thank you for your help in this very important matter.
$>$
> Joyfully,
> Jenn Mabie
$>$
$>$

| From: | Loper, Ann B (abl2x) |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Charlottesville and Albemarle |
| Date: | Wednesday, November 10, 2021 1:09:32 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to strongly urge you keep Charlottesville and Albemarle together for districting purposes. The adjacent areas have economic ties and cultural ties. Please resist partisan gerrymandering efforts to carve the area unreasonably.

Respectfully,
Ann Loper
1822 Yorktown Drive
Charlottesville, VA

```
From: Lames Schoenster
To: Redistricting
Subject: Special Master Nominees
Date: Wednesday, November 10, 2021 1:11:25 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Greetings,

It has come to my attention that a decision will be made regarding special master nominees. Virginia Senate and House Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government.

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him. Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010. Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

I implore you to reject these nominees and give Republicans a chance to reconsider their choices.

Sincerely, James Schoenster

Virus-free. www.avast.com

| From: | Scott Silvers |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Master Nominees |
| Date: | Wednesday, November 10, 2021 1:12:12 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## To Whom It May Concern:

I am writing to you concerning the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting. These nominees, Thomas Bryan, Adam Kincaid, \& Adam Foltz, have already demonstrated extreme bias towards the Republican party, Mr. Bryan having recently accepted a large payment from the VA Senate Republicans and Mr. Kincaid \& Mr. Foltz have both been found in federal court to have engaged in partisan gerrymandering. Based on these nominees backgrounds it is obvious that the Republican Party in VA is making efforts to use the redistricting process to gerrymander VA districts in their favor, defeating the entire purpose behind the 20202020 Virginia Redistricting Commission Amendment.

Please reject these nominees. The people of the Commonwealth of Virginia deserve a redistricting process that is as impartial as can reasonably be expected.

Thank you for your time, Scott Silvers

| From: | Ari Ghasemian |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public comment |
| Date: | Wednesday, November 10, 2021 1:12:30 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Clerk,

I write to express my wish that blatant, naked partisanship not be allowed to infect the redistricting process more than it has. I urge the justices to consider first and foremost nominees' academic credentials, as well as to look disfavourably upon nominees who earn their living on the payroll of only one political party. I urge the justices to salvage this year's flawed process by considering the legislators' and voters' intent in approving Amendment 1.

Thank you for your service, and thank you for your attention in this matter.
Best,
Ari Ghasemian
1703 Briar Ridge Rd
McLean, VA 22101

Sent from my iPhone

| From: | Pat smith |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Albemarle and Charlottesville |
| Date: | Wednesday, November 10, 2021 1:13:28 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of this area I am writing to say the two jurisdictions need to remain together. I'm hopeful you will remain bi-partisan on this issue. Let's not be like Texas.

Sent from Pats iPhone

| From: | annettenelms@aol.com <br> To: |
| :--- | :--- |
| Redistricting  <br> Subject: Master Nominees to the VA Redistricting Process <br> Date: Wednesday, November 10, 2021 1:17:57 PM |  |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing today to request that you disqualify the Republican party's special master nominees to the Virginia redistricting process.

Republican Delegate Todd Gilbert and Republican Senator Tommy Norment are currently on the payroll of Republican organizations. It is clear that these individuals will make no effort to draw fair maps in determining future voting districts. The people of Virginia deserve fair voting maps that allow their votes to matter and not be weakened through partisan gerrymandering. Accordingly, I hereby request that you disqualify the nominations of Thomas Bryan, Adam Kincaid, and Adam Foltz.

| From: | Sally Thomas |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Drawing the lines in the Piedmont |
| Date: | Wednesday, November 10, 2021 1:18:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

A request to the Supreme Court in redistricting decisions.
Please observe the very obvious community of interest that holds together Charlottesville and Albemarle. For some years, this community has been divided in non-sensical ways. On a flat piece of paper, it may seem that we are close to Augusta County, but that mountain is a serious divide that has stood for generations. In the last election, Albemarle County had to produce 9 distinct versions of ballots in order to let voters cast correct ballots, due to House of Delegate boundaries' meandering across the countryside. With a concern for voters' sanity and their interest in participating, please keep us together.
Thank you for your service.
Sally Thomas
(former Albemarle County Board of Supervisors member)
500 Crestwood Drive
Charlottesville, VA 22903

| From: | Tim Hickey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Tim Hickey Redistricting Public Comments |
| Date: | Wednesday, November 10, 2021 1:18:03 PM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMuriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, $5^{\text {th }}$ Floor
Richmond, VA 23219

## To Whom It May Concern,

My name is Tim Hickey. I am a resident of Albemarle County, Virginia, and was a 2019 candidate for the House of Delegates in the 59th District. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.

Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.

Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.
Republican Proposed Special Masters: The three proposed Special Masters by the Republican
caucus have disqualifying conflicts of interest. They are partisan operatives who will erode the faith of the people of Virginia in the maps produced by this Court. I urge you to direct the Republican caucus to do as the Democratic caucus has done and put forward unbiased nominees.

Thank you.

Tim Hickey
Albemarle County, Virginia

| From: | jdkinkaid@gmail.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistributing |
| Date: | Wednesday, November 10, 2021 1:20:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

You do not need a partisan person to oversee redistributing.

Jack Kinkaid
Sent from my iPhone

| From: | David Saunier |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle and Charlottesville |
| Date: | Wednesday, November 10, 2021 1:24:42 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Having been raised in Charlottesville, and now living in Albemarle and working in Charlottesville, I can say that from a geographic, economic, and cultural standpoint, the two entities should be together in any redistricting map.

Thanks,
David M Saunier, M.A.
235 Reas Ford Road
Earlysville, VA 22936
(434) 953-6220
dmsaunier@gmail.com

| From: | Sarah Mournighan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican Special Masters - Redistricting |
| Date: | Wednesday, November 10, 2021 1:28:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom this May Concern,
As a longtime resident of Alexandria, VA I am writing to concur with the Virginia Senate Democrats that the special masters suggested by the Virginia republicans have too many conflicts of interest to serve in this role.

All of them are long-time operatives with the republican party, including past experiences redistricting in order to maintain republican majorities. I firmly believe that none of these nominees will act within the spirit or the letter of the constitutional amendment passed by Virginia. The goal of this constitutional amendment is to keep politics out of redistricting and have the voters pick their representatives and not the other way around. I implore you to reject those special masters and ask for a new slate for the republicans, or just disqualify them outright in favor of a non partisan special master.

Thank you for your consideration.
Sarah Mournighan
Alexandria, VA.

| From: | art fonzie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disqualify the GOP"s special master nominees |
| Date: | Wednesday, November 10, 2021 1:37:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
Virginia Senate Democrats have submitted a letter asking the Supreme Court of VA to disqualify Thomas Bryan, Adam Kincaid and Adam Foltz from assisting in the redistricting process. Appointing partisan political operatives to participate in redistricting is not what the people of VA had in mind when they voted to change the process. This is unacceptable and I ask you to reject the GOP's nominees. These candidates have all been paid by the Republican party in the past for their work and thus this is a clear conflict of interest.

Thanks,
Kelly Gotschalk
N. Chesterfield, VA

| From: | Robert Tate |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please disqualify Republican special master nominees for the redistricting process, for the sake of all Virginians |
| Date: | Wednesday, November 10, 2021 1:37:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable members of the Virginia Supreme Court:

I am writing in support off the written request of Virginia Senate Democrats that you disqualify the special master nominees submitted by Virginia Republican party officials.

Democratic members of Virginia's legislature submitted special master nominees who are leading respected academics in relevant fields. To permit the individuals submitted by the Virginia Republican party to serve as special masters would make a mockery of this process and would violate the conflict of interest protections incorporated into the consititutional amendment to help avert such an outcome.

The public must have confidence in both the process and the outcome of this process, such that the new boundaries will be fair and will not amount to a partisan power play.

If the process does result in a partisan outcome, the public will know this, and the integrity and nonpartisan reputation of the Virginia Supreme Court will take a major hit.

The relevant facts about the Republican special master nominees that would create obvious and major credibility problems for this process if they are permitted to perform these roles, as I understand them, are as follows:

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

These facts establish clear, disqualifying conflict of interest, in each case.

Virginians of all and no political affiliations across the Commonwealth need you to do the right thing and disqualify these individuals from serving as special masters.

Thank you for listening.

Very respectfully submitted.
Sincerely,

Robert Tate
6320 Mori Street
McLean, Virginia 22101

| From: | Sheila Haughey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Charlottesville and Albemarle County |
| Date: | Wednesday, November 10, 2021 1:39:15 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I moved to Virginia in 1979 and we lived in Albemarle County until my husband, Lloyd Snook, and I bought our first home in Charlottesville in 1980. We have lived in Charlottesville ever since and we practice law together here. When you draw the maps to re-district, please keep Charlottesville and Albemarle County together as much as possible on every map. We definitely share a community of interest, which we do to a much lesser extent with some of the rural counties not contiguous with the City with which we have sometimes been lumped for voting purposes.

Thank you.

Sheila C. Haughey, VSB \# 19130
Snook \& Haughey, P. C.
408 East Market Street, Suite 107
P. O. Box 2486

Charlottesville VA 22902
434.293.8185 tel
434.295.0698 fax
schaughev@snookandhaughey.com

| From: | Network NOVA |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disqualification of Special Master Nominees |
| Date: | Wednesday, November 10, 2021 1:55:42 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please disqualify the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting. These individuals: Adam Foltz, Adam Kincaid and Thomas Bryan do not have the expertise or experience to qualify and have been either paid by the Republicans and/or long time and known Republicans.

## Stair Calhoun

Fairfax County

| From: | Stair Calhoun |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fwd: Disqualification of Special Master Nominees |
| Date: | Wednesday, November 10, 2021 1:59:13 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the redistricting, Adam Foltz, Adam Kincaid and Thomas Bryan do not have the expertise or experience to qualify as a master and have been either paid by the Republicans and/or long time and known Republicans. Please do not accept these nominations.

Michael Calhoun
Fairfax County

| From: | Linda Dunham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 2:00:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of the Supreme Court of Virginia:
The nonpolitical distribution of voters into fair voting districts is imperative for democracy to survive.
Sadly, one side of the discussion wishes to add lobbyists of their cause to the debate. I believe the Republican roster of special masters is not a contribution to fairness and equity but an attempt to eliminate equity and fairness.
I hope the court will support fair and equitable districting by rejecting the Republican roster and by compelling the Republicans to submit a less biased list of names.
Yours respectfully,
Linda Dunham
Richmond, VA 23227

Sent from my iPhone

| From: | цim Pyles |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep Charlottesville and Albemarle County united |
| Date: | Wednesday, November 10, 2021 2:02:41 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear sirs and madam,
Please eliminate the gerrymandering that has resulted in the democratic residents of Charlottlesville and Albemarle County being disinfranchased for the past ten years. Believing that your vote counts is the foundation of our representational democracy. Charlottesville and Albemarle County should be in their own Congressional District. Former residents of Albemarle County, Mr. Jefferson and Mr. Madison, would want you to do this. Charlottesville and Albemarle County should be in their own Congressional District.

This is an opportunity for you to make Virginia great again.
James Pyles
5714 Upland Drive
Crozet, Virginia 22932
jcpyles44@gmail.com

| From: | Will Harvey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle County and City of Charlottesville |
| Date: | Wednesday, November 10, 2021 2:15:27 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I respectfully submit that with redistricting these 2 jurisdictions should remain in the same congressional district. Thank you. William B. Harvey, 2721 Timberlake Road, Charlottesville (Albemarle County) Virginia 22901

Virginia wants to prevent gerrymandering. Can a mathematician help?
By Steve Thompson
September 06 at 6:00 AM ET
When Virginians voted last year to create a commission to draw the state's political districts, many hoped to head off the partisanship that has marred previous redistricting efforts.
Gerrymandering - rigging maps to favor a political party or candidate - has long been used by incumbents in Virginia and elsewhere to hold onto or expand political power. Both parties agree it damages the integrity of elections, but the complexities of map drawing make it difficult to prevent.
Now Virginia's commission is considering an offer of help from someone accustomed to solving complex problems: a mathematician.
Moon Duchin, a math professor at Tufts University who specializes in geometry, has been immersed in redistricting problems since 2016, when she taught a class on voting theory. Duchin figured the field of geometry ought to be able to help. She soon founded the MGGG Redistricting Lab, an effort to apply data science to redistricting.
The lab, which grew out of an informal research collective called the Metric Geometry and Gerrymandering Group, has helped refine techniques that construct representative samples of the universe of valid redistricting maps for a given jurisdiction. When human-generated maps deviate far from statistical norms, it can be a dead giveaway of gerrymandering or some other agenda, Duchin and other mathematicians say.
[Virginians approve turning redistricting over to bipartisan commission]
In 2018, Pennsylvania Gov. Tom Wolf (D) hired Duchin to evaluate the fairness of a congressional map revised by legislators, after that state's Supreme Court ruled that a previous map was an illegal gerrymander. Duchin found the new map's "bias in favor of Republicans [was] extremely unlikely to have come about by chance," she later wrote, putting the odds at roughly 0.1 percent.
In 2019, Duchin's lab organized a group of mathematical and legal experts to file an amicus brief to the U.S. Supreme Court about the new mathematical method. They touted what they said was an emerging scientific consensus that computer sampling techniques can help distinguish maps drawn to conform to aboveboard and transparent goals - such as creating compact districts and keeping communities together - from maps created with hidden agendas like partisan gerrymandering.
In that landmark case, Rucho v. Common Cause, the court ultimately ruled that federal judges do not have the power to stop politicians from drawing electoral districts to preserve or expand their party's power.
Duchin has worked with commissions and groups across the country, including the Michigan Independent Citizens Redistricting Commission, the People's Maps Commission in Wisconsin, and Arizona's Independent Redistricting Commission. Her work has flagged numerous instances of gerrymandering by both parties.
Last month, she offered her services to Virginia's redistricting commission. The bipartisan commission, which has an equal number of Democratic and Republican members, has faced traditional partisan pressures. The members voted 10 to 4 this summer to hire two sets of lawyers - one Democratic and one Republican - to make sure neither party gets an edge. Then they voted to hire two different map drawers as well.

The Democratic lawyer, Gerald Hebert, told commissioners at their Aug. 23 meeting that he approached Duchin's team to be his map drawer. She declined, saying she didn't want to work for one side or the other. So Hebert selected another map drawer and proposed that the commission hire Duchin to consult for both sides, perhaps to help evaluate their proposed maps.
[Virginia's bipartisan redistricting commission struggling with partisan pressures] The commission's co-chair, Greta J. Harris, a Democrat, greeted the offer warmly. "I am thrilled that Ms. Duchin is on the call," said Harris, one of the commission's nonlegislative members, after Duchin was introduced by phone at the meeting. "The work that I have looked at that her lab does really tries to strip out the partisan nature that can be so prevalent in any redistricting process."
It remained unclear what others on the commission thought of the idea. A Republican-side lawyer, Bryan Tyson, said at the meeting that he needed more time to consider it.
"I could see some value depending on what it is," he said. "But I want to understand what are kind of the contours of it."
The commissioners have pledged to avoid speaking about the redistricting process outside of public meetings, and several members either declined to comment or did not return messages from The Washington Post. Harris declined to comment, except to say that she expected the decision of whether to hire Duchin to be discussed at a coming meeting.
Virginians overwhelmingly approved a constitutional amendment last fall to create the commission rather than continuing to allow the General Assembly to draw the state's political districts. The process unfolds every 10 years, based on data from the U.S. census. The commission has 45 days to submit new maps to the General Assembly. If the commission fails to agree, or if the legislature rejects the plan, the Supreme Court of Virginia would create the new maps.
The commission's creation came after years of court battles over gerrymandering. The maps in place now were created by a special master after federal courts repeatedly found that maps by Virginia Republicans unconstitutionally packed Black voters into a handful of districts.
A 2018 white paper by Duchin's lab found that a plan for the House of Delegates put forward by Democrats similarly diluted the Black vote.
Duchin said in an interview that she wants no part of any partisan agenda. Rather, she seeks out work "where you can kind of call balls and strikes," she said.
"I'm a mathematician who uses open-source algorithms, open-source computer programs," she said. "Meaning not only is there a body of literature behind it that was developed outside of the political context, but also all the algorithmic stuff we do is completely transparent, because anybody can go look at the code and understand how it works."
A technique Duchin relies on, which she and others have called "the method of ensembles," works by randomly creating tens of thousands of maps drawn according to whatever priorities the computer is given. The result is a collection - or ensemble - of thousands of maps that mirror the much larger number (often trillions upon trillions) of maps that could be drawn in the same jurisdiction under those priorities.
The ensembles can help solve a problem that has long bedeviled map drawers: a lack of neutral benchmark maps, Duchin said.
[Redistricting battles kick off early as Democrats scramble to try to cut into GOP advantages]
"You'll see people arguing, for instance, about whether if you did party-blind redistricting, would you get an outcome that's proportional to the vote? Is that kind of the state of nature?" she said. "People have been fighting about that for at least many decades, if not longer."
In recent years, and with the help of refinements by Duchin's lab, mathematicians have learned to harness computing power to create such benchmarks.
"There are fast and efficient algorithms that build you a lot of plans," Duchin said. "Not only are they numerous, but you can explain how they're distributed in the world of possibilities. That's new, and it's kind of exciting."
Many people approach redistricting with an intuitive sense that a state should elect representatives of each party in proportion to that party's voters. Under this concept, called proportionality, where a party has 40 percent of voters, it should get 4 out of 10 political representatives.
But mathematical research shows that because of political geography and demographic patterns - how densely or spread-out voters for different parties are, for instance - things don't necessarily work out that way naturally. Duchin says getting rid of gerrymandering does not mean getting rid of the partisan advantages that geography and demographics create; it means stopping people from intentionally orchestrating partisan advantage. "The opposite of gerrymandering isn't proportional representation; the opposite of gerrymandering is not gerrymandering," Jordan Ellenberg, a math professor at the University of Wisconsin and a co-author of the 2019 mathematicians' brief to the Supreme Court, wrote in an essay in Slate that Duchin likes to quote.
And although Duchin advocates computing power as a potentially game-changing tool, she doesn't propose taking humans out of the process.
"In all the different states, as we approach redistricting now and into the future, we need to keep on having these debates about what principles we want embodied in our maps," she said. "Different states will come to different ideas about local fairness, about what fairness looks like there. I hope that they'll use techniques like this to help them get closer to those ideals."

```
From: Jenny Seitz
To:
Redistricting
Subject:
objections to Republican nominees to committee
Wednesday, November 10, 2021 2:28:33 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to formally and strongly object to the nominations put forth by the Republican Caucus for the Virginia Redistricting Committee. They should be disqualified on the following grounds.

Adam Kincaid was found to have engaged in partisan gerrymandering in Ohio after the last census.

Adam Foltz was also found to be engaged in partisan gerrymandering in Wisconsin in 2010.
Thomas Bryan was paid \$20,000 in September 2021 by the Virginia Senate Republicans. That would certainly put him under a cloud of suspicion the they would unduly influence his decisions.

These 3 men should not be allowed to make any decisions regarding the redistricting in Virginia.

Sincerely, Jenny Seitz

| From: | George.Moore@Vre4vets.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 2:28:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Do not appoint a partisan operative to oversee the process. Select a nonpartisan person.

George Moore
Partner, VR\&E Service For Veterans, LLC
804-405-1518
Fax: 1-800-878-2824
George.Moore@vre4vets.com

| From: | Rosemary Lawler |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican special master nominees |
| Date: | Wednesday, November 10, 2021 2:31:11 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good afternoon,

I ask that the current Republican special master nominees be disqualified.
The point of the redistricting amendment passed a year ago was to end the abhorrent practice of partisan gerrymandering of legislative districts. No one who voted for that amendment myself included - expected the process to end up being administered by special masters. That the committee was unable to complete its job due to extreme partisan logjams, moving the work of redistricting to the courts, just proves that partisans should have no place in the process.

Republicans have nominated candidates who have been, or currently are, paid party operatives, two of whom have participated in gerrymandered redistricting processes in other states. It is a slap in the face to voters who want fairly drawn districts, and who thought the amendment passed would do away with gerrymandered districts, that Republicans chose these specific nominees. There are many, many non-partisan academics, legal scholars, demographic experts, and political science scholars who would make far better special masters, truly in keeping with the spirit of the amendment and the will of the people who voted for it a year ago.

Please disqualify the current Republican nominees.
Thank you,
Rosemary Lawler
15483 Limestone School Rd
Leesburg, VA 20176
703-795-0486

| From: | Rean Maples <br> To: |
| :--- | :--- |
| Redistricting  <br> Date: Nonpartisan Redistricting | Wednesday, November 10, 2021 2:31:53 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
Our courts are intended to be free of politics-which is why conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment were enacted. Three candidates' backgrounds do not meet these provisions. Below are reasons why I do not want the candidates named below presented as nominees.

Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on 9/3/2021, a fact the Senate Republican Caucus did not disclose to the Court when nominating Bryan.

Adam Kincaid is current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that Kincaid engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found he engaged in partisan gerrymandering. Foltz has also been retained this year in Texas as Texas draws its legislative and congressional maps.

Please know the above three candidates are extremely biased and inappropriate persons to work on redistricting maps in Virginia.

Thank you.

Joan B. Maples<br>14109 Rigney Drive<br>Midlothian, VA 23113

| From: | Hughes, Jenefer |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Regarding the nomination of a Special Master |
| Date: | Wednesday, November 10, 2021 2:36:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honored Justices of the Virginia Supreme Court,

I am writing to request that you consider nominations for a Special Master who is non-partisan, highly qualified and has a track record of independence and adherence to both the letter and spirit of the law. Citizens overwhelmingly voted for the Redistricting Constitutional Amendment in November 2020, on the understanding that it would eliminate partisanship and incumbency protection. I ask you to consider the intent of the voters during this nomination process.

The Special Masters' nominated by members of the Republican Senate caucus have demonstrated that they are partisan and have/will, based on reported evidence, engage(d) in gerrymandering districts in favor of the Republican Party of Virginia and the Republican legislative caucuses.

As an elected official, I strongly belief that we gain the trust of citizens by listening to and serving them. Voters have the right and the obligation to choose who represents them. Gerrymandering and incumbency protection distorts those rights and obligations, and serves to disenfranchise voters. I trust you to uphold the independence of the 2021 redistricting process and I ask you to reject those nominees selected by the Republican caucus and appoint an independent Special Master.

Thank you for your service to the Commonwealth of Virginia.

Kind regards,

## Jenefer Hughes, мза, аеа

Commissioner of the Revenue
Tel: (804) 748-1281
Fax: (804) 768-8649
PO Box 124
Chesterfield, VA 23832
cor@chesterfield.gov

## "Elected ta Serue"



In order to protect the safety of taxpayers and staff and slow the spread of COVID-19, we encourage you to connect with us virtually. Most transactions with our office can be done by email, phone, or through the mail. Please visit our website, send us an email, or call us at 804-748-1281 weekdays from 8:30 a.m. to 5:00 p.m. If you choose to visit in person, please contact our office in advance as appointments are required.

| From: | Fred Hussain |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Response to Virginia state Senator Richard Saslaw"s letter to disqualify Republican special master nominees |
| Date: | Wednesday, November 10, 2021 2:35:31 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
My name is Fred Hussain and I am a resident of Dumfries, Virginia writing to you in response to the November 8th letter from Virginia Senate Majority Leader Richard L. Saslaw's to the Supreme Court of Virginia regarding Senator Saslaw's request to disqualify the list of Republican nominees for special master to redraw both the General Assembly and Congressional districts. As a Virginia resident, I support Senator Saslaw's request to disqualify the following Republican nominees being considered for special master: Thomas Bryan, Adam Foltz and Adam Kincaid.

I have been a Virginia resident nearly all of my life and I have witnessed in previous redistricting sessions where the elected members of the General Assembly have redrawn both the legislative and Congressional districts to benefit the legislators' interests. With the passing of the Constitutional Amendment last year to shift the redistricting responsibilities from the General Assembly to a bipartisan redistricting commission, voters in the Commonwealth hoped that the politics would be mitigated with the commission working together in coming up with these maps. However, it appears that the members of the state Republican Caucus, whom provided these three nominees, have an underlying interest to retain the status quo for maintaining their power in the General Assembly without regard to the change in demographics in every region across the Commonwealth over the past decade. Their disguise of being cooperative in the redistricting process while masking their resistance of working in a nonpartisan manner contradicts the rules set fourth in the Constitutional Amendment.

As for the nominees provided by the Democratic Caucus, I support all three nominees who each have the experience to perform this task and ensures that the newly created districts are in full compliance with Federal and Virginia laws. Specifically, I have full support for Bernard Grofman--the political science professor from the University of California, Irvine--who was previously selected as the special master to redraw the 3rd Congressional district back in 2016 and the 25 Virginia House of Delegates districts in 2018. From his work as special master, Mr. Grofman created these districts not only to become competitive in elections but that to become more compact and to minimize splitting communities. If Mr. Grofman is selected, I will feel confident in his ability to redraw both Congressional and General Assembly districts and that future elections, over the next 10 years, will increase voter interest.

In closing, the Constitutional Amendment to establishing the redistricting commission is not perfect as what the voters hoped. I still have hope that the Supreme Court of Virginia will honor the message that voters want to have districts be implemented in a nonpartisan manner and also the districts are designed to represent communities with a strong diverse background.

Selecting one from the three Democratic nominees as the special master will achieve that goal.
I look forward to the next steps that the Supreme Court of Virginia will take in the redistricting proceedings. Thank you for the opportunity to provide my response on the redistricting process.

Sincerely, Fred Hussain
bannerscore@gmail.com

```
From:
Lay Cuasay
T0:
Subject:
Date: Wednesday, November 10, 2021 2:36:47 PM
Redistricting
GOP Special Master Nominees are not qualified
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I am a resident of Sterling VA and am writing to request that the nominees put forward by the Republican Party be disqualified from serving in the redistricting process. I, like many other voters, want maps drawn for free and fair elections. This can only be done when political partisanship is taken out of the equation. Democrats have put forward professionals in the fields of demographics, political science, and law. Republicans have put forward House Delegate Todd Gilbert and Senator Tommy Norment, both are Republican elected officials and clearly not non-partisan.

Other people involved are Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him; Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010.

This cannot be what citizens voted for when they wanted maps redrawn for free and fair elections. I strongly urge the VA Supreme Court to disqualify these Republican partisans seeking to be special masters nominees.

Jay Cuasay

Sterling, VA

To the Honorable Members of the Supreme Court of Virginia:
Dear Justices:
A heavy burden of responsibility has been laid upon you to draw the districts for the Commonwealth of Virginia for the next 10 years. I urge you to step back from the divisive and partisan voices in your ears and use competent professional demographers to assist in the drawing of these lines and NOT make the mistake the Commission made by using partisan party politics to oversee your process. The voters of Virginia THOUGHT they had voted for an Amendment that would end Gerrymandering. They were wrong. The partisan aspects woven into the Commission became its undoing. Please do not let it continue. Use non-aligned professional staff.

In addition The amendment and the statutes surrounding it emphasize the importance of keeping jurisdictional boundaries as a priority. Albemarle Country and the City of Charlottesville which it surrounds have within 12,000 citizens of qualifying for 2 members of the House of Delegates. In Central Virginia, Charlottesville/Albemarle is the mecca for jobs, planning districts, entertainment and shopping not only for itself but also for the surrounding counties. PLEASE DO NOT DIVIDE CHARLOTTESVILLE/ALBEMARLE INTO MORE THAN 2 HOUSE OF DELEGATES DISTRICTS. Instead of sensibly adding 12K citizens to Charlottesville/Albemarle from any of the willing surrounding counties, the Gerrymandering mapmakers of the last several decades have chosen to send the citizens of Albemarle to far flung districts in Greene County, Augusta County, Orange County and even Lynchburg, both diluting their influence and vastly increasing the difficulty of having any significant access to their elected representatives. Please right these wrongs and keep out community intact.

Highest regards and gratitude for your service to the citizens of the Commonwealth,

Linda G. Perriello Albemarle County
415 Grassmere Road 22903

## Lindagperriello@gmail.com

434.825.8275

| From: | wein.nancy@gmail.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Selection of candidates for special masters for redistricting in Virginia |
| Date: | Wednesday, November 10, 2021 3:05:18 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Supreme Court members:
I am writing to add my voice to those who are opposed to the candidates for special masters that have been proposed by the Republicans. I will refrain from copying the comments already given by many others.

We Democrats have tried to play fair in this. I supported the Constitutional Amendment last year even though I thought that the Democrats would have the upper hand in the redrawing of the districts. I do not want partisan lines drawn in either direction. And the Democrats have nominated nonpartisan academics who have experience and a track record of fairness. The Republicans have once again shown their true colors and nominated political operatives with a history of proposing partisan gerrymandering. Please disqualify these individuals and force the Republicans to nominate people who will play by the rules of fairness.

I live in a purple district myself (especially the HofD and the Congressional districts) and I want to continue to have a fair election in which the result is not based on unfair gerrymandering.

Thanks for your attention to this matter.
Nancy Wein
Chesterfield County
Currently $-7^{\text {th }}$ district Congressional, $27^{\text {th }}$ district House of Delegates, and $11^{\text {th }}$ district Senate.

| From: | Charles Stanton |
| :--- | :--- |
| To: | Redistricting |
| Subject: | CD 2 |
| Date: | Wednesday, November 10, 2021 3:10:43 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you for taking my comments into consideration.
I am dumbfounded how the 2nd congressional district fails to be consolidated into communities of interest. The current district snakes from the Easter Shore through Norfolk and crisscrossing up the Virginia Peninsula. This is just crazy.

CD 2 should be a South Hampton Roads anchored district. Norfolk and Virginia Beach are tied to the Norfolk Naval Base with all the active duty and veterans who reside here. Why not have a Newport News/Hampton anchored peninsula district and the Norfolk/VB district. For that matter, a Chesapeake/Portsmouth might be considered for a 3rd sea anchor.

Please consider a Norfolk/VB district for CD2.

One other point. End the precinct spitting. If communities of interest are important, it would seem neighbors in a precinct are this by definition!

Charles F. Stanton
Norfolk, VA
757-344-2277

| From: | juanita thorne |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting Concerns |
| Date: | Wednesday, November 10, 2021 3:27:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TO ALL CONCERNED:
As a lifelong resident and voter of Virginia I request that you disqualify the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in redistricting.

I did not think that maps would be drawn by partisan operatives when I voted to approve the nonpartisan redistricting constitutional amendment in 2020. The GOP's nominees are currently on the payroll of Republican organizations; They cannot be trusted to draw fair maps in a transparent and inclusive way .

Courts are supposed to be free of politics-The Republican caucuses have asked the Supreme Court of Virginia to effectively sanction partisan map drawing - this is not free of politics it is quite the opposite.

Sincerely,
Juanita R. Thorne
Prince George, Virginia

| From: | Tina Takach <br> To: <br> Subject: |
| :--- | :--- |
| Date: | Redistricting |
|  | Dednalify GOP special master noms |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good afternoon,

I am writing as a Virginia civics teacher, parent, and lifelong Virginian. I am concerned about the ability of the three special master nominees chosen by the Virginia republican party to redistrict our fair state.

We have come so far as a state when it comes to voting rights. We can see this is not a partisan issue because of the gubernatorial turn out and how well it went for the republican party. We had a record breaking electoral turnout thanks to good solid voting rights legislation. As a Virginian I support making voting easier and fair, and celebrate the efforts of the General assembly. We had a model election this November.

However, attempts to manipulate the redistricting process go against the foundation of our government that I'm currently teaching our students and future voters - representative government and democracy. Our state elections should reflect the will of the people, not the will of the people who draw the maps.

The people nominated by the GOP do not serve as experts in this process. They will not operate in good faith with the other party to produce maps that both sides can agree on. Those individuals have a record of being obstructionist when it comes to fair redistricting. The Virginia Supreme Court cannot allow these underqualified individuals to perform such an important task on behalf of the citizens of Virginia. The republican party must go back to the drawing board and choose three redistricting experts - not three political operatives - to draw our electoral map.

I implore you as someone who is educating future generations of citizens and civic participants. I've been teaching civics for a decade and doing my part to ensure that Virginians become lifelong voters and civic participants.

Efforts like this that feed into political climate of the time rather than the enduring fundamental principles of representative government and democracy. This type of partisanship behavior does not reflect the high standing that Virginia should hold itself when it comes to operating state government and state elections. We are Virginia for chrissake, not Florida. The country is watching us. We need to serve as a model for everyone else, as we have done for centuries.

Thank you,

Tina Takach

| From: | Ikingboyd@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fwd: Redistricting Appointment Concerns |
| Date: | Wednesday, November 10, 2021 3:42:33 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## To All Concerned:

As a concerned citizen of the State of Virginia, I am requesting the disqualifying of the Special Master Nominees submitted by Delegates Gilbert and Norment to assist in the SCOVA in redistricting.
Virginia Senate \& House Democrats have set an example in submitting special master nominees who are well respected academics in the fields of political science, demographics and law. It is expected the Republicans would do likewise and choose nominees whose participation will ensure fair and equal representation in State \& Federal government.
The current nominees can NOT be trusted to draw fair maps. Do NOT make this a partisan \& divisive issue in our State of Virginia. It is common knowledge the two gentlemen selected will not exercise fair and impartial decisions.

Lillian K. Boyd, Ph.D.<br>Prince George County, VA

| From: | Lean Umiker-Sebeok |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle County and Charlottesville |
| Date: | Wednesday, November 10, 2021 3:44:31 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Charlottesville and urge you to keep the city and Albemarle County in the same district. They are governmentally, culturally, historically and economically similar and entwined. People are crisscrossing every day for working, studying, dining, shopping, worshipping and recreating.

Thank you for preserving these natural communities for the purpose of redistricting.

D Jean Umiker-Sebeok

200 Garrett St Unit 414
Charlottesville VA 22902

## D. Jean Umiker-Sebeok

Mobile: 812-219-1062

My name is Megan Rickman Blackwood and I am a senior majoring in political science and minoring in philosophy at Virginia Commonwealth University. I am also a redistricting fellow with Fair Elections Center's Campus Vote Project, an organization that has empowered college student voices in state redistricting processes.

The Virginia Supreme Court has been asked to step in and take over our state's redistricting process from the Virginia Redistricting Commission. I am writing to you today to advocate for your inclusion of public hearings in this process. Virginians have shown that they are interested, knowledgeable, and confident enough to engage. 78 citizens have drawn and submitted community of interest maps to the commission, 63 have petitioned for consideration of communities of interest, and hundreds have testified at public hearings.

As a Redistricting Fellow with Campus Vote Project, I have personally drawn and submitted maps and testified before the Virginia Redistricting Commission, advocating for campus communities throughout Virginia to be brought and kept together. Citizens have answered the call of a free and fair democracy and have engaged in this process. I implore you to continue including their voices in your decision-making process, and that you listen to those voices asking that communities of interest be kept whole in the new Congressional and State Legislative district maps you will draw.

Please see my testimonies, below, that were previously submitted to the Virginia Redistricting Commission for your ongoing consideration.

Sincerely,
Megan Rickman Blackwood

## October 6, 2021

## Verbal testimony provided at Virginia Redistricting Commission public hearing

Good afternoon, my name is Megan Rickman Blackwood and I am neutral for today. I am a senior at Virginia Commonwealth University and have lived in Richmond for the last ten years. I am also participating in a college student Redistricting Fellowship with Campus Vote Project, an organization that is empowering college students to have a voice in their state's redistricting process. On behalf of students at Virginia Commonwealth University, we need representatives who listen to our voices and look to understand our needs.

My campus and the Richmond community are incredibly diverse mirroring other communities throughout our melting-pot state. Nestled in the heart of Richmond, our community represents all ethnicities and faiths. Much like the first settlers who first arrived in the Americas a short distance from our campus, we have all come to VCU seeking better lives for ourselves and our families, the freedom of opportunity that comes with a good education, and a chance to pursue our happiness.

However, students are confused about who is representing them. This is because our campus and our community are divided among multiple districts at certain levels of our government. For example, looking at our Virginia House of Delegates Representatives, our campus and the surrounding communities of student housing are split between eight districts. Students looking to for off-campus housing, a challenge in the densely populated capital of our state, find themself stratified through Congressional Districts 1, 4, and 7 for Representative in the United States. Affordable housing, located further from campus, often separates students from their peers, diluting the power of an increasingly engaged and powerful voting bloc.

Virginia Commonwealth University in Richmond needs to be considered as a Community of Interest when redrawing our district lines. We are entrusting you with the responsibility of ensuring every part of our campus is represented by the same elected officials in order to avoid confusion among voters. Because our campus is diverse in its people and ideals, I believe that this is a non-partisan matter. Because we should also have an equal voice in our government, I believe that everyone benefits from considering our campus as a Community of Interest regardless of political identity.

As students, we also contribute so much to the community. We contribute to local businesses around campus and town, we live, work, eat, and sleep in this community. I urge you all to remember, the college and university students you consider today, are statistically, the most likely population to engage in future elections. You have the unique opportunity to better their experience with democracy and help our university nurture life-long voters.

I am here today advocating for fair districts to be drawn. I believe that, if we draw fair districts, we will see more students civically engaged in the Richmond area and throughout the
state of Virginia. We will also see representatives who better reflect our community and are better able to advocate for our needs.

Thank you for your time today and have a blessed day.

## ---

October 22, 2021
Written testimony submitted to Virginia Redistricting Commission

My name is Megan Rickman Blackwood. I am a senior majoring in Political Science at Virginia Commonwealth University in Richmond, Va. I also serve as a Redistricting Fellow with Campus Vote Project, whose non-partisan parent organization is the Fair Elections Center. It is our mission at the Campus Vote Project to promote student registration, education, and turnout in a non-partisan manner while helping to empower lifelong voters. Leading field research continues to show that the development of these critical civic skills during early adulthood is imperative to shaping feelings of efficacy and enthusiasm about participating in democracy that follow voters throughout their lives.

I want to thank Chairwoman Babichenko and the rest of the commission here today for the opportunity to discuss the infrequent position that we are in to shape the future of our great Commonwealth. I come here today with the hope that even though this commission may disagree on social and economic issues, we can all agree that increasing the political participation of young people is something that we can work on together.

Today, I speak on behalf of over 524,932 fellow students, according to the latest numbers by the State Council of Higher Education, who are attending college and other higher educational opportunities in Virginia. After speaking with students from around the state, there is a clear and present need for this commission to ensure that colleges, technical schools, and other higher education centers are not broken up into multiple districts as they are a vital community of interest.

Unfortunately, too many students are facing the consequences of this issue across the state.

Roughly 300,000 of these students are enrolled within Virginia's Community College and Technical training programs. With the passage and funding of the G3 program, more Virginians than ever have the opportunity to pursue their dream of higher education. This influx of students, coinciding with the task of redistricting, offers this commission the rare opportunity to establish protections for these vital communities as they grow, ensuring each campus is a
connected voting bloc where students will have the chance to be educated, engaged, and active in our commonwealth's democracy.

For further clarification on the importance of protecting colleges and universities as Communities of Interest, we look to the definition established by White House Senior Policy Advisor for Democracy and Voting Rights Justin Levitt. Communities of Interest are "a neighborhood, community, or group of people who have common policy concerns and would benefit from being maintained in a single district."

I understand the temptation to dismiss college and university communities as impermanent ones, however, the Supreme Court has ruled in Symm v. United States, higher education campuses are a bona fide residence, thus we must be considered as such in the eyes of the law.

Students certainly have common policy concerns, with representatives making crucial decisions that impact higher education such as setting amounts for federal and state financial aid, appropriating research and institutional support spending, and legislating the communities students live and learn in.

Finally, meeting the last prong of the definition's test, student bodies certainly benefit from containing campuses and student housing within a single district. A unified campus will allow for greater student voter turnout with an easier process and allow students to elect representatives who understand and advocate for their needs and interests.

These communities of interest do exist across institutions in the state and deserve to be represented as such in the maps approved by this body.

In considering the Congressional District maps as they currently stand, George Mason University is split between districts. Imagine the confusion for students in housing along the north side of Braddock Road in District 10, catching a ride to the polls with their neighbor across the street, and ending up at a polling place for District 11. In these cases, students can be unaware of this issue and denied access to their right to vote. A study from Tufts University, in 2016, found that 1 out of 4 students who were registered to vote and did not vote in the 2016 elections cited not being able to find their polling place as the reason for not voting.

During the past three election cycles, there has been a drastic uptick in student voter participation. A report from Tufts University finds that in Virginia gubernatorial contests, the youth voting rate has increased from $17 \%$ in 2009 to $34 \%$ in 2017. Throughout the past four years, student voter participation has continued to skyrocket with $56 \%$ of young people in

Virginia casting a ballot in the 2020 presidential election. A quick glance at the monthly report, issued by the Department of Elections, tracking new registered voters shows 43,104 students registered to vote in Virginia in just the last six months. This shows that students are eager to participate in our electoral system. Your jobs today are to do everything you can to ensure that it is an easy, exciting process.

With that, this commission has the opportunity and duty to consider higher education institutions as communities of interest, given their importance for helping our young voters create a pattern of lifetime voting, engagement, and fulfillment of their duties as American citizens.

Thank you Chairwoman Babichenko and the rest of the commission here for giving me the opportunity to speak and I would be happy to answer any questions you may have.

| From: | $\frac{\text { Ludy Chalkley }}{\text { To: }}$ |
| :--- | :--- |
| Redistricting |  |
| Subject: | Citizen Input ref Redistricting Maps |
| Date: | Wednesday, November 10, 2021 3:59:03 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good afternoon,

As a lifelong resident and voter of Virginia, I request that you disqualify the special master nominees submitted by Republicans Delegate Todd Gilbert and Senator Tommy Norment to assist the Court in the drawing of redistricting maps.

The people of Virginia voted for nonpartisan redistricting with the passage of the constitutional amendment in 2020. The GOP's nominees are currently on the payroll of Republican organizations. Their involvement with the drawing of redistricting maps in Wisconsin and Ohio has shown they cannot not be trusted to draw fair maps in a transparent and nonpartisan manner.

The people of Virginia should be the ones choosing their elected officials, not partisan map makers.

Thank you,

Judy Chalkley
13701 Goosehaven Ln
Prince George, VA 23875

My name is Callie Jordan. I am a junior, double majoring in Political Science and Women's Studies at the University of Mary Washington in Fredericksburg, Virginia. I serve on the executive board of UMW Votes College Student Voting Coalition. I am also a Redistricting \& Democracy Fellow with Campus Vote Project, an organization that has empowered college student voices in state redistricting processes.

After speaking with students from around the state, there is a clear and present need for the Virginia Supreme Court to ensure that colleges, technical schools, and other higher education centers are not split between multiple Congressional or State Legislative districts as they are a vital community of interest.

At the University of Mary Washington, the campus is split between House Districts 28 and 88, in addition to a 3 -split division within its city wards. This means students who live, work, and attend the same institution are either represented on the state or city level by different officials simply contingent upon where their dorms or residential buildings are located on-campus.

It is with that I ask the Virginia Supreme Court to provide public hearings on these matters and allow all higher education institutions to be considered as communities of interest, given their shared interests and concerns, as well as their importance for helping our young voters create a pattern of lifetime voting, engagement, and fulfillment of their duties as American citizens.

## October 4, 2021

Verbal testimony provided at Virginia Redistricting Commission public hearing

Hi , my name is Callie Jordan. I have lived, worked, and gone to school in the city of Fredericksburg, VA for almost three years. I am also participating in a college student Redistricting Fellowship with Campus Vote Project, an organization that is empowering college students to have a voice in their state's redistricting process. I'd like you to keep my community, the University of Mary Washington together.

My community is composed of young people, students, faculty, staff, and administration. On-campus students either live in the underclassman and upperclassman mixed buildings, the UMW apartments, or the apartments in Eagle Village. Off-campus students frequently live downtown. Currently, on-campus students are split into three separate wards in between State House District 28 and 88 . This causes confusion come election time about where and how to vote. Many students feel that contingent upon where they live, they are isolated from the rest of their peers because they are not counted and represented together. In order to qualify for VA state financial aid programs and offers, students are encouraged to live and stay on-campus throughout their time at the University.

Students belong to a myriad of social and civic groups like Diversability, Prism, UMW Votes, and the Ecology Club. Common gathering points are Freddy Doughnuts, Soup, and Taco, and many of the bars along the downtown strip bordering the Rappahannock. Additionally, students regularly run, walk, and bike many of the local trails like the canal path, the VCR pathway, and Old Mill Park. Students often attend many of the annual celebrations hosted both on-campus and within the downtown areas like Octoberfest, and the annual Christmas Parade. The University and the greater Fredericksburg area partner together on many projects and initiatives for community members.

Nonprofits that serve our community are the FAHASS Fredericksburg and the RCASA. These groups offer services on-campus and in their office buildings just a short walk from campus. They provide backbones of support for many of the school's sexual assault and sexual wellness resources. Additionally, The greater Fredericksburg area is full of small and independently owned and operated small businesses that students enjoy and become regular customers at like Agora, Katora Cafe, Hyperion, and Curitiba Art Cafe. The locals look forward to students' arrival and are sad when they leave, and the students enjoy interacting with them on-campus. Many residents will walk their dogs along campus and enjoy our amenities with their families regularly. Over the last 20 years, the surrounding Fredericksburg area's makeup has grown to accommodate more young and working professionals and their families who often commute to
DC. Thus, the Fredericksburg Amtrak station downtown is another important locational marker.

In conclusion, it is important for my community to be kept together in the new district maps in order for students to be counted together and for our campus to vote and participate as one block. Thank you for letting me speak and provide testimony today.

## October 22, 2021

## Written testimony submitted to Virginia Redistricting Commission

My name is Callie Jordan. I am a junior, double majoring in Political Science and Women's Studies at the University of Mary Washington in Fredericksburg, Virginia. I serve on the executive board of UMW Votes College Student Voting Coalition. I am also a Redistricting \& Democracy Fellow with Campus Vote Project, which is a part of the non-partisan parent organization, Fair Elections Center. It is our mission at Campus Vote Project to promote student voter registration, education, and turnout in a non-partisan manner while helping create lifelong voters.

I want to first thank the Commission for the opportunity to discuss the infrequent position that we are in to shape the future of our great Commonwealth. I come here with the hope that even though some members of the Commission may disagree on social and economic issues, the idea of increasing political participation among all young people is something that we can work on together.

Today, I speak on behalf of my fellow students in the Commonwealth, including the over 37,700 new first-time students and, oftentimes, first-time voters enrolled at public four-year institutions according to insights from the State Council of Higher Education for Virginia. After speaking with students from around the state, there is a clear and present need for this Commission to ensure that colleges, technical schools, and other higher education centers are not broken up into multiple districts as they are a vital community of interest.

Unfortunately, too many students are facing the consequences of this issue across the state.

At the University of Mary Washington, the campus is split between House Districts 28 and 88, in addition to a 3 -split division within its city wards. This means students who live, work, and attend the same institution are either represented on the state level by Josh Cole or Mark Cole.

On the city level, students are represented by Jason Graham, William Withers, and Tim Diffy, all simply contingent upon where their dorms or residential buildings are located on-campus.

At Virginia Commonwealth University, the issue is further exacerbated. For example, looking at their state level representation, the campus and the surrounding communities where students live in larger percentages are split between eight districts. At the federal level, students are stratified through Congressional Districts 1, 4, and 7.

For various reasons, students might get reassigned to another dorm or residential building that is potentially located in another district, thus requiring certain actions on their part such as updating their voter information or learning more about who their new representatives are. In these cases, they might be unaware of this issue and denied access to their right to vote. A study from Tufts University, in 2016, found that 1 out of 4 students who were registered to vote and who did not vote in the 2016 elections cited not being able to find their polling place as the reason for not voting.

Another side effect of district lines going through colleges and universities is that some students may have a close and convenient polling place while another group of students may have to travel long distances that may require access to personal transportation. In that same study, $27 \%$ cited not having transportation to their polling place as why they did not vote. This issue is also apparent at other colleges across the state such as Norfolk State University, Old Dominion University, Christopher Newport University, among others.

During the past election cycle, there was immense support for students registering to vote and voting from non-profit groups, colleges, the Virginia Department of State, and other organizations. Even in smaller elections, Virginia students turned out. According to Virginia Department of Elections data, more than 14,000 students requested absentee ballots ahead of the 2020 Democratic presidential primary. This shows that when the process to vote is made more accessible, student voter turnout will increase accordingly.

But, why should higher education institutions be considered communities of interest? White House Senior Policy Advisor for Democracy and Voting Rights Justin Levitt stated that "a community of interest is a neighborhood, community, or group of people who have common policy concerns and would benefit from being maintained in a single district."

I understand there may be concerns that higher education is not a permanent community for many. However, the Supreme Court has ruled in Symm v. United States, higher education campuses are a bona fide residence, thus we must be considered as such in the eyes of the law.

The second part of the definition is that we must have common policy concerns, which students have with higher education such as issues on federal and state financial aid or ensuring students can find gainful employment upon graduation.

With the last part of the definition surrounding that a group must benefit from a single district, a unified campus will allow for greater student voter turnout with a more accessible process, thus allowing students to elect representatives who will understand and advocate for their needs. In Virginia House District 28 and city Ward 2, which encompasses the University of Mary Washington, many voters are students. These communities of interest do exist across institutions in the state, including my own, and deserve to be represented as such when the maps are finally drawn.

So it is with that I ask the Commission to allow all higher education institutions to be considered as communities of interest, given its importance for helping our young voters create a pattern of lifetime voting, engagement, and fulfillment of their duties as American citizens.

Thank you to the Commission for giving me the opportunity to speak and I would be happy to answer any questions you may have.

| From: | Lohn McLaren |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Special Masters. |
| Date: | Wednesday, November 10, 2021 4:10:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Virginia Supreme Court:
I am writing to express my alarm that three of the proposed Special Masters for the redistricting process appear to be committed partisans. They are Republicans, but that is not the important point; there should be no partisan operatives on either side. I ask the Court to reject these proposed Masters and insist on non-partisan members all around who are committed to fair legislative maps.

Thank you,
John McLaren
Charlottesville, VA

| From: | Zachary Lincoln |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special Masters |
| Date: | Wednesday, November 10, 2021 4:16:46 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia,

Last year's elections were one of the most intense and divisive in modern American history, yet Democrats and Republicans alike voted overwhelmingly to take politics out of redistricting and draw fair maps that equally represent all Virginians.

However, it is clear that Mr. Adam Kincaid, Mr. Thomas Bryan, and Mr. Adam Foltz, who have been selected by the Republican Party of Virginia to serve as special masters during this process, are blatantly partisan and thus unfit to serve, unlike Dr. Bruce Cain, Dr. Bernard Groffman, and Dr. Nathaniel Persily, who have been nominated by the Democratic Party of Virginia to impartially carry out the important process of redistricting.

I join many of my fellow Virginians in asking the Court to fulfill their promise of ensuring equal justice under law and listening to the people of our Commonwealth. Therefore, it is only right that the Court disqualify Mr. Kincaid, Mr. Bryan, and Mr. Foltz, so politics can finally be taken out of our maps and all Virginians can be fairly and equally represented.

Best regards,

Zachary Lincoln
West Springfield, VA

| From: | $\underline{\text { Carrie Pruett }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Reject partisan gerrymandering |
| Date: | Wednesday, November 10, 2021 4:21:29 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am concerned to learn that several individuals nominated by the Republican Party to participate in the redistricting process have a history of participating in partisan gerrymandering with the express purpose of artificially creating Republican power in Congress and state legislators. As a voter, I do not want to see gerrymandering occur in Virginia. Please reject any individuals whose partisan history disqualifies them from participating in a fair process.

Additionally, as a resident of Henrico County, I am concerned about the county being divided between three or four congressional districts. Many political and economic issues affect communities within the county, and making arbitrary divisions that separate voters from our neighbors and schools and work places will make it more difficult for elected representatives to work for their constituents.

Thank you,
Caroline Pruett 4908 Finnegan Court
Henrico, Va 23228
804-305-2226

| From: | Cheryl Dancy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Nominees |
| Date: | Wednesday, November 10, 2021 4:25:20 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a Virginia citizen and voter, I have serious concerns about the Republican nominees to assist in the redistricting process. Considering their involvement in other redistricting plans, I can't imagine that fairness and equality will be a priority. They are currently being paid by Republican organizations so whom would we expect them to be listening to or serving for that matter?

I question their allegiance, as well as their ability to draw fair maps in a transparent and inclusive manner. Please remember that Courts are supposed to be free of politics.

Respectfully,
Cheryl Dancy

| From: | Tammie Miller Jennings |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican nominees for redistricting |
| Date: | Wednesday, November 10, 2021 4:30:38 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing today as a citizen of Prince George County, Virginia, and a legal Voter. I strongly OPPOSE the Republican nominees and request they be disqualified.

We should be appointing individuals who are highly qualified in their respected fields and whose focus is on fair representation, not partisan politics. The Republican nominees have a history of gerrymandering and should never participate in Virginia redistricting efforts.

Every Virginian should feel comfortable knowing their vote is equal to everyone else's. Politics, specific gerrymandering, has no place in the voting booth.

Sincerely,
Tammie Miller Jennings
9639 Sandy Ridge Rd
North Prince George, Virginia

| From: | Sharon"s Gmail |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 4:31:14 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello-
Please keep Albemarle and Charlottesville together without splitting apart into multiple districts
Like is the current state.
Thanks so much!
Sharon Webb
Sent from my iPhone
electoral

November 10, 2021

Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
Supreme Court Building
100 North 9th Street
Richmond, Virginia 23219

Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A, I write to offer public comment on the Supreme Court of Virginia's selection of redistricting special masters.

As director of the Electoral Innovation Lab at Princeton University, I lead the work of the Princeton Gerrymandering Project, which has worked since 2013 to develop and apply scientific tools for nonpartisan fair districting. My team, composed of data scientists, legal staff, and technology developers, offers those resources at gerrymander.princeton.edu. In the current redistricting cycle, our work has been cited favorably by Republican, Democratic, and nonpartisan commentators. ${ }^{1}$

Our standards are based on nonpartisan criteria. Our analysis produces both numerical metrics and scores that fall on a "grading curve," analogous to the way grades might be assigned in a college course. Our metrics have identified extreme partisanship on the Democratic side in Illinois and Oregon, and on the Republican side in Texas, Ohio, and North Carolina.

For Virginia, our standards, as well as the information needed for a normally skilled expert to use them to evaluate new maps, are posted at https://github.com/PrincetonUniversity/PGP-Virginia2021. A detailed memo explaining how to apply these standards is also available at that link, and a copy is attached here. Normally skilled experts would be able to use these standards using

[^0]voting data available to them. In addition, we have also posted our own voting estimates of Virginia precincts. These estimates are based on official voting returns and are fully documented. These resources are all available free to the public under an MIT license and do not require any contact with us.

The Virginia Redistricting Commission's work illustrated the important role technical experts can play in implementing the standards of Virginia's new redistricting law. Staff on both sides of the Commission produced maps that were initially reasonable from a partisan fairness point of view, as indicated by our analytics. Our reports on the Commission's proposed maps are available here. It is unfortunate that the Commission was ultimately unable to achieve consensus.

Nominees for special master have been submitted to the Virginia Supreme Court in accordance with Rule 2 of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A. Of the nominees submitted, we note that Bernard Grofman and Nathaniel Persily both have valuable recent experience as special masters in the 2011 redistricting cycle and subsequent litigation. Furthermore, Thomas Bryan and Professor Grofman have familiarity with Virginia, Mr. Bryan as a resident of the Commonwealth, and Professor Grofman as special master in two federal redistricting cases, Bethune-Hill v. Virginia State Board of Elections and Personhuballah v. Alcorn. These three nominees also have multiple peer-reviewed publications relating to redistricting. It is our sense that any of them would render high-quality service to the Court in the important work ahead.

Rigorous data-driven evaluation will be invaluable to the Supreme Court of Virginia as it seeks to adopt districting plans that give all Virginians a voice in state legislative and congressional elections. We thank the Court for the opportunity to comment on this important matter.

Respectfully submitted,


Director, Electoral Innovation Lab
Princeton University

To: Interested persons in Virginia
From: The Princeton Gerrymandering Project data team (Hannah Wheelen, Amanda
Kmetz, Ari Goldbloom-Helzner, and Sam Wang)
Date: November 10, 2021

This memo documents how to calculate the individual and final letter grades that the Princeton Gerrymandering Project's Redistricting Report Card would issue for a given plan in Virginia. These report cards have been cited favorably by both political parties across the nation. For implementations in Virginia, see gerrymander.princeton.edu for the redistricting commission's publicly released maps.

To use this memo, we assume that you are normally skilled in the ability to estimate district-level parameters: shape parameters, partisan tendency, and racial composition. We describe PGP's metrics for fairness and performance levels, and describe how to use those thresholds to calculate letter grades. Letter grades, while a simplification, can be used for rapid communication to nontechnical audiences.

For best results and the most meaningful grades, we highly recommend that you use the chamber-specific Python script with your hypothetical Virginia plan as input. The script aggregates this plan with a PGP-provided precinct shapefile and PGP chamber-specific precinct-level voting estimates, both of which are freely available on Github at https://github.com/PrincetonUniversity/PGP-Virginia-2021. The output is a JSON-format file which contains a variety of numeric scores.

It is also possible to score districts using your own evaluation tools (e.g. Maptitude or Dave's Redistricting). However, note that results may sometimes come out differently because of differences in precinct-level inputs. ${ }^{1}$ For example, the commission's state Senate map A5 gives 21 Democratic-leaning seats using PGP estimates, but 23 Democratic seats using Dave's Redistricting App composite election estimates. In this case, the likely reason is that three Republican-leaning districts have margins smaller than 2 percentage points.

[^1]Numeric scores (either in the JSON file or your own estimates) can be compared to these thresholds. Grading thresholds were generated by making comparisons to millions of computer simulated maps (an "ensemble") as well as maps drawn by a corps of experienced community mappers.

Note that this report-card approach does not include racial fairness, an area sufficiently complex that PGP has not established a grading scale. PGP's approach has been to calculate and display potential ability-to-elect districts as districts that are 30-40\%, $40-50 \%$, or $>50 \%$ Black Voting Age Population (BVAP), Hispanic (HVAP), Asian (AVAP), or total minority (MVAP, defining a potential coalition district). Example racial-minority metrics for Commission maps can be seen at gerrymander.princeton.edu.

## Competitiveness:

The "ActualCompetitive" entry gives the estimated number of competitive districts, defined as districts whose difference between Democratic and Republican vote share is less than 7 percentage points. The grade is determined using the following table.

| ActualCompetitive | "A" | "B" | "C" | "F" |
| :---: | :---: | :---: | :---: | :---: |
| Congress | 4 or more | 3 | 1 to 2 | 0 |
| State Senate | 10 or more | 8 to 9 | 4 to 7 | 0 to 3 |
| House of Delegates | 19 or more | 15 to 18 | 9 to 14 | 0 to 8 |

## Partisan Fairness:

The "DemWins" entry gives the estimated most-likely number of Democratic wins, defined as all districts where the Democratic candidate would be favored by any margin. The starting grade is determined using the following table.

| DemWins | "A" | "B" | "C" | "F" |
| :---: | :---: | :---: | :---: | :---: |
| Congress | $7-8$ | N/A | 6 | $0-5,9-11$ |
| State Senate | $24-26$ | $23,27-28$ | N/A | $0-22,29-40$ |
| House of Delegates | $59-62$ | $56-58,63-72$ | N/A | $0-55,73-100$ |

Next, modify the grade based on the Competitiveness score. If Competitiveness received an " F ", bump down the partisan fairness grade by one letter grade (e.g. " B " becomes " C "). If Competitiveness received an " A ", bump up the partisan fairness grade by one letter grade (e.g. " $B$ " becomes " $A$ "). Other Competitiveness grades do not affect this grade.

## Geography:

The Geography grade uses both geometric compactness and county splits. The "avgReock" entry is the average Reock score, a measure of geometric compactness. The starting grade is determined using the following table.

| avgReock | "A" | "C" | "F" |
| :---: | :---: | :---: | :---: |
| Congress | $\geq 0.4184$ | $0.3241 \leq$ avgReock $<0.4184$ | $<0.3241$ |
| State Senate | $\geq 0.4370$ | $0.3622 \leq$ avgReock $<0.4370$ | $<0.3622$ |
| House of Delegates | $\geq 0.4309$ | $0.4018 \leq$ avgReock $<0.4309$ | $<0.4018$ |

Using the "countySplits" entry to grade county splits", the grade is determined using the following table.

| countySplits | "A" | "C" | "F" |
| :---: | :---: | :---: | :---: |
| Congress | $\leq 5$ | 6 to 16 | $>16$ |
| State Senate | $\leq 16$ | 17 to 46 | $>46$ |
| House of Delegates | $\leq 42$ | 43 to 80 | $>80$ |

Finally, to determine the Geography Overall Grade:
" $A$ ": if both county splits and compactness received an " $A$ "
" B ": if one of county splits and compactness received an " A " and the other a "C"
" $F$ ": if both county splits and compactness received an " $F$ "
"C": otherwise

[^2]
## Final Letter Grade:

Take the partisan fairness grade (which incorporates any changes due to competitiveness as described above). This is the final letter grade unless the overall geography grade is an "F", in which case the final letter grade is bumped down by one letter grade.

# WW leagueof women voters* 

November 10, 2021

## Board of Directors

2021-2023

## Officers:

## President:

Deb Wake
1st V.P./
Arrangements:
Joan Porte
2nd V.P.:
Erni Bridges
Secretary:
Jes Davis
Treasurer:
Debbie Combest

## Directors:

Doris Bey
Janet Boyd
Carolyn Caywood
Denise Harrington
Andrianne Konstas-
Salvette

Supreme Court of Virginia
100 N. $9^{\text {th }}$ Street, $5^{\text {th }}$ floor
Richmond, VA 23219

Dear Justices,
In November 2020, Virginia voters supported a constitutional amendment that would take redistricting out of the control of the majority party and put some of that power back into the hands of voters by giving citizens seats on the redistricting commission and giving citizens chairmanship of the commission. In addition, the new process allowed for transparency and public input in the form of comments at commission hearings, meetings, via email and via the commission website. Unfortunately, the commission deadlocked because of partisanship and gamesmanship and refusal to compromise and work fairly on behalf of voters.

Now that the public trust and potential for fair maps is in the hands of our Supreme Court Justices, adherence to the rules in the governing statute is imperative. Your job now is to choose two special masters who will take over the process and draw the maps that the commission could not. Virginia code, as established by SB203, lays out some of the qualifications for the special masters. For example, once the commission failed to submit plans, the legislative leaders of the two largest parties are each required to submit a list of three or more nominees to be special masters. The list shall include "a brief biography and resume for each nominee, including the nominee's particular expertise or experience relevant to redistricting."
The Court shall then choose one special master from each party. These special masters "shall have the requisite qualifications and experience to serve as a special master and shall have no conflicts of interest. In making its appointments, the Court shall consider any relevant redistricting experience in the Commonwealth and any practical or academic experience in the field of redistricting."

[^3]In addition, Virginia code stipulates:
8. A map of districts shall not, when considered on a statewide basis, unduly favor or disfavor any political party.

Virginians are not registered with a political party. Representative democracy means being able to elect someone to represent constituent interests - not the interests of the representatives or the parties to which they may belong. The best way for the court to protect the interests of voters is to ensure the process is transparent and that the most qualified people are selected to serve as special masters. According to law, these individuals should have redistricting experience and expertise and no conflict of interest. To ensure the maps do not unduly favor or disfavor a political party, the special masters should not be unduly influenced by either political party. Their duty and the court's duty is to represent all Virginians (whether they are eligible to vote or not) because that is what is prescribed in the taking of census data.

Sincerely,
Der Wake
Deb Wake
President, League of Women Voters of Virginia

| From: | \|v2bwl |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican nominees for redistricting |
| Date: | Wednesday, November 10, 2021 4:35:18 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing today as a citizen of Prince George County, Virginia, and a legal Voter. I strongly OPPOSE the Republican nominees and request they be disqualified.

We should be appointing individuals who are highly qualified in their respected fields and whose focus is on fair representation, not partisan politics. The Republican nominees have a history of gerrymandering and should never participate in Virginia redistricting efforts.

Every Virginian should feel comfortable knowing their vote is equal to everyone else's.
Politics, specific gerrymandering, has no place in the voting booth.
Sincerely,
Chris Jennings
9639 Sandy Ridge Rd
North Prince George, VA 23860

```
From:
To:
Subject: Viewpoint on Redistricting for Albemarle County and Charlottesville
Date: Wednesday, November 10, 2021 4:36:43 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Justices of the Supreme Court of Virginia
I am a 78-year-old native of Virginia who grew up in Pittsylvania County but have spent most of my working life elsewhere (primarily in New Orleans and New York City). I am a graduate of the University of Virginia School of Law and, following my retirement from the practice of law in New York City, I moved back to Virginia and settled in Albemarle County (just outside the city limits of Charlottesville) in 2011.

I was not familiar with the local political landscape when I moved into the Charlottesville/Albemarle County area, and was very surprised to learn that the County I am living in is carved up so that parts of it are in four different House of Delegates districts! Three of those four segments of Albemarle County are in "safe" Republican districts, despite the fact that the County now leans heavily Democratic (with $62 \%$ of the vote in the recent election for Governor going to the Democratic candidate).

Thus it seems to me that most of the voters in Albemarle County are not able to have their views adequately represented in the House of Delegates because 3/4 of our Delegates are much more conservative than most of the people they are supposedly representing.

Consequently, I hope you will seriously consider keeping Albemarle County together as a single unit (or two at the most, if one is not possible), together with Charlottesville, which is surrounded on all sides by Albemarle County and which has similar political leanings.

I also hope that Albemarle County (and Charlottesville) can be placed in a new Congressional District other than the current monstrosity that is the highly gerrymandered 5th district, which extends from the North Carolina state line almost to the D.C. suburbs (over 200 miles). As the 5th District is currently constituted, there is no hope of electing a Congressman who represents the predominant local views of Charlottesville/ Albemarle County voters on major issues. From my perspective, I do not currently have a Congressman that I can reasonably expect to seriously consider my views on such issues.

Sincerely,
William C. Love, Jr.
2659 Hydraulic Road, Apt. D Charlottesville, VA 22901
(434) 202-1571

```
From: Diana Smith
To: Redistricting
Subject: Redistricting Master Mapper
Date: Wednesday, November 10, 2021 4:38:35 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good afternoon,
The people of Virginia were sold on the Amendment using phrases such as "No Gerrymandering", "Bi partisan" and Citizen commissioners.

Since the beginning of the commission none of the ideals or promises came to pass.
I saw map after map drawn by Republicans that showed clear intent to politically gerrymander. I saw a bit of the same with Democrats (not so obvious).

I listened to all of the meetings. Things went wrong from the beginning -- two lawyers, two mapping teams and failure to compromise anywhere.

When I saw the proposed Congressional District maps, I signed up to testify. The map (also drawn by "citizen" Tom Davis") that the republicans were proposing joined
Western/Rural/White Va (frederick, clark, Fauquier) with the urban/suburban county of Prince William that has one of the most vibrant \& diverse populations that can be found in Virginia.

On the face of this map one could see issues galore -- the Appalachian Trail crosses through one side and the challenging transportation arteries of routes 28 and 95 through the other. There is no commonality in economy, transportation, life styles, religions, communities, backgrounds and voting history. It was a map designed to dilute and remove the influence of Prince William County. That's what my testimony would have been, including charts and tables of supportive data and social analysis.

But then, I received EMAIL from the commission -- they were cancelling all further meetings. And the mapping process would move to the SCOVA.

Please do not compound this debacle of partisan politics by being a partisan court. Please employ a master mapper from the community of expertise and not associated in the world of politics. Surely the Brennan Center or the Princeton Center could offer good unobjectionable candidates to fulfill this need.

The ugliness of the commission process exposes deep issues in Virginia. Please do not add to this; instead find a judicious solution that has no partisan cloud.

Thank you, Diana Smith
2429 Freetown Drive
Reston Va. 20191

| From: | beardsinva |
| :--- | :--- |
| To: | Redistricting |
| Subject: | keep Charlottesville/ Albemarle in same districts |
| Date: | Wednesday, November 10, 2021 4:38:59 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sir or Madam:

I write as a citizen of the Commonwealth and a taxpayer and civic activist in Albemarle County.

It is imperative that Albemarle/ Charlottesville should not be gerrymandered, split up again into four different legislative districts, as is the case currently. My delegate, for instance, lives in the Shenandoah Valley, which does not have the same common interests as Albemarle and the piedmont.

Albemarle/ Charlottesville should also be redistricted into a Congressional district that stretches to the east along I-64, taking in the Richmond suburbs. The current fifth lumps us into a New Jersey-sized monolith, meaning we have no common interests, too, with other parts of the district, including Southside and Fauquier.

Please listen to us in this process.
Thank you for your time and energy to make Virginia redistricting a success.
Sincerely,
Robert E. Beard
845 West Leigh Dr.
Charlottesville, Va. 22901
(434) 996-1188
beardsinva@comcast.net

| From: | Vonni Stamp |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Objection to the GOP nominees |
| Date: | Wednesday, November 10, 2021 4:49:22 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I have serious objections to the GOP nominees for what is supposed to be a non partisan redistricting committee. These nominees are on the Republican political payroll in one form or another and should not be viewed as non partisan. The point of the amendment being approved was to ensure non partisan, fair and transparent redistricting. This cannot occur with partisan nominees.

Please disqualify these nominees and enforce the non partisan part of the redistricting process.
Thank you
Vonni Stamp
Round Hill, VA

| From: | Gail Christie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Special masters |
| Date: | Wednesday, November 10, 2021 4:49:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The citizens of Virginia passed the constitutional amendment establishing a redistricting commission because they wanted fair, unbiased drawing of district lines. Unfortunately, it now falls on the Court to do this. I urge you to reject the nominees proposed by the Republicans and direct them to submit new, unbiased nominees. These three nominees are partisan political operatives who have interests in creating maps that will unduly favor the Republican party. It is tremendously important that the Court set a precedent for the creation of fair, nonpartisan maps, in accordance with the wishes of the electorate.

Sincerely yours,

Gail E Christie
3509 Walkers Ferry Road
Midlothian, VA 23112

| From: | Emily Little |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair lines |
| Date: | Wednesday, November 10, 2021 4:50:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Virginia Supreme Court:
I am writing to express my alarm that three of the proposed Special Masters for the redistricting process appear to be committed partisans. They are Republicans, but that is not the important point; there should be no partisan operatives on either side. I ask the Court to reject these proposed Masters and insist on non-partisan members all around who are committed to fair legislative maps.

There was at some point someone who suggested that high school students be in charge to keep it more fair. Please we hope we can trust you with this job.

Thank you,
Emily Little, RN
Charlottesville, VA
--
Emily Little
emilyblittle@gmail.com
2076692480

[^4]| From: | Virginia Smith |
| :--- | :--- |
| To: | Redistricting |
| Subject: | New Redistricting Maps |
| Date: | Wednesday, November 10, 2021 4:52:33 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Members of the Supreme Court of Virginia
From: Virginia M. Smith Citizen of the Commonwealth
It has come to my attention that the special master nominees submitted by the Republican legislators have a questionable history of drawing redistricting maps that demonstrate gerrymandering. Certainly, you are aware of the financial ties these special master nominees have with Republican organizations.

I am confident that your goal is to be free of the appearance of political influence. Please keep this reachable goal as your guidepost. Based on your goal for Virginia, I ask that you consider disqualifying the special master nominees submitted by members of the Virginia House and Senate.

Living in the Commonwealth of Virginia has so many benefits, but the one I enjoy most is that we aim high, especially, when it comes to fair representation and understanding the needs of our voters.
Earlier in the redistricting process, a map was presented that included a new senatorial district in Southside Virginia. That particular map reflected voters' needs in Southside Virginia. Please, let this new senatorial district become a reality for me and my fellow Virginia voters.

Best regards,
Virginia M. Smith

## Virginia M. Smith

former State Senate candidate (district 15 )
Career K-8 Educator
Adjunct Professor
Children's Book Author
"correction does much, but encouragement does more."

| From: | Sarah Sussan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair redistricting in VA |
| Date: | Wednesday, November 10, 2021 4:54:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the VA Supreme Court:
I agree with Senator Saslaw's evaluation of the selection of the three Masters proposed by the Republicans for redistricting. They are not neutral, as they should be in this monumental effort. They should be non-partisan and experts in their field; they are not.

Please find that the Republicans need to propose 3 neutral, qualified masters.
Sincerely,
Sarah and David Sussan
1208 Wesanne Ln, Midlothian, VA 23114
Cindy Sussan
Cindy.Sussan@gmail.com
804-543-4409
Texting me is usually faster!

| From: | Herschell Emery |
| :--- | :--- |
| To: | Redistricting |
| Subject: | For nonpartisan redistricting, reject Republicans" 3 partisan, discredited nominees for Special Master |
| Date: | Wednesday, November 10, 2021 4:59:55 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,
Virginians came together to change our traditionally partisan redistricting process into one that would be transparent and nonpartisan, fair to all, and that would encourage participation in our democracy.

Yet the Virginia Republican caucus has submitted names of 3 hyper-partisan individuals to be considered as assistants to our Supreme court in redrawing our maps fairly?! This blatant disregard for the will of Virginia voters must not be rewarded. I urge you to reject partisan nominees.

Herschell Emery
3509 Walkers Ferry Rd
Midlothian, VA 23112

| From: | Shirley Lavin <br> To: |
| :--- | :--- |
| Subject: | Redistricting |
| Dair redistricting please | Wednesday, November 10, 2021 5:00:08 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Your Honor,

The public spoke loud and clear when it voted on the redistricting referendum: draw boundaries fairly.
All of this monkey business by the Republicans is a stain on the Commonwealth. Please reject their nominees.
Pulling random names from a hat would be fairer to constituents!
I for one have NEVER met, heard from or seen from afar my representative because he feels safely cocooned in his gerrymandered district and could not care less about the outlying "stragglers" of District 65.

Please- let our work on OneVirginia not be in vain.

Thank you
From Shirley Lavin

| From: | Catherine Cazares |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, November 10, 2021 5:04:23 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Justices,

I agree with Senator Saslaw.
Please order that all map masters to be neutral, nonpartisan and experts in their field.

Sincerely,
Cathy Cazares
N Chesterfield, VA

Sent from my iPhone

| From: | Lauren Robinson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Republican nominees |
| Date: | Wednesday, November 10, 2021 5:44:52 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral.
Our courts are supposed to be free of politics-which is why they enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment. These candidates backgrounds do not meet the provisions. Below is why I do not want these candidates presented as nominees.

Thomas Bryan was paid \$20,000 by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely,
Lauren Robinson
Midlothian, VA

| From: | FRANCES CRUTCHFIELD |
| :--- | :--- |
| To: | Redistricting@vacourts.com |
| Cc: | Frances Crutchfield |
| Subject: | Map Masters |
| Date: | Wednesday, November 10, 2021 4:04:29 PM |

Dear sir:

Senator Saslaw is correct,
And it is very true indeed.
The Republican proposed map masters
Are not whom we should heed.
Neutral and nonpartisan
Are the map masters we need.

Sincerely,
Frances Broaddus-Crutchfield
oldscouts2@aol.com
Sent from my iPhone

```
From: Will Pace
To: Redistricting
Subject: Please support how Danville and Pittsylvania County were drawn for General Assembly Districts
Date: Wednesday, November 10, 2021 7:36:06 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Madam Clerk,
My name is Will Pace, and I am a resident of Pittsylvania County. I also serve as Mayor of Chatham, which is the county seat of Pittsylvania County. I have been following the efforts of the Redistricting Commission and have been anticipating how the City of Danville and Pittsylvania County would look like. While I am disappointed that the Redistricting Commission could not find a solution with the House of Delegates and Senate maps, I appreciate what both the Republican and Democrat mapmakers did in the end in the matter of how Danville and Pittsylvania County were drawn.

The Senate District maps proposed by the Republican and Democrat mapmakers (A5 and B5) are perfect for Pittsylvania County and Danville. Both maps created a Senate district that included Danville, Martinsville, Pittsylvania County, Henry County and Franklin County. None of these localities are split in different Senate districts. Leave this Senate district as was proposed by both the Republican and Democrat mapmakers as is.

I support how the House District maps (A7 and B7) were drawn. While it is not perfect, A7 and B7 were by far the best versions out of any maps proposed as they both keep our communities of interest intact. These maps split Pittsylvania County north and south (not east and west), which is the way it should be done. In addition, these maps maintain for the most part the communities of interest for Chatham, Gretna and Hurt all in one House district while maintaining the communities of interest (COI) for Danville in another House district. Both maps put northern and central Pittsylvania County in a House district with all of Franklin County while southern Pittsylvania County and Danville are in one whole district with a few precincts from Henry County including the town of Ridgeway in this House district. I have listed the towns and cities communities of interest below.

Hurt COI: Town of Hurt, Motley, Renan, Sycamore
Gretna COI: Town of Gretna, Mt. Airy, Pittsville, Sandy Level
Chatham COI: Town of Chatham, Callands, Dry Fork, Java, Riceville, Rondo, and
Tightsqueeze
Danville COI: City of Danville, Bachelors Hall, Berry Hill, Brosville, Kentuck, Laurel Grove, Mount Cross, Mount Hermon, Ringgold, Stony Mill, Tunstall, and Whitmell.

Finally, Danville City and Martinsville City should NOT be placed in the same House of Delegates district as these cities and their surrounding areas are NOT communities of interest. Putting the cities of Danville and Martinsville in the same House of Delegates district will split their respective communities of interest and will create a Gerrymandered House District. Martinsville's COI are Chatmoss, Collinsville, and Fieldale. A Gerrymandered Danville CityMartinsville City House District will keep Chatmoss, Collinsville, and Fieldale outside of a

House district with the City of Martinsville, and will keep Kentuck, Laurel Grove, Mount Cross, Mount Hermon, and Ringgold outside of a House district with the City of Danville. The Redistricting Commission was created to avoid the creation of Gerrymandered districts. Creating a Danville City-Martinsville City House District will result in a Gerrymandered district that will split communities of interest.

In closing, I hope that you will support what the Democrat and Republican mapmakers drew for the House of Delegates and Senate in regard to Pittsylvania County and Danville. Please do everything to keep these communities of interest intact and leave Senate District maps (A5 and B5) and House District maps (A7 and B7) as is for our region. Thank you.

Sincerely,

Will Pace
Mayor of Chatham

| From: | Karen Nuzzo |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Preference for individuals redrawing Virginia's redistricting lines. |
| Date: | Wednesday, November 10, 2021 7:54:03 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Justices,
I would like to see Thomas Bryan serve as the Republican serving to redraw the new redistricting lines and Bernard Grofman to serve as the Democrat. Thank you.
Sincerely,
Karen R. Nuzzo
1314 Coltons Mill Rd
Bedford, VA 24523

Sent from my iPad

| From: | Martha Turner |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment from a frustrated voter |
| Date: | Wednesday, November 10, 2021 8:52:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sirs,
i am frustrated that the non-partisan redistricting has turned out to be totally partisan with the current nominees. I request that you disqualify the GOP nominees as they have an agenda not to improve democracy, but to sway elections in a partisan direction. This is a very real concern in today's political environment.
Please disqualify Thomas Bryan, Adam Kincaid, and Adam Foltz. Here are my reasons

- Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
- Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.
- Adam Foltz is a long-time Republican operative who worked on the mapdrawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional districts.

Please consider the fair and right way to serve the all the people of Virginia.

Sincerely,
Martha M. Turner
Midlothian Va 23113

| From: | katherine slaughter |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public Comment |
| Date: | Wednesday, November 10, 2021 9:15:02 PM |
| Attachments: | Redistrictinq_OCT21.docx |
|  | Redistricting.docx |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Members of the Supreme Court:
In choosing the special master, I hope that you will select a team who are experienced at drawing nonpartisan district lines based on the criteria of the given state. The failure of the process in the Redistricting Commission was due to adherence to party politics. The special masters should not be "stand-ins" for either political party. Other states do have nonpartisan redistricting so I know that there are professionals experienced in the art of drawing districts who are not partisan stand-ins.

I have written two separate comments at two different meetings of the Redistricting Commission and attach these to this email.

I especially ask that you direct the masters to seek to make the districts conform to "communities of interest." In the latest Commission draft map, our area of Charlottesville-Albemarle was once again divided into four districts, including districts that cross the mountain and thus are not a "community of interest." That is similar to the current situation in which our area is gerrymandered into numerous districts. My initial comments from last January made suggestions about how to discern communities of interest noting specifically the issues in Charlottesville.

Thank you for your consideration of my public comment.

[^5]Please stick to your idea of retaining communities of interest.
Do not gerrymander Albemarle County. The Republican plan divides it into three districts; the Democratic plan makes one of two districts cross the Blue Ridge to Augusta County - and while Augusta and Albemarle may share these beautiful mountains, they are not a community of interest.

Neither does Albemarle share interests with the Lynchburg area an hour to the south.
To get the additional population to complete any Albemarle district please add areas from Nelson, Fluvanna, or Greene, all counties adjacent to Albemarle and part of the Planning District 10: they have worked together on common issues. People in these counties and Charlottesville commute between them for work, family, medical care, cultural activities and shopping.
(Likewise Augusta over the blue Ridge is connected to communities in the Valley and Lynchburg to the areas of Amherst, Campbell and Bedford).

Please stick to your original guiding principles and do not gerrymander. This is the raison d'etre for the founding of your commission.

Kay Slaughter

To: Redistricting Commission
From: Katherine Slaughter, Former Charlottesville Mayor, former chair, Thomas Jefferson Planning District
Re: Virginia Planning District Boundaries as Basis for Redistricting; Opposition to Including Political Addresses in mapmaking.

$$
1 / 11 / 2021
$$

I am Kay Slaughter of Charlottesville, a former city councilor and Mayor and a retired environmental attorney who lobbied the General Assembly in the '90s and early 2000s.

I am here to urge commission members, despite your Republican or Democratic label, to reject political considerations in designing district boundaries. I request you utilize planning district boundaries AND exclude addresses of General Assembly members in the mapping criteria.

The criteria for voting districts should include compactness, contiguity, racial equity, and representation by communities of interest. I focus here on communities of interest.

Past gerrymandering has led to absurd results, for example our area is split into four separate Senate districts: two including western neighbors in the Shenandoah Valley, and one from Spotsylvania in the East, and Lynchburg to the south. Likewise, our area is split among five House districts, including two from the Valley and Richmond. Our Congressional District stretches from Fauquier to the North Carolina border. Across the state other glaring examples abound where the communities of interest are split up and not truly represented by a common legislator.

I urge you to correct this by adopting Planning Districts as your working template for legislative and congressional districts. PDs are special districts created by Virginia statute. The 23 planning districts provide the best basis for creating communities of interest.

The counties and cities in these PDs are contiguous, share a common geography, and have collaborated on common interests, such as housing, transportation, economic development, and waste management. Because the Planning Districts are creations of the state government, using their structure as a template for redistricting is most appropriate.

For example, Charlottesville and Albemarle County are part of the Thomas Jefferson Planning District 10, which also includes Nelson, Louisa, Fluvanna, and Greene. Neighboring Rappahannock-Rapidan District 9 encompasses Madison, Orange, Culpeper, Rappahannock, and Fauquier.

Congressional districts could be fashioned by combining some portions of adjacent planning districts. To reach the ideal size for congressional districts, some PDs would need to be combined in whole or in part with adjacent PDs

I hope you will adopt this model and that you will exclude political addresses in your redistricting mapping criteria. I am happy to answer any questions.

```
From: eleanore rhoden
To: Redistricting
Subject: disqualify the three current GOP special master nominees,
Date: Wednesday, November 10, 2021 9:21:55 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Voters did not think they were asking maps to be drawn by partisan operatives when they approved the nonpartisan redistricting constitutional amendment in 2020. All of the GOP's nominees are currently on the payroll of Republican organizations; how can they be trusted to draw fair maps in a transparent and inclusive way? The citizens of Virginia voted to depolitize the construction of legislative districts. Democracy is subverted when the democratic process is manipulated. For that reason, I ask that you disqualify the GOP nominees as they have an agenda not to improve democracy, but to sway elections in a partisan direction.

The Democrats have set an example in submitting special master nominees who are leading respected academics in the fields of political science, demographics, and law. We hope Republicans will do the right thing for the Commonwealth and choose new nominees whose participation in this important process will ensure Virginians have fair representation in state and federal government.

Below is a short background on the Republican nominees:
Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.
Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps."

Sincerely, Eleanore Rhoden
Midlothian VA

| From: | Lames Croll |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public Comment |
| Date: | Wednesday, November 10, 2021 9:30:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Dear Madame Clerk,

My name is J ames Croll, a high school senior in Loudoun County. I write today to urge you to consider the Democratic motion to suspend the special masters nominated by the Republican Party, Mr. Bryan, Mr. Kincaid, and Mr. Foltz. All three have demonstrated partisan interest in previous redistricting ventures (Kincaid in Ohio, Foltz in Wisconsin, Bryan was paid 20k from the Virginia Senate Republicans) which I believe disqualifies them from being able to draw a fair map. The purpose of the commission was to draw fair districts that did not demonstrate partisan favoritism in any way, but if any of the three Republican nominees were to become the final cartographer, a non-representative and gerrymandered map would surely be the result. I do not want a Democratic map or a Republican map, simply a fair map that accurately represents the partisanship and communities of interest of the Commonwealth of Virginia.

As for the actual map itself, I have some suggestions about communities of interest that should remain together. Having three Northern Virginia districts is fair in my opinion (one for Arlington/I nner Fairfax, one for Greater Fairfax and parts of PWC, and one for exurban Loudoun and Clarke Counties). The first issue is in Norfolk. The commission repeatedly ignored the fact that a VRA district is required in that area for a majority-black congressional seat, something that must be implemented in the final version. Another issue lies with the drawing of the 5th congressional district, currently represented by Bob Good. This district stretches from Fauquier County to the North Carolina border, not representing any communities of interest and not providing adequate/representative government to individuals living in places like Charlottesville and Albemarle County. I ask that the Court investigate creating a congressional seat similar to the 7th district on commission draft C1-B, a seat that combines the southern exurbs of NoVa, Quantico, and Charlottesville/Albemarle County into a new district that represents both the population and the partisanship of this area. A side effect of the creation of this district is that (according to C1-B) a new Southside district will be
created that combines another community of interest into one congressional seat that is currently represented by four congresspeople. I also believe that the Shenandoah Valley and the SW panhandle require independent districts, as both have distinct cultural identities that need representation from the right people. The current VA-02 and VA-04 should be fine to mostly leave intact as they both fairly represent the communities of Virginia Beach/Eastern Shore/Hampton and Richmond (however I think that VA-04 should incorporate more of Mechanicsburg/suburbs but that is a minor detail).

Once again, I implore you to expel the Republican nominees in exchange for cartographers that hold fairness over partisanship. Thank you very much for your time.

J ames Croll

| From: | Leslie Rubio |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fwd: Political Maps-Redistricting |
| Date: | Wednesday, November 10, 2021 9:50:50 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am forwarding my email that was sent before the deadline but returned as undeliverable. I am so sorry as I had .com instead of .gov.
Please accept my apologies.
---------- Forwarded message ---------
From: Leslie Rubio [lesliesu123@gmail.com](mailto:lesliesu123@gmail.com)
Date: Tue, Nov 9, 2021, 4:03 PM
Subject: Political Maps-Redistricting
To: [Redistricting@vacourts.com](mailto:Redistricting@vacourts.com)

I am writing to express my dismay about hearing of the persons recommended to draw maps for Virginia's districts.

Please reject these recommendations, and ask members to find persons who are non-partisan and can fairly draw the new maps.

Thank you,

## --

Leslie Rubio
Activist/Advocate for Women
Commonwealth of Virginia Notary Public \#7278454
(804) 484-9884

| From: | Leigh Eicher |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting in VA |
| Date: | Wednesday, November 10, 2021 9:59:40 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
Our courts are supposed to be free of politics. The Redistricting Map Masters the Republicans have proposed are not even close to neutral or nonpartisan experts in their field.

- Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
- Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.
- Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering.

Please demand the Republicans to select 3 neutral, nonpartisan map Masters who are acknowledged experts in their field with no history of gerrymandering.

Kind Regards, Leigh Eicher
Henrico, Virginia

| From: | Robert Haley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | GOP Special Master Candidates |
| Date: | Thursday, November 11, 2021 12:03:01 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Blatent partisan redistricting candidates must not be allowed! The VA S.C. must disqualify!!
Robert Haley
Reston, VA
haleyr@sprintmail.com

Sent from my iPhone

| From: | David Walatka |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Concerned about the Republican strong tilt for the redistricting |
| Date: | Thursday, November 11, 2021 6:17:06 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I do not like what the Republicans are doing with the strong tilt in favor of the Republicans with the redistricting. That is not benefiting the citizens of Virginia.

Please work to have a bipartisan setup for the new redistricting.

David Walatka
20876 Butterwood Falls Terr
Sterling, VA 20165
571-313-0512

Sent from Mail for Windows

| From: | cwhumphries125@gmail.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Objection to three GOP nominees |
| Date: | Thursday, November 11, 2021 8:12:10 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,

I have read with dismay the backgrounds of three of the special master nominees to assist in the redistricting effort in Virginia. Thomas Bryan, Adam Kincaide, and Adam Foltz are clearly and demonstrably partisan and cannot be counted on to serve the will of Virginians in establishing as equitable a redistricting as possible. The whole purpose of the referendum was to make voting fairer in Virginia and this trio will do their best to skew those results. This is abominable, and not the will of the people.

I request these three be rejected, and hopefully the Republicans will show more integrity in nominating three others without the baggage and clear intent to cheat that these three have.

Thank you.
Carol Humphries
Rockbridge Baths, Virginia

Sent from Mail for Windows

| From: | Lennifer Garvin-Sanchez |
| :--- | :--- |
| To: | Redistricting |
| Subject: | redistricting |
| Date: | Thursday, November 11, 2021 8:23:37 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I urge you to reconsider the members appointed to the committee for redistricting. It seems that the committee is not a politically neutral committee and this is NOT what the voters wanted. Please make sure that the committee is as neutral as possible, and not stacked with political operatives.

Thanks for your time,
Jennifer Garvin-Sanchez
12135 Petersburg St, Chester, VA 23831

| From: | Christine Walther-Thomas |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Objection to BRYAN, FOLTZ, KINCAID appointments |
| Date: | Thursday, November 11, 2021 8:25:29 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## To Whom It May Concern:

I am writing to express my concerns regarding redistricting in the Commonwealth and the Virginia Courts consideration of three partisan appointees in this process. Like our court system, redistricting must remain nonpartisan to ensure the rights of all Virginia citizens and to maintain confidence in decisions rendered.

Virginia enacted conflict of interest provisions to facilitate fairness through the nonpartisan redistricting constitutional amendment. Inappropriately, Republican caucuses now ask our Supreme Court to effectively sanction partisan map drawing with the appointments of three clearly partisan nembers:

1. Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on 9/3/2021, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.
2. Adam Kincaid, Executive Director of the National Republican Redistricting Trust, has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.
3.Adam Foltz is a long-time Republican operative who worked on the map-drawing in various states where gerrymandering has occurred.

To ensure fair representation of all Virginia citizens and transparency in this important process, the Supreme Court must ensure this work is completed by the proffessional experts--not partisan operatives. Let Virginia's work serve as a model for other states.

Thank you for your consideration of this request.
Christine S. Walther-Thomas, PhD
3121 Summerhurst Drive
Midlothian,VA 23113

# WW leagueof women voters* 

November 10, 2021

## Board of Directors

2021-2023

## Officers:

## President:

Deb Wake
1st V.P./
Arrangements:
Joan Porte
2nd V.P.:
Erni Bridges
Secretary:
Jes Davis
Treasurer:
Debbie Combest

## Directors:

Doris Bey
Janet Boyd
Carolyn Caywood
Denise Harrington
Andrianne Konstas-
Salvette

Supreme Court of Virginia
100 N. $9^{\text {th }}$ Street, $5^{\text {th }}$ floor
Richmond, VA 23219

Dear Justices,
In November 2020, Virginia voters supported a constitutional amendment that would take redistricting out of the control of the majority party and put some of that power back into the hands of voters by giving citizens seats on the redistricting commission and giving citizens chairmanship of the commission. In addition, the new process allowed for transparency and public input in the form of comments at commission hearings, meetings, via email and via the commission website. Unfortunately, the commission deadlocked because of partisanship and gamesmanship and refusal to compromise and work fairly on behalf of voters.

Now that the public trust and potential for fair maps is in the hands of our Supreme Court Justices, adherence to the rules in the governing statute is imperative. Your job now is to choose two special masters who will take over the process and draw the maps that the commission could not. Virginia code, as established by SB203, lays out some of the qualifications for the special masters. For example, once the commission failed to submit plans, the legislative leaders of the two largest parties are each required to submit a list of three or more nominees to be special masters. The list shall include "a brief biography and resume for each nominee, including the nominee's particular expertise or experience relevant to redistricting." The Court shall then choose one special master from each party. These special masters "shall have the requisite qualifications and experience to serve as a special master and shall have no conflicts of interest. In making its appointments, the Court shall consider any relevant redistricting experience in the Commonwealth and any practical or academic experience in the field of redistricting."

[^6]In addition, Virginia code stipulates:
8. A map of districts shall not, when considered on a statewide basis, unduly favor or disfavor any political party.

Virginians are not registered with a political party. Representative democracy means being able to elect someone to represent constituent interests - not the interests of the representatives or the parties to which they may belong. The best way for the court to protect the interests of voters is to ensure the process is transparent and that the most qualified people are selected to serve as special masters. According to law, these individuals should have redistricting experience and expertise and no conflict of interest. To ensure the maps do not unduly favor or disfavor a political party, the special masters should not be unduly influenced by either political party. Their duty and the court's duty is to represent all Virginians (whether they are eligible to vote or not) because that is what is prescribed in the taking of census data.

Sincerely,
Der Wake
Deb Wake
President, League of Women Voters of Virginia

| From: | Fran Larkins |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Senate Districts - Stafford County and Fredericksburg |
| Date: | Thursday, November 11, 2021 10:24:53 AM |
| Attachments: | image.png |
|  | image.pnd |
|  | image.png |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TO: Justices of the Supreme Court of Virginia and Special Masters
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

We are residents of southern Stafford County, just across the Rappahannock River from the City of Fredericksburg. We are currently in the ridiculously gerrymandered $28^{\text {th }}$ Virginia Senate District which includes portions of five counties. Stafford County is "represented" by three different state Senators.


Current Map of 28th Senate District

As you redraw state Senate maps, please consider -


Commission Map \#103 - Senate B3, September 18, 2021
This Commission map does an excellent job of keeping our "community of interest" together:

- Residents of this proposed Senate District 13 all have a Fredericksburg address and are connected economically, socially, and historically with Fredericksburg as the hub.
- It logically follows the North/South I-95 transportation corridor. Stafford County is the third fastest growing county in Virginia and many residents use I-95 to commute north to work. I95 is used for shopping and enjoying restaurants in downtown Fredericksburg or northern Spotsylvania.
- It does not group us with more rural King George County with which we have very little in common other than a state Senator.
- Stafford County is divided into only two Virginia Senate districts rather than three.
- Fredericksburg is kept whole.
- Other citizen comments can be read at the dots on the live map at https://www.virginiaredistricting.org/legdistricting/comments/plan/103/1

Another option would be a Commission map posted October 8, 2021 -


Commission Map \#255-B5 Statewide SD 10-8-2021
This more recent map keeps Stafford County and Fredericksburg whole and, a positive, doesn't include King George County. However, the part of northern Spotsylvania County that runs along Route 3 west should also be in the Fredericksburg "community of interest. " (See Map \#103 above.) Public comments for each dot may be seen at https://www.virginiaredistricting.org/legdistricting/comments/plan/255/1

Respectfully,

Fran and Richard Larkins
40 Battery Point Dr.
Fredericksburg, VA 22406
Franlarkins40@gmail.com
703-517-9032

Michael and Lynne McCay
26 Battery Point Drive
Fredericksburg, VA 22406
mdmlkm73@verizon.net
540-373-1960

Renee Marshall
239 Long Point Dr.
Fredericksburg, VA. 22406

Elizabeth and Michael Spragins
9 Brant Ct.
Fredericksburg, VA 22406

Clayton Hill
3 Mendota Way
Fredericksburg, VA 22406

Paul and Janet Bonner
19 Eagle Bluff Street
Fredericksburg, Virginia 22406
imbonner@verizon.net

Kim Jacoby
2 Whaleback Lane
Fredericksburg, VA 22406

Idella Edwards
188 Hyannis PI
Fredericksburg, VA 22406

Elliott Rubinstein
167 Long Point Dr.
Fredericksburg, VA 22406

Deborah J Wilcox
80 Table Bluff Drive
Fredericksburg, VA 22406

Elizabeth \& Bruce Smith
281 Long Point Drive
Fredericksburg VA 22406
epsmith@gisco.net
(315)286-4551

Eleaner Loos
111Montauk Ave
Fredericksburg, VA. 22406

Juanita Channel

183 Hyannis PI.
Fredericksburg, VA 22406

Diane S. Shea
15 Eagle Bluff St.
Fredericksburg, VA 22406
shea.sullivan70@gmail.com
540-370-8868

Walter M. Mathews
Mary F. Mathews
66 Battery point Drive
Fredericksburg, VA 22406
wmmathews@me.com
516-671-4772

Susan Hadley
8 Maroochy Court
Fredericksburg, Va. 22405

Elaine Diepenbrock
55 Harborton Lane
Fredericksburg, VA 22406
ediepenbrock@gmail.com
540-654-506

Jacqueline Arthur
23 Ridge Pointe Lane
Fredericksburg, VA 22405

| From: | avirginiagentleman@reagan.com |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Roger Schweikert |
| Subject: | A Statewide Redistricting suggestion |
| Date: | Thursday, November 11, 2021 11:32:42 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Honorable Members of The Virginia Supreme Court:
Pursuant to the Rules and Procedures for Imprementing the Requirements of Article II Section 6-A of The Virginia Constitution, I submit the following comments and suggestion.

While the designated members of the Commonwealth of Virginia Bi-partisan Redistricting Committee tasked with re-drawing the state's Congressional and state Legislative Boundaries has seemingly failed, and that task has now been re-assigned to you, I have to question how an even smaller body of ten of you along with two special Masters can actually do it better than whatever the Commitee tried to do much less what the over eight million people of Virginia could do for themselves if given the opportunity. So why can't we re-draw these same political lines or lean on the already 95 pre-existing county limit lines and 38 pre-existing independent city lines that surely should provide a better map of where these lines should permanently stay? For that matter, why can't the people of each county and city be tasked with this issue to decide for themselves what is in their best interest and be permitted, encouraged, or even instructed by this Court to hold individual referenda on this issue towards even becoming separate states altogether rather than continuing to be forced to remain in a large single "purple" state?

Rural voters and urban and suburban voters in Virginia do not always share the same values or political affiliations. Smaller county or city states would, and also better reflect the ole saying that "All politics are local."

Making each county and city into a separate state would also provide a more accountable and representative voice in both The House of Representatives and The United States Senate as well as add to the number of people who could finally be added to the number of Electors who select our President every four years for the first time since 1920 and the passage of The Permanent Reapportionment Act of 1929. Sdadly this single statute was never offered to the states as a proper constitutional amendment requiring ratification by them, yet has fundamentally limited and "consolidated the power of the people into the hands of too few"* by virtue of its imposing an artificial cap on the House of Representatives and The Electoral College, both of which were specifically created to base their representation on our growing population. Simarilarly I believe it has also directly led in large part to the huge growth of our administrative and regulatory states which now set their own rules and regulations with little or no Congressional oversight or law making in the matter.

Furthermore in contrast to the 30,000 person size our founding fathers envisioned a Congressional district size should be this statue has now directly lead to huge Congressional districts of over 610,000 people, like current state Iw as also created Senate districts of over 200,000 and state Legislative districts of over 70,000 often encompassing more than one single community of interest.

For this same reason most of the people in Greene County I know and talk to where I live would prefer not to be apart of any District or State with Albemarle County, The City of Charlottesville, much less Fairfax County, or City, or any of the 22 other independent "blue"cities, or larger "blue" counties in the Commonwealth. Yet remaining one single state threatens to continue "to hold hostage" the majority of our votes to those same near and distant larger polulation centers, especially during Presidential election years and in most statewide races with few exceptions since 1974 and this year also due in part to "the
state winner take all rule" in Presidential elections rather than allowing a "by district vote count."
My solution therefore would be to order every county Board of Supervisors and every city Council to hold separate referenda on statehood instead, as soon as possible to allow each locality to decide with whom they want to be associated. For when the people have a real choice their interest is better served, rather than having to depend only on the sole wisdom of appointed judges or two special masters to decide what is in their best interest.

Finally please advise when any future public hearings on this matter will be held or when any public deliberations will be open to the public.

Respectfully submitted,
Roger R. Schweikert
a resident and former Presidential Elector from
Greene County, Virginia
434-990-9094

| From: | Sonia Zawadski |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please disqualify GOO special master nominees |
| Date: | Thursday, November 11, 2021 11:42:07 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
As a Virginia voter, I was disappointed to learn that the GOP legislative members have nominated partisan operatives payrolled by Republican organizations whose goal is to gerrymander our districts. I, and my fellow Virginians, voted in favor of nonpartisan redistricting that would ensure fair representation for all voters in our Commonwealth. Virginia Senate and House Republicans, however, are disregarding the voters' will with their selection of nominees.

Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

I humbly ask that the Court disqualify these partisan GOP nominees. Please protect nonpartisan redistricting and uphold the right of all Virginians to participate in a fair electoral process.

Thank you,
Sonia Zawadski

Sent from my iPad

## Testimony Before Redistricting Commission

## Sarah Dewees

Thank you for allowing me to speak to you. My name is Sarah Dewees and I live in Fredericksburg, Virginia. I vote in the $28^{\text {th }}$ House of Delegates in Virginia. I am also employed at the University of Mary Washington, where I work at the Center for Community Engagement. As part of my work at the Center for Community Engagement, I work with University of Mary Washington students to help them register to vote and to learn more about civic engagement. With permission, I am presenting this testimony on behalf myself and of some of the UMW students I work with. So I am presenting with University of Mary Washington, in Fredericksburg, Virginia, as my community of interest.

As part of our nonpartisan voter registration program, called UMW Votes, we have worked to educate University of Mary Washington students about how to register to vote and when to vote in Virginia, or when elections are being held. Some of the UMW students choose to register to vote in Fredericksburg, Virginia, at their campus address. They often do this because they are in Fredericksburg during fall elections, and find it easier to vote at their campus address. We try to educate UMW students regarding which candidates and issues are on the ballot. Unfortunately, the residence halls on the UMW campus are divided into two different State Delegate districts, District 28 and District 88. When I started in this job three years ago, I found out how complicated it can be to make sure that we give the right information regarding which candidates would be found on students' ballots, depending on where they lived.

The University of Mary Washington campus has a collection of residence halls, as can be seen in this map I am holding up. A new residence hall was built across Route 1 from the main UMW campus about 10 years ago. This new residence hall, and all the students who are registered to vote at that address, vote in a different House of Delegates district from all the other students who live in UMW residence halls on the rest of the UMW campus.

Now, UMW is a small college - around 4,000 students. We are not talking about a huge campus like VCU or JMU. So it was a big surprise to me to find that the UMW campus was split into two districts for the House of Delegates. So, not only is Fredericksburg a split district, but the UMW community is split too. I request that you not divide up our community of the University of Mary Washington and the residence halls on that campus.

Thank you for all your work on this commission, and for taking time to hear my comments today.

| From: | Phyllis Berg |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA Redistricting |
| Date: | Thursday, November 11, 2021 1:03:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Court Justices
I am writing today to request that you disqualify the Republican party's special master nominees to the Virginia redistricting process. Republican Delegate Todd Gilbert and Republican Senator Tommy Norment nominated partisan operatives, who are currently on the payroll of Republican organizations. It is clear that these individuals will make no effort to draw fair maps in determining future voting districts. The people of Virginia deserve fair voting maps that allow their votes to matter, and not be weakened through partisan gerrymandering. Accordingly, I hereby request that you disqualify the nominations of Thomas Bryan, Adam Kincaid, and Adam Foltz.

Sincerely,
Phyllis Berg
2930 Summerhurst Dr. Midlothian, VA 23113

| From: | Robert Latham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Opposition to Republican nominees |
| Date: | Thursday, November 11, 2021 1:33:03 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Day,
When I supported a non-partisan redisrrixting commission I wanted to see it free of partisan hacks. The Republican nominees have been critical in making heavily gerrymandered partisan maps for years.

Please reject their nominees.
--
http:

```
From: M Brennan
To:
Subject: Fwd: Please use non-partisan map masters to redraw districts
Date: Thursday, November 11, 2021 1:45:55 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
---------- Forwarded message
From: M Brennan [mbrennanedit@gmail.com](mailto:mbrennanedit@gmail.com)
Date: Wed, Nov 10, 2021, 1:05 PM
Subject: Please use non-partisan map masters to redraw districts
To: [redistricting@vacourts.com](mailto:redistricting@vacourts.com)

Please use neutral people to redraw the district maps. Polarization is destroying this country.
Our courts are supposed to be free of politics-which is why they enacted conflict of interest provisions in the enabling legislation for the nonpartisan redistricting constitutional amendment. These candidates backgrounds do not meet the provisions. Below is why I do not want these candidates presented as nominees.

Thomas Bryan was paid $\$ 20,000$ by Virginia Senate Republicans on $9 / 3 / 2021$, a fact that the Senate Republican Caucus did not disclose to the Court in nominating him.

Adam Kincaid is the current Executive Director of the National Republican Redistricting Trust, and has previously worked for the Republican National Committee, the National Republican Congressional Committee, and the Republican Governors Association. A federal court found that he engaged in partisan gerrymandering in Ohio in 2010.

Adam Foltz is a long-time Republican operative who worked on the map-drawing in Wisconsin in 2010, where a federal court found that he engaged in partisan gerrymandering. He has also been retained this year in Texas as they draw their legislative and congressional maps.

Thank you,
Megan Brennan
Moseley, VA
Chesterfield County

| From: | Minipoodle |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting; right wing operatives |
| Date: | Thursday, November 11, 2021 1:57:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a permanent resident of Fairfax County VA, I am expressing my disgust at the republican operatives republicans have chosen to manipulate districts in Virginia. Republican operatives will manipulate the process to make it impossible for Democrats to have a fair chance at holding any power in Virginia politics. In my opinion Republicans are attempting to turn our democracy into a fascist, theocratic, authoritarian regime. They are making it so that our votes do not count and our voices are silenced. Republicans play dirty.
We will never be silent in the face of republican aggression and manipulation.
I hope my life will not be threatened as a result of this message.

Cordially,
D. B. Beck

Springfield, VA
Sent from my iPad

| From: | Meg Fitzgerald |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Reconsideration |
| Date: | Thursday, November 11, 2021 2:19:36 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with Senator Saslaw that the masters the Republicans have proposed are not neutral. All map masters must be nonpartisan and experts in their field. This initial Redistricting, following the adoption of the amendment sets an important precedent.

Please order the Republicans to engage 3 neutral, nonpartisan map masters who are acknowledged experts in their field.

Sincerely,
Meghan Fitzgerald
Midlothian, VA

Sam Shirazi
6565 Washington Blvd.
Arlington, VA 22205
November 11, 2021
Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
redistricting@vacourts.gov
Dear Madam Clerk,
Pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, Rule 4(a), I write in my personal capacity of a citizen of Virginia living in Arlington to provide public comment. I previously participated at the Virginia Redistricting Commission by submitting maps and commenting on proposed maps.

While I have my own opinions about how best to draw the maps, I write instead to encourage the Court to embrace its role and not shy away from dealing with partisan realities. Based on my observations, the main reason the Commission could not agree on maps was an inability by some Commissioners to put aside partisan interests.

I understand that the Court may not want to wade into partisan waters and become accused of becoming too political. However, the reality is that the voters of Virginia entrusted the Court with an important role in the redistricting process given that the Commission did not agree to maps.

It is possible to draw maps that are fair to everyone based on commonsense principles of keeping communities of interest together, protecting minority voting rights, and maintaining competitive seats. While redistricting is by no means a simple process, it is also not an impossible endeavor with no way of creating objectively fair maps.

In terms of attempts by any party to gain partisan advantage in the process, I encourage the Court to use the most basic test of "I know it when I see it" as famously coined by U.S. Supreme Court Justice Potter Stewart. Based on my experience, it is possible to tell when maps are drawn with the goal of partisan advantage as opposed to fairness.

I once wrote in an article, "the judiciary is not simply a passive observer in the democratic process," but instead plays an important role in making sure "the guardrails of democracy stay up," and "it is the duty of judges to uphold the rule of law even if it would otherwise make them confront uncomfortable political issues. ${ }^{11}$ I encourage the Court to do what is necessary to make sure fair maps are produced, even when it requires making judgment calls that touch on partisan issues.

Ultimately, the Court is the last backstop in ensuring that all Virginians have fair maps for the next decade and keep faith in our democratic system of government. I wish the Court the best of luck in its work and know that it can rise to the moment.

Sincerely,
/s/ Sam Shirazi

[^7]| From: | Genie McCreery |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Comment: I would like to file this comment with the Virginia Supreme Court regarding the |
|  | Republican Caucuses" pick of three special master picks conflicts of interest. |
| Date: | Thursday, November 11, 2021 4:58:46 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Re: Redistricting voice

Virginia Supreme Court,

It is essential that the Virginia State redistricting process is executed as independent with balanced input and ensure all negotiations have the best interest of the people of Virginia in mind as was the original legislations' intent. The primary purpose of creating this redistricting commission in the first place was to stop partisanship and gerrymandering that has occurred in the past and continues today. It was also to establish a system consistent with the inclusiveness of our constitution and to ensure fairness, equity, impartiality and justice.
At this very moment, you have the opportunity and good fortune as Virginia Supreme Court Justices, to show your citizens your good faith effort and establish our voting districts fairly and without bias.

We are asking that you honor the wishes of your fellow Virginians to act in a way that is in concurrence with the lawful responsibilities associated with your office and the constitution. We have entrusted you the privilege to make the maps of our state of Virginia impartial and unbiassed and stop all efforts to undermine this process. The Special Masters need to be free from bias and self-interest as Senator Saslaw had stated in his letter regarding this matter.

Our request is simple: that you reject the Republicans' choice of Special Masters and demand they resubmit impartial Special Masters that have all Virginians interests in mind and not simply those of their own party. Nothing short of the trust of all Virginians is on your shoulders.

Thank you for considering our comments.

Genie McCreery

1212 Shenandoah Road
Alexandria, Va 22308
571-233-4674

| From: | $\underline{\text { Greg Brandon }}$ |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Cc: | $\underline{\text { varedistricting2021@gmail.com }}$ |
| Subject: | Conflicted Republican nominees for special master |
| Date: | Friday, November 12, 2021 8:00:31 AM |
| Attachments: | rules and procedure for implementing the requirements of article ii section 6a of the constitution of virginia.pdf |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Honorable Members of the Supreme Court of Virginia (SCOVA):
The three individuals nominated to fill the Republican Special Master position for redistricting are patently unqualified because of massive conflicts of interest. Please reject them.

- Mr. Kincaid is a partisan hack through and through.
- Mr. Folz helped Wisconsin Republicans ruin any semblance of impartially drawn political districts during the Badger state's last redistricting and continues his infectious partisanship with the Texas redistricting effort.
- Mr. Bryan, according to the Richmond Times, "received \$20,000 in consulting fees from the Virginia Senate Republican Caucus." That is a conflict of interest the size of a barn door.

None of the above Republican nominees could remotely be deemed academicians. I'll also submit that appointing any of them will result in a reiteration of the Virginia Redistricting Commission's failure to produce political district maps.

Speaking of college professors, the spokesperson for the Virginia Republican Senate Caucus was openly contemptuous of the qualification criteria set forth by the Virginia Constitution, as amended, and the Supreme Court of Virginia's Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia which states that "the Court should consider any relevant redistricting experience in the Commonwealth and any practical or academic experience in the field of redistricting."

The folks at The Institute for Management Development (IMD) have described the four tiers of conflict of interest faced by board directors which, I believe pertains broadly to the Special Masters. Furthermore, I believe the Republican nominees will - not, could - violate tiers I, II, and III.

Failure to reject the Republican nominees could be interpreted as a tier IV conflict of interest on the part of SCOVA which could result in a lawsuit brought before one of Virginia's two federal district courts. This, I contend, would be an indelible stain on SCOVA's reputation.

Very respectfully,
Gregory H. Brandon
McLean, Virginia

| From: | Keith Perrigan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Friday, November 12, 2021 8:49:29 AM |
| Attachments: | Outlook-byydkap1.png |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,

I am writing to share my opinion about the redistricting process that is underway in the Commonwealth of Virginia. It is my understanding that there is a possibility of combining Russell County with Washington County and the City of Bristol. Even though Russell County adjoins Washington County, Russell County does not share many natural relationships with Washington County and especially not with Bristol. Whether the consideration is for Community College opportunities, Health District guidance, economic relationships related to transportation, or regional educational partnerships, Russell County is a much more natural fit with Tazewell County, Buchanan County, etc. The current recommendation honors this ideal by aligning District 100 in a way that keeps LENOWISCO and Mountain Empire Community College counties together.

Some examples of the benefits of excluding Russell County from a District with Bristol and Washington County include:

- Throughout the pandemic the Mount Rogers Health District has provided guidance to their school divisions that has been different than the guidance from other Health District guidance based on community metrics and practices.
- Virginia Highlands Community College serves as an important partner with our school divisions and offers workforce development opportunities based on our communities' needs.
- The economy on the 1-81 corridor is very different than the economy that is accessed by Highway 19.
- School divisions on the 1-81 corridor have regional partnerships for Special Education, transportation, and mental health related services because of the natural collaborations that are afforded due to proximity, accessibility, and even similar weather patterns.

In summary, please consider the partnerships, relationships, and natural collaborations that students, schools, and industry currently enjoy as you finalize the redistricting process. This will ensure that the best interest of all communities are protected as legislative decisions are made.

Sincerely,

Keith Perrigan, Ed.D.

Superintendent

Bristol Virginia Public Schools

Preparing All Students to Thrive in a Dynamically Changing World


| From: | Kevin Nelson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | DISQUALIFY REPUBLICAN SPECIAL MASTER NOMI NEES TO REDISTRI CTING PROCESS |
| Date: | Wednesday, November 10, 2021 11:19:58 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing today to request that you disqualify the Republican party's special master nominees to the Virginia redistricting process. Republican Delegate Todd Gilbert and Republican Senator Tommy Norment nominated partisan operatives, who are currently on the payroll of Republican organizations. It is clear that these individuals will make no effort to draw fair maps in determining future voting districts. The people of Virginia deserve fair voting maps that allow their votes to matter, and not be weakened through partisan gerrymandering. Accordingly, I hereby request that you disqualify the nominations of Thomas Bryan, Adam Kincaid, and Adam Foltz.

Sincerely,

Kevin Nelson
Midlothian, VA

| From: | Mary Anne Pugh |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Implementing the Requirements of Article II, Section 6-A |
| Date: | Friday, November 12, 2021 11:19:36 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Clerk of the Supreme Court of Virginia
Re: Implementing the Requirements of Article II, Section 6-A
Virginians voted for a constitutional amendment that they believed would result in fair, nonpartisan redistricting.
Unfortunately, the Redistricting Commission was unable to agree on maps, so the issue is now before the Court. Republicans and Democrats each have nominated 3 masters, but the 3 Republican masters are Thomas Bryan, who worked as a consultant for the Virginia Senate Republican Caucus; Adam Kincaid, previous redistricting coordinator for the national Republican Congressional Committee; and Adam Foltz, who helped draw maps for the Wisconsin State Assembly Caucus that were later declared by courts to be unconstitutionally gerrymandered. The Democratic nominees for masters are all academics with no partisan affiliation who specialize and have vast experience in this work.

As a citizen I would have no confidence in the fairness of maps drawn by the Republican-nominated masters. It is certainly plausible that they will draw maps that would land Virginia back in court and keep our state election process unsettled for years. I urge the Court to work diligently toward fair, nonpartisan redistricting and to reject the Republican nominees. The reputation and legacy of this Court is on the line, too.

Mary Anne Pugh
15209 Mountain Road
Montpelier, VA 23192
804-347-3978

| From: | losborne@graysoncountyva.gov |
| :--- | :--- |
| To: | Redistricting |
| Cc: | William L. Shepley |
| Subject: | Public Input |
| Date: | Friday, November 12, 2021 2:10:06 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good afternoon Commission Members:

I am submitting the below statement on behalf of our County Administrator, William L. Shepley:

During my time as County Administrator for Grayson County, I have come to understand and appreciate how close knit the localities in the Mount Rogers PDC are. We share so many interests and have worked collaboratively on many initiatives including economic development, broadband deployment an educational opportunities. Many of my counterparts in other planning districts of Southwest Virginia feel the same as I do and respectfully request that as you determine the final make up of house districts, you consider how well PDC localities work together to move the region forward and are natural friends and allies with like minded interests. For the Mount Rogers PDC in particular, breaking up these areas into more than 2 house districts could undermine decades worth of work and progress.
Respectfully,
William "Bill" Shepley
Grayson County Administrator

Thank you, Linda

## Linda C. Osborne

Office Manager
Grayson County, VA
PO Box 217
Independence VA 24348
Phone: 276.773.2471
Fax: 276.773.3673
www.graysonvirginia.com

CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information or otherwise be protected by law. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

4 November 2021
Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315


100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Dear Clerk Muriel-Theresa Pitney:
I am writing to you to express my opinion about the redistricting situation the Supreme Court of Virginia is now undertaking since the commission was unable to come to a consensus.

I serve as the Chief Election Official for the Newport News Kiln Creek Precinct (\#0218). Our precinct is what is known as a split precinct. For the State Senate and Congressional Districts, the residents of this precinct fall into 2 different State Senate districts and 2 different Congressional Districts.

During any of the elections for these seats and any statewide office (Governor, LT Governor, Attorney General, US Senator) our precinct has two different ballots to issue to the voters. The workers must look at the Congressional district indicated in the electronic pollbook and make sure they give the correct ballot to the voter. The workers can easily make a mistake during heavy voting times and during the long day.

Since we are a split precinct, we have to fill out two different sets of election results (one for each Congressional District/State Senate District). As you can imagine, it is easy to make a mistake on the forms after 13 hours of working at the polling place.

As you endeavor to draw the districting maps, I urge you to have one required constraint at the top of your list: Keep every precinct intact for the House of Delegate, State Senate and Congressional Districts. As you work on the districting, keep in mind the additional burdens you are placing on the poll workers and local registrars of any location with a split precinct.

I am available to discuss this with the court or any other persons involved with the map drawing.
Respectfully,


[^8]| From: | Norman Solowey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Role and requirements for Special Master |
| Date: | Friday, November 12, 2021 6:00:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your Honors,
I am writing to applaud your clarification of the requirements for the role of special master for redistricting, as cited in your opinion:
"Although the Special Master candidates are to be nominated by legislative leaders of a particular political party, the nominees - upon being
appointed by this Court as Special Masters - will serve as officers of the Court in a quasi-judicial capacity. Consequently, the Special Masters must be neutral and must not act as advocates or representatives of any political party."

This is clearly what the constitutional amendment intended to accomplish and I wanted to express my gratitude for clarifying and upholding that intent.

As has been stated many times, voters should have the right to choose their representatives, not the other way around.

With thanks, Norman Solowey
Palmyra, VA

| From: | Skip Stiles |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Nonpartisan redistricting |
| Date: | Friday, November 12, 2021 6:09:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Justices,
Please do everything in your power to ensure that our redistricting is conducted in a nonpartisan manner. We voted for fair district lines when this process was established and now you are our last hope.

I worked in Congress for 22 years and was involved in three state redistrictings in California. I worked for a Democrat and the Democrats were in charge of the process. It was such a horribly distorted process, held in secret, without regard to the fair representation of the people. Elected representatives were punished for being in the "wrong" party or voting against the Democratic Party's interest. My boss was redistricted out of his district twice by his own party!

I was ashamed of my own party for this and am ashamed that both parties still engage in this practice.

Thank you for upholding an honest and fair redistricting process.
Regards,
Skip Stiles
--
Skip Stiles
1121 Graydon Ave.
Norfolk, Va 23507

| From: | saulamca@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Enough is enough |
| Date: | Friday, November 12, 2021 6:14:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
As a landowner, a registered voter, a former business owner and employer (now retired), I am distraught by the state of our voting districts,
Please bring about a more sane approach to our elections, and thus our governance.
What's wrong with having the already established boundaries of our counties as our voting blocks?
Thanks for your efforts in clearing up our gerrymandered mess.
Saul Y. Barodofsky
4242 Monacan Trail Rd
North Garden, Virginia
22959

Sent from the all new AOL app for iOS

| From: | Lohn Wandling |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Use computer to draw districts |
| Date: | Friday, November 12, 2021 6:32:08 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

It does not seem to be an impossible task to design an algorithm that would redistrict arbitrarily, based on political boundaries and population. I think William and Mary has done some work in this area.
wandling42@gmail.com

| From: | Rick Galliher |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair Redistricting! |
| Date: | Friday, November 12, 2021 6:39:21 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Gerrymandering leads to just the far left and far right leading their parties - which is bad for democracy and civil discourse. I want fair redistricting, by precinct - not individual addresses and no protection for incumbents.!

Thanks
--
Rick Galliher
Sign the Petition - VABottleBill.org

## 2

| From: | Aaron Penney |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Non partisan map drawers |
| Date: | Friday, November 12, 2021 6:49:41 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

When we voted for doing a commission for districts, it was to get partisans out of the process. Please protect the prices for all Virginians.

Aaron B Penney
703.447.0557

# Robert G. Hofheimer <br> 6400 Ocean Front Avenue <br> Virginia Beach, VA 23451 

November 12, 2012

Supreme Court of Virginia
100 North Ninth Street
$5^{\text {th }}$ Floor
Richmond, VA 23219-1315
VIA Email Only Redistricting@vacourts.gov
To the Chief Justice and Honorable Associate Justices of the Virginia Supreme Court

The Virginia Redistricting Commission got hijacked by the General Assembly. The members, well-meaning from the start, were redirected from what the public wanted and twisted to what those members of the commission who were also in the General Assembly wanted: safe districts.

As an active participant in One Virginia 2021, few of us wanted safe districts. We wanted competitive districts. We wanted districts where a "Sen Joe Manchin" type could be competitive in Southwest Virginia and a "Sen Mitt Romney" type had a chance in Northern Virginia.

Here's an idea: What if the Supreme Court would set up their own Special Committee? It would be composed of only the original citizen members of the Virginia Redistricting Commission (without the pols), plus five true independents chosen by the Supreme Court. This new transparent committee would work on the same original goals of the Virginia Redistricting Commission, including choosing Special Master, but under the supervision of the Supreme Court. This configuration could straighten out the mess the General Assembly created and fulfill the goals Virginia voters thought they were going to get.

I realize that no entity has the authorization to put this plan into place. But isn't it time to recognize the will of the electorate?

Respectfully,
Robert G. "Buzzy" Hofheimer

Daytime Phone 757.647.2070
Email: Buzzyhof@gmail.com

| From: | bobnorvell@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank you |
| Date: | Friday, November 12, 2021 8:00:21 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your actions in regard to this redistricting situation is the best news I have heard in years. The true role of the courts as I have always understood it is to be totally non partisan. I am proud that you all are living up to that role when I cannot say the same about the the federal supreme court. Way to go!!! Keep up the good work!!!!
Sincerely.
Robert E Norvell
Staunton Virginia

| From: | Bob Meunier |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Subject: | Virginia Redistricting Effort |
| Date: | Friday, November 12, 2021 8:48:04 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We applaud all efforts for Virginia to re-structure the way voting districts are drawn and to eliminate as much as possible all those with conflicted interests from drawing those districts. This is one of the most important efforts in the way we in Virginia ensure fairness and eliminate bias from the process. All states are watching what we do. Please keep our process as pure and unbiased as possible.

Robert and Antoinette Meunier
114 S. Buchanan St.
Arlington, VA 22204

| From: | M Cooper |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting of VA |
| Date: | Friday, November 12, 2021 10:02:05 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

SCoVA members:

This is to emphasize the importance of non-partisan membership for those redrawing electoral districts in Virginia. Please do everything in your power to make the districts without political party influence.

Thank you,
Martha Cooper
207 S Virginia Avenue
Falls Church, VA 22046

Sent from my iPhone

| From: | Philip Broadfoot |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Friday, November 12, 2021 11:09:09 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Here is my suggestion. It may already be the goal, but if it isn't, please consider it. Thank you.

Redistricting every ten years should be designed to equalize both political parties as much as possible. The parties then "start from scratch" and the one that convinces voters they can govern the best should win consistently. At the end of ten years, redistricting returns everything to an equal status and the political parties have to start over with their efforts to prove their ability to govern. The advantage of this concept is that no one party has a lock on power for more than a decade unless they clearly win the right at the ballot box as opposed to controlling the redistricting process.

Philip Broadfoot

| From: | Beth McCoy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank you |
| Date: | Saturday, November 13, 2021 8:15:45 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear members of the Supreme Court of Virginia,
Thank you for rejecting the nominees for Special Master in the redistricting process who showed partisan conflicts of interest. This gives me hope that the final district lines will be drawn without bias toward one or the other of the political parties.
E. S. McCoy

Lynchburg, Virginia

| From: | Camille Alexander |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disqualification of nominees |
| Date: | Saturday, November 13, 2021 8:56:35 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your Honors,

I was heartened to read you are serious and courageous about the integrity and transparency of the new Virginia redistricting process as reflected by the disqualification of the three Republican and one of the Democratic nominees. Had you allowed those inappropriate delegates, especially those with conflicts of interest all the hard work and amendment to the Virginia constitution would have been in vain.

Thank you for the good, honest work you are doing.

Sincerely,
M. Camille Alexander, M.D.

Goode, Va

| From: | Tyrone Foster |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Saturday, November 13, 2021 9:19:28 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,

I am appreciative for the opportunity to share my views about the Redistricting Commission's work to redraw district lines in the Commonwealth of Virginia. Washington County and the City of Bristol have long been served in the same district along with Smyth County and other localities along Interstate 81. Russell County does not always experience the same concerns that we have in our section of Southwest Virginia. When you consider the economy, infrastructure, transportation and geographic needs of our community, Russell County shares more in common with coalfield localities like Tazewell and Buchanan. Those counties have longstanding partnerships already developed through their Health District, Planning District, and Community College service area.

As you are drawing lines that will impact the way our rural communities are represented in Richmond, please consider the preexisting partnerships that are already established to ensure our community interests are better represented and protected.

Again, I appreciate the opportunity to weigh in on this important issue that will impact our region for years to come. The work you are doing is important and I am confident the input of stakeholders will be given careful consideration.

Sincerely,
R. Tyrone Foster

School Board Chairman
Bristol Virginia Public Schools

## R. Tyrone Foster

School Board Chairman
Bristol Virginia City Public Schools
Past Virginia School Boards President 280 Lee Street
Bristol, Virginia 24201
"Be The Difference"


| From: | m doyle |
| :--- | :--- |
| To: | Redistricting |
| Subject: | A bipartisan, balanced approach to redistricting is critical |
| Date: | Saturday, November 13, 2021 9:35:59 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Given the events of Jan 6, 2021, when insurrectionists almost took control of our U.S. government, I am very concerned about a voting system that allows all citizens' voices to be heard in a balanced format. I urge you to appoint professional, non-partisan officials to help determine a fair redistricting of Virginia's congressional districts. Thank you for keeping a sense of integrity in Virginia's voting system.

Respectfully,
Mike Doyle
Alexandria, VA

## Redistricting Decision Matrix for Virginia's Congressional Districts

The primary data source used to develop the Decision Matrix was the most current data available from the US Census Bureau for zip codes/ZCTAs from the American Community Survey's 2019 5-year estimates.

| VA <br> Congressional District | Current population within 95\% to $105 \%$ of $1 / 11$ of Virginia's total population? | Urban Land <br> Area - Rural <br> Land Area <br> Breakdown <br> within 95\%- <br> 105\% of state- <br> wide <br> averages? | Ethnicity Balanced? | Land Area relative to Average state CD Land Area | Candidate for Redistricting? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VA-01 | No-Has excess of 48,945 residents. | No - Urban Land Area deviates from state-wide average of 75.51\% by negative 5.97\% | No -Current \% of Whites exceeds statewide average by $6.83 \%$. | Minor <br> Deviation from state-wide average (i.e.; 94.28 square miles) | Yes |
| VA-02 | No -; shortfall of 52,070 residents. | No - Urban Land Area exceeds statewide average by $16.99 \%$. | Yes | Shortfall of <br> 2,598.32 <br> square miles | Yes |
| VA-03 | Yes | Yes | Yes | Shortfall of 2,642.92 <br> square miles | No |
| VA-04 | Yes | Yes | Yes | Exceeds statewide average by 720.28 square miles | No |
| VA-05 | No - shortfall of 40,231 residents. | No - Urban Land Area falls short of statewide average by $40.21 \%$. | No - * Current \% of Whites exceeds statewide average by $9.41 \%$ <br> * Current \% of Hispanics falls short of statewide average of $5.5 \%$. | Entire Land <br> Area is 10,030 <br> square miles <br> which exceeds <br> all of other <br> congressional <br> districts total <br> land areas. | Yes |


| VA <br> Congressional District | Current population within 95\% to $105 \%$ of $1 / 11$ of Virginia's total population? | Urban Land <br> Area-Rural <br> Land Area <br> Breakdown within 95\%- <br> $105 \%$ of state- <br> wide averages? | Ethnicity Balanced? | Land Area relative to Average state CD Land Area | Candidate for Redistricting? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VA-06 | Yes | Urban Land Area falls short of state-wide average by 11.17\%. | No - <br> * Current \% of Whites exceeds state-wide average by 18.07\%. <br> * Current \% of Blacks falls short of state-wide average by 7.83\%. | Exceeds state-wide average by 2,339.98 square miles | Yes |
| VA-07 | Yes | Yes | Yes | Shortfall of 813.62 <br> square miles from statewide average | No |
| VA-08 | Yes | No - Urban Land <br> Area exceeds <br> state-wide <br> average by <br> 24.2\%. | No - <br> * Current \% of Whites less than state-wide average by 9.49\%. <br> * Current \% of Hispanics exceeds statewide average by 9.74\%. <br> * Current \% of Asians exceeds state-wide average by 6.51\%. | Shortfall of 3,440.82 <br> square miles from statewide average | Yes |


| VA <br> Congressional <br> District | Current <br> population <br> within 95\% to <br> 105\% of 1/11 <br> of Virginia's <br> total <br> population? | Urban Land <br> Area - Rural <br> Land Area <br> Breakdown <br> within 95\%- <br> 105\% of state- <br> wide averages? | Ethnicity <br> Balanced? | Land Area <br> relative to <br> Average <br> state CD <br> Land Area | Candidate for <br> Redistricting? |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | No - shortfall <br> of 71,919 <br> residents. | No -Urban Land <br> Area falls short <br> of state-wide <br> average by <br> VA-09 | No - <br> * Current \% of <br> Whites exceeds <br> state-wide <br> average by | Exceeds <br> state-wide <br> average by <br> 25.62\%. | Yes |
| square miles |  |  |  |  |  |,


| VA <br> Congressional District | Current population within $95 \%$ to $105 \%$ of $1 / 11$ of Virginia's total population? | Urban Land <br> Area - Rural <br> Land Area <br> Breakdown within 95\%105\% of statewide averages? | Ethnicity Balanced? | Land Area relative to Average state CD Land Area | Candidate for Redistricting? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VA-11 | Yes | No - Urban Land Area exceeds state-wide average by 24.46\%. | No - <br> * Current \% of Whites falls short of statewide average by $15.79 \%$. <br> * Current \% of Hispanics exceeds statewide average by 9.43\%. <br> * Current \% of Asians_exceeds state-wide average by 13.81\%. | Shortfall of 3,404.92 <br> square miles from statewide average | Yes |


| From: | Christopher Pax |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Non Partisan Special Masters |
| Date: | Saturday, November 13, 2021 11:47:09 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Greetings justices of the Virginia Supreme Court:
It is with admiration that I note the court has chosen to weed out partisan candidates for the positions of Special Masters for the drawing of nonpartisan election maps. The voters of Virginia have strongly indicated that we want a nonpartisan redistricting process.

While disappointing that the appointed commission could not put the hopes and desires of the electorate above their party loyalty, I think we now have another opportunity for the creation of fair districts.

Thank you for taking petty politics out of the process by demanding nonpartisan Special Masters. Please stay vigilant to make sure we get the best, fairest voting district maps possible.

Yours sincerely, Christopher Pax

| From: | Nancy Montagna |
| :--- | :--- |
| To: | Redistricting |
| Subject: | fair redistricting |
| Date: | Saturday, November 13, 2021 2:34:10 PM |



Thank you so much for showing your commitment to fair, non-partisan redistricting.
Nancy
Hood, VA 22727
Nancy K Montagna, PhD
Licensed Clinical Psychologist
Master Practitioner and Trainer for Accelerated Resolution Therapy, www.acceleratedresolutiontherapy.com

| From: | Candace Graham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | 7th CD communities of interest |
| Date: | Saturday, November 13, 2021 3:10:33 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

When drawing the 7th Congressional District, please do not separate Chesterfield from Henrico. We are communities that work, live and shop/recreate in each county. The 288 and 64 corridors have similar vested interests. Please keep this district contiguous.

Thank you,
Candace Graham
Midlothian, VA

| From: | Brenda Hill |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Saturday, November 13, 2021 9:08:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Chesterfield County which encompasses part of the 7th Congressional District. The communities of interests need to be kept together because residents of Chesterfield County, Henrico County and the surrounding areas support each other. Many Chesterfield County residents work in Henrico County and vice versa. The same applies to shopping, medical care, etc. The 7th district, especially Chesterfield County and Henrico County need to remain part of the 7th district. The surrounding rural areas also do business in Chesterfield County and Henrico County and are a large part of our community. These areas are made up of Democrats, Republicans, and Independents who have the best interest of the community and the 7th district at heart. The 7th district isn't broken so please don't try to fix it.

Brenda Hill
804-218-1717

| From: | Marie Winn |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Virginia |
| Date: | Sunday, November 14, 2021 6:23:23 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear members of the SCOVA,
It is so important that every eligible Virginian votes. Please draw clear, fair lines that do not automatically determine election outcomes. This is not about political party this is about having our one vote count and make a difference. Many people already believe their votes does not count, please don't make them right!!! I continue to believe that you WILL protect each and every Virginians right to vote. Thank you.

Sincerely
Marie Winn
Glen Allen, Virginia

| From: | Brenda Hill |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Saturday, November 13, 2021 9:08:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Chesterfield County which encompasses part of the 7th Congressional District. The communities of interests need to be kept together because residents of Chesterfield County, Henrico County and the surrounding areas support each other. Many Chesterfield County residents work in Henrico County and vice versa. The same applies to shopping, medical care, etc. The 7th district, especially Chesterfield County and Henrico County need to remain part of the 7th district. The surrounding rural areas also do business in Chesterfield County and Henrico County and are a large part of our community. These areas are made up of Democrats, Republicans, and Independents who have the best interest of the community and the 7th district at heart. The 7th district isn't broken so please don't try to fix it.

Brenda Hill
804-218-1717

TO: Justices of the Supreme Court of Virginia and Special Masters
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
SUBJECT: House Districts - Stafford County - Celebrate by Del Webb "Community of Interest"
Date: November 14, 2021

Our "Celebrate by Del Webb" community is in Stafford County to the west of I-95 and just south of Route 17. (Please see area within blue oval on the map.) We are in the $88^{\text {th }}$ House District (Purple) which was formed in 2001 to include parts of Stafford, Spotsylvania and Fauquier Counties and Fredericksburg City. In 2001, the area where Celebrate was built was undeveloped. Today, we have over 1,000 homes. Falls Run, another Del Webb community of almost 800 homes is just on the other site of Route 17. They are, however, in the $28^{\text {th }}$ House District (hot pink) in a section that was carved out of the $88^{\text {th }}$. Because of this "thumb," our two communities are divided among two Virginia House districts and three magisterial districts. Even though we are less than four miles from our "sister" Del Webb community, our representation depends on which side of Route 17 we live on.

## Current map of $88^{\text {th }}$ and $28^{\text {th }}$ House Districts



We share similar concerns about traffic congestion on Route 17 and I-95. Route 17 is the "main street" for both our communities but mainly serves trucks and through traffic accessing l-95 and there are way too many auto parts stores and fast-food restaurants. If we had the same representatives, our voices for improved development might be heard. It is important that you combine the $88^{\text {th }}$ and $28^{\text {th }}$ House Districts in this area and eliminate this carveout. It is hoped magisterial districts may then follow suit and be drawn more logically by Stafford County.

[^9]Please consider two possible solutions to bring our communities together -


Commission Map \#254 - B7 Statewide HOD, 10-7-2021


Commission Map \#198 - A7 Statewide HOD, 10-3-2021

Commission Map \#254 would no longer divide our "community of interest" because the "thumb" is eliminated and our communities on either side of Route 17 would be together.

Commission Map \#198 still divides our "community of interest" - two large "55+" developments - Falls Run by Del Webb and Celebrate by Del Webb - which are on either side of Route 17. Falls Run would be in District 33 and Celebrate in District 34. The "arm" of District 33 extends too far south toward Route 17. An easy fix would be to divide Districts 33 and 34 slightly more north. Stop at 652 (Truslow Rd.) or even out that area entirely with a line drawn along Potomac Creek.

Respectfully,

Fran and Richard Larkins
40 Battery Point Dr.
Fredericksburg, VA 22406
Franlarkins\$0@gmail.com
703-517-9032

Michael and Lynne McCay 26 Battery Point Dr. Fredericksburg, VA 22406 mdmlkm73@verizon.net 540-373-1960

Walter and Mary Mathews 66 Battery Point Dr.
Fredericksburg, VA 22406
wmmathews@me.com
516-671-4772

Elizabeth and Bruce Smith 281 Long Point Dr.
Fredericksburg, VA 22406
epsmith@gisco.net
315-286-4551

Juanita Channel
183 Hyannis PI.
Fredericksburg, VA 22406

Clayton Hill
3 Mendota Way
Fredericksburg, VA 22406

Elliott Rubinstein
167 Long Point Dr.
Fredericksburg, VA 22406

Paul and Janet Bonner
19 Eagle Bluff St.
Fredericksburg, VA 22406

Denise and Dirk Georgeson
30 Battery Point Dr.
Fredericksburg, VA 22406

Renee Marshall
239 Long Point Dr.
Fredericksburg, VA 22406

Elaine Diepenbrock
55 Harborton Lane
Fredericksburg, VA 22406
ediepenbrock@gmail.com

Diane S. Shea
15 Eagle Bluff St.
Fredericksburg, VA 22406
shea.sullivan70@gmail.com
540-370-8868

Eleaner Loos
111 Montauk Ave.
Fredericksburg, VA 22406

Deborah Wilcox
80 Table Bluff Dr.
Fredericksburg, VA 22406

Idella Edwards
188 Hyannis PI.
Fredericksburg, VA 22406

Kim Jacoby
2 Whaleback Lane
Fredericksburg, VA 22406

Anne Tunney
46 Denison St.
Fredericksburg, VA 22406

Bill and Barbara Wright
178 Long Point Dr.
Fredericksburg, VA 22406

| From: | Loette Mitchell |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Implementing the Requirements of Article II, Section 6-A |
| Date: | Monday, November 15, 2021 5:33:51 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Clerk of the Supreme Court of Virginia
I'm writing to remind you that Virginians are counting on you to:
--appoint no master with a conflict of interest
--insist on only experienced, knowledgeable masters
--conduct the process in a non partisan way
Please act with the highest integrity in this process so that ALL VIRGINIANS can trust the process of redistricting in our Commonwealth!
--
Joette Mitchell

| From: | linda.Caldwell@comcast.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Suggestions for Redistricting |
| Date: | Monday, November 15, 2021 9:08:21 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Put a small population county in a single district.
No zig-jag lines

Each district representative of the overall population in terms of race and political leaning.
It's that simple.

Thank you for the opportunity to comment.
Linda Caldwell, Henrico County

| From: | Kat Maybury |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please read previous comments |
| Date: | Monday, November 15, 2021 9:18:41 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello-

I strongly urge the court to please read, or at least peruse, the previous comments that were submitted to the Redistricting Commission via their website to get a flavor of the concerns that people across the state were expressing. There was much more communication about how to comment on the maps and there were a lot of legitimate concerns expressed. It seems like a shame if those were completely lost at this stage.

In particular (but not exclusively) there were a *flood* of comments about splitting up Albemarle County (and to some extent its "sister county, Nelson) into 2 or more House districts to dilute it. Albemarle (Nelson) is clearly a single community. Nearly everyone works in the Charlottesville area/UVA, attends the same schools/places of worship, roots for the same teams, goes to the same shops, etc. We have been split up for years---unfairly, in what people here *know* is a gerrymander---and people here are expecting this process to fix this.

Please keep Albemarle or Albemarle/Nelson together in a single House District. Charlottesville City, being its own district makes sense given its population but the rest of Albemarle or Albemarle/Nelson is one community, as so many commenters pointed out.

Again, please see the comments on the earlier maps for this and so much more. You will really get a flavor for the most pressing concerns.

Thank you for your work.
-Kat Maybury
Albemarle County

```
From: David Hechtman
To: Redistricting
Subject: Holmes Run Acres/Merrifield community of interest in Fairfax County"s Woodburn precinct (VTD 717)
Date: Monday, November 15, 2021 9:25:28 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a resident of Holmes Run Acres, a historic neighborhood of 355 homes due south of Tysons Corner, in Fairfax County's Woodburn precinct (\#717).

We are part of the Merrifield/Falls Church area, at the intersection of three north-south arterials. Two of these roads are interstate highway facilities - the Capital Beltway and the I495 Express Lanes.

Woodburn is the southernmost precinct in Fairfax's Merrifield Suburban Center planning area.

Woodburn precinct has only $\mathbf{2 , 0 5 4}$ active voters but is an employment hub for medical and defense research - much of it federally funded. Our precinct includes the Inova Schar Cancer Institute, Inova Center for Personalized Health, the headquarters of General Dynamics Information Technology (GDIT), in addition to 21 lane-miles of interstate highway.

- Holmes Run Acres and Woodburn would benefit from remaining in the Eleventh Congressional District with:
- Mantua/Price precincts, where many neighborhood children, including mine, attend FCPS's Mantua Elementary
- The entire Dunn Loring-Merrifield area, home to our nearest transit and retail, as well as Luther Jackson Middle School, which our neighborhood children attend
- Pine Ridge precinct - a former section Woodburn precinct with which we share Gallows Road and the Inova campus
- We understand that General Assembly Districts are smaller. We wish to be in the same district as central Merrifield precincts on both sides of I-495, where our experience with VDOT road projects is most similar:
- We have a lesser interest in the east-west routes radiating from Arlington, Alexandria, and D.C. - distinguishing Holmes Run Acres and Woodburn from Annandale, Burke, Fairfax/Falls Church cities, Lake Barcroft, Mantua, Ravensworth/Braddock, Springfield, and Vienna.

Thank you,
David Hechtman
7705 Poplar Tree Ln, Falls Church

| From: | Susan Holland |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank you, SCOVA! |
| Date: | Monday, November 15, 2021 10:40:33 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you, SCOVA, for rejecting the three Republican nominees for Special Master who were disqualified due to conflicts of interest. THAT gives me hope that all Virginians will be able to vote without fearing that their votes won't count.

Susan Holland
Reedville, VA

## Jacqueline Coachman

1921 South Langley Street • Atlington, Virginia 22204 • 703.553 .8250 - jacquelinecoachman@comcast.net

15 November 2021

Clerk of the Supreme Court of Virginia
100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

Dear Ms. Pitney:
While many comments regarding the construct of redistricting maps are being considered, my appeal is rooted in my heritage. I am the great-great-granddaughter of Sergeant Alfred Pride, a Buffalo Soldier born in 1854 in Amelia Court, Virginia. A journey that began as a teenager in Amelia Court ended at Fort Myer (VA). His last assignment was in recognition of the contributions of the 9th Calvary, including a herculean effort to provide assistance to General Custer at Little Bighorn (reportedly riding horseback for almost 48 hours only to arrive too late to save the man who refused to command black troops), protecting the construction of the Pacific Railroad, and preserving Yosemite and Sequoia National Parks. All of the challenges and obstacles Sergeant Pride overcame were overcome because of his fierce belief that the American way of truth and justice would eventually apply to all Americans.

The Supreme Court has already demonstrated the depth of its commitment to truth and justice in the redistricting process. All Virginians are entitled to a redistricting process that places equity over the amassing of political power. Research of the caliber of that produced by Tufts University would be a blessing to the realization of that goal.

Like Sergeant Pride, many Virginians of all stripes and colors have sacrificed much to assure America is truly the home of the free. The way to acknowledge those sacrifices is to assure the vote of each and every Virginian matters ... regardless of their color.

Sincerely
/s/

Jacqueline Coachman

| From: | Mike Fox |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle County |
| Date: | Monday, November 15, 2021 11:43:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
Albemarle County is a community of interest and shares a cultural identity unique to Virginia, with Monticello, Highlands and the University of Virginia in its borders. Our residents, which includes the town of Scottsville, share similar concerns with agribusiness, housing development and tourism that makes having one unified voice in Richmond all the more important and productive.

I would encourage the special masters and justices to keep Albemarle as compact as possible for state House districts. The county is currently mapped into four different districts, and only one delegate lives in Albemarle.

One draft map split Albemarle into two districts: one that'd include Charlottesville and another that'd include Greene County. Such a map would accurately reflect the common interests of county residents, policymakers and stakeholders.

Mike Fox
Albemarle County

| From: | Slades123 |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fw: Virginia Redistricting |
| Date: | Tuesday, November 16, 2021 9:41:57 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Sent from the all new AOL app for iOS

## Begin forwarded message:

On Sunday, November 14, 2021, 2:42 PM, slades123 [slades123@aol.com](mailto:slades123@aol.com) wrote:

## To the Supreme Court of Virginia:

The purpose of this letter is to respectfully express my opinion on Virginia Redistricting as it pertains to the 7th Congressional District. My family and I live and work in Chesterfield County. As such, we are advocating for Chesterfield County to remain within the boundaries of the 7th Congressional District. We do a good amount of our shopping in Henrico County and would very much appreciate local connecting customs between the two counties to remain the same.

Thank you in advance for your kind consideration.
Respectfully submitted,
Daniel Walter Slade
Eileen Slade
5311 Chestnut Bluff Terrace
Midlothian, Virginia 23112

Sent from the all new AOL app for iOS

```
From: William Panak
To: Redistricting
Subject: To the Clerk of the Supreme Court of Virginia -- Congressional Redistricting
Date: Tuesday, November 16, 2021 9:59:03 AM
```


## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSThis letter is in regards to the Supreme Court's request for input on how Article II, Section 6-A of the Virginia Constitution will be enacted for the 2022 election, how the VA-7 district as it is currently drawn, and the fact that only the B5 map is favorable to my current congresswoman, Abigail Spanberger.

Abigail is a good fit for this district, and the district currently leans against her by $5 \%$ as per the 538 analysis:
https://projects.fivethirtyeight.com/redistricting-2022-maps/virginia/commission_plan_b5/
Regardless of this lean, Abigail has been elected and re-elected, and she has been a successful congress member. Her bravery saved lives on January 6 when she defied an order from Capitol Policy to the press who were in the House chamber to have the press leave the safety of the chamber. Abigail showed valor. Her influence over legislation on rural broadband shows that she can serve a diverse district. Her passion and voice matters a lot in these times.

Meanwhile, the most likely challenger to this district, VA Delegate John McGuire, attended the January 6 insurrection, then lied about his attendance. He stated that he did not realize it had become violent until he returned home that evening. There are pictures clearly showing him within 50 yards of the police barricade at the point where the crowd at the barricade is hostile and 20-50 people deep. He did nothing other than join the crowd and move with the mob. I do not want that man in Washington making decisions for any of us.

Any district that rewards John McGuire with a safe seat is an abomination. Only one map works against that, and that map pulls in college educated populations from the University of RIchmond, through to the various community colleges and to University of Virginia. It may be a diverse district, but it also has a stake in this outcome. Given the trial that is ongoing in Charlottesville, it would send a deeply disturbing message to Virginians, state-wide, to set aside the B-5, VA-7 district for any other option.

I understand that achieving a balance across numerous factors is needed, and I don't expect the final VA-7 district to have $\mathrm{a}+5$ lean for Abigail. But I do expect fairness and that is why I voted for the bipartisan redistricting amendment, and why I volunteered to serve on the committee. Now that work falls to the Supreme Court of Virginia, and I appreciate the gravity of that work. I hope my words are read in the spirit with which the words are intended. These are troubling times, we need basic fairness, honesty, and goodwill. That is what Abigail Spanberger embodies, as well as valor and fierce friendship, please draw a fair district so that she can win re-election in a fair way.

Regards,

William Panak
1517 Jonquill Dr
Henrico, VA 23238
(804) 726-0800

| From: | Shelby Thompson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Stop being so bipartisan |
| Date: | Tuesday, November 16, 2021 10:14:52 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Republicans as well as democrats need to be on the redistricting decisions.
I would like to get back into my district I live in because I feel like it is "Taxation without Representation" because if I complain in my voting district they tell me I have to go to the district I live in. If I go to the district I live in, they tell me to go to my voting district. It gets complicated and I do not like it.

Shelby Thompson

```
From: jim poole
To: Redistricting
Subject: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
Date: Tuesday, November 16, 2021 5:19:40 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia
Dear Sir/Madam:
First, thank you for the opportunity to comment on implementing the requirements of Article II, Section 6-A. My comments are mine alone and result from my concern that the Court needs to hear the views of those citizens who are most likely to be adversely affected by its decision, should it result in a dilution of our vote, not in the Commonwealth alone, but in selecting our representative in the 7th U.S. Congressional District in Virginia.

Second, it was readily apparent among reports of the day to day meetings of the Bipartisan Redistricting Committee, that efforts were made to gerrymander the 7th District in Virginia so that our sitting representative in Congress would lose the seat that she won in two elections. This is unacceptable and the Court needs to ensure that there is no interference with our ability to choose our representative in Congress.

Third, there is no reason for changing the balance of rural counties and suburban counties in the 7th District of Virginia. Voters in Orange, Culpeper and Madison Counties have been well-served by our elected representative, just as those suburban counties south of us. Please ensure that the Court hears and recognizes the need to maintain a rural and suburban balance in the 7th District.

Finally, the matter of redistricting has been passed to the Court by default. It is clear that members of the Bipartisan Redistricting Committee intended to redefine the 7th District, simply to remove a highly effective representative from political office. The Court must not let this happen.

Yours truly,
sgd/jpoole
Alfred J. Poole, III
208 Beachside Cove
Locust Grove, VA 22508
jipoole33@gmail.com

| From: | Eileen Davis |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Concerning the rules and procedures for implementing the requirements for article 2, section 6-A |
| Date: | Tuesday, November 16, 2021 9:39:58 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of the 7th congressional district, I am hopeful that when redrawing Congressional districts, the court will address the important aspect of keeping Chesterfield, and Henrico counties together, along with the 64 west corridor, up to and including Charlottesville and greater Abermarle county. This contiguous 288/64 highway interchange corridor would preserve communities of interest as well as meet the requirements of contiguous borders. These three counties and their surrounding areas share common roadways via the 288 and 64 interchange, which provide everyday transportation infrastructure of highways, bridges, buses, and train services for employment, medical services and hospitals, public health and safety, educational access,shopping, emergency services,economic development, local environmental concerns, and parks and recreation .
The 288/ 64 corridor is a deeply intertwined, interconnected community . One needs only to see 288 north and south bound full of commuters each business day crossing the James River because, from both directions, they work in one and live in the other.
The same holds true for the 64 corridor between Henrico County and Charlottesville/ Abermarle County , including the rural swath between, whose residents also work, play and recreate between the connected urban/suburban areas that surround them.
Please keep Route 288 north and south and the Interstate 64 West corridor from Henrico County to Charlottesville/ Albermarle, top of mind in drawing a Congressional district of contiguous community interest.
Thank you,
Martin Davis
Glen Allen
804-432-7917

```
From: Terry Hickey
To: Redistricting
Subject: Redistricting in Virginia - Albemarle and Nelson Counties
Date: Wednesday, November 17, 2021 2:46:22 PM
```


## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMuriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,

My name is Teresa A. Hickey. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county. The citizens of Albemarle and Nelson share in the Blue Ridge Health District. We also share in the Jefferson Madison Regional Library. Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly
the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.
Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.
Teresa Hickey
Albemarle County, Virginia

| From: | Charles Mathewes |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA Redistricting |
| Date: | Wednesday, November 17, 2021 2:50:55 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Feel free to use my message below as a template. Cheers.

Muriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,

My name is Charles Mathewes. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.

Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government.

You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable.

In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our
community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing.

In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.

Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders.

Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.

Charles Mathewes
Albemarle County, Virginia

| From: | Atieno Bird |
| :--- | :--- |
| To: | Redistricting |
| Subject: | comment |
| Date: | Wednesday, November 17, 2021 3:27:13 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,

My name is Atieno Bird. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting. House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.
Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.
Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan
gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you'
Atieno Bird
Albemarle County, Virginia
Atieno Bird

www.AtienoBird.com

| From: | Lauren Boggs Meslar |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle Resident Redistricting Message |
| Date: | Wednesday, November 17, 2021 3:56:55 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,

My name is Lauren Boggs Meslar. I am a ninth generation resident of Albemarle County, Virginia and I was grassroots leader of the Fifth Congressional District for Virginia for Pete (Buttigieg) in 2019-2020. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.

Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. I have neighbors two miles away that are in a different district than myself, but can drive an hour and a half south to Rustville, Virginia and still be in the 59th District. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are
mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. Nelson also shares community programs with Albemarle (Jefferson-Madison Regional Library system and Blue Ridge Health District, for example) which make this combination a natural one. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.

Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. When I was in charge of CD5 for Virginia for Pete, my responsibilities covered from Northern Virginia to the North Carolina line; an area larger than 6 states. There was no commonality to the constituents, no shared city or feature. As a lifelong Virginia resident, there were areas I traveled to and reached out to that I'd never even heard of. The Congressional maps proposed by the GOP members of the Redistricting Commission this year were unfortunately egregious partisan gerrymanders which perpetuate the issues of our current district. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.

Lauren Boggs Meslar
Albemarle County, Virginia

```
From: Emily Little
To: Redistricting
Subject: Redistricting
Date: Wednesday, November 17, 2021 4:14:19 PM
```


## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMuriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,

My name is Emily Little. I am a resident of Charlottesville, Virginia. We are a city that is surrounded by Albemarle County. It is a doughnut and we are the doughnut hole. I am submitting my comments to you regarding redistricting.
House of Delegates Map: Please keep Albemarle County as unified as possible to maintain the community of interest and allow Albemarle to live in fair, compact House of Delegates Districts. Specifically, please include Albemarle in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom Albemarle residents share a community of interest. This would be a fair treatment of Albemarle county and the city of Charlottesville.
Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes the ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6.

Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for the area by keeping Albemarle in 2 Districts I have described.
Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.
Emily Little
Charlottesville, VA 22902
--
Emily Little
emilyblittle@gmail.com
2076692480

[^10]| From: | Donna McCauley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Virginia maps |
| Date: | Wednesday, November 17, 2021 5:17:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,
My name is Donna McCauley and I am a resident of Albemarle County, Virginia. I am submitting my comments to you regarding redistricting.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include the country in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county. For the past decade the people of Albemarle County have been fractured across 4 House Districts. This sows confusion among residents and dilutes our ability to have an effect on the political process. You can keep Albemarle County in 2 Districts in the way I have described above by compromising. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. Map A7 is slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest, however, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7 which combines Nelson County with Albemarle County. Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6.

Congressional Map: Regarding the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to
choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.
Donna McCauley
Albemarle County, Virginia

| From: | Robert Keith Thomas |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Fredericksburg |
| Date: | Thursday, November 18, 2021 8:35:29 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Clerk of Supreme Court of Virginia
Re: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A.
I urge the court to make it a priority to keep intact well defined areas such as Fredericksburg with zip code 22401 and not divide it to mix with other areas with which it has little interest.
Sincerely,
Robert Thomas
Fredericksburg VA

| From: | Shelton Panak |
| :--- | :--- |
| To: | Redistricting |
| Subject: | To the Clerk of the Supreme Court--Redistricting Concerns |
| Date: | Thursday, November 18, 2021 1:04:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I voted for the amendment that was designed to reduce gerrymandering. I had hoped that the commission would have been able to create fair districts that would lead to the legislature reflecting the desires of all Virginians. That did not happen. This task now resides with the Supreme Court of Virginia. I hope my faith is well-placed.

Congressional districts should represent common interests, needs, and issues faced by the represented community and have relatively equal populations. Creating districts by dividing urban and suburban areas into multiple districts and combining them with large swaths of rural areas does not meet this goal. The better strategy is to combine rural areas to meet the population goal and maintain shared concerns. Rural areas definitely need adequate representation; however, their needs should not completely subsume those of the greater number of citizens in urban and suburban areas. This unfortunately happens with many of our current districts. I support keeping Chesterfield and Henrico counties together and creating a corridor that includes Charlottesville as illustrated in map B-5. This map is the best representation of the goals of redistricting.

Regards,
Shelton Panak

Sent from Mail for Windows

| From: | Matt Hedstrom |
| :--- | :--- |
| To: | Redistricting |
| Subject: | comment on redistricting of Albemarle county |
| Date: | Thursday, November 18, 2021 1:38:44 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney<br>Clerk of the Virginia Supreme Court<br>100 North Ninth Street, 5th Floor<br>Richmond, VA 23219

To Whom It May Concern,

My name is Matthew Hedstrom. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

My main concern is this: please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in a fair, compact House of Delegates District. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.

Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise.

Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.

With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.
Matthew Hedstrom
Albemarle County, Virginia

# Virginia's 11-compact Congressional Districts 

by Richard Galt Zimermann, Jr.
a Commission citizen-made "Map \#164" on its website
argued for by the author:

- Reston homeowner 11 years
- Chesapeake City homeowner 14 years total
- Harrisonburg homeowner 7 years


## A Redistricting Decision Tree

11-rules for every region of the Commonwealth non-partisan, centered on Virginian's socio-economic commuting in 2020 submitted to the 2021
VIRGINIA REDISTRICTING COMMISSION
\& draft guide for automated intelligence redistricting Chart \#1, Chart \#2 for values and other considerations

## Summary points from TESTIMONY

 on the Foundational principles to Redistrictby a retired Virginia secondary history teacher in
3 regional sessions
3 full commission sessions


Virginia Redistricting Commission citizen-drawn Map \#164
an approximation mapped onto a US Census locality density map

## TABLE OF CONTENTS

1. Foundational Preliminaries ..... p. 3
2. Redistricting to mirror living residents in the nation, in the states ..... p. 4
3. Sequencing the Redistricting Process ..... p. 5
4. Partisan Gerrymandering ..... p. 6
5. Authoritative "communities of interest" ..... p. 7
6. Redistricting rules by law, by Commission resolution and hearings discussion ..... p. 8
7. Guidelines for Congressional District drawing; with notes for Delegate \& State Senate ..... p. 10
8. Draft guide for redistricting by an automated intelligence decision tree ..... p. 13

Appendix A. How the COMMISSION CITIZEN-DRAWN MAP \#164 account for Voting Rights Act, where: p. 15 = > TOTAL of "enumerated population" MINUS a total "White majority" population EQUALSa "Non-white minority" population < =
Appendix B. An OVERVIEW view of Commission citizen-drawn Map \#164
p. 16
Appendix C. The PUBLIC COMMENTS \& author replies for Commission citizen-drawn Map \#164 p. 19

Appendix D. Map \#164 - an ATLAS of "communities of interest" for each Congressional District. - TBD Plan District 1-11; Metro- Micropolitan Statistical Area; National Geodetic Survey built-up area Core urban area START point; State Police, Va Health, Va Social Services, Va Water Conservation, Va Schools Superintendent Regions, Va Association of Counties, Va Area Codes

Links for in a partial list of references used
p. 2 the US Constitution (National Archives)
p. 2 the Declaration of Independence (National Archives)
p. 2 the Preamble to the US Constitution (National Archives)
p. 3 The Virginia Constitution (Loyola Law School)
p. 3 the Equal Protection Clause of the US $14^{\text {th }}$ Amendment (Legal Information Institute) p. 3 the Voting Rights Act of 1965 as amended (Britannica online)
p. 4. Stephen R. Covey's best-seller The Seven Habits of Highly Effective People
p. 5 Justin Levitt wrote A Citizen's Guide to Redistricting published by The Brennan Center for Justice at the New York University Law School.
p. 6 MSAs drawn from US Census data reporting foreign-born in Virginia, mapped at the

Weldon Cooper Center for Public Service at the University of Virginia.
p. 6 Maps4office. link to an "anamorphic map" of locality density.
p. 6 DMV "Friends of the Chesapeake Bay" specialty license plates.
p. 9 " 10 ways to map Northern Virginia" found on UVA's StatChat online, published by the

Weldon Cooper Center for Public Service.
p. 10 The Changing Shape of American Cities, by Luke Juday from the Weldon Cooper Center for Public Service at UVA.
p. 10 Neighborhood Scout online: "Custom analytics to invest, appraise, or finance real estate" p. 12 Map, supporting document, comments at MAP \#164 "Congressional Districts" tab. https://www.virginiaredistricting.org/legdistricting/comments/plan/164/1 p. 12_Virginia's 2020 two "minority incumbents" * residence
https://www.nytimes.com/2016/01/08/us/virginia-court-again-redraws-voting-districts.html p. 14 "Defining Rural Population" https://www.hrsa.gov/rural-health/aboutus/definition/index.html

## 1. Foundational Preliminaries

The United States was founded and made "more perfect" as an experiment, a democraticrepublic embracing the populations living within an area thousands miles square. It is a nation-state of choice, based on a common belief for inalienable rights for each individual of us all in the Declaration of Independence, and subscribed to in a political compact for political freedom with mutually beneficial equitable justice, peaceable public pursuits, common defense, and general welfare "for ourselves and our posterity", in the Preamble to the US Constitution.

It was at the time, and it remains, the largest in Western history's "modern era". The Articles of Confederation that served as a 'working document' of written constitution from 1776 was unanimously ratified by the original 13 states within six years. The US 1789 Constitution that replaced it was unanimously ratified within three, signed in Philadelphia and voted for in state legislatures by many of the same principle actors who had been a part of ratifying the Articles. The US Constitution was ratified in half the time, even without the pressure of on-going war to
 "get something done", perhaps because Founders believed it to be two times better than the first one.

- The 1776 first stab at "a perpetual Union" was, in their 1789 Preamble, made a "more perfect Union" on the second go-round. Unlike the predecessor regime under the Articles of Confederation, the US Constitution provided for improvement, amendment in its future governance of citizen and resident.

Today, the "Supreme Law of the Land" in the United States and in each of its 50 states and 6 territories ${ }^{1}$ is specified in Article VI, 2 ${ }^{\text {nd }}$ paragraph: (1) the 1789 US Constitution as amended to the present; (2) the Congressional statutes enacted by the US Congress and signed into law by the US president; and (3) Treaties ratified by two-thirds 'super-majority' in the US Senate. ${ }^{2}$ The judges in every state are bound by the US constitution, "any thing in the Constitution or laws of any state to the contrary notwithstanding". All state and federal elected officials and judges swear to support the US Constitution required in Article VI, $3^{\text {rd }}$ paragraph.
2. Redistricting to mirror living residents in the nation, in the states

[^11]Why is a democratic-republican legislature to mirror the people resident who are to be represented? - British: No rotten boroughs. 12 game wardens in the King's forest do not elect one Member of Parliament while a manufacturing or port city of 30,000 has one. Historical legacy does NOT represent the selfgoverning people who are to choose their own rulers in their legislator elections.

- American: One-man-one-vote. In Virginia since the 1960s, a county with 100,000 population does NOT get 2-Delegates, and one with 10,000 also get 2-Delegates; counties with equal representation does NOT mirror the living people resident in their settlement habitats, once family farms, now city neighborhoods.

Article I of the Constitution establishes the House of Representatives. The first article is for "The First Branch" of government closest to "the people" as the foundation of a democratic-
 republic, the largest number of people resident and voting in elections. In Section 2, the $1^{\text {st }}$ paragraph, the voters in each state for the US House of Representatives "shall have the qualifications requisite" for voters electing the "most numerous branch of the state legislature". That was and is, the Virginia Assembly House of Delegates. ${ }^{3}$

Section 2, the $3^{\text {rd }}$ paragraph provides for US representatives to be apportioned among the US states according to their respective numbers. The actual enumeration made every ten years. The Census Bureau of the presidential cabinet level US Department of Commerce makes a count of population in the year ending in zero (0).

The Virginia Constitution Article II, Section 6, "Apportionment", provides for reapportionment of its resident population into US Congressional districts in the year following the US


Population Census ending in one (1).
"Every electoral district shall be composed of contiguous and compact territory [with] representation in proportion to the [nearly equal] population of the district[s] as provided by law. ${ }^{4}$ Previous voting discrimination from gerrymandering by race is prohibited, "Districts shall provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." ${ }^{5}$

[^12]

## 3. Sequencing the Redistricting Process

First things first. Stephen R. Covey's best-seller The Seven Habits of Highly Effective People tells a variation on "the professor and the jar story". Given proportioned piles of 2 "-diameter rocks, $1 / 2$ " gravel, and a pile of sand, if someone puts all the little things in first, all the elements do not fit below the lip of the jar. But if the demonstration begins with the rocks, the pebbles can be shaken down through the loose rocks, and the sand can be poured into the jar last to fill in the air pockets between rocks and gravel. All three elements then fit below the lip of the jar, to audience surprise and applause.


The political borders of the Commonwealth of Virginia are like a jar that holds its population in three aspects, each one meant to ensure their citizenship with personal liberty and political freedom. Virginia is the given area of habitat settlement for the people who are to be represented in each case. One sequence for reapportioning people into every kind of legislator district can follow a three-step process, each step related to the next step as explained below. (1) Redistrict Virginian's legislator districts for the 11 state Congressional delegation, (2) redistrict the 100 districts for its House of Delegates, and (c) redraw the 40 for Virginia state Senate around the new compact Delegate districts.
(1) The biggest arena for representation for residents in their aspect of citizenship in the nation is for the US House of Representatives as required by the Supreme Law of the Land; state officers all swear to support the US Constitution first, and then the Virginia Constitution.


For 2021, the first task using the decennial US census report for Virginia, is to redraw the eleven Congressional districts away from the previous gerrymandering that was overturned in state and federal courts for "black packing" voters into one Congressional District. ${ }^{6}$ Most Virginians, 70\% of our residential settlement is census "urban". That "proportionality" found in neighborhood habitat statewide should be reflected in nearly the same proportion in each legislature chamber. In Congressional delegations, 8 of the 11 can be fairly expected to contain urban resident majorities at a summary review of any proposed redistricting plan.
(2) The second arena for representation is historically connected by self-same voting requirements for the House of Representatives in the Virginia House of Delegates, for representatives who are likewise elected every two years. This aspect of resident citizenship in the state is closest to the people voting the year following each Congressional election. The second task in redistricting Virginia is to reflect the Constitutional qualification for Congressional voters, but go further to make voters in each Delegate_district the same voters for

[^13]each member of Congress. That can be done in 2021 by nesting 8-9 compact Delegate districts within each of the 11 Congressional districts, minimizing the number of Delegates straddling two Congressionals. The habitat proportionality for Delegate districts can be fairly expected to be nearly 70 of 100 districts with urban-suburban resident majorities.
(3) The third arena for reapportionment every decade, is that of the Virginia state Senate, whose officers are elected every four years. They are more remote from the Founders' "sensibilities of the people" than either Virginia Delegates or US Representatives.

The third task is to combine two-and-a-half of the 100 compact Delegate districts into each of 40 state Senate districts, dividing every third Delegate district along locality lines of PreK-5 school attendance zones with compatible cultural communities. The habitat proportionality for state Senate districts can be fairly expected to be nearly 28 of 40 districts with urban resident majorities.

## 4. Partisan Gerrymandering

In a democratic-republic, the legitimate purpose for representing the "sovereign people" in the legislature is to mirror them in districts of their diverse voluntary settlement. That is the 'why' for single-member districts. In Virginia 90\% live above the poverty line. Home-renters relocate every 4-6 years on average, and homeowners relocate every 6-8 years, often for work or to school their children. ${ }^{7}$
Cracking for partisan gerrymandering is redistricting by an artificial division of communities, the same genuine settlement that a legislature legitimately wants to mirror. Virginians (70\%) live in urban areas for work, relationships, and lifestyle.


Packing for partisan gerrymandering is drawing many likevoters in different habitats into one district, regardless of their neighborhoods. It makes surrounding districts into other-party-majorities to "water-down" their fair statewide influence.

Tacking for partisan gerrymandering is adding adjacent populations of like-minded voters along some vector regardless of connecting thoroughfares or like settlement habitat, in order to achieve an partisan majority in the artificial district. ${ }^{8}$
5. Authoritative "communities of interest"

[^14]The US Census authoritatively defines communities of interest in MSAs. In the 'Age of the Automobile' these are tied by socio-economic commuting Virginians reported in 2020. Census reports reflect changes in work, shopping, schools, and voluntary associations. They are adjacent localities around one or more urban cores, with
 Micropolitan Standard Areas over 10,000 urban cores (Danville, Martinsville), and Metropolitan Standard Areas over 50,000 urban core population, such as NoVaWinchester, Hampton Roads on both sides of the James River and Richmond, Roanoke, Lynchburg and Charlottesville.

In Virginia, the urban population cores in MSAs can be graphically mapped by (1) a Mercator map of locality densities, (2) a map of census tract densities, or (3) an "anamorphic map" of
 locality density published by Maps4office. The Northern Virginia region in red and orange has population to support four Congressional districts (CDs).

- The next cluster of densely populated red and orange areas are in Central-west Virginia, the 3adjacent MSAs for Charlottesville-HarrisonburgAugusta. In Southwest Virginia, the historically drawn "Fighting Ninth" CD has a cluster of red in the Roanoke-Blacksburg-Bristol MSAs at Roanoke and Montgomery Counties in the Valley of Virginia, west of I-81.

Adjacent and to the east are the "Southside" Virginia areas densely populated in the Lynchburg-Danville-Martinsville MSAs. In central-east Virginia, the Richmond-north-SMA
 above the James River with Henrico and Hanover Counties supports a CD. In South-central-east Virginia a compact majority-minority district lies from suburban Chesterfield County and Petersburg, south of the James River eastward to Suffolk and Portsmouth Cities. South-Hampton Roads MSA with Virginia Beach-Norfolk-Chesapeake cities support a CD. Lastly, a CD can be centered on north-Hampton Roads MSA localities of the "Chesapeake Bay": Newport News, Hampton, the Eastern Shore and Bay-shore counties of the Middle Peninsula and the Northern Neck.


A "Chesapeake Bay" district reflects Virginia's 400-year historical community of interest among the residents along the shores of the Bay region. The DMV "Friends of the Chesapeake Bay" specialty license plates have sold 500,000 with recently 20,000 a year. They are everywhere along the Eastern Shore, Cape Charles (Bay-shore Virginia Beach and Norfolk), and throughout the localities with Bay shore on the Lower Peninsula, Middle Peninsula, and the Northern Neck.
6. Redistricting rules by law, by Commission resolution and hearings discussion

There have been five Commission imperatives in apportionment by population into US Congressional Districts.

The districts..
(1) have equal population: totals to range by $5 \%$ by courts = target goal average $+/-2.5 \%$. (2) are compact: test LENGTH-WIDTH v. 'sausage', POLSBY-POPPER v. 'juts', REOCK v. 'tendrilfingers'.
(3) are contiguous: adjacent like-habitats, within the same MSA, then 'spoke' localities remote from dense 'hub'.
(4) account for communities of interest: socio-economic settlement tied by commutes in MSAs: cities, towns, census-designated-places under 50 square miles; historical residential areas; PreK-5 school attendance zones for early childhood education.
(5) in summary view statewide account for Voting Rights Act requirements: racial minorities communities in coalition can elect their preference.

The Commission applied four additional redistricting conditions to be applied by statewide summary review of the total plan.

The districts...
(6) DO NOT take voting results into consideration for populations within each district.

BUT summary view must justify any non-competitive districts by compactness and adjacent like-habitat among urban, suburban, exurban, and rural settlements. Example: Southwest Virginia is compact, adjacent, without an alternative configuration; it has been solid Republican Congressional.
(7) DO NOT take racial goals into consideration for populations within each district.

BUT on summary view the plan must not reduce number of minority opportunity districts with greater than $40 \%$ total population.
(8) DO NOT take incumbency into consideration.

BUT recall that in Congressional districts, incumbents need not reside in the district elected. See Governor P. HENRY's attempt to deny J. MADISON a seat in the First Congress.
(9) DO start from scratch, without reference to previously drawn districts. DO meet the 8 previous criteria.

Two additional considerations can be kept in mind by mappers, as discussed during sessions by commissioners, both "citizens" and "electeds". Relevant comments were added from partisan legal council, mappers, and professional Virginia state senate legislative staff.
(10) Respect city, county, and town boundaries, so that most Virginians reside in localities are undivided, nesting within each kind of district that the residents are drawn into.

BUT some localities can be divided to balance district populations: those counties less than 20,000 population at the "spoke" end of a district, remote from its district urbansuburban "hub", those counties greater than a 50 square-miles area. Any division made must conform to respected locality school attendance zones the division along.
(11) Proportionality is not to be considered as a political goal, because redistricting apportionment is to be made of Virginian residents, not political parties for the coming decade.

BUT proportionality of residential habitat (urban-suburban-exurban-rural) is important to mirror the changes in Virginian resident population settlement in the 10 years since the last decennial US census. Virginian settlement is $70 \%$ in urban habitat, so to mirror the people in their places (and NOT to mirror the places of people for representation), most legislature districts should be drawn with mostly urban residents, $70 \%$ with urban resident majorities, so statewide, proportionately by the settlement of the people.

The map below is drawn on a US Census map of locality densities. It is an approximation of the Virginia Redistricting Commission citizen-drawn Map \#164 for 11-compact Congressional districts. It meets all publically available criteria to draw fair districts in 2021. Two districts require explanation for their length-to-width shapes, Plan-09 and Plan-07.


Plan -09 is constrained geographically by southwest state boundaries. Along the floor of the Valley of Virginia, turning northward, there are related highdensity adjacent localities making up adjacent Roanoke and Blacksburg MSAs along I-81 North.

Easterly Floyd County is adjacent to a like settlement habitat connected via the flat Highway-8 to "Southside" Patrick County and Plan-05.

Were Plan-09 to push out into Virginia's "Southside", the less urban region would have taken the district east in a way to lose its compactness, and place Roanoke into a northerly district. That would violate the commuting landscape, as most of Roanoke's out-commuters originate in settlements south of it, and it would lead to either separating adjacent Roanoke-Blacksburg MSAs, or a locality division of Roanoke City or County as proposed in other 2021 Maps.


The map to the left is reproduced from " 10 ways to map Northern Virginia" found on UVA's StatChat online, published by the Weldon Cooper Center for Public Service.

Plan-07 lies in primarily suburban and exurban habitat tied to Northern Virginia by Virginia's 2020 commuters into the DC Metro area as the map title shows. Its core densely populated areas are Fredericksburg connected north on US-17-US-15 to Warrenton, connected north on US-15 to Leesburg, connected west to Winchester on VA-7.

Commuter rail is available within fifteen minutes of Winchester, north along I-81, and commuter rail operates every 15-minutes at peak hours from downtown Fredericksburg into downtown Alexandria. Alexandria, Arlington, and Washington DC are connected by the Metrorail Blue Line. Three additional lines serve Fairfax County, north by the Silver Line, central by the Orange Line, and south by the Yellow and Blue Lines.

## 7. Guidelines for drawing a Congressional District map with notes for Delegate Districts and Virginia Senate Districts

District mapping starting points designated below are a combination of three elements:
(a) US Census Bureau urban and rural population counts administered by Republican political appointees, so they meet expressed reservations about federal government agencies and their reports. The majority of Virginian residents live in urban areas; people in urban settlements should be proportionately reflected in legislatures meant to represent Virginians. The turn-of-the-21 ${ }^{\text {st }}$ century "Center City" is described in, The Changing Shape of American Cities, by Luke Juday from the Weldon Cooper Center for Public Service at UVA.
(b) Commercial maps are used for "center city" designations by banks to invest, realtors to appraise, and commercial developers to finance real estate. Firms such as Neighborhood Scout online replicate (but do not copy) previous scholarly publications of "population-density heat-map" graphics. Each has been classified US Census "urban", or as "urban-suburban" by scholarly publications. These considerations answer questions about the trustworthiness of university professors in Virginia and their scholarship.
(c) PreK-5 school attendance zones mapped by our respected localities with the authority from the General Assembly to apportion our children in families from compatible cultures into schools that best promote their early childhood education. These considerations answer those who dismissed any authority beyond majorities voting in localities.

The general locations of each dense settlement of Virginians can be identified by independent inspection on (a) the locality resident Census-block map, (b) the locality-precinct map, drawn not for people, but for machines with parking lot access, (c) on commercially available redistricting map software.

In summary view, a majority of Virginians should live within their locality within the same district or in an adjacent same-habitat district. The goal is the most people in undivided localities, NOT the most undivided localities apportioning districts with urban minorities racial makeup in each urban population should not be a determining factor, but like habitat in the same MSA, or like habitat nearby adjacent should be.

- Begin with Virginia's MSAs, Metropolitan/Micropolitan Statistical Areas. The US Census has authoritatively (non-partisanly) designated adjacent areas that redistricting intends to represent in each legislature. These have one or more core areas of 'urban population, plus adjacent territory' with substantial 'social and economic integration' as measured by the 'commuting tie'. Micropolitan areas exceed 10,000, Metropolitan exceed 50.000 people.
- Designate "center-of-density nodes" within each MSA comparable to "city core" or "center city" places. Three census blocks or precincts within a densely populated area -based on US Census population data -- can provide a starting point from which to begin drawing districts of concentrically.
- Draw districts compactly radiating from a "center-of-density node", acquire precincts of like density first. Adopt four categories that parallel "urban", "suburban", "exurban", and "rural" habitats of Virginian resident settlement to easily distinguish "like density". The individual's chosen habitat and lifestyle is a priority "community of interest" for each district drawn.
- Rotating through the nodes of population to be distributed into districts, add three to five census blocks or precinct "parcels" onto a growing draft-district along main thoroughfares, US highways, State Routes. Fill in gaps to maintain a compact regular shape, an equilateral or oval-like figure. Measures of compactness include PolsbyPopper and Reock. The Length-Width measure can avoid "sausage" districts.
- Refer to locality maps of PreK-5 schools attendance zones to keep them intact. These are areas of compatible cultural settlement that local authorities find conducive for early childhood education. Families with children are a priority "community of interest".
- Do not divide localities of less than $\mathbf{5 0}$ square miles, whether they are cities, counties, towns, or census designated places (CDPs). These settlements often are made up of home-renters moving every 4-6 years, or home-owners moving every 6-8 year. The first relocate there for their children's public education.

Notes for drawing compact

## DELEGATE DISTRICTS \& STATE SENATE DISTRICTS

- Nest 8-9 Delegate districts and divide 1-2 within each Congressional district following the same procedure. Starting with the previous starting points, such that on summary review, 100 compact Delegate districts are nested within 11 compact Congressionals.
- Aggregate 2.5 Delegate districts to each state Senate district, such that at summary review, 40 compact delegate districts compactly span 100 Delegate districts almost entirely nested within 11 compact Congressional districts.



## 8. Draft guide for redistricting by an automated intelligence decision tree

Based on the first three tutorials I found on YouTube for artificial intelligence AI decision trees, whose notes seem to have disappeared from my iMac. ${ }^{9}$ Use the US Department of Commerce, Census Bureau 2020 Census of Population data provided for the decennial reapportionment of population during redistricting in each state. ${ }^{10}$

- START each "draft district" in an MSA "urban core" with a three-census-block urban "hub". ${ }^{11}$

In each MSA region, choose the most densely population core reported by the Census is the beginning for map drawing. ${ }^{12}$

- Virginia Beach in South Hampton Roads, Newport News in North HR, Arlington "Inside the Beltway", Reston n. of US-50 in Fairfax Co., Springfield s. of US-50, Fredericksburg-Warrenton-Winchester in NoVa Metro Exurbia, Charlottesville in central-western Virginia, Lynchburg in Southside Virginia, and Roanoke in southwest Virginia.

In each MSA, EXTEND "spokes" along major thoroughfares to more remote areas. ${ }^{13}$
During map drawing at each step of extension, immediately at the next step, FILL IN any gaps formed to maintain compact, regular shapes as geography and population settlement allow. ${ }^{14}$

[^15]For simplicity and 'objectively unambiguous" (non-partisan) classification, use the National Geodetic Survey mapping of habitat 15 :

1-"built-up-denser" (dark-grey) -approximating Census "urban settlement";
2- "built-up-lesser" (light-grey) - roughly approximating "suburban settlement";
3-"military installation" (pink) - count for those in barracks, officer \& enlisted housing; 4-"not-built-up" (white) - census of population defined "rural, 5-"forested" (green).

CHOOSE the next adjacent census block, based on the highest numerical score.
At numerical score ties, draw districts from east to west, north to south except in three cases. At the two westernmost MSAs for Winchester and Bristol, draw them from west to east. For the Southside within the triangle of Portsmouth-Petersburg-Emporia, draw them south to north for compactness.

| CHART \#1. District mapping numerical weights attached to each Census Block |  |  |
| :--- | :---: | :--- |
| - feature - | - value - | - notes - |
| MSA Urban Core | 2 | The START of each Census SMA where 70\%+ <br> Virginians reside for their representation. |
| Adjacent urban block | 1 | Like settlement of residents, habitat and <br> neighborhoods chosen for work or their child's <br> schooling in PreK-5 attendance zones. |
| Same MSA <br> either urban or rural | 1 | Convey the "community of interest" extant in the <br> Age of the Automobile, those "tied by commuting". |
| Adjacent MSA | 1 | Connect Winchester to NoVa; Charlottesville to <br> Harrisonburg \& Staunton at I-64 \& I-81, and <br> Roanoke to Blacksburg-Montgomery Co. at I-81. |
| Adjacent rural block | 0 | Rural areas depopulated over time with less <br> population than centuries ago, or by forest parks, <br> man-made lakes, or military facilities |
| Adjacent block with <br> I-XX, US-XY, VA-XZ | 1 | Major thoroughfares, commuting ties of MSA <br> economic \& social 'community of interest' |
| Same locality <br> < 50 square mile area | 1 | The Lynchburg Rule from Commission hearings. <br> Maintain intact smallest cities and incorporated <br> towns with few divisions, and city- and town- <br> majority districts. |
| Adjacent block with <br> 2-adjacent in district | 2 | For compact districts, fill in gaps from previous <br> block-adds. |
| Chesapeake Bay shore | 1 | Maintain 400-year "community of interest" seen in <br> "Friends of the Chesapeake" DMV popularity. Same <br> MSA, Area Code 757, same region for State Police, <br> School Superintendents, Virginia Social Services. |

${ }^{15}$ These roughly approximate the US Census of Population categories "urban-rural" listed alongside below. Both are an alterative to other Federal agency, academic and commercial classifications including variations of categories defined as urban-suburban-exurban-rural.

## APPENDIX A.

COMPLIANCE WITH THE VOTING RIGHTS ACT - for citizen-drawn Congressional District MAP \#164 Re: MAP \#164 @ "Congressional Districts" tab.https://www.virginiaredistricting.org/legdistricting/comments/plan/164/1 This chart illustrates how the districts of Plan \#164 taken together statewide, account for Voting Rights Act requirements in summary view. ${ }^{16}$

11-compact Congressional districts Plan\#146

| 11-compact Congressional districts Plan\#146 <br> Voting Rights Act - Summary Chart where TOTAL of the "enumerated population" MINUS its total "Whitemajority" population EQUALS its "Non-white minority" population. <br> https://www.nytimes.com/2016/01/08/us/virginia-court-again-redraws-voting-districts.html |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| District \& Descriptor | District population \& \%-offtarget (Comm'n) | $\begin{gathered} \text { \% white } \\ \text { rounded up } \\ \text { (Com'n) } \end{gathered}$ | $\%$ <br> non-white <br> rounded <br> down | $\begin{gathered} \hline \begin{array}{c} \text { Voting Rights } \\ \text { Act } \end{array} \\ \frac{\text { approximate }}{\text { label }} \\ \hline \end{gathered}$ | Congress District * Minorityinc'mb'nt | black \& multirace | Voting Rights Act approximate label |
| $\begin{gathered} \text { VA-08 } \\ \text { Nova MSA } \\ \text { south of US-50 } \end{gathered}$ | $\begin{gathered} 777,610 \\ -0.79 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 43.3 \% \\ & 336,648 \end{aligned}$ | 56.7\% | Majority minority(3) | -08 | 30.9\% | Black-Multi competitive 1-of-3 - |
| $\begin{gathered} \text { VA-10 } \\ \text { Nova MSA } \\ \text { north of US-50 } \end{gathered}$ | 789,442 +0.64\% target | $\begin{aligned} & \hline 49.1 \% \\ & 387,569 \end{aligned}$ | 50.9\% |  | -10 | 15.4\% | --- |
| VA-04 <br> Fall Line - EAST south-James R. | $\begin{gathered} 784,168 \\ -0.41 \% \\ \text { target } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 49.1 \% \\ & 384,991 \end{aligned}$ | 50.1\% |  | $\begin{gathered} * \\ \mathbf{- 0 4} \\ 40 \% \mathrm{BVAP} \\ \hline \end{gathered}$ | 42.2\% | Black-Multi opportunity 1-of-1 |
| VA-02 <br> SE Hampton Roads MSA | $\begin{gathered} 775,609 \\ -1.14 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 52.4 \% \\ & 406,696 \end{aligned}$ | 47.6\% | Minority opportunity <br> (4) | -02 | 32.6\% | Black-Multi competitive 2-of-3- |
| VA-11 "Inside the Beltway" | $\begin{gathered} \hline 786,620 \\ +0.31 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 52.7 \% \\ & 414,780 \end{aligned}$ | 47.3\% |  | -11 | 20.3\% | --- |
| VA-01 <br> Chesap'ke Bay n-Hampton Rds | $\begin{gathered} 781,909 \\ +0.08 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 54.2 \% \\ & 428,799 \end{aligned}$ | 45.8\% |  | $\begin{gathered} *-\mathbf{0 1} \\ 45 \% \text { BVAP } \\ \text { in } 2016-03 \end{gathered}$ | 33.3\% | Black-Multi competitive -3-of-3 - |
| $\begin{gathered} \text { VA-03 } \\ \text { RVA-MSA } \end{gathered}$ | $\begin{gathered} \hline 781,835 \\ -0.02 \% \\ \text { target } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 59.9 \% \\ & 468,038 \end{aligned}$ | 40.1\% |  | -03 | 27.4\% | --- |
| $\begin{gathered} \text { VA-07 } \\ \text { Nova MSA } \\ \hline \end{gathered}$ | $\begin{array}{r} 787,760 \\ +0.49 \% \\ \text { target } \\ \hline \end{array}$ | $\begin{aligned} & \hline 67.7 \% \\ & 533,233 \end{aligned}$ | 32.3\% | Minority competitive <br> (2) | -07 | 17.3\% | --- |
| VA-05 <br> Fall Line west LYN-DAN-MAR | $\begin{gathered} \hline 779,123 \\ -0.98 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 70.5 \% \\ & 549,074 \end{aligned}$ | 29.5\% |  | -05 | 23.2\% | --- |
| $\begin{gathered} \text { VA-06 } \\ \text { CVL-HBG-STN } \end{gathered}$ | $\begin{gathered} \hline 799,415 \\ +1.81 \% \\ \text { target } \end{gathered}$ | $\begin{aligned} & \hline 79.3 \% \\ & 633,672 \end{aligned}$ | 20.7\% | Minority participate <br> (2) | -06 | 11.4\% | --- |
| VA-09 | $\begin{gathered} \hline 785,304 \\ -0.4 \% \\ \text { target } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 84.5 \% \\ & 663,916 \end{aligned}$ | 15.5\% |  | -09 | 8.4\% | --- |

[^16]| ROA-BBG |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

APPENDIX B.

OVERVIEW view of Commission citizen-drawn Map \#164
Re: MAP \#164 @ "Congressional Districts" tab.https://www.virginiaredistricting.org/legdistricting/comments/plan/164/1
All eleven compact Congressional districts in Plan \#164 meet the NINE (9) Commission criteria, for each one and altogether, for 2021 redistricting plans. Below please find Appendix A, a compliance chart for Plan \#164 Voting Rights Act Plan, and Appendix B, a summary of Plan \#164 Commission website public comments and author replies.

Virginia Redistricting Commission citizen-drawn Map \#164
an approximation mapped onto a US Census locality density map


## DISCUSSION

(1) The districts have equal population, Plan \#164 ranges from target $+1.4 \%$ to $-1.8 \%$ of $+/-2.5 \%$ allowed.

- Every district has a margin of 5-6,000 population to "smooth" boundaries to maintain the cultural 'communities of interest' in the respected localities PreK-5 school attendance zones for early childhood education, a principle reason for Virginian family relocation, whether home-renters every 4-6 years, or home-owners every 6-8.
(2) The districts are compact.
- The Plan-06 "Virginia central-west" district is commended by a resident as compact, and an improvement over the 2021 sausage north-south gerrymander to the Carolina Line.
- Two public comments are "friendly amendments" to reapportion west-Prince William from a 3-way district split, see "Comment summaries and replies" below for a 2-way result realigning Plan-10 \& 07.
(3) The districts are contiguous.
- The Plan-01 "Chesapeake Bay district" is commended in 3 of 6 public comments on \#164. Residents in the Lower \& Middle Peninsulas, and on the Eastern shore, share the same North-Hampton-Roads MSA and 757Area Code. Plan-01 recognizes the historic "community of interest" persisting for over 400-years along the
shores of the Chesapeake Bay. The DMV "Friends of the Chesapeake Bay" plate-sets have been sold to over 500,000 Virginians since its 1996 first issue.
(4) The Plan districts account for communities of interest. While statewide "partisan proportionality" has been ruled indefensible in court, the "one-man-one-vote" doctrine place represents people in settlements rather than locality places. Most Virginians live in urban habitat.
(a) Urban habitat is "densely settled", with "residential, commercial and other non-residential" land use; it "does not follow city or county boundaries". The US HRSA refines that to "large area census tracts" of 400+ square miles and less than 35 people per square mile. * @ "Defining Rural Population" https://www.hrsa.gov/rural-health/about-us/definition/index.html
(b) The US Census defines MSAs as adjacent localities of urban area. Metropolitan Statistical Area MSAs have "at least one urban area of 50,000 or more", and Micropolitan Statistical Area MSAs have "at least one urban area of 10,000 or more".
(5) The Plan in summary view account for Voting Rights Act requirements. (a) There are no target racial proportions applied to any district. (b) The number of existing districts with minority (non-white) populations may not be arbitrarily reduced. Plans must apply consistent rules for compact districts of equal population.
(6) The districts drawn DO NOT take voting results into consideration for populations within each district. However, on summary inspection, they cannot allow undue weight to one party without mitigating circumstances as required by law. compact, contiguous community settlement by the residents alone must be represented. Plan \#164 districts are drawn independently of previous voting results.
(7) The districts drawn DO NOT take racial goals into consideration for populations within each district.
- However, on summary inspection, to conform to recent Voting Rights Act provisions and their US Supreme Court interpretations, they cannot allow loss of minority-opportunity districts over 40\%, -- a standard set by Court-order redistricting for VA-03 at $41 \%$, and VA- 04 at $46 \%$.
- In Plan-03 and Plan-04, black-multi-racial groups have competitive or opportunity districts.
- It has THREE (3) majority-minority $>50 \%$ constituents - including one Black-Multi-race opportunity $>40 \%$ and one Black-multi-race competitive $>30 \%$; - It has FOUR (4) minority opportunity $>40 \%$ constituents - including two Black-Multi-race competitive $>30 \%$ districts;
- It has TWO (2) minority competitive $>30 \%$ constituents.
- The Commission publicly defined the population to use for drawing 2021 districts in the linked software for redistricting on its website.
- The political standard used in public software is the "total resident population" in precincts and census blocks.
- The commission did NOT adopt the judicial "voting age population" standard in its publicly applied software used elsewhere in some aspects of legal proceedings (or any sidebar discussions that lawyers may have used for billable hours).
(8) The districts drawn DO NOT take incumbency into consideration.
- However, on summary inspection, avoid arbitrarily throwing two incumbents into the same newly drawn district without a rationale according to compactness, community of interest, or equal population apportionment.
(9) The redistricted boundaries start from scratch, without reference to previously drawn districts.
- However on summary inspection, districts should not arbitrarily draw a district outside of incumbent's current district constituency.
- Plan-01 situates incumbent BOBBY SCOTT of Newport News in the district population center of a Minority-opportunity district of $45.8 \%$, and that is black-multiracial competitive at $33.3 \%$.
- Plan-03 situates incumbent A. DONALD MCEACHIN of Richmond in the district population center of a Minority-opportunity district of $40.1 \%$, and that is black-multiracial participation at 27.4\%. McEachin has demonstrated a partisan coalition with Democrats who voted 54\% for Biden in 2020.
- Plan-06 situates incumbent ABIGAIL SPANBERGER of Henrico County in the Plan-03 district. - The Plan-06 district population center is Charlottesville-Albemarle MSA, the largest concentration of Democratic votes for Abigail Spanberger's Congressional election.

fluent speaker of Spanish, she can win substantial populations Spanish-speaking homes. Settlement boomed in the two Harrisonburg wards of US-33.

Many VMI graduates become Marine officers each year; all six 4-star Marine Generals left the Trump administration. The NC-Goldsboro AF base district elected a Democrat in 2020, and a majority of voters in the two Norfolk Naval Station voted for Joe Biden. Marine Gen. John Allen endorsed Hillary Clinton at the 2016 Democratic Convention.

## APPENDIX C.

Public comments \& author replies https://www.virginiaredistricting.org/legdistricting/comments/plan/164/1 COMMISSION CITIZEN-DRAWN Plan \#164


Virginia Redistricting Commission citizen-drawn Map \#164 an approximation mapped onto a US Census locality density map

## Comments of general agreement:

- J ustin Ranson, commends Plan-01 embracing the Chesapeake Bay: Eastern Shore-Middle Peninsula-Northern Neck, reservations about lines nearby HAYMARKET (see Plan-07 reply below). - Susan Katsarelis, of Burke. generally approves, but a reservation at PRINCE WILLIAM COUNTY on 3 -way split in Plan-07 first draft.( (AGREED to - see reply below.)
- J erry Saleeby, prefers compactness over "north-south run of the districts in the western/valley part of the state". It silenced the voice of the Charlottesville area.
- Nathan Alderman, locality dot at ALBEMARLE/ Augusta County, commends the "more coherent community-of-interest...a definite improvement over the current map", though he sees connections to the Richmond area, accepting of compactness with western counties as "better than current" within a district drawn south to "drown out our voices". [the north-south 2011 "sausage-district", presumably].


## Comments of general disagreement:

- Peggy Layne. Objects, FLOYD County is on the western side of "the mountain", so it belongs in the $-09^{\text {th }}$ with Montgomery, Pulaski and Carroll Counties. (Reference Rte-8 east in Plan-05 reply below.)
- J oshua Mayes. Critiques, a "nightmarish" plan for "eastern Virginia". Eastern Shore must pay a \$17 toll to cross onto Cape Henry, Virginia. There is only free passage to Maryland in this Plan. To be included in a Virginia Congressional district, Tidewater localities in the district must cross "major bridges" over water in this Plan. "Watermen, rural farmers" should be in their own Congressional District, they have no "community of interest" with any Virginian "inner city" adjacent to them. (See rebuttal for each asserted point in Plan-01 reply below.)
- The author is disagreed with the 3-premises put forward by Mr. Mayes.
(1) All districts drawn must use the $\$ 17$ toll bridge to Cape Henry, Virginia.
(2) Every plan requires Virginians to cross a 'major bridge'. (a) The two major bridges for north-south Richmond crossing the J ames River are required to keep that locality intact, and (b) the Rappahannock River crossing from Richmond City to the Northern Neck either by US-301 or by US-360 to connect north-Richmond MSA there.
(3) Virginians in localities within an MSA containing an "inner city" habitat do have "community of interest" with those same MSA localities containing 'water' or 'rural' habitat.
- Note: In our 2021 Virginia and now for over 60-years, there is no compactcontiguous expanse in Virginia comprised of watermen and farmers to make up a District of 780,000 excluding inner-city urban habitat. Current proposals submitted
to the commission that picture "great crescent roll" districts that wrap-around urban centers are not "compact" as required by law, statute and judicial rulings of our time.


## Plan-07.

- Per Comment: CULPEPPER should be entirely in -06 or -07, undivided.
- Reply: For district compactness, one narrow precinct fingerling of eastern-most Culpeper is apportioned to Plan-07, the fourth compact district within the NoVa MSA. Over 98\% of Culpeper's population remains in the same Plan-06 district.
- Per Comment: PRINCE WILLIAM should not be in three Congressional Districts, though Plan-08 "makes sense" to draw "eastern Prince William" in the same district as "lower Fairfax" County.
- Reply: AGREED. Prince William in Plan-07 can be apportioned to Plan-08, and that lost population to -07 can be made up with population taken from Plan-08 Loudoun County along the Potomac River, maintaining compactness in both districts.
- Per Comment: reservations about lines nearby HAYMARKET.
- Reply: AGREED to an adjustment from first draft. NoVa MSA town of HAYMARKET in northern Prince William County, can be apportioned with Plan-10 with the rest of northern Prince William with 30-30\% commuters into DC Metro, including BATTLEFIELD HIGH SCHOOL attendance zone-entire. That will allow the southern settlements with over 50\% commuters into DC Metro area in the City of MANASSAS-entire, and southern Prince William to be apportioned into Plan-08.


## Plan-05.

- Per Comment: "FLOYD COUNTY. across mountains from Franklin \& Patrick Co., belongs in 9th."
- Reply: Southwest Virginia's population loss requires Plan-09 to extent north of previous limits to embrace Roanoke County to meet population requirements. Immediately adjacent is a suburban settlement in Botetourt in the tens of thousands. Floyd County with a smaller population is more remote more remote from the Plan-09 population centers of greater settlement density. By the Commission-adopted map for cultural regions, Floyd County's population is akin to adjacent Franklin County in Plan-05, just to its north as the commenter did note.
- Per Comment: POWHATAN COUNTY, though some rural, is more aligned with Chesterfield and Henrico than Plan-05.
- Reply: For Congressional districts to be drawn both (a) compactly and (b) in equal populations, the smallest localities most remote away from dense district population hubs may be apportioned into districts other than an adjacent locality similar in some way. Despite its recent growth over 0.5\% greater than the state average, Powhatan is still in the bottom $20 \%$ for total locality populations.


## Plan-06.

- Per Comment: COMPACTNESS is commended, though connections east, accepts the substance of a "community of interest" west to the adjacent Valley MSAs of Harrisonburg and Staunton.
- Reply: Thank you. District boundary location still should not be a barrier to incumbent Abigail Spanberger's reelection with Charlottesville-Albemarle the same majority-urban center in both 2011 VA-06 and Plan-06.
- Per Comment: COMPACTNESS is commended, preferable to north-south sausage that silenced the electoral voice of the Charlottesville area.
- Reply: Thank you. Abigail Spanberger is fluent in Spanish and German so she can capably give voice to the constituents in the Spanish- and German-speaking homes in Plan-06.
Plan-01.
- Per Comment: A "nightmarish" plan for "EASTERN VIRGINIA".
- Reply: 'Chesapeake Bay' is not 'eastern Virginia', it is a compact district of (a) the Eastern Shore, (b) the Cape Henry shore, (c) the Lower Peninsula \& (d) eastern contiguous Bay-shore counties. The localities all lie within the same Hampton Roads MSA and 757 Area Code but for the three northernmost counties on the Bay with MSAll populations less than at their 1600s incorporation.
- The Bay district is a 'community of interest' with its own specialty DMV license plate "Friends of the Chesapeake Bay" - - - ubiquitous throughout the region in all shore localities, recently selling about 20,000 a year, and totaling over 500,000 since 1996.
- The Eastern Shore is connected to the Tidewater region with the Chesapeake Bay Bridge for every district that may be drawn. The district is continuously transited by (a) US-13 on the Eastern Shore, (b) US-60 on Cape Henry, (c) US-17 across the Lower Peninsula and Middle Peninsula, and (d) VA-3 across the Middle Peninsula and the Northern Neck.
- Per Comment: COMMENDING Plan-01 embracing the Chesapeake Bay: Eastern Shore-Middle Peninsula-Northern Neck, but reservations about lines nearby HAYMARKET.
- Reply: Thank you, see adjustment in Plan-07 above regarding the PRINCE WILLIAM district division separating Haymarket township looking north to Loudoun together in Plan-10, and Manassas City looking east and north to Fairfax County together in Plan-08.


Virginia Redistricting Commission citizen-drawn Map \#164
an approximation mapped onto a US Census locality density map
Links and References
p. 2 the US Constitution (National Archives)
p. 2 the Declaration of Independence (National Archives)
p. 2 the Preamble to the US Constitution (National Archives)
p. 3 The Virginia Constitution (Loyola Law School)
p. 3 the Equal Protection Clause of the US $14^{\text {th }}$ Amendment (Legal Information Institute)
p. 3 the Voting Rights Act of $\mathbf{1 9 6 5}$ as amended (Britannica online)
p. 4. Stephen R. Covey's best-seller The Seven Habits of Highly Effective People
p. 5 Justin Levitt wrote A Citizen's Guide to Redistricting published by The Brennan Center for Justice at the New York University Law School.
p. 6 MSAs drawn from US Census data reporting foreign-born in Virginia, mapped at the Weldon Cooper Center for Public Service at the University of Virginia.
p. 6 Maps4office. link to an "anamorphic map" of locality density.
p. 6 DMV "Friends of the Chesapeake Bay" specialty license plates.
p. 9 " 10 ways to map Northern Virginia" found on UVA's StatChat online, published by the Weldon Cooper Center for Public Service.
p. 10 The Changing Shape of American Cities, by Luke Juday from the Weldon Cooper Center for Public Service at UVA.
p. 10 Neighborhood Scout online: "Custom analytics to invest, appraise, or finance real estate"
p. 12 Map, supporting document, comments at MAP \#164 "Congressional Districts" tab.
https://www.virginiaredistricting.org/legdistricting/comments/plan/164/1
p. 12_Virginia's 2020 two "minority incumbents" * residence
https://www.nytimes.com/2016/01/08/us/virginia-court-again-redraws-voting-districts.html
p. 14 "Defining Rural Population" https://www.hrsa.gov/rural-health/about-us/definition/index.html

| From: | 吕k and Terry Hickey |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting maps for Albemarle \& Nelson Counties |
| Date: | Thursday, November 18, 2021 2:30:49 PM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMuriel-Theresa Pitney
Clerk of the Virginia Supreme Court
100 North Ninth Street, 5th Floor
Richmond, VA 23219

To Whom It May Concern,

My name is John C. Hickey. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting.

My thoughts reflect the reasoning of my son, Tim Hickey, who ran for delegate in the 59th district of Virginia in 2019.

House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county. The citizens of Albemarle and Nelson share in the Blue Ridge Health District. We also share in the Jefferson Madison Regional Library. Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners
specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.
Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.
John C. Hickey
Albemarle County, Virginia

| From: | opalstroup@comcast.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fair Redistricting in Va. |
| Date: | Thursday, November 18, 2021 3:02:07 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## To: Clerk of the Supreme Court of Virginia

I am writing to express my concern that the redistricting in Virginia comply with the 'Rules and Procedures for Implementing the Requirements of Article II, Section 6-A' by the creation of compact, contiguous districts which maintain communities of interest and do not create safe seats for one party.

When Virginia Voters approved Amendment 1, they voted for a Bipartisan Redistricting Commission that would end unfair Gerrymandering so that Va. voters could choose their representatives rather than the reverse.. Voters did not expect the Commission to dilute their votes by spitting communities of interests into multiple, widely scattered pieces..

The map submitted by the Commission negates the voters desire to end Gerrymandering by, for example, dividing Charlottesville/Albemarle into more than 2 House Districts and by not keeping Henrico and Chesterfield community of interest in one Congressional District.

To accomplish fair non-gerrymandered, non-partisan districts , I suggest that the court be advised by professional demographers rather than partisan political operatives.

Thank you,
Opal Stroup
13402 Perimeter Dr.
Spotsylvania, Va. 22407
$7^{\text {th }}$ Congressional District


As a Charlottesville resident, I want to voice my strong support for a central Virginia congressional district stretching from Charlottesville and Albemarle to the West End of Richmond. This is a genuine community of interest. Many colleagues and friends who work in Charlottesville live in Richmond and commute along I-64 every day. Like many Charlottesville residents, I shop in Richmond, visit Richmond's museums and galleries, eat in Richmond's restaurants, and fly out of the Richmond airport on a regular basis.

For too long, Charlottesville has been stranded in districts designed to dilute its political influence by linking it with totally unrelated communities. Southside Virginia, stretching all the way to the North Carolina border, is far more rural and culturally conservative. So is the Shenandoah Valley on the other side of the Blue Ridge. Greater Charlottesville is a racially diverse mix of urban and suburban, with an economy built around government, higher education, and finance, much like Richmond and its western suburbs. I hope the new map will respect these connections.

Sincerely, Erik Linstrum

1806 Rugby Place
Charlottesville, VA
Associate Professor of History
University of Virginia

| From: | Darius Massoudi |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank You Re: Nonpartisan Redistricting Order! (Comment from VA Homeowner) |
| Date: | Friday, November 19, 2021 2:46:35 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Clerk of the Supreme Court of Virginia:
I am so pleased and happy that the Supreme Court of Virginia has committed itself to a nonpartisan and apolitical redistricting process with its Nov 17th redistricting order. At a time when so many non-Virginians preemptively (and incorrectly) attacked our commonwealth's supreme court as unable to fulfill its obligations without supporting the Republican Party, this Court has proven them wrong. I sincerely and deeply thank this Court for committing itself to the rule of law rather than serving as an agent of any political party.

Best regards,
Darius Massoudi (1851 Stratford Park PL APT 105; Reston, VA 20190)
Darius Massoudi
J.D., 2015

University of California, Berkeley, School of Law

| From: | Fran Larkins |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting and "Communities of Interest" |
| Date: | Friday, November 19, 2021 3:02:13 PM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSTO: Justices of the Supreme Court of Virginia and Special Masters

RE: "Rules and Procedures for Implementing the Requirements of Article II, Section 6-a"

We are Co-Coordinators of the League of Women Voters of Virginia Redistricting Committee. With other League members, we have spent many long, fruitful hours at the polls and community events speaking with voters about solutions to gerrymandering. In November 2020, over 65\% of Virginians agreed with our concerns and passed a Constitutional amendment that we hoped would bring fair maps to Virginia. This was a huge step forward for our democracy, and the transparency and opportunity for public input were welcome changes to the process. Unfortunately, the bipartisan structure of the Virginia Redistricting Commission created too much division to overcome. We hope this will not extend to the work which the special masters must do together and that, as Justices, you will ensure the maps are fair.

Representatives of the League took advantage of the transparency provisions and attended all the Commission meetings and hearings either in person or virtually. We invite you to read the LWV-VA blogs which cover Virginia's redistricting process in detail beginning with the selection of commission members in January 2021 to the most recent information provided through the SCoVA website. We captured citizen comments which are not available from any other source unless one has the time to listen directly to the video transcripts of the meetings and hearings.

Many of the comments from citizens focused on their "communities of interest" (COI). COIs are defined in Virginia statute as a "neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests." Preservation of COIs was "extremely important to the Commission" per their "Redistricting Guidelines and Criteria".

The Commission also voted for wording in the "Redistricting Guidelines and Criteria" document that reads "The integrity and priority of existing political subdivisions should be preserved to the extent possible by avoiding unnecessary divisions of those subdivisions." 3.c.i.b. Citizens asked that their towns and cities be kept together as "communities of interest," e.g., Fredericksburg and Lynchburg. They asked that their cities and counties not be divided unnecessarily into multiple districts. This focus on COIs led to more compact maps that kept cities, towns, and even some counties together.

Many of the maps prepared by the Commission map drawers and those submitted by the public were also much more compact because, in response to a public outcry, they voted, 12-4 in a rare bipartisan vote, to start maps "from scratch" rather than using previously gerrymandered districts. This also served to keep "communities of interest" together.

Please take advantage of the extensive public input previously provided to the Commission in the form of maps and comments. We appreciate that a page on the Virginia courts website has already
been set up for public comment and we encourage this to be supplemented by public hearings both before and after the maps are drawn. We hope both the special masters and Justices will attend and listen to such hearings, which can be organized as Zoom meetings to allow Virginians across the Commonwealth to participate. It is also essential that language services allow non-English speakers to participate and provide public comment.

Thank you so very much,
Chris DeRosa (Arlington) and Fran Larkins (Stafford)
Co-Coordinators, LWV-VA Redistricting Committee
Chris.Iwv.222@gmail.com
Franlarkins40@gmail.com

```
From: robert.peterson.2010@gmail.com
To: Redistricting
Cc: robert.peterson.2010@gmail.com
Subject: Redistricting of the State of Virginia Senate and House Districts, Article II, Section 6-A
Date: Saturday, November 20, 2021 2:57:57 AM
```


## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSNovember 18, 2021

TO: Clerk of the Supreme Court of Virginia

SUBJECT: Redistricting of the State of Virginia Senate and House Districts, Article II, Section 6-A

REFERENCE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

BACKGROUND: Virginia is divided into 11 Congressional districts, 40 state Senate districts and 100 State House districts. Each of these sets of districts is numbered sequentially beginning with the number 1 (one). The result is that there are three districts for each number from 1 through 11 (Congressional, state Senate and state House), and two districts for each number 12 through 40 (state Senate and state House).

ISSUE: The current numbering of districts causes significant confusion among the voters, including me, especially when trying to determine which state Senate or House district I'm in, and especially when referred to in discussions, new and political discussions. When referred to by number only it is hard to determine if it is a congressional, Senate or House district being referred to when only one of these lower numbers is used to reference a district.

RECOMMENDATION: Leave the Congressional districts as currently numbered. Renumber the Virginia state Senate districts to 100 through 139, and renumber the Virginia state House districts to 200 through 299.

Thank you for your attention to this matter, Robert W Peterson
1841 Glanzer Court
Harrisonburg, Virginia 22801

Muriel-Theresa Pitney
Clerk, Supreme Court of Virginia
100 North $9^{\text {th }}$ Street, Fifth Floor
Richmond, Virginia 23219
Dear Ms. Pitney:
The following comments are respectfully submitted according to Rule 4(a) of the Court's rules of February 23, 2021, related to redistricting. These comments make recommendations regarding a process that could be following in defining maps for the House of Delegates, Virginia Senate, and congressional districts, with particular emphasis on the criteria of communities of interest and compactness. These comments are submitted without partisan motivation. In addition to accepting written comments, I hope public hearings would be held according to Rule 4(b).

Use existing locality boundaries to define legislative districts and complete the process with House of Delegates districts before considering state Senate or congressional districts. Doing so would help meet the "communities of interest" and "compactness" tests. It should be noted the principles underlying these tests include the practical effect of making the day-to-day operation of government more efficient, especially in the administration of voting and elections. The number of different combinations of candidates on ballots is reduced, unnecessarily small "orphan" precincts are reduced, and local governments, school boards, and civic organizations would be better aligned with the state legislators who represent them.

In the case of localities in which the population approximates $1 / 100$ of Virginia's population (86,313, or the "target population"), the House districts should be drawn to the locality lines as much as possible, so the locality has a single House member.

In the case of localities that are smaller than the target population, House district lines should circumscribe whole adjacent localities to bring the total population as close as possible to the target population and with a portion of an adjacent locality added only to the extent necessary to meet the population target. In doing so, the principle of "communities of interest" should be extended to include regions of interest. As a hypothetical example, in defining a House district in Shenandoah Valley, such district should include Valley localities rather than drawing House district lines eastward across the Blue Ridge to include the Piedmont Region.

In the case of localities that are larger than the target population, the number of House districts in such localities should be maximized to minimize the number of House districts that cross the locality's boundary, which would help ensure compactness. For example, Fairfax County, which surrounds the entirety of Fairfax City, has a combined population with Fairfax City of 1,174,455. Thirteen (plus a fraction) House districts would "fit" into Fairfax County and City. This should be goal of drawing lines, with one House district including the entirety of Fairfax City plus adjacent areas of Fairfax County, with a fourteenth district straddling the Fairfax County boundary with an adjacent jurisdiction.

Muriel-Theresa Pitney
November 1, 2021
page two

Consistent with "communities of interest" principle, House districts should be drawn to encompass entire towns within a particular county, and common interest communities as defined in the Code of Virginia. Some common interest communities are quite large, such as Reston, South Riding, Ashburn, Brambleton among many others in Northern Virginia and elsewhere.

In addition, consideration should be given to defining "communities of interest" in large localities according to public high school attendance areas. High school education and extra-curricular activities, and that of their "feeder" elementary and middle schools, define as a practical matter much of what is considered "community." Encompassing these types of communities in single House districts would also contribute to the efficient operation of government as noted above.

In taking these considerations into account, one test of compactness that could be applied is the measure of the ratio of the physical area of a district to the length of its boundary. The larger this ratio, the more compact the district and vice versa. Once an initial map of House districts is defined, the additional tests to comply with racial, language, and other federal and state laws should be applied, and adjustments made accordingly.

In considering state Senate districts, I suggest the process borrow from Wisconsin. Wisconsin has 99 House districts and 33 Senate districts. Each Senate district is defined to encompass exactly three House districts. In Virginia, with 40 Senate districts and 100 House districts, application of the Wisconsin rule would define Virginia's Senate seats as encompassing the entirety of two House districts plus half of another. This would also further the efficient operation of government for the reasons stated above, and contribute to more effective governing, as 80 of the 100 House members would be pared with a single Senator in terms of constituency, with 20 House members paired with two Senators.

In taking this approach, defining Senate districts could be done more easily than "starting from scratch," since Senate districts would substantially meet the criteria of compactness, encompass communities of interest, and meet the other legal requirements because they would be based on the House districts defined to meet these requirements. In larger jurisdictions with populations at or greater than a target Senate district $(215,785)$ one or more entire Senate districts should be defined within the boundaries of the locality while minimizing the crossing of locality lines.

For these same reasons, a similar approach could be taken to defining congressional districts.
Virginia's 11 congressional districts could be drawn so each encompasses the entirety of nine House districts and three Senate districts plus fractions of a tenth House and fourth Senate district, while applying the "regions of interest" principle.

Thank you for the opportunity to submit comments.


| From: | Justin Shreve |
| :--- | :--- |
| To: | Redistricting |
| Subject: | A Message to the Special Masters: Just be Fair |
| Date: | Saturday, November 20, 2021 4:21:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to write to the Special Masters who have been appointed to draw the new voting districts in Virginia.

I have watched gerrymandering and partisan drawing of the voting maps for my entire residency in the Commonwealth of Virginia. I am imploring you to execute on the intention of the voters of Virginia when we twice voted for the establishment of a bi-partisan redistricting committee. I feel that Virginians want fairness to be the overarching concern when our political districts are apportioned. I do not believe that Virginia voters want a guarantee that whichever party we support will win. What's the point of that? There is no room for any meaningful discourse if the outcome of an election is largely predetermined. There is no room or incentive for compromise if there is no NEED to compromise.

I respect the credentials, experience and judgement of both Special Masters. I know that you will both do what is right, ethical and representative of the vote ratifying the Constitutional Amendment establishing the bi-partisan commission. Please prove me right.

Thank you for your service in this most important duty. Justin Shreve

## --

Justin Shreve

```
From: Ankit Jain
To: Redistricting
Subject: Do not start from current gerrymandered districts, ensure proportionality
Date: Saturday, November 20, 2021 4:35:43 PM
```


## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSHello,
My name is Ankit Jain and I grew up in Fairfax County. I've been following the redistricting process closely and I have two requests for Special Masters Grofman and Trende. First, I ask that you do not start your map-drawing from the current gerrymandered districts. Starting from a gerrymandered base will inevitably result in a worse final product, no matter how many changes you make. It is better to have a clean break from Virginia's history of gerrymandering. This request of starting from scratch was the main message sent to the redistricting commission by the public. I hope you will heed the public's desire here just as the commission did. I encourage you to look at the maps the Commission released, as well as those submitted by the public, to help you find a different base to start from.

My second request is that you consciously consider the partisan makeup of the maps you are drawing and ensure that the final product results in a seat share for each party about proportional to the party's vote share. You are in fact legally obligated to do this under Virginia law prohibiting the drawing of districts to favor or disfavor any political party. To meet this requirement, you must consciously consider partisanship when drawing maps rather than drawing maps without looking at partisanship at all. An essential element of drawing fair maps is to ensure the maps have partisan proportionality. Ensuring proportionality is just as important as protecting communities of interest, and I hope you take it seriously.

Best,
Ankit Jain

| From: | richard.yoder@gmail.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Rules and Procedures for Implementing the Requirements of Article II, Section 6-A |
| Date: | Thursday, November 18, 2021 5:20:22 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

November 18, 2021
Clerk of the Virginia Supreme Court
Virginia Supreme Court
Subj: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

## Dear Clerk:

For many years, I have found it difficult to make sense of the range of voting districts in Virginia. Specifically:

- Virginia is divided into 11 congressional districts, 40 state Senate Districts, and 100 state House districts. Each set of districts is identified numerically starting with the number one. This results in multiple districts identified by the same number. There are three districts for each number 1-11. There are two districts for each number 12-40.
- When referred to by number only, it is hard to know if it is a congressional, Senate or House district being referenced. If you have ever had trouble following a political discussion for this reason, you are not alone!
- Duplication has also resulted in some Rockingham County residents residing in two different districts numbered 26: House District 26 and Senate District 26.

Here is one proposed solution I am requesting that you consider:

- Leave the congressional districts as they are (1-11) and renumber the state districts as follows:
- Senate Districts would be numbered 100-139; and House Districts would be numbered 200299.
- Not only would this give each district a distinct number, but it would also immediately identify them as congressional, Senate, or House. It would give each category room for expansion.

Thank you for your consideration,

Richard Yoder, PhD, MPIA, MPH
Longacre Endowed Professor of Business and Economics Emeritus
Eastern Mennonite University
3358 Ft. Lynne Rd
Rockingham, VA 22802
540-810-3839

Virginia Supreme Court
100 North $9^{\text {th }}$ St.
Richmond, VA 23219
November 20, 2021
Dear Members of the Virginia Supreme Court:
As you deliberate on redrawing the voting districts of the Commonwealth of Virginia, please consider adding one basic consideration that will be of great value to the citizens of the Commonwealth. The way that legislative districts are identified at present has created undue confusion among those of us who would like to be able to identify which congressional, Senate, or House districts in which we live. This is particularly confusing when districts may overlap. I would ask that you identify a simpler system that relies on the use of just one number to precede all of one category (e.g., Senate vs. House vs. congressional district). This should obviate the need to use the same number for different categories of districts.

A simple solution would make the system more accessible to all voters and Commonwealth residents. Thank you for your consideration.

Sincerely,


Nancy Barbour 2610 Rising Rock Court
Rockingham, VA 22802-8013

| From: | Sam Rasoul |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Roanoke City House District |
| Date: | Sunday, November 21, 2021 1:49:06 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
With Roanoke City being slightly larger than a single house district, below is a list of Roanoke City precincts which best keeps communities of interest intact in my opinion for both what is the current 11th House District and the neighboring house districts:

1 Peters Creek
2 Grandview
3 Preston Park
4 Williamson Road
5 Hollins Road
6 Southeast
7 Lincoln Terrace
8 Highland
9 Old Southwest
10 Raleigh Court
11 Crystal Spring
12 Grandin Court
13 Deyerle
14 Lee-Hi
15 Summit Hills
16 Forest Park
17 Eureka Park
These 17 Roanoke City precincts are very close to the target population, keep several communities of interest relatively intact, and are compact \& contiguous.

Thank you,

## Sam Rasoul

Virginia House of Delegates - Eleventh District
Box 13842 | Roanoke, VA 24037
M: 540.312.9449 | O: 540.904.6905 | Sam4VA.com | $\ddagger$

| From: | Kris Peckman |
| :--- | :--- |
| To: | $\underline{\text { Redistricting }}$ |
| Subject: | Congressional District 9 and VA General Assembly District 17 |
| Date: | Monday, November 22, 2021 11:09:13 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Both of the above districts have had no competition in at least 20
years. Even when a Democrat dared to run, he lost by a large margin. Please make these two districts more competitive!

Kristin Peckman
8131 Webster Dr.
Roanoke, VA 24019
(540)366-7780

```
From: Erin Corbett
To: Redistricting
Subject: Letter to the Clerk of the Court from Virginia Counts Coalition
Date: Monday, November 22, 2021 2:52:17 PM
```


## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMs. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. 9th Street, 5th Floor
Richmond, VA 23219
November 22nd, 2021

Dear Ms. Pitney:
Pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A, the Virginia Counts Coalition submits the following as public comments. The Virginia Counts Coalition has spent the last year advocating in regards to redistricting on behalf of the many communities that our coalition represents. In this effort, we have consistently urged the Virginia Redistricting Commission to focus on equitably drawn districts, to ensure accessible and transparent meetings and documents, and to prioritize ensuring the protection of communities of interest and historically underrepresented communities.

In recognizing the responsibility of drawing district maps has now passed from the Virginia Redistricting Commission to the Supreme Court of Virginia, please accept and review the following (links and also attached) as written public comments to inform your work:

## -

Coalition Congressional Maps and Statement
-
Coalition State House Maps and Statement

。

## Coalition Map Shapefiles

## Letter to the VRC Regarding Language Access

## Testimony to the Commission on Behalf of State House Maps Delivered October 5th

- 

Public Statements
-

## Public Comments

We believe these attached maps illustrate a way to draw districts that ensure the preservation of communities of interest and keep together communities of color, better ensuring that these communities can successfully elect the candidates of their choice. The documents also explain the need for meaningful access to the comment process by disability and language minority communities so that they may also participate in the redistricting process.

We believe these statements and testimony ensure a more equitable and accessible process. The public input process built into Amendment 1 provided the Virginia Redistricting Commission with a record to ground and inform the mapmaking process with the experience and wisdom of everyday Virginians. This Court's special masters should not lose sight of this vital public testimony. Accordingly, we formally ask that the Clerk of the Court, under Rule 3 of the Rules and Procedures, request all records currently held by the Virginia Redistricting Commission. This would include, but is not limited to, any transcripts commission meetings, particularly where oral testimony was provided, written or oral public comment to the commission about communities of interest or district lines, including maps, postcards, etc. and any and all other records that the Commission may hold relating to public input on their communities or district lines

We ask that the commission take these efforts into consideration as the product of collaboration between many Virginians, community organizations, and experts. We thank you for your consideration.

Sincerely,
Virginia Counts Coalition, comprised of:

Advancement Project
-
Campus Vote Project
-
Common Cause

Edu-Futuro

## Fair Elections Center

Hamkae Center
-
League of Conservation Voters of Virginia

League of Women Voters of Virginia
-
Multicultural Family and Education Center

Sikh American Legal Defense and Education Fund
-
Virginia Civic Engagement Table

Virginia Interfaith Center for Public Policy
-
Virginia Coalition of Latino Organizations (VACOLAO)
-
Shirlington Employment and Education Center
-
Sin Barreras Without Barriers

Erin Corbett
Redistricting Manager VCET
e: erin@engageva.org
c: 202-257-1324
Meet with me

| From: | briannamsham@everyactioncustom.com on behalf of Brianna Shamsuddoha |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Our commonwealth needs fair maps |
| Date: | Monday, November 22, 2021 2:54:38 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Supreme Court,
To the Clerk of the Supreme Court of Virginia:
I am writing this letter, pursuant to the Supreme Court's Rules and Procedures for Implementing the Requirements of Article II, Section 6-A, to provide you with my input about redistricting in Virginia. These maps will be the basis for representation for the next decade and it's important that the maps fairly reflect our communities.

In addition to my written comment provided today, I look forward to the opportunity to present my testimony at a public hearing. I believe there must be a robust public hearing schedule to provide Virginians with ample opportunity to advocate for their communities.

While there are many interests that unite my community, one important shared interest is reducing splits in Northern Virginia. As a resident of Arlington County, I believe we share a strong economic and community bond with Alexandria County. We should remain in the same congressional district together.

Thank you for taking the time to read my public comment letter.

Sincerely,
Brianna Shamsuddoha
Arlington, VA 22201
briannamsham@gmail.com

| From: | Wren Olivier |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Monday, November 22, 2021 10:09:03 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of Virginia Supreme Court
100 North Ninth St, 5th Floor
Richmond, VA 23219

Dear Ms. Pitney,
As a resident of Albemarle County I am writing to urge that our county be kept in as few districts as possible in the re-districting process so that our community of interest be maintained as best possible. The current maps are quite contrary to this philosophy to our detriment.

Thank you,

Wren Dawson Olivier Albemarle County

Sent from my iPad

```
From: edward strickler
Redistricting
Subject: To VA Supreme Court re: Redistricting
Date: Tuesday, November 23, 2021 10:30:38 AM
```

```
EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING
ANY ATTACHMENTS
```

The public, including elected officials, may participate in the Court's redistricting deliberations through the submission of written comments. Any such comments must be provided in the form of a letter addressed to the Clerk of the Supreme Court of Virginia and reference the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A. All public comments must be sent toRedistricting@vacourts.gov and must be germane to the topic of Virginia redistricting.

Respectfully,

I am providing below a record of email with the Redistricting Commisson. My comments regard what appeared to be a breach of good faith effort - and perhaps a form of mal-practice by the Commission - by allowing incorrect uses of terms that were already legally defined. I observed that incorrect uses of legally defined terms - that was not corrected by the Commission were inflected with politically partisan bias, as well as offensive prejudices, that sometimes in some speakers approached racialist bigotry. This was very distressing.

Sincerely,
Edward Strickler
Farmville VA
retired, School of Medicine, University of Virginia

From: edward strickler [edwardnvirginia@hotmail.com](mailto:edwardnvirginia@hotmail.com)
Sent: Saturday, October 9, 2021 8:52 AM
Subject: Keep working Redistricting Commission. You've failed - thus far - by failing to enforce the Code's meaning of 'communities of interest'

Dear Commissioners:

Keep working.

That is your sworn public service. Quitters - who are not quitting because of their own or family illness or crisis - are quitting on the public - all of us in the Commonwealth - that they claim to 'serve', contrary to their oath and commitment to serve faithfully. As I believe one of the Commissioners said in yesterday's meeting there is a moral dimension to your work: that moral dimension involves not to quit your public service until a higher authority (the Constitution, the Virginia Supreme Court, etc) tells you to quit or you reach the conclusion that you can reach.

It is incorrect to claim - as many 'progressive' media appear to be doing - that your morass is due to 'conservative' partisanship and racialist thinking. There has been that, sad to say, but, I believe also, sad to say, because of 'progressives' pushing their own racialist thinking and tribalist partisanship, frequently cloaked in prejudicial constructions of 'communities of interest'.

I tried this week to step in with comments that might help by re-focusing your lens on equity among metro and rural areas that are part of any 'community of SHARED interests, shared benefits and burdens of Constitutional governance! I heard too many times metro area commenters unwilling to consider SHARED interests other than shared politically partisan interests. Shame on them. But also shame on the Commission for not calling it out.

You will need to answer for allowing commenters to abuse the meaning given by Virginia Code, and in common morality, of

## 'communities of interest'. Commenters transgressed the specific definition cited at your Commission's website ( https://www.virginiaredistricting.org/2021/Data/Ref/2021\%20Redistricting\%20Guidelines\%20and\%20Criteria\%208-19-2021.pdf ). <br> 'Communities of interests' must be

- 'contiguous'. Many or most Virginia metro areas are contiguous with one of more rural areas. BUT metro area commenters frequently discussed their adjacent rural communities as foreigners, almost as if a different species, who were (implicitly or explicitly) inferior intellectually, behaviorally and morally, and thereby, to the metro area commenters, incompatible, or unworthy of association. Quite a display of 'progressive' tribalist high dudgeon 'drag' ("Whatever you proclaim as your identity here in the material realm is also your drag", RuPaul).
- 'avoiding unnecessary divisions of those subdivisions' (common sense \& common morality for good government)
- 'geographically defined group of people living in an area who share similar social, cultural, and economic interests shall be maintained to the extent possible'. Many Virginia metro areas - as described below - are dependent upon water resources, waste streams, food and agricultural production, and energy production that are in adjacent/contiguous rural areas, and most metro areas depend on labor markets coming in from rural areas (especially to do lots of the dirty dangerous work). YET I did not hear metro area commenters discuss these ESSENTIAL 'social, cultural and economic interests'! It was as if 'progressives' had taken a holiday from their 'progressive' ideals about diversity, equity and inclusiveness! And, rather, for the purposes of redistricting, become possessed by anti-ecological, anti-scientific, anti-working class, anti-'green' tribal spirits ... for the sake of political partisanship ... which of course, Virginia Code says they must not be:
"For purposes of this subdivision, a 'community of interest' means a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests. A 'community of interest' does not include a community based upon political affiliation or relationship with a political party, elected official, or candidate for office." Va. Code Ann. § 24.2-304.04(5)." [ emphasis added]

The good people of the Commonwealth - by a sound majority - informed you what to do. The Code of Virginia was/is a sufficient guide. And you had/have the high privilege of serving the public in this important matter. You failed, for a time. But Keep Working.

Thank you,
Edward Strickler

From: edward strickler [edwardnvirginia@hotmail.com](mailto:edwardnvirginia@hotmail.com)
Sent: Thursday, October 7, 2021 4:25 PM
Subject: Comments today: Rural communities are communities of interest in relation to metro areas

May I respectfully point out a problem with many comments to you that I have noticed.

Many comments, particularly from metro areas, have discussed rural areas adjacent to their metro area as NOT part of their 'community of interest' BECAUSE 'they' 'don't vote like we do'. BUT this is defining a 'community of interest' based upon political affiliation or relationship with a political party and is disallowed by the Code of Virginia, as described on one of the Commission's webpages. How will Commissioners regard or disregard these comments that are contrary to provisions of the Code?

## Moreover,

many comments have portrayed rural areas adjacent to metro areas as populated by people who are described as if foreigners, or perhaps as intellectually, behaviorally and/or morally inferior. This sort of political tribalism is something you should draw lines to protect against, for the sake of our 'Commonwealth': the social bonds we share in common which is our greatest strength and 'wealth'.

Too many comments denying that metro areas have any 'community of interest' with adjacent rural areas destroys this 'Common-wealth'. Metro areas and adjacent rural areas have much in 'common interest'.

For example:

## Waste

How many Virginia metros keep their waste in city limits? Many, perhaps most, dump into rural areas, that are - not incidentally - very often in rural communities of color, and working class communities? Clearly, considering waste streams, many adjacent
rural areas ARE IN FACT in a social, cultural and economic 'community of interest' with metro areas, are they not?

## Labor

Similarly, metro areas have long been dependent on cheaply paid labor that migrates or commutes from adjacent rural areas. Are the people who do much of the dirty, hard work in metro areas - who commute in from rural areas - not part of these metro commentators' 'community of interest'?

## Food

And what about food production? Are the working class people doing dirty, dangerous and poorly compensated jobs of agricultural production, that provide for needs in growing metro areas, not worthwhile in metro commentators' assessment of their 'community of interest'?

## Energy

Today we see metro area interests - that need more and more and more energy - predating upon rural landscapes and communities to provide utility-scale solar production of electricity, externalizing the effects and costs of these vast acres of toxic e-waste pollution upon the rural jurisdictions. But we still hear metro area commentators denying any 'community of interest' with adjacent rural areas.

Many metro area commenters have expressed conceptions of 'community of interest' that are politically partisan - which is not allowed by the Code - and many have abstracted adjacent rural areas from their 'community of interest' apparently out of historical blindness, intellectual laziness, or moral indifference.

I propose that your map drawing should not be blind, lazy or indifferent to how, historically and presently, rural areas may be 'communities of interest' in relation to adjacent metro areas. commentators.

Respectfully,

Edward Strickler
resident in Farmville VA
providing comments only as myself
member and past chair, Ethics Section, American Public Health Association
retired, School of Medicine, University of Virginia
member of many statewide, regional and local advisory bodies regarding the health and well being of disadvantaged, disenfranchised, and vulnerable rural populations

From: edward strickler [edwardnvirginia@hotmail.com](mailto:edwardnvirginia@hotmail.com)
Sent: Wednesday, October 6, 2021 6:31 PM
Subject: Rural communities are communities of interest in relation to metro areas

I am Edward Strickler. I live in Prince Edward county in the very rural Southside, and have lived in rural Albemarle County, and lived from birth to college age in a rural working class farming community of Rockingham County. My ancestors arrived to the Shenandoah Valley in the early decades of the 18th century escaping genocidal religious persecution in Europe. Some of them carried a rare 16th century family Bible from Switzerland to the Valley (it's in the very fine Luray Valley Museum in Luray).

I am a member and past chair of the Ethics Section of the American Public Health Association, am recently retired from the School of Medicine at UVA, and have served on many advisory commissions, committee, boards and other bodies with state, regional or local jurisdiction.

Throughout I have aimed to elevate needs, issues, and concerns of underserved and vulnerable rural populations, who, as anyone worth their salt should know, in Virginia, means many rural residents, and sometimes most households of a rural area census tract, zip code, or entire counties.

I am raising with you a moral imperative to repair the many disparities, inequities, and injustices endured, across generations in many rural areas of Virginia that have transpired, in part, through political line drawing. Line drawing should not disadvantage rural populations and instead should tend toward improved equity for rural populations. Here I briefly define equity as the fair sharing of benefits and burdens across society; and I define justice as the morally sound discernment of what fair sharing would be, that involves all stakeholders in conversation together.

I am sad - but not surprised - that your crushing schedule (I am sorry it has been so crushing but that is your public service and we thank you for that!) has poorly engaged concerns about equity and justice (in the terms above). It has been wonderful to hear many comments from persons speaking for themselves and/or for their communities of different colors, races, ethnicities, and cultures. Thank you for welcoming them. Many spoke about historical and ongoing problems from Virginia's wickedly racialized legal, political, and social histories and their legacies. That is a part of discovering justice (through their engagement in this conversation about redistricting). But, powerful and important, as that is, it gets us not very far regarding equitable sharing or benefits and burdens, across metro area and rural areas Virginia. This is in large part due to how, historically, metro-dominated politics created/s rural areas as subaltern. Subaltern?: subordinate to metro issues, needs, and concerns; because rural people are considered inferior (inferior intellectually, inferior in economic or cultural production, and inferior morally).

I have been advocating this summer with the Governor's Commission on Racial Inequity in Virginia Law ( https://www.governor.virginia.gov/racial-inequity-commission/ ). Fortunately I knew some members to breakthrough their crushing and important schedule. My aim was to encourage consideration of rural disparities, inequities, and injustices within their broader discussion, and to recommend out of that discuss, within their mission. I am glad that they appear to be completing a 'rural' chapter, with description and recommendations. I believe, from viewing meetings online, that some members were surprised to know how great, and how entrenched, disparities, inequities, and injustices are in much of rural Virginia.

Generally, in most such bodies that I've be part of, or advocated with, most appointees had not a clue that the Virginia jurisdictions with the largest proportions of residents of color are rural and very rural counties, not metro areas! Their discussions of racial equity failed to include seriously the disparities, inequities, and injustices across rural Virginia, because of the falsehood that rural Virginians are mostly 'White'. Which is easily disproved with a single map: https://www.indexmundi.com/facts/united-states/quick-facts/virginia/black-population-percentage\#map And comparing that map to another set - https://www.countyhealthrankings.org/app/virginia/2020/overview - where we see that much of rural Virginia - and especially Southside, Southwest, the Eastern Shore, and areas of the Middle and Northern Peninsulas - are counties, census tracts and zip codes where Virginians get sick more, stay sick (and disabled) longer, and die sooner, than other Virginians - we see another way to understand 'communities of interest', 'racial equity' and equitable sharing across the Commonwealth. And yet another map - https://www.vpap.org/visuals/visual/increase-multiracial-identity/ - showing growth in multiracial populations in rural Virginia helps us too.

Many rural jurisdictions in Virginia are communities of interest because of the prominent, and sometimes extreme, disparities, inequities, and injustices they endure - and have endured for generations - when compared to metro areas. Getting sick more, and staying sick (and disabled) longer are prominent disparities! Rural residents dying sooner are extreme inequities (wouldn't a rational person concur?, and wouldn't a moral person abhor?). Continuing the legal, political and social conditions that sustain these are grave injustices.

What can your Commission do about this? Your crushing schedule will not allow you to do much. But you can, when faced with the comments you've heard about linedrawing and 'communities of interest' recall these legal, political, and social legacies or disparities, inequities, and injustices across much of rural Virginia.

Too many times in the live and recorded public hearings I heard city dwellers and metro area advocates discuss adjacent rural communities as foreigners to their interests and values. I did fewer times hear rural dwellers discuss metro areas as foreigners. Language selected and emphasized by the metro area residents/advocates too frequently, distressingly, veered toward stereotypical and prejudicial belittling, devaluing, and even fear mongering stereotyping of rural voters, rural values, and rural communities.

I lived many years in rural Southern Albemarle County. I heard today many Charlottesville and metro-area Albemarle County speakers relate that they have nothing in common with Buckingham County. So, they appear not to know or not to care that many of the working class and skilled workers at the University, in the UVA Health System and Martha Jefferson Sentara Health Systems. And other workplaces - who do many of the dirty jobs - live in Buckingham County. And also in Augusta County (another county many metro-Charlottesville speakers considered foreigners. But I also heard a Buckingham County Supervisor -
who knows more about these strong ties. with Scottsville (in Albemarle County) as the central market, health care, and other center for much of Buckingham County - tell the opposite story: that many Buckingham residents have a common 'community of interest' with Albemarle County and Charlottesville, where so many work, so many get health care, and so many find services they need.

My impression - formed over decades of work with many advisory bodies - is that affluent metro elites' preconceptions and prejudicial appraisals of rural Virginia interests and values - as contrary to their interests - is not founded very much in fact but in selfish emotions. It was too hard, and too distressing, to consider that economic patterns that benefited/benefit metro areas for generations, while burdening rural areas for generations, were facts to deal with. Rather, instead, turn the situation around, emotionally, and consider, and sometimes publicly call rural Virginians 'racists', 'rednecks', 'White trash', 'trailer trash', 'country trash', and the like. Great and abundant public institutions, seated in larger and smaller metro areas, sparingly provide or seldom sustain economic development and outreach, clinics, practitioners, and specialists, educational enrichment and lifelong learning to advance along $21^{\text {st }}$ century career ladders, and other benefits of their abundance into underserved rural areas. Rural need is emotionally distant and easy to put out of mind. Economically, politically, and emotionally, it is very easy for many metro areas to ignore rural needs, concerns and values. While many rural areas, long ago, were economically captured/colonized by metro area economies, and politics, to suit their selfish interests.

I beg you, please, do not put rural Virginians out of mind. Rural Virginians are, in many ways, and in many places, a 'community of interest'/'communities of interest' IN RELATION historically, economically and politically with metro areas, that include generations-long concerns for communities of different colors, races, and ethnicities, residing in rural areas, who have been disempowered by economic and political arrangements that suite metro area elites.

I can share to any who ask my written presentation to the Governor's Commission on Racial Inequity in Virginia Law. But you already have enough read. And I thank you for your kindness and consideration for that! Thank you.

Respectfully,

Edward Strickler

| From: | Debbie Donehey |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Garrey Curry |
| Subject: | Rappahannock County |
| Date: | Tuesday, November 23, 2021 3:17:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Rappahannock County Board of Supervisors previously voted unanimously to authorize me to submit comment to the redistricting commission regarding our local desire to remain in the same House District as northern Fauquier County. I am repackaging that comment for the benefit of the court.

We and northern Fauquier County, for all practical purposes, form a community of interest. There are many similarities that span the county line including: land-use values as evidenced by the significant presence of conservation easements and restrictive zoning; economic, social, and cultural factors revolving around the predominant agricultural business climate; and similar geographic features of the piedmont.

In addition, we have had a strong community relationship with Fauquier County for decades. Our citizens go to school in Fauquier County, including the Governor's School, Wakefield School, Highland School, and LFCC. Our citizens do business, shop, and engage in a wide range of recreational activities in Fauquier County.

We understand that redistricting is a difficult task with many variables at play. In reaching your decision, we respectfully request that you consider our desire to remain with northern Fauquier County in the same House District and to specifically not align our small community with only metropolitan areas or areas on the west side of the Blue Ridge.

Sincerely,

Debbie P. Donehey, Chair<br>Rappahannock County Board of Supervisors



COUNTY OF FREDERICK

Roderick B. Williams<br>County Attorney

540/722-8383
Fax 540/667-0370
E-mail rwillia@fcva.us
November 23, 2021
VIA EMAIL TO Redistricting@yacourts.gov
Honorable Muriel-Theresa Pitney, Clerk of Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street
Richmond, VA 23219-1315
Re: Decennial Redistricting Pursuant to the Constitution of Virginia, art. II, §§ 6 to 6-A, and Virginia Code § 30-399

Dear Ms. Pitney:
Pursuant to the Court's Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I write on behalf of Frederick County and its Board of Supervisors (collectively, "Frederick County" or "the County") regarding the state legislative and congressional redistricting proceeding currently pending before the Court. Frederick County has diligently pursued its local magisterial district redistricting, with a Board of Supervisors public hearing on the County's proposed redistricting scheduled for December 8, 2021. This is in anticipation of the adoption of the proposed redistricting that same evening, as the proposed redistricting responds to public comments the Board of Supervisors received on November 8, regarding a prior version of the County's proposed redistricting.

The County's specific concern with the state legislative and congressional redistricting relates to geographic correspondence between state legislative and congressional districts and local magisterial districts and precincts. The County respectfully requests that, based on its modest population size, the County not be split between congressional or State Senate districts and, to the extent possible, the House of Delegates district lines conform to the precinct and magisterial district lines that the County ultimately adopts. Doing so would avoid the potential for split precincts. It would also avoid the possibility that residents of a County magisterial district - the median 2020 population of a magisterial district in Frederick County is just 15,236 - would be split between multiple state legislative and/or congressional districts.

Toward this end, I am including with this letter copies of the proposed County-wide map and individual maps of the proposed magisterial districts. Both the County-wide map and the individual magisterial district maps show the constituent precincts. I am also including a copy of
the County's proposed redistricting ordinance, which includes text descriptions of the boundaries of the proposed magisterial districts and precincts.

In particular, I note that, in the state legislative redistricting following the 2010 Census, despite the combined population of Frederick County and the City of Winchester (which the County wholly surrounds) being just 104,508 , a total that was not that much more than the target population for a single House of Delegates district, the County was divided among three House of Delegates districts. Two of those districts extend from the east into the eastern portion of the County, into some of the highest growth areas of the County.

Consequently, in undertaking the current redistricting exercise, the existing House of Delegates district lines did not provide a viable rubric for the local magisterial district redistricting. In this regard, I note that, in all or almost all of the draft maps prepared by the consultants to the Virginia Redistricting Commission, the maps divided the County between only two House of Delegates districts. The County proceeded with its redistricting process in anticipation of the County being divided between only two House of Delegates districts.

I further note that, based on the median 2020 population of 15,236 for the County's magisterial districts, the population of four magisterial districts, plus the City of Winchester's population of 28,120 , would total 89,064 . This would represent almost the ideal size for a House of Delegates district, being just $3.2 \%$ over the target size of 86,314 . Therefore, the County believes that four intact County magisterial districts, plus the City of Winchester, could constitute a single House of Delegates district, at worst requiring perhaps the placement of just a single precinct from them into the one adjacent House of Delegates district that could include the rest of the County. The County respectfully submits that there is no need for a more radical division of the County among House of Delegates districts.

The County can provide to the Court and its Special Masters further information regarding the County's proposed magisterial districts and precincts, including the listing of census blocks comprising each, upon request to the undersigned County Attorney. The County very much appreciates the Court's consideration of the County's concerns.

Respectfully submitted,


Roderick B. Williams
County Attorney
Attachments
cc: Board of Supervisors
County Administrator


## Proposed Gainesboro Precincts



## Proposed Stonewall Precincts



## Proposed Redbud Precincts



## Proposed Shawnee Precincts



## Proposed Opequon Precincts



## Proposed Back Creek Precincts



## PROPOSED AMENDED FREDERICK COUNTY CODE

## CHAPTER 7 ELECTIONS

## Article I Magisterial Districts

## § 7-1 Districts created.

Pursuant to authority contained in Code of Virginia (1950), as amended, § 15.2-1211, the Magisterial Districts of Frederick County, Virginia, are hereby created and established as set forth in this article.

## § 7-2 Districts enumerated.

The magisterial districts with populations set forth are as follows:

| Magisterial District | Population (as of April 1, 2020) |
| :--- | :---: |
| Back Creek | 14,930 |
| Gainesboro | 14,944 |
| Opequon | 15,507 |
| Red Bud | 15,058 |
| Shawnee | 15,652 |
| Stonewall | 15,326 |

## § 7-3 Central Absentee Voting Precinct.

The Central Absentee Voting Precinct for all elections is to be held at 107 North Kent Street (County Administration Building), Winchester, Virginia, in a first-floor conference room.

## § 7-4 Boundaries.

The boundaries of the respective magisterial districts are set forth below:
A. Back Creek Magisterial District. Beginning at the southernmost edge of the county, at the intersection of the Interstate 81 southbound lanes and the boundary between Frederick County and Warren County, proceeding west along the boundary with Warren County until reaching Cedar Creek and the boundary between Frederick County and Shenandoah County. Thence following the boundary between Frederick County and Shenandoah County approximately northwest, then north, and then southwest again, following the boundary and roughly the trajectory of Cedar Creek. Thence departing Cedar Creek and continuing northwest along the county boundary until arriving at the border between Virginia and West Virginia, and the boundary between Frederick County and Hardy County, West Virginia. Thence proceeding northeast to the start of the boundary shared between Frederick County and Hampshire County, West Virginia. Thence continuing broadly northeast, following the county boundary, until arriving where Back Creek Road crosses the county border. Thence
following the centerline of Back Creek Road north-northeast to the intersection with Gore Road. Thence following the centerline of Gore Road northeast to the intersection with Route 50. Thence following the eastbound lanes of Route 50 east to the boundary of the City of Winchester. Thence proceeding in a roughly southerly fashion along the border with the City of Winchester until its terminus, near where Hoge Run passes under Interstate 81. Thence following the Interstate 81 southbound lanes until the point where the northern boundary of the Town of Stephens City runs perpendicular to Interstate 81. Thence following the boundary of the Town of Stephens City in a first roughly west, then roughly south direction, until the place where the southernmost boundary of the Town of Stephens City meets Family Drive. Thence following the centerline of Family Drive southeast to the intersection of Route 11, and thence southwest along the centerline of Route 11 until the intersection with Salem Church Road. Thence following the centerline of Salem Church Road east to its intersection with the southbound lanes of Interstate 81. Thence following the southbound lanes of Interstate 81 south to the boundary between Frederick County and Warren County, arriving at the starting point.
B. Gainesboro Magisterial District. Beginning at the intersection of the boundary of the City of Winchester and the eastbound lanes of Route 50. Thence proceeding west along the eastbound lanes of Route 50 to the intersection with Gore Road. Thence proceeding southwest along the centerline of Gore Road until the intersection with Back Creek Road. Thence proceeding south-southwest along the centerline of Back Creek Road to the boundary between Frederick County and Hampshire County, West Virginia. Thence following the boundary of Frederick County and Hampshire County roughly west and then roughly northnortheast to the intersection of boundaries of Hampshire County, West Virginia and Morgan County, West Virginia with Frederick County. Thence following the boundary of Frederick County and Morgan County, West Virginia in a southeasterly direction to the intersection with the boundary of Berkeley County, West Virginia. Thence following the boundary of Frederick County and Berkeley County, West Virginia in a southeasterly direction to the intersection with the Interstate 81 southbound lanes. Thence following the southbound lanes of Interstate 81 south-southwest to the overpass crossing at Rest Church Road. Thence following along the centerline of Rest Church Road west and south to the intersection with Welltown Road. Thence following the centerline of Welltown Road south to the intersection with the southbound lanes of Route 11. Thence following the southbound lanes of Route 11 southwest until the intersection with Route 37, and then proceeding along Route 37 south to its intersection with Route 50. Thence following the eastbound lanes of Route 50 east to the intersection with the boundary of the City of Winchester, arriving at the starting point.
C. Opequon Magisterial District. Beginning at the intersection of Route 277 and the boundary between Frederick County and Clarke County, following southsouthwest along the boundary between Frederick County and Clarke County to the intersection with the boundary between Frederick County and Warren County. Thence following the boundary between Frederick County and Warren County south-southwest, then turning west-southwest, to its intersection with the Interstate 81 southbound lanes. Thence following the Interstate 81 southbound lanes north until the intersection with Salem Church Road. Thence following the centerline of Salem Church Road west to the intersection with Route 11. Thence following the centerline of Route 11 northeast to its intersection with Family Drive. Thence following the centerline of Family Drive west to its intersection with the boundary of the Town of Stephens City. Thence following the boundary of the Town of Stephens City clockwise to its intersection with Interstate 81. Thence following the Interstate 81 southbound lanes north to the point where the interstate crosses Opequon Creek (watercourse). Thence following Opequon Creek briefly to the east, where it passes beneath Tasker Road. Thence following the centerline of Tasker Road southeast to the intersection with Aylor Road. Thence following the centerline of Aylor Road southwest to the intersection with Caroline Avenue. Thence following the centerline of Caroline Avenue south to Fredericktowne Drive. Thence following the centerline of Fredericktowne Drive south to the intersection with Westmoreland Drive. Thence following the centerline of Westmoreland Drive east to the intersection with Churchill Drive. Thence following the centerline of Churchill Drive briefly to the intersection with Warrior Drive. Thence following the centerline of Warrior Drive north to the intersection with Tasker Road. Thence following the centerline of Tasker Road east to the intersection with White Oak Road. Thence following the centerline of White Oak Road south to the intersection with Route 277. Thence following the intersection with Route 277 east to the boundary between Frederick County and Clarke County, arriving at the starting point.
D. Red Bud Magisterial District. Beginning at the intersection of Senseny Road and the Interstate 81 southbound lanes and proceeding northeasterly along the Interstate 81 southbound lanes, and parallel to the boundary with the City of Winchester. Thence proceeding north to the intersection between Route 7 and the boundary of the City of Winchester. Thence proceeding east along the westbound lanes of Route 7 to the boundary between Frederick County and Clarke County. Thence following the boundary between Frederick County and Clarke County in a southerly direction, arriving at the intersection with Route 50. Thence following the Route 50 eastbound lanes northwest to the intersection with Airport Road. Thence following the centerline of Airport Road northwest to the intersection with Victory Road. Thence following the centerline of Victory Road north to the intersection with Route 50. Thence following the Route 50 eastbound lanes west to the intersection with Sulphur Spring Road. Thence following the centerline of Sulphur Spring Road east to the intersection with Greenwood Road.

Thence following the centerline of Greenwood Road north to the intersection with Senseny Road. Thence following Senseny Road west to the intersection with Interstate 81, arriving at the starting point.
E. Shawnee Magisterial District. Beginning at the border between Frederick County and Clarke County where it crosses Route 277, thence proceeding in a northwesterly direction along Route 277 to the intersection with White Oak Road. Thence following the centerline of White Oak Road north to the intersection with Tasker Road. Thence following the centerline of Tasker Road west to the intersection with Warrior Drive. Thence following the centerline of Warrior Drive south to Churchill Drive. Thence following the centerline of Churchill Drive briefly to the intersection with Westmoreland Drive. Thence following the centerline of Westmoreland Drive west to the intersection with Fredericktowne Drive. Thence following the centerline of Fredericktowne Drive north to the intersection with Caroline Avenue. Thence following the centerline of Caroline Avenue north to the intersection with Aylor Road. Thence following the centerline of Aylor Road northeast to the intersection with Tasker Road. Thence following the centerline of Tasker Road northwest until it crosses the path of Opequon Creek (watercourse). Thence following of Opequon Creek briefly to the west to the point where Interstate 81 crosses it. Thence following the Interstate 81 southbound lanes north, until intersecting Senseny Road. Thence following the centerline of Senseny Road east until it intersects Greenwood Road. Thence following the centerline of Greenwood Road south to the intersection with Sulphur Spring Road. Thence following the centerline of Sulphur Spring Road west until intersects Route 50. Thence following the Route 50 eastbound lanes east to the intersection with Victory Road. Thence following the centerline of Victory Road south to the intersection with Airport Road. Thence following the centerline of Airport Road southeast to the intersection Route 50. Thence following the Route 50 eastbound lanes southeast to the boundary between Frederick County and Clarke County. Thence following this boundary south until to where the boundary is crossed by Route 277, arriving at the starting point.
F. Stonewall Magisterial District. Beginning at the intersection of Route 7 where it meets the boundary of the City of Winchester, at the overpass crossing of Interstate 81. Thence proceeding in a roughly west-northwesterly direction, identical to the boundary of the City of Winchester and Frederick County, to where this boundary meets Route 37, southwest of the terminus of Margaret Lane. Thence following Route 37 north to its intersection with Route 11. Thence following the southbound lanes of Route 11 northeast until the intersection with Welltown Road. Thence following the centerline of Welltown Road north to the intersection with Rest Church Road. Thence following the centerline of Rest Church Road to the overpass crossing of the Interstate 81 southbound lanes. Turn following the Interstate 81 southbound lanes north-northeast until reaching the boundary between Frederick County and Berkeley County, West Virginia.

Thence following the boundary between Frederick County and Berkeley County, West Virginia southeast, until reaching the intersection between Berkeley County and Jefferson County in West Virginia, and Frederick County and Clarke County in Virginia. Thence following in a southerly direction along the boundary between Clarke County and Frederick County, along Opequon Creek, until the overpass where Route 7 crosses Opequon Creek. Thence following the westbound lanes of Route 7 west, to where Route 7 meets the boundary of the City of Winchester, arriving at the starting point.

## § 7-5 Election of Supervisors.

There shall be one Chairman elected at-large from all districts within the County, and one Supervisor shall be elected from each magisterial district created by this article.

## ARTICLE II Election Precincts

## § 7-6 Precincts created.

Pursuant to authority contained in the Code of Virginia (1950), as amended, §§ 24.2305 through 24.2-310.1, the precincts and their respective polling places for the County are hereby created and established as set forth in this article.

## § 7-7 Precincts and respective polling places enumerated.

The precincts for each magisterial district and the polling places for each precinct shall be as set forth below:
A. Back Creek Magisterial District

## Precinct <br> Polling Place

Cedar Creek
Gore
North Mountain Fire Hall
Kernstown
Middletown
Russells
Middletown Elementary School

Orchard View Elementary School
Middletown Elementary School
Round Hill Fire Event Center
B. Gainesboro Magisterial District

| Precinct | Polling Place |
| :--- | :--- |
| Albin | James Wood High School |
| Gainesborough | Gainesboro Elementary School |
| Nain | James Wood High School |
| Redland | Indian Hollow Elementary School |

White Hall Apple Pie Ridge Elementary School
C. Opequon Magisterial District
Precinct Polling Place

Aylor
Bass-Hoover
Canterburg
Stephens City
Vaucluse Spring

Robert E. Aylor Middle School
Bass-Hoover Elementary School
Sherando High School
Bass Hoover Elementary School
Sherando High School
D. Red Bud Magisterial District

## Precinct

Ash Hollow
Carpers Valley
Greenwood
Millbrook

Polling Place
Dowell J. Howard Center
Senseny Road School
Greenwood Mill Elementary School
Millbrook High School
E. Shawnee Magisterial District

Precinct
Armel
Parkins Mill Precinct
Shenandoah
White Oak School
F. Stonewall Magisterial District

## Precinct

Clear Brook
Gibson School
Jordan Springs
Neff's Town
Sunnyside

Polling Place
Armel Elementary School
Bowman Library
Evendale Elementary School
Bowman Library

## Polling Place

Stonewall Elementary School
Dowell J. Howard Center
Jordan Springs Elementary School
Redbud Run Elementary School
Apple Pie Ridge Elementary School

## § 7-8 Boundaries.

The boundaries of the respective precincts are as set forth below:

## A. Back Creek Magisterial District

(1) Cedar Creek Precinct. Beginning at the intersection of Middle Road and the boundary between Frederick County and Shenandoah County, proceeding northeast along the centerline of Middle Road until the intersection with Marlboro Road. Thence proceeding west along the centerline of Marlboro Road until arriving at the boundary of the Town of Stephens City. Thence following the boundary of the Town of Stephens City counterclockwise to where it intersects Family Drive. Thence following the centerline of Family Drive southeast until the intersection with Route 11. Thence following the centerline of Route 11 southwest until reaching the intersection with Salem Church Road. Thence follow the centerline of Salem Church Road southeast to the overpass crossing with Interstate 81. Thence following the Interstate 81 southbound lanes to the boundary between Frederick County and Warren County, but excluding the Town of Middletown, which constitutes a separate precinct. Thence following the boundary between Frederick County and Warren County to the point it meets Cedar Creek and the boundary between Frederick County and Shenandoah County. Thence following Cedar Creek and the boundary between Frederick County and Shenandoah County northwest to its intersection with Marlboro Road, arriving at the starting point.
(2) Gore Precinct. Beginning at the point where Mountain Falls Road meets Cedar Creek at the boundary between Frederick County and Shenandoah County, proceeding southwest along Cedar Creek and the boundary between Frederick County and Shenandoah County. Then departing Cedar Creek and continuing northwest along the boundary between Frederick County and Shenandoah County, until arriving at the boundary between Frederick County and Hardy County, West Virginia. Thence proceeding northeast to the start of the boundary shared between Frederick County and Hampshire County, West Virginia. Thence continuing broadly northeast, following the county boundary, until arriving where Back Creek Road crosses the county border. Thence following the centerline of Back Creek Road north-northeast to the intersection with Gore Road. Thence following the centerline of Gore Road northeast to the intersection with Route 50. Thence following the eastbound lanes of Route 50 east to the intersection with Back Mountain Road. Thence following the centerline of Back Mountain Road southwest, briefly joining Wardensville Grade heading southwest, and then following the centerline of Mountain Falls Road southeast to Cedar Creek and the boundary between Frederick County and Shenandoah County, arriving at the starting point.
(3) Kernstown Precinct. Beginning at the point where Marlboro Road departs the boundary of the Town of Stephens City, proceeding west along the centerline to the intersection with Middle Road. Thence following the centerline of Middle Road southwest to the intersection with Cedar Creek Grade. Thence following the centerline of Cedar Creek Grade north and then northeast to its intersection with the boundary of the City of Winchester. Thence following the boundary of the City of Winchester to the south until reaching Interstate 81. Thence following the southbound lanes of Interstate 81 to the south until reaching the northernmost boundary of the Town of Stephens City. Thence following the boundary of the Town of Stephens City to the west and south and east again to the point where it intersects Marlboro Road, arriving at the starting point.
(4) Middletown Precinct. The Middletown Precinct follows exactly the boundaries of the Town of Middletown.
(5) Russells Precinct. Beginning at the intersection of Middle Road and the boundary between Frederick County and Shenandoah County at Cedar Creek, following that boundary and Cedar Creek generally west to the point where Mountain Falls Road meets Cedar Creek at the boundary between Frederick County and Shenandoah County. Thence following the centerline of Mountain Falls Road northwest, briefly joining Wardensville Grade heading northeast, and then following the centerline of Back Mountain Road northeast to its intersection with Route 50. Thence following the eastbound lanes of Route 50 east to the boundary of the City of Winchester. Thence following the boundary of the City of Winchester south to its intersection with Cedar Greek Grade. Thence following the centerline of Cedar Creek Grade west and then south until it intersects with Middle Road, and thence along the centerline of Middle Road to the boundary between Frederick County and Shenandoah County, arriving at the starting point.
B. Gainesboro Magisterial District.
(1) Albin Precinct. Beginning the intersection of Apple Pie Ridge Road and Route 522, following the northbound lanes of Route 522 to the north to the point where Route 522 crosses Hogue Creek (a watercourse). Thence following Hogue Creek north to where Hogue Creek joins Back Creek. Thence following Back Creek north until reaching the boundary between Frederick County and Berkeley County, West Virginia, with any islands having no clear dominance by either bank therefore being within the Albin Precinct. Thence following the boundary between Frederick County and Berkeley County, West Virginia southeast to its intersection with Apple Pie Ridge Road. Thence following the centerline of Apple Pie Ridge Road south to its intersection with Route 522, arriving at the starting point.
(2) Gainesborough Precinct. Beginning at the point where Route 522 crosses Hogue Creek (a watercourse) and proceeding along the northbound lanes of Route 522 to the north, to its intersection with Bloomery Pike. Thence following the centerline of Bloomery Pike west to its intersection with the boundary between Frederick County and Hampshire County, West Virginia. Thence following the boundary of Frederick County and Hampshire County roughly west and then roughly north-northeast to the intersection of boundaries of Hampshire County, West Virginia and Morgan County, West Virginia with Frederick County. Thence following the boundary of Frederick County and Morgan County, West Virginia in a southeasterly direction until it meets Back Creek (a watercourse). Thence following Back Creek south to where Hogue Creek joins it, with any islands having no clear dominance by either bank therefore being within the Albin Precinct. Thence following Hogue Creek south to its crossing by Route 522, arriving at the starting point.
(3) Nain Precinct. Beginning the overpass where Route 37 crosses over Route 522, thence following Route 37 south to its intersection with Route 50. Thence following the eastbound lanes of Route 50 west to its intersection with North Hayfield Road/South Hayfield Road. Thence following the centerline of North Hayfield Road northeast to the intersection with Gainesboro Road. Thence following the centerline of Gainesboro Road east to its intersection with Route 522. Thence following the northbound lanes of Route 522 south to Route 37, arriving at the starting point.
(4) Redland Precinct. Beginning the intersection of North Hayfield Road/South Hayfield Road and Route 50 and thence following the eastbound lanes of Route 50 west to its intersection with Gore Road. Thence following the centerline of Gore Road southwest to its intersection with Back Creek Road. Thence following the centerline of Back Creek Road southsouthwest to the boundary between Frederick County and Hampshire County, West Virginia. Thence following the boundary of Frederick County and Hampshire County roughly west and then roughly north-northeast to the intersection with Bloomery Pike. Thence following the centerline of Bloomery Pike east to its intersection with Route 522. Thence following the northbound lanes of Route 522 south to its intersection with Gainesboro Road. Thence following the centerline of Gainesboro Road west until its intersection with North Hayfield Road. Thence following the centerline of North Hayfield Road southwest until reaching Route 50, arriving at the starting point.
(5) White Hall Precinct. Beginning at the point where Route 37 intersects Route 522, following the northbound lanes of Route 522 north to the
intersection with Apple Pie Ridge Road. Thence following the centerline of Apple Pie Ridge Road north to its intersection with the boundary between Frederick County and Berkeley County, West Virginia. Thence following the boundary of Frederick County and Berkeley County, West Virginia in a southeasterly direction to the intersection with the Interstate 81 southbound lanes. Thence following the southbound lanes of Interstate 81 south-southwest to the overpass crossing at Rest Church Road. Thence following along the centerline of Rest Church Road west and south to the intersection with Welltown Road. Thence following the centerline of Welltown Road south to the intersection with the southbound lanes of Route 11. Thence following the southbound lanes of Route 11 southwest until the intersection with Route 37, and then proceeding along Route 37 south to the crossing with Route 522, arriving at the starting point.

## C. Opequon Magisterial District.

(1) Aylor Precinct. Beginning at the intersection of Route 277 and Warrior Drive, following the centerline of Warrior Drive northeast to the intersection with Tasker Road. Thence following the centerline of Tasker Road east to the intersection with White Oak Road. Thence following the centerline of White Oak Road southwest to the intersection with Route 277. Thence following the centerline of Route 277 west to the intersection with Warrior Drive, arriving at the starting point.
(2) Bass-Hoover Precinct. Beginning at the intersection of Warrior Drive and Route 277, following the centerline of Route 277 west to the intersection with Interstate 81. Thence following the Interstate 81 southbound lanes north to the point where the interstate crosses Opequon Creek (watercourse). Thence following Opequon Creek briefly to the east, where it passes beneath Tasker Road. Thence following the centerline of Tasker Road southeast to the intersection with Aylor Road. Thence following the centerline of Aylor Road southwest to the intersection with Caroline Avenue. Thence following the centerline of Caroline Avenue to Fredericktowne Drive. Thence following the centerline of Fredericktowne Drive to the intersection with Westmoreland Drive. Thence following the centerline of Westmoreland Drive to the intersection with Churchill Drive. Thence following the centerline of Churchill Drive to the intersection with Warrior Drive. Thence following the centerline of Warrior Drive southwest to the intersection with Route 277, arriving at the starting point.
(3) Canterburg Precinct. Beginning at the point where Double Church Road intersects the boundary between Frederick County and Warren County, following the centerline of Double Church Road northwest to the intersection with Route 277. Thence following the centerline of Route 277 east until it crosses the boundary between Frederick County and Clarke

County. Thence following the boundary between Frederick County and Clarke County south-southwest, and then the boundary between Frederick County and Warren County, until turning west-southwest and following the boundary between Frederick County and Warren County to the intersection of Double Church Road, arriving at the starting point.
(4) Stephens City Precinct. The Newtown Precinct follows exactly the boundaries of the Town of Stephens City.
(5) Vaucluse Spring Precinct. Beginning at the point where Interstate 81 crosses the boundary between Frederick County and Warren County, following the southbound lanes of Interstate 81 south to the intersection with Salem Church Road. Thence following the centerline of Salem Church Road west to the intersection with Route 11. Thence following the centerline of Route 11 north to the intersection with Family Drive. Thence following the centerline of Family Drive northwest to where Family Drive meets the boundary of the Town of Stephens City. Thence following the boundary of the Town of Stephens City counterclockwise to the point where it meets Interstate 81. Thence following the Interstate 81 southbound lanes north to the intersection with Route 277. Thence following the centerline of Route 277 east to the intersection with Double Church Road. Thence following the centerline of Double Church Road southeast to the boundary between Frederick County and Warren County. Thence following the boundary between Frederick County and Warren County west-southwest to its intersection Interstate 81, arriving at the starting point.
D. Redbud Magisterial District.
(1) Ash Hollow Precinct. Beginning at the intersection of Senseny Road and Greenwood Road, following the centerline of Senseny Road west to its intersection with Interstate 81. Thence following the southbound lanes of Interstate 81 northeast to the intersection with Route 7 . Thence following the westbound lanes of Route 7 east to the intersection with Valley Mill Road. Thence following the centerline of Valley Mill Road southeast to the intersection with Greenwood Road. Thence following the centerline of Greenwood Road south-southwest to the intersection with Senseny Road, arriving at the starting point.
(2) Carpers Valley Precinct. Beginning at the intersection of Greenwood Road and Senseny Road, following the centerline of Senseny Road east until reaching the boundary between Frederick County and Clarke County. Thence following the boundary between Frederick County and Clarke County in a southerly direction, arriving at the intersection with Route 50. Thence following the Route 50 eastbound lanes northwest to the
intersection with Airport Road. Thence following the centerline of Airport Road northwest to the intersection with Victory Road. Thence following the centerline of Victory Road north to the intersection with Route 50. Thence following the Route 50 eastbound lanes west to the intersection with Sulphur Spring Road. Thence following the centerline of Sulphur Spring Road east to the intersection with Greenwood Road. Thence following the centerline of Greenwood Road north to the intersection with Senseny Road, arriving at the starting point.
(3) Greenwood Precinct. Beginning at the intersection of Senseny Road and Greenwood Road, following the centerline of Greenwood Road northnortheast until the intersection with Woodrow Road. Thence following the centerline of Woodrow Road southeast to its intersect with Charlton Road. Thence following the centerline of Charlton Road northeast to its intersection with Nassau Drive. Thence following the centerline of Nassau Drive southeast to its intersection with Channing Drive. Thence following the centerline of Channing Drive north to its intersection with Valley Mill Road. Thence following Valley Mill Road east to its intersection with Route 7. Thence following the westbound lanes of Route 7 east to its intersection with the boundary between Frederick County and Clarke County. Thence following the boundary between Frederick County and Clarke County in a southerly direction, arriving at the intersection with Senseny Road. Thence following the centerline of Senseny Road west to its intersection with Greenwood Road, arriving at the starting point.
(4) Millbrook Precinct. Beginning at the intersection of Valley Mill Road and Route 7, following the centerline of Valley Mill Road southwest to its intersection with Channing Drive. Thence following the centerline of Channing Drive south to its intersection with Nassau Drive. Thence following the centerline of Nassau Drive northwest to its intersection with Charlton Road. Thence following the centerline of Charlton Road southwest to its intersection with Woodrow Road. Thence following the centerline of Woodrow Road northwest to its intersection with Greenwood Road. Thence following the centerline of Greenwood Road north to its intersection with Valley Mill Road. Thence following the centerline of Valley Mill Road northwest to its intersection with Route 7. Thence following the westbound lanes of Route 7 east to its original intersection with Valley Mill Road, arriving at the starting point.
E. Shawnee Magisterial District.
(1) Armel Precinct. Beginning at the point where Route 277 intersects with the boundary between Frederick County and Clarke County, following west along the centerline of Route 277 to the intersection with White Oak Road. Thence following the centerline of White Oak Road northeast to its
intersection with Tasker Road. Thence following the centerline of Tasker Road west to its intersection with Warrior Drive. Thence following the centerline of Warrior Drive northeast to its intersection with Talamore Drive. Thence following the centerline of Talamore Drive east until it crosses the gully of the unnamed watercourse that runs roughly parallel to Auburn Hill Court, and which is ultimately a tributary of Opequon Creek (watercourse). Thence following said watercourse northeast to where Route 522 crosses it. Thence following along the southbound lanes of Route 522 north to the intersection with West Parkins Mill Road. Thence following the centerline of West Parkins Mill Road east to its intersection with Route 50 . Thence following the eastbound lanes of Route 50 east until arriving at the boundary between Frederick County and Clarke County. Thence following the boundary between Frederick County and Clarke County south to its intersection with Route 277, arriving at the starting point.
(2) Parkins Mill Precinct. Beginning at the intersection of Aylor Road and Tasker Road, following Tasker Road northwest, to the place where Opequon Creek (watercourse) crosses beneath Tasker Road. Thence following Opequon Creek west to the place where it passes beneath Interstate 81. Thence following the Interstate 81 southbound lanes north, until intersecting with Route 50 . Thence following the Route 50 eastbound lanes east to the intersection with Route 522. Thence following the southbound lanes of Route 522 southeast, to the point where Route 522 crosses the gully of the unnamed tributary watercourse that joins Opequon Creek. Thence following said watercourse southwest, continuing along the more northerly of the two paths where the tributary forks, until meeting Lakeside Drive. Thence following the centerline of Lakeside Drive southwest to the intersection with Oak Ridge Drive. Thence following the centerline of Oak Ridge Drive to the intersection with Tasker Road and Aylor Road. arriving at the starting point.
(3) Shenandoah Precinct. Beginning at the intersection of West Parkins Mill Road and Route 522, thence following the southbound lanes of Route 522 north to the intersection with Route 50. Thence following the Route 50 eastbound lanes west to the intersection with Interstate 81. Thence following the Interstate 81 southbound lanes north to its intersection with Senseny Road. Thence following the centerline of Senseny Road east to its intersection with Greenwood Road. Thence following the centerline of Greenwood Road south to the intersection with Sulphur Spring Road. Thence following the centerline of Sulphur Spring Road west to the intersection with Route 50. Thence following the eastbound lanes of Route 50 east to the intersection with Victory Road. Thence following the centerline of Victory Road south to the intersection with Airport Road.

Thence following the centerline of Airport Road southeast to the intersection with Route 50. Thence following the eastbound lanes of Route 50 southeast to its intersection with West Parkins Mill Road. Thence following the centerline of West Parkins Mill Road to its intersection with Route 522, arriving at the starting point.
(4) White Oak School Precinct. Beginning at the intersection of Warrior Drive and Talamore Drive, following the centerline of Warrior Drive southwest to its intersection with Churchill Drive. Thence following the centerline of Churchill Drive briefly to the intersection with Westmoreland Drive. Thence following the centerline of Westmoreland Drive west to the intersection with Fredericktowne Drive. Thence following the centerline of Fredericktowne Drive north to the intersection with Caroline Avenue. Thence following the centerline of Caroline Avenue north to the intersection with Aylor Road. Thence following the centerline of Aylor Road northeast through the intersection with Tasker Road, continuing as Aylor Road becomes Oak Ridge Drive, to the intersection with Lakeside Drive. Thence following the centerline of Lakeside Drive northeast until it meets the gully of an unnamed watercourse that is ultimately a tributary of Opequon Creek. Thence following said watercourse northeast to where it is joined from the south by a second unnamed tributary, and then following that second unnamed tributary southwest until it reaches Talamore Drive. Thence along the centerline of Talamore Drive west to its intersection with Warrior Drive, arriving at the starting point.
F. Stonewall Magisterial District.
(1) Clear Brook Precinct. Beginning at the intersection of Welltown Road and Route 11, following the centerline of Welltown Road north to the intersection with Rest Church Road. Thence following the centerline of Rest Church Road north and east to its intersection with Interstate 81. Thence following the southbound lanes Interstate 81 north to the intersection with the boundary between Frederick County and Berkeley County, West Virginia. Thence following the boundary between Frederick County and Berkeley County, West Virginia southeast, until reaching the intersection between Berkeley County and Jefferson County in West Virginia, and Frederick County and Clarke County in Virginia. Thence following in a southerly direction along the boundary between Clarke County and Frederick County, along Opequon Creek, following the boundary of Clarke County, to the point where High Banks Road abuts the banks of Opequon Creek. Thence following the centerline of High Banks Road northwest to its intersection with Jordan Springs Road. Thence following the centerline of Jordan Springs Road north and northwest to its intersection with Old Charles Town Road. Thence following the centerline
of Old Charles Town Road west to its intersection with Route 11. Thence following the centerline of Route 11 southwest to its intersection with Welltown Road, arriving at the starting point.
(2) Gibson School Precinct. Beginning at the intersection of Route 11 and the boundary of the City of Winchester, following the centerline of Route 11 north-northeast to the point that Route 37 joins Route 11, and continuing to follow the centerline of Route 11 north-northeast to its intersection with Interstate 81. Thence following the southbound lanes of Interstate 81 south to the intersection with Route 7 and the boundary with the City of Winchester. Thence following the boundary of the City of Winchester west-northwest to its intersection with Route 11, arriving at the starting point.
(3) Jordan Springs Precinct. Beginning at the intersection of Morgan Mill Road and Route 7, following the centerline of Morgan Mill Road north to its intersection with Redbud Road. Thence following the centerline of Redbud Road northwest to its intersection with Milburn Road. Thence following the centerline of Milburn Road north to its intersection with Old Charles Town Road. Thence following the centerline of Old Charles Town Road east, and then continuing onto Jordan Springs Road and following the centerline southwest and west to its intersection with High Banks Road. Thence following the centerline of High Banks Road southeast, to the point where it abuts the banks of Opequon Creek and the boundary between Frederick County and Clarke County. Thence following Opequon Creek and the boundary with Clarke County south to the intersection with Route 7. Thence following the westbound lanes of Route 7 to the intersection with Morgan Mill Road, arriving at the starting point.
(4) Neff's Town Precinct. Beginning at the intersection of Interstate 81 and Route 7, following the southbound lanes of Interstate 81 north to the overpass crossing above Route 11. Thence following the centerline of Route 11 northeast to its intersection with Old Charles Town Road. Thence following the centerline of Old Charles Town Road east to its intersection with Milburn Road. Thence along the centerline of Milburn Road south to its intersection with Redbud Road. Thence following the centerline of Redbud Road southeast to its intersection with Morgan Mill Road. Thence following the centerline of Morgan Mill Road south to its intersection with Route 7. Thence following the westbound lanes of Route 7 to the intersection with Interstate 81, arriving at the starting point.
(5) Sunnyside Precinct. Beginning at the point where Route 11 meets the boundary of the City of Winchester and following west along the boundary with the City of Winchester until arriving at the point at which it abuts Route 37. Thence crossing Route 37 and following north along
southbound lanes of Route 37 to the point at which Route 37 joins Route 11. Thence following the centerline of Route 11 south to the point at which it meets the boundary with the City of Winchester, arriving at the starting point.

## § 7-9 Changes in precinct or polling place.

The Secretary of the Electoral Board shall notify by mail, no later than 15 days prior to the next general, special, or primary election, all registered voters whose precinct or polling place has been changed by the provisions of this article.

| From: | spit750@everyactioncustom.com on behalf of Robert Tuleya |
| :--- | :--- |
| To: | Redistricting |
| Subject: | REDISTRICTING: Written Comment |
| Date: | Wednesday, November 24, 2021 8:31:38 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Clerk of the Supreme Court of VA Muriel-Theresa Pitney,
I am submitting this written comment in regards to the redistricting process currently underway. Please make all districts consistent with present geographical and governmental boundaries such as counties and neighborhoods. Our present state and federal districts are discontinuous. Our local civic league area is composed of two separate Va delegate districts!

Sincerely,
Robert Tuleya
550 Nansemond Cres Portsmouth, VA 23707-1135
spit750@aol.com

```
From: Megan Rhyne
To: Redistricting
Subject: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
Date: Wednesday, November 24, 2021 11:11:39 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning --
The Virginia Coalition for Open Government - a non-partisan, nonprofit alliance that works to forward the public's right to know - writes to urge the Supreme Court of Virginia to immediately provide a modernized document management system for receiving and cataloguing public comment on the redistricting process to replace the current sporadically updated single PDF document now in use.

Many models for providing indexed, automatically updated document repositories already exist: From free or low-cost services like shared a folder on Google Drive, Dropbox, Sync, Evernote, Scribd, and others, to more sophisticated applications like those already in use by Virginia's Regulatory Town Hall.

These systems and others like them provide an easy-to-follow timeline of who has submitted comments and when, making it much more useful to citizens to zero in on comments of importance to them, without the endless scrolling of the current single-PDF system.

Further, the current approach being employed on the Supreme Court's website is one that must be manually updated, and -- based at least on today's schedule -- not on a consistent or timely basis. As of today, Nov. 24 at 11 a.m., 25 hours have passed since the last update (Nov. 24 at 10 a.m.), leaving the public to wonder whether anyone has submitted comments at all, much less knowing whether a response to those comments is warranted.

This is unchartered territory, and it is understandable that some things must be created and tweaked on the fly. This happened when the pandemic began and the Virginia Department of Health had to continually adapted its system to provide as much timely information as it could and to be responsive to the public's requests for additional information and/or different ways of presenting it.

The redistricting process has a finite window in which to operate. There is no time to waste. It is imperative that the public and the press has up-to-date and easily parsed information about who has submitted comments and when.

There is intense public interest in the process. Please dedicate time and resources immediately to ensure easy access to maximize transparency during that process.

Very truly yours, Megan Rhyne

Megan Rhyne
Virginia Coalition for Open Govemment, Executive Director
P.O. Box 2576

Willia msburg VA 23187
540-353-8264
www.opengovva.org

| From: | clark@polidata.org |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Rules and Procedures for Implementing the Requirements of Article II, Section 6-A: Public Comment on Data |
| Date: | Wednesday, November 24, 2021 11:48:54 AM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSThe following comment is submitted pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A with respect to the redistricting of the Virginia General Assembly.

Introduction:
This note is to assist the map drafters retained by the Court to understand one important limitation of the political data, i.e., election results, produced by the Virginia Department of Legislative Services (DLS).
Presumably, DLS will be developing these datasets, as I believe they did for the recent commission process.
It was during the commission process, where I assisted the Republican line drawer and counsel in running statistical reports, that this shortcoming of the results was noted. These election results had a problem: they did not include all votes cast as they were frequently, and inconsistently, missing centrally reported absentee, and/or early-in-person votes.
While several states have, throughout the previous decade, redirected such non-precinct votes to the registration precinct for tabulation, Virginia is not one of these states, at least not for statewide offices.

## Discussion:

The lack of absentee votes was a relatively minor issue for some elections during the commission process because the number of such votes was not a very large percentage of the overall vote for the state.
For example, for both the 2013 and 2017 races for Governor, such non-precinct votes were less than $10 \%$ of the statewide vote.

However, for the recent 2021 election these non-precinct votes were more than a third (36.4\%) of all votes cast.

Moreover, the partisan break of these non-precinct votes differs substantially from the break of votes cast at the polls.
Reviewing the data released by the Virginia Department of State (DOS) following the November 15 certification results in the following summary.

The partisan break for all votes cast for Governor was 48.6 \%Dem to 50.5 \%Rep (as a percentage of all votes).
For the poll vote, the break was 42.4 \%Dem to 56.7 \%Rep;
for the non-precinct vote, the break was 59.4 \%Dem to 39.8 \%Rep.
Clearly, ignoring these non-precinct votes may skew the results for any review of partisan indicators for any proposed plans.

Alternative Data:
A related problem is that the data provided by the Department of State, albeit the official certified data, does not, apparently, include the best available data. A recent news item (see https://www.vpap.org/visuals/visual/fairfax-county-results-legislative-district/ ) indicates that Fairfax County did redirect votes to registration precincts. Alas, the data for Fairfax County provided by the Department of State does not.
For example, the VPAP.org website indicates that Fairfax County's vote system has the votes for Governor in House of Delegates district 35 as:
McAuliffe: (Democrat) 23,791, 67.3\%;
Youngkin: (Republican) 11,350, 32.1\%;
Blanding: (Liberation Party) 176, 0.5\%; a total of 35,317 votes,

Yet, the votes, as tabulated for this district in the DOS file, are
McAuliffe: (Democrat) 12,121, 60.5\%,
Youngkin: (Republican) 7,776, 39.8\%,
Blanding: (Liberation Party) 136, 0.6\%, a total of 20,033 votes.

The unaccounted for 15,284 votes are commingled with other non-precinct votes for the county.
(See
https://results.elections.virginia.gov/vaelections/2021\ November\ General/Site/Statewi de.html ).

Summary:
Stakeholders interested in this process will likely devise their own means by which they can incorporate these absentee votes into their own analysis; something that time did not allow during the fast-paced commission process. It is unclear exactly how much time is to be allocated to the court's experts to work on these plans but, because rectifying this situation with respect to these missing votes will take some time, it seemed important to simply alert the court and their experts as they sift through the numerous tasks before them.

Sincerely,
Clark Bensen, Polidata LLC

POLIDATA © Political Data Analysis | https://polidata.org/ | Distillers of Official Data ${ }^{\text {® }}$ since 1974 Clark Bensen | POLIDATA LLC | Tel: 703-690-4066 | eFax: 202-318-0793 | clark@polidata.org

| From: | Rebecca Hanmer |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep the City of Fredericksburg intact |
| Date: | Wednesday, November 24, 2021 3:00:16 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing you on behalf of myself and 10 other Fredericksburg residents (named below) to repeat the comments which we offered on July 27, 2021, to the Redistricting Commission. We urge the Court to make the City of Fredericksburg one voting district for the Virginia House of Delegates, the Virginia Senate and the U.S. House of Representatives.

Fredericksburg is a distinct community of interest. Here are elements that make it so:

- We are a relatively small city, and our City government is not remote from us. There is a shared civic culture.
- We have our river and our riverfront, shared by all. We take pride in, and work to preserve, our distinctive environment..
- We have our university, and there is a real sense of shared community between the University of Mary Washington and the City.
- We have our shared history. Not everyone agrees on how to interpret that history, but it's a presence in our lives today--as an attraction for business and tourism, a source of interest and learning, and of scenery and recreational opportunities.

This small community of interest should not be split between districts. Please keep the City of Fredericksburg intact as you establish the new voting district boundaries. Thank you for your essential service.

From the following residents of the City of Fredericksburg: Rebecca Hanmer, 138 Caroline Street; Frank and Maureen Widic, 119 Caroline Street; Paula Chow and Ed Sandtner, 132 Caroline Street; Constance Smith, 143 Longstreet Avenue; Katherine Pecka, 227 Charles Street; Anne and Carl Little, 726 William Street; Ann and Steve Jurczyk, 1434 Buckner Street

| From: | Roger Dadiomoff |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Whitney Lajaunie |
| Subject: | redistricting |
| Date: | Wednesday, November 24, 2021 4:28:15 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I understand a proposal is being floated to redistrict placing Williamsburg and the historic district with the Eastern Shore and Virginia Beach. Doing so is a flagrant attempt to change the representation of those areas (in which I live).
Anyone looking at a map would easily conclude that combining those geographic areas makes no sense, unless there is an underlying political move that is working towards undermining the will of the voters in those areas.
I most strongly reject this attempt and hope we can hold those who are propagating it accountable.

Commander R.S. Dadiomoff
US Navy (ret)

| From: | Neal Sumerlin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | City of Lynchburg |
| Date: | Thursday, November 25, 2021 8:11:02 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I urge the Special Masters to restore Lynchburg to the single legislative districts in which it was found before 2011. Our city is a single community of interest, but it is currently split between two House of Delegates districts and two Senate districts. Because of the unusual way that Virginia allows totally separate jurisdictions for independent cities and the counties that surround them, the interests and concerns of Lynchburg and its contiguous counties diverge more often than they align.

The argument is sometimes made that having four legislators in Richmond and not just two gives Lynchburg extra clout. That doesn't really hold up when you look at the numbers. In House District 22 for example, Lynchburg citizens comprise roughly a quarter of the district's total population. In a House district that included all of Lynchburg, our citizens would make up nearly all of that district's constituents. The elected representative would of necessity represent those constituents more strongly.

Senate districts are of course larger. But in Senate District 23, Lynchburg represents less than a fifth of the total population. Putting our city in a single district would bump that figure up to more than 35\%--again, increasing our influence and more closely reflecting our interests in Richmond.

The current map is a historical anomaly. I ask that you restore Lynchburg as a single community of interest.

Neal Sumerlin<br>Lynchburg

| From: | Chuck Coleman |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Comment |
| Date: | Friday, November 26, 2021 12:42:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

ATTN: Clerk of the Supreme Court of Virginia
Per the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A, I would like to submit a comment regarding Virginia's redistricting.

This comment is in regard to the interpretation of Code of Virginia, § 24.2-304.04. Standards and criteria for congressional and state legislative districts, paragraph 7: "A map of districts shall not, when considered on a statewide basis, unduly favor or disfavor any political party." I would like to offer an interpretation, based on the work done by the Duke Quantifying Gerrymandering Project: https://sites. duke.edu/quantifyinggerrymandering/. 1. The districts of every redistricting map should be responsive in that, as the proportion of votes received by one party increases, its number of seats increases. 2. There should be no firewall, a supermajority share of the vote such that only when a minority party that receives this vote does it receive a majority of seats of the body for which the map has been created.

I further suggest that that any proposed reapportionment's districts' partisanship be compared to those of an ensemble of maps created to satisfy the criteria of Code of Virginia, § 24.2-304.04. The above mentioned Quantifying Gerrymandering site has several examples of how this can be done.

Respectfully Yours, Charles Coleman 5811 Governors View Ln. Alexandria, VA 22310
chuckcoleman@yahoo.com

# Thomas M. Strassburg 

735 Lochridge Lane
Earlysville, Virginia 22936

November 26, 2021

Ms. Muriel Theresa Pitney, Clerk of Court<br>Supreme Court of Virginia<br>100 North Ninth Street<br>Richmond, Virginia 23219

via email

Dear Ms. Pitney:
I am writing to comment on Virginia redistricting in accordance with the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia. My comment is as follows:

According to the Virginia Code, "Districts shall be drawn to preserve communities of interest." I live in an area with rural zoning. While I do not live on a farm, there is one just up the road, and there is a vineyard just beyond that. To lump my area in with the Charlottesville urban ring is just wrong and is inconsistent with the statute I quoted.

Thank you for considering my comment.
Sincerely,


Thomas M. Strassburg

| From: | Alan Veeck |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Friday, November 26, 2021 4:20:49 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court of Virginia:
I am a resident of Mecklenburg County and I write to request that the Supreme Court decline to approve any final map that splits our county. Mecklenburg is not an exceptionally populous county like Fairfax or other places in Northern Virginia, so there is no rational reason it should need to be divided. It could easily be included in a single district, and I would have serious questions about the rationale if it is not.

Al Veeck
129 Boyd Dr.
Bracey, VA 23919
"From nothing, nothing comes."
—Parmenides

Sent from my iPad
Send from my Android

| From: | Lames Poplar |
| :--- | :--- |
| To: | Redistricting |
| Cc: | 1rpoplar@shentel. net |
| Subject: | Public Comment on VA Proposed Redistricting. |
| Date: | Saturday, November 27, 2021 9:33:32 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Evening,

As a longtime resident of the Commonwealth of Virginia and as a thirty-year veteran of the United States Navy I would like to offer my input concerning the prposed reallocation prisoners to their last-known address for redistricting. From my perspective this does not make fiscal sense nor is in keeping with the spirit or intent of a representative democracy envisioned by our Founding Fathers .

Nevada is one of eleven states that reallocates inmates to their preprison addresses during redistricting. State law requires prison officials "compile the last known residential address of each offender immediately before the offender was sentenced" and send the information to the state demographer -- the process has proven to be cumbersome and ineffective. It simply does not work.

For the duration of their confinement these individuals that are incarcerated they are physically present in a different community than their last know address and thus the people who live in that community support the institution in which they are housed through both property and sales taxes. Those districts where prisons are located would receive less aid from the state if this change would take effect.

I highly recommend that this change not be implemented in our fair state.

Best Regards,

J ames R Poplar III
CAPT USN(ret)
Quicksburg VA 22847

| From: | Niro Rasanayagam |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep City of Lynchburg whole as ONE community of interest in ALL maps |
| Date: | Sunday, November 28, 2021 12:46:36 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Dr. Grofman and Mr. Trende, Special Masters for VA Redistricting,

I am an 18-year resident of the City of Lynchburg and I urge you to please do the following as you re-draw Virginia's state House, Senate, and Congressional House districts:

1) Please carefully review and consider the written and verbal citizen input the VA Redistricting Commission has received since last July through emails, letters, and public hearings. This feedback from Virginia residents should inform ALL your decisions on maps.
2) I trust that you will do \#1 above thoroughly and therefore, I will not restate the details of my prior feedback to the commission here. However I will reiterate the gist of my prior feedback: I implore you to please keep the City of Lynchburg, with a population size of about 80,000, residents, as ONE COMMUNITY OF INTEREST as your draw all our maps.
3) Simply put, for all practical purposes, the City of Lynchburg is a small urban city with urban needs and urban issues, and it must be represented by legislators who understand and want to serve this urban profile of strengths and challenges, and Lynchburg's unique set of social, cultural and economic interests. For this reason, please keep Lynchburg WHOLE within ONE state House district and ONE state Senate district.
4) Given the size of our city and its population profile, I also urge you to please keep Lynchburg intact within ONE Congressional House district. (The last iteration of Congressional House maps from the Redistricting
commission released in October had most of Lynchburg with the $6{ }^{\text {th }}$ Congressional House district, and a small sliver of two precincts, mainly a predominantly African-American area, appended on to the $5^{\text {th }}$ Congressional House district. Please know that this racial gerrymander will NOT do!).

Thank you for keeping Lynchburg intact as the one community of interest that we are in ALL maps.

Sincerely,

Niro Rasanayagam
Lynchburg, VA

| From: | Eileen Barthelmy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting Public Comments |
| Date: | Sunday, November 28, 2021 4:45:08 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

November 28, 2021
Dear Clerk of the Supreme Court of Virginia:
Per the Rules and Procedures for Implementing the Requirements Article II, Section 6-A I am submitting this letter.

Thank you to the Justices of the Supreme Court of Virginia for insisting on appropriate people to act as special masters in the redistricting process.

I supported the legislation and Constitutional amendment that established the current re-districting process and was proud that Virginians voted for a fair process that avoided gerrymandered districts. The abject failure of the Virginia Redistricting Commission was a betrayal of Virginia's residents. I respectfully urge the Supreme Court to continue its work in the same fair manner it has shown with selection of the special masters as spelled out in the law.
With respect to Powhatan County, where I reside, some of the draft maps have, I believe erroneously, included Powhatan in districts that border North Carolina and include only counties that are nearly totally rural. While Powhatan is rural, it is not strictly so and, along with Goochland County, is contiguous to Richmond suburbs and shares important economic and transportation interests. While Powhatan residents support our county's businesses, many people travel east to work, dine and recreate; not many travel south.

Respectfully,
Eileen Barthelmy

| From: | Magnus, Chris |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle |
| Date: | Monday, November 29, 2021 3:48:10 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,

My name is Chris Magnus. I am a resident of Albemarle County, Virginia. Pursuant to Rule 4 under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting my comments to you regarding redistricting. House of Delegates Map: Please keep Albemarle County as unified as possible to maintain our community of interest and allow us to live in fair, compact House of Delegates Districts. Specifically, please include us in only 2 House Districts. One District should be Charlottesville and some portion of Albemarle. The second District should be the rest of Albemarle and our neighbor to the south, Nelson County, with whom we share a community of interest. This would be a fair treatment of our county.
Unfortunately, for the past decade the people of Albemarle County have been fractured across 4 House Districts. This divides neighborhoods, separates families and friends, sows confusion among residents, breeds apathy, dilutes our ability to participate in the political process, and muzzles the voices of the people in state-level government. You can keep Albemarle County in 2 Districts in the way I have described above by doing something the Redistricting Commission was not able to do: compromise. Specifically, a compromise between proposed maps A7 and B6 offers a path forward for a fair treatment of Albemarle County. One negative aspect of Map A7 is that it slices Albemarle into 3 Districts. This would lead to the same negative results that we experience under the current map. That is simply not acceptable. In contrast, Map B6 keeps Albemarle in 2 compact Districts, thereby maintaining our community of interest. This is much better for the people here. However, Map B6 draws Albemarle County in with a piece of Augusta County. GOP Commissioners specifically objected to this proposal because there are mountains between Augusta and Albemarle. To address that concern directly, we can look to Map A7, which combines Nelson County with Albemarle County. This solution has the benefit that Nelson County has roughly the same population as the portion of Augusta County included with Albemarle under Map B6. Thus, it should be a relatively easy fix in terms of map drawing. In sum, dividing Albemarle County into any more than 2 Districts would be a betrayal of the people here. Please draw a fair map for our area by keeping us into the 2 Districts I have described.
Congressional Map: With regard to the Congressional Map, our area is currently in the heavily gerrymandered, non-compact 5th District. The Congressional maps proposed by the GOP members of the Redistricting Commission were unfortunately egregious partisan
gerrymanders. Please proceed in good faith in ensuring that we have an opportunity to choose our Representative in a compact, fairly-drawn District that maintains communities of interest and rejects bad faith partisan efforts to gerrymander us for another decade.

Thank you.

Christopher Magnus

Albemarle County, Virginia

Get Outlook for Android

Clerk of the Supreme Court of Virginia c/o Redistricting Special Masters
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219
redistricting@vacourts.gov

November 29, 2021

Dear Special Masters Grofman and Trende:

I submit this letter on behalf of the Sikh American Legal Defense and Education Fund (SALDEF). We thank you for the opportunity to provide comments on the issues that you should take into consideration as you complete the task for which you have been appointed. Specifically, we share our concern about the way the maps could impact AAPIs, other communities of color, immigrant communities, and other communities of interest. Any maps you submit to the Supreme Court of Virginia should not sacrifice the integrity of communities of interest, as defined by identical bills SB717/HB1255 passed into Virginia law in 2020 as well as the federal Voting Rights Act, in favor of compactness or other political consideration.

SALDEF is a national Sikh American media, policy, and education organization based in Washington, DC. Founded in 1996, SALDEF's mission is to empower Sikh Americans by building dialogue, deepening understanding, promoting civic and political participation, and upholding social justice and religious freedom for all Americans.

Given our longstanding presence in the DC/Maryland/Virginia area, and deep relationships with our fellow local advocacy organizations, SALDEF is strongly positioned to advocate for South Asian and broader AAPI communities of interest in Virginia in the redistricting process. In fact, it is on those terms that we engaged with a coalition of advocacy
organizations and constituents across Virginia to produce a unity map, submitted by the Virginia Counts Coalition for your consideration. It is our hope that you draw insights from the coalition's work and outreach into diverse communities to prevent the dilution of and division of communities of interest in Virginia, thereby undoing much of the progress those communities have made since the most recent redistricting process in 2011.

## Asian Americans and Pacific Islanders in Virginia

Per the 2020 U.S. Census, seven percent of all Virginia residents identify as AAPI, with heavy concentration in northeast Virginia. ${ }^{1}$ The population of NoVA continues to grow much faster than the population of the rest of the commonwealth, and AAPI residents are a key pillar in that trend. ${ }^{2}$ Three counties have AAPI populations of at least ten percent. Fairfax and Loudoun counties exceed 20\% AAPI. Arlington is around 11\% AAPI; between the 2010 and 2020 Censuses, self-identifying Asians were the largest growing group in Arlington County. ${ }^{3}$ Prince William and Henrico counties both have AAPI populations around $9 \%$ of their total population. Montgomery, York, and Albemarle counties have at least 5\% AAPI residents. Among independent cities, very high concentrations of AAPI residents occur in Fairfax (17\%), Manassas Park (10.8\%), and Falls Church (10.1\%). These localities are areas of focus for SALDEF's activities in Virginia, not just because they are among the largest in the state. These counties tend to elect the representatives who have begun to create an AAPI imprint in the Virginia Assembly - including the very recently formed Asian American and Pacific Islander

[^17]Caucus. Empowering these representatives is critical to the elusive dream of moving Asian Americans in Virginia beyond the 'underrepresented' label.

Proportional representation has never been attained by Asian Americans and Pacific Islanders in Virginia. Per our partners at APIAVote, Asian American voters now constitute 7.8\% of the Virginian electorate. ${ }^{4}$ For truly proportional representation, approximately 11 members of the General Assembly should identify as AAPI across the two houses. Today, the number stands at less than half of that. This state of play persists despite the $112 \%$ growth rate the AAPI community has posted in Virginia since 2000, and is a persistent area of concern for SALDEF and for our AAPI partners.

Compounding the lack of representation is the lack of language access for AAPI Virginian voters: per APIAVote, $76 \%$ of Asian Americans in Virginia speak a language other than English at home, and $38 \%$ of that group speak English less than "very well." SALDEF is one of many signatories to a separate letter to the Supreme Court of Virginia's public comment address highlighting the English-only redistricting website, lack of interpretation services for languages beyond Spanish, and systemic minimization of the testimony of Virginians using translators. These problems are not new for the AAPI community, and it is disappointing that we continue to be overlooked.

The phenomenon of AAPI voters being ignored despite their increasing electoral influence extends beyond language access services and includes the national political apparatus, both parties and media. The AAPI vote surged across the country in 2020, with a $47 \%$ increase in voting among our communities from 2016 compared to an overall average increase of just $12 \%$, per Targetsmart. ${ }^{5}$ This spike in engagement came despite more than half of AAPI registered voters in Virginia reporting little to no engagement from either political party in APIAVote's 2018 Asian American Voter Survey. This pattern repeated itself in the 2021

[^18]Virginia gubernatorial race: major polls by respected outlets like the Washington Post grouped all data on AAPI voters into 'other'. ${ }^{6}$ It would be problematic to simply group South, East, and Southeast Asian voters into one AAPI group, but that state of play would actually represent a major improvement over how AAPI voters are treated in the present day by political and media stakeholders across the political spectrum. Given the historical barriers outlined here, which themselves represent the very tip of an iceberg of erasure, SALDEF places even greater importance on a fair and transparent redistricting process that protects and promotes the communities of interest that define the country's fastest growing ethnic voting bloc, and indeed all other communities of interest in Virginia.

## Principles That Should Guide the Process

Per the Princeton Gerrymandering Project, redistricting in Virginia must be conducted in accordance with the federal requirements of one person, one vote, and it must be compliant with the Voting Rights Act. ${ }^{7}$ In addition, Article II section 6 of Virginia's state constitution requires that state legislative and congressional districts be compact and contiguous. Furthermore, the two houses of the Virginia Legislature passed two bills (SB717 ${ }^{8}$ and $\mathrm{HB} 1255^{9}$ ) into law in 2020 that include state-level Voting Rights Act language, protections for communities of interest, and an explicit prohibition on partisan gerrymandering when considering a map on a state-wide basis as you are doing. Finally, the two bills end prison gerrymandering in Virginia by requiring prisoners be counted at their last-known residence and not their location of incarceration.

From the perspective of the Virginian AAPI community, the most critical aspects of the redistricting mandate revolve around the preservation of communities of interest. In Article II, Section 6 of the Constitution of Virginia, this is articulated: "Districts shall provide, where

## 6

https://www.nbenews.com/think/politics-policy/virginia-election-2021-asian-voters-impact-results-rcna4348
${ }^{7}$ https://gerrymander.princeton.edu/reforms/VA
${ }^{8} \mathrm{https}: / / / \mathrm{lis} . v i r g i n i a . g o v / c g i-b i n / l e g p 604 . e x e ? s e s=201 \& t y p=b i l \& v a l=s b 717 \& s e s=201 \& t y p=b i l \& v a l=s b 717$
${ }^{9}$ https://lis.virginia.gov/cgi-bin/legp604.exe?ses=201\&typ=bil\&val=hb1255\&ses=201\&typ=bil\&val=hb1255

SALDEF 5
November 8, 2021
practicable, opportunities for racial and ethnic communities to elect candidates of their choice."10 The Virginia code expands further: section 24.2-304.04(3) states that "no district shall be drawn that results in a denial or abridgement of the rights of any racial or language minority group to participate in the political process. ${ }^{11}$ Unfortunately, our analysis of most of the proposed maps considered by the Commission before its final concession of failure suggests the current redistricting process is poised to achieve the opposite of many of these mandates.

## Concerns with Maps Being Considered

It is indisputable that as NoVA's population grows, powered by communities like ours, southwest Virginia's population continues to shrink, particularly west of Montgomery County. ${ }^{12}$ The present-day Virginia district map is imperfect, but does respect the differences inherent to the different regions of the commonwealth. In a fair and data-driven redistricting process that prioritizes communities of interest, we should therefore see maps that acknowledge and accommodate the vast differences between east and west Virginia in carving new districts that have similarly sized populations as the districts in the existing map.

We instead saw deliberate contortion of the redistricting mandates in order to artificially preserve parity between the two political parties' voting bases, in brazen defiance of the shifting demographics of Virginia. ${ }^{13}$ Article II of the Virginia state constitution states that each electoral district shall be composed of contiguous and compact territory. However, in many of the maps over which the Commission deadlocked before sending control of the redistricting process to the Supreme Court of Virginia, the notion of compactness was used to reorient many districts from primarily north-south orientation to east-west orientation. As outlined earlier, an east-west

[^19]SALDEF 6
November 8, 2021
orientation in new districts allows for the dilution and cracking of AAPI communities' vote by mixing them with regions of Virginia that are vastly different ethnically and economically. Urban areas like greater Richmond and Falls Church must be kept intact and drawn into districts that are culturally similar, but several late-stage proposals by the Republican half of the Commission pointedly carved these regions into multiple districts and diluted AAPI voting power in each by mixing in heavily rural, heavily white areas of Virginia. These districts maintained the appearance of compactness but with a fundamental shift away from Virginia's redistricting mandate to draw each district "in accordance with the requirements of federal and state laws that address racial and ethnic fairness" in Article II, Section 6 of the Constitution. To shift the electoral map of Virginia in this fashion is to effectively punish AAPI voters for their increased civic engagement. SALDEF considers this outcome to be unacceptable. However, while the Commission attempted to conduct its work, we aligned ourselves with a coalition that seeks the same thing we do: fair representation for all Virginians.

## Recommendations

We encourage you, the Special Masters, to preserve the current north-south orientation of the present-day electoral maps in Virginia in all maps produced based on the 2020 U.S. Census. As the eastern and western halves of Virginia continue to diverge in their development and demographics, the importance of allowing those communities to vote alongside people like them only gains more weight. It is our hope that you draw on the work of the Virginia Counts Coalition to honor your mandates while preserving AAPI voting power. The VCC unity map incorporates input from SALDEF, other AAPI advocacy organizations, Latinx advocacy organizations, and Black American advocacy organizations, as well as legal and academic support. The unity maps produced by the coalition play by the same rules as the Commission and now the Supreme Court. Districts are compact, contiguous, and compliant with both population size requirements and federal and state statutes mandating fairness and
preservation of communities of interest. Communities of interest have weighed in directly, and the result is a map where districts are based on accurate racial/ethnic delineations, language enclaves, and locality lines. VCC's Congressional districts unity map is available here.

It is SALDEF's hope that the VCC unity map is carefully considered. Virginia has changed enormously in the past ten years. The new electoral maps must fairly and accurately reflect those changes.

Thank you for your attention to this matter and your consideration of AAPI voting power as you draw new district lines that will impact Virginian civics for a decade. Should you have any further questions please feel free to contact me at kiran@saldef.org, or my colleagues Navdeep Singh at navdeep.singh@saldef.org and Jyot Singh at jyot.singh@saldef.org.

Sincerely,

Kiran Kaur Gill
Executive Director

| From: | Carey Allen |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Concerns over Redistricting |
| Date: | Monday, November 29, 2021 8:01:02 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Chief Justice Donald Lemons,

I am writing to you to express concerns over minority representation on Virginia's potential new maps.

I am aware of discussions about redrawing districts to reduce the minority voting population below $50 \%$, assuming that this would result in more "opportunity districts" for minority voters.

I question whether that is true - look at how many minority delegates lost in the most recent election in these "opportunity districts" drawn by the Democrat's special master a few years ago.

I would feel more certain about the future of all voters' representation in Virginia if we preserved districts where minority voters constitute a majority of the population (and maybe even create more).

Thank you for your time and consideration.

Best regards,

Carey Allen

| From: | Lohn Wagstaff |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep Redistricting Fair! |
| Date: | Monday, November 29, 2021 9:24:28 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

While reading about your involvement in redistricting, it seems odd that the court would become involved in a political matter. Many democrat legislators are trying to create a problem where there is none.
Are people actually arguing that black interests will be better represented if black voters are redistributed into majority-white districts? Seems to me that this would only make it harder for black voters to elect the representatives that they want. I look at how many black areas of Southside and Hampton Roads are now represented by Republican delegates and I just wonder how anyone could come to that conclusion.

Thank you!
John Wagstaff
--
BIT BY BIT FARM
JOHN \& JACQUIE WAGSTAFF
2
2086 CLARKTON ROAD
NATHALIE, VIRGINIA 24577
434-349-2159

| From: | Carla Heath |
| :--- | :--- |
| To: | Redistricting |
| Subject: | State delegate and senate maps |
| Date: | Monday, November 29, 2021 9:40:53 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Special Masters,
Thank you for taking on the task of drawing legislative maps for the Commonwealth of Virginia.

As you know, the Virginia Code requires that state senate and house maps be approximately equal in population, compact, contiguous, and respect communities of interest.

The City of Lynchburg is a community of interest with one governing body that provides ALL residents with EMS, fire, police, water/sewage, and trash collection services, public schools, and public recreation facilities and community centers. City Councilors, representatives to the General Assembly, and the voting public alike have publicly stated that the City and its residents will be best served if it is represented in the G.A. by a single delegate and single senator. To excise a few census tracts and add them to an adjacent county which does NOT offer the above listed services to Lynchburg residents will not serve those residents well and, further more, will dilute their voices in the G.A.

Respectfully, Carla W. Heath 339 Sumpter ST Lynchburg,

| From: | Pete Costigan |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Pete Costigan |
| Subject: | suggested districts in Virginia"s House of Delegates map |
| Date: | Monday, November 29, 2021 12:43:39 PM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTShttps://www.virginiaredistricting.org/legdistricting/comments/plan/186/1
https://www.virginiaredistricting.org/legdistricting/comments/plan/254/1
Muriel-Theresa Pitney, Clerk of the Virginia Supreme Court
Dear Ms. Pitney:
In accordance with Rule 4 (included below) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I submit the following comments to the court regarding the House of Delegates map.

Rule 4. Public Participation. (a) Comments - The public may participate in the Court's redistricting deliberations through the submission of written comments. Any such comments must be provided in the form of a letter addressed to the Clerk of the Supreme Court of Virginia and referencing these rules and procedures.

I made the following remarks on House of Delegates (HOD) map B6 (plan 186 in the link above above) during the Virginia Redistricting Commission's (VRC) October $6^{\text {th }}$ virtual meeting which covered the Commonwealth's central district. After the October $6^{\text {th, }}$ meeting, the VRC's Democratic map drawer did reflect the changes I and other citizens recommended in his HOD map B7 (pan 254 in the link above). Both HOD maps B6 and B7 are included as links in this e-mail. In drawing the HOD maps, I hope the special masters will consider the four reasons I list below for proposing that Greene County be include in HOD district 81 as shown as HOD map B7. Thank you. Pete Costigan
"Good afternoon Commissioners,
My name is Pete Costigan and I live in Ruckersville in Greene County.
I'd like to comment as a private citizen on HOD map B6.
Regarding HOD map B6, l'd like to propose that the northeast corner of Augusta County be swapped out of HOD district 81 and replaced by Greene County. Since that northeast portion of Augusta County borders Rockingham County, I believe it makes more sense to attach that portion of Augusta to Rockingham County as part of HOD district 69.
Here are my four reasons for making this proposal.
First, HOD map B6 currently includes all of Greene County, much of Rockingham County and part of Page County in district 69. The bulk of the proposed district's land is in Rockingham and Page Counties, both of which are separated from Greene by the Blue Ridge Mountains. I object to this grouping for the same reasons the

Commission has heard many other residents of counties on both sides of the Blue Ridge object to being grouped with residents in counties on the mountain's opposite side. Greene County residents have more common interests with Albemarle County than they have with either Page or Rockingham.
Specifically, Greene County residents regularly drive to Albemarle for shopping and medical care. In addition, every day, many Greene residents drive into Albemarle to their jobs at the National Ground Intelligence Center in northern Albemarle, to State Farm and to various UVa facilities in Albemarle among other employers. In fact, a significant percentage of Greene County's employed residents work in Albemarle. In contrast, relatively few drive the 30-35 miles west over the Blue Ridge to jobs in Rockingham or Page.

Second, Greene is a small county with about $55 \%$ of its 20,000 residents living in two of its five voting precincts. Those two precincts - Ruckersville and Midway - are located mostly south, east and west of the intersection of east-west route 33 and north-south route 29. Route 29, a major highway, reaches the Greene/Albemarle border in less than four miles south of this intersection.

Third, Greene County, along with Albemarle, are among the counties served by the Thomas Jefferson Planning Commission. Through the Commission's Legislative Services program, the interests of the region's localities are represented before the state legislature and other state policymakers. Much of this effort occurs at the General Assembly during the January-March session each year. Augusta County is not served by the Thomas Jefferson Planning Commission. Augusta County is served by the same planning district that serves Rockingham County.

Fourth. Like Rockingham and Page Counties, all of Augusta County is on the western side of the Blue Ridge and on the opposite side from Greene and Albemarle.
As always, I thank you for considering my proposal and for the difficult but important work you are doing.
Pete Costigan
Ruckersville, Va, 22968
434-466-2384"

From: Ward Bourn wobourn@macicom
Subject RULES FOR SETTING LEGISLATIVE RE-DISTRICTING
Date: November 27, 2021 at 12:29 AM
To: Theron Donald -W Lemons The Hon. Donald W. Lemons
Ce: The Hon S. Bernard Goodwy The Hon. William C. Mips The Hon. Cleo E. Powell The Hon. D. Arthur Kelsey The Hon. Stephen R McCullough The Hon. Teresa M. Chafin
The Hon, S. Bernard Goodwin The Hon. William C. Mips The Hon. Cleo E. Powell The Hon. D. Arthur Kelsey The Hon. Stephen R McCullough The Hon. Teresa M. Chafin
Bic: Executive Secretary Supreme Court of Virginia

## The autuchned OpEd Letter semi io the Richmond Times Dispatch addresses the problem which the supreme Court is now considering.

Although the RTD did not publish this one, on November 1, the editors did publish my letter concerning the issue of equality of opportunity for applicants for admission to the Governor's Schools. So this distinguished journal has some respect for my analysis of complex problems of pubic concern.

Ward C. Burn


3800 Treyburn Drive, 4413
Williamsburg, VÄ 23185-2897
[757] 532-3555
Apologies for the bizarre double listing of addressees, and the omission of commas between their names. Both are the result of the quarreling of Microsoft and Apple for the control of this iMac desktop computer, a problem beyond my ken.

[^20]The difficulties the Redistricting Commission has encountered in establishing maps for the various governmental units were predictable. They stem from the Commission's failure to first establish a process by which the task should be accomplished.

It would be wise to start with some rules to guide the process - even now for the week remaining, or for the consideration of the Supreme Court, if that is the body which ultimately makes the decision. Once, settled, the rules should be incorporated in legislation (not the Virginia Constitution.)

The problem to be solved is the same for any governmental unit which holds elections. Districts should be compact and represent areas the citizens taxes support and with which they identify in their activities and allegiances. Districts should have reasonably equal populations. (Yes, you vote on behalf of your kids - and other folks' kids.)

Rule 1. There is no point in attempting to achieve nearly equal populations as of the start of the decade. We should not be tinkering with these boundaries again until 2031. Districts which have been strongly gaining population for 10 years or more, as indicated by interim Bureau of the Census estimates, will continue to gain residents at a rate above statewide averages. Limit the differential in population between the lowest and highest numbers allocated to $5 \%$.

Rule 2. Boundaries should reflect those for voting jurisdictions included within the district to be delimited. Never, ever split a voting precinct. Never partition a governmental unit unless it is entitled by population to more than one representative of the kind being dealt with. (Example: For Congressional Districts, for which the national average is upwards of 750,000 people, only Fairfax County should be split, and none of it should be parceled out to more than one abutting city or county. For House of Delegates Districts, several cities and counties would be entitled to more than one delegate. But no locality should be divided into more pieces than one more than the whole number of delegates for which the last decennial Census entitled it.)

Rule 3. Computer mapping should be employed as a tool for assessing district compactness - not for creating designer districts to benefit a party or candidate. For proposed Congressional Districts, any of the 180 lines which could be drawn through the center of population of the district (at one degree intervals from north) which is two times or more longer than the shortest such line is prima facie evidence that the proposed district is not compact. An additional test of reasonableness of the contours of a proposed district is whether all parts of it can be reached by roadway from other parts of the district. Eastern Shore and Virginia Beach must be in the same Congressional District. Period. (Any inhabited islands can be accommodated case-by-case.)

Obviously, computer mapping could generate an infinite number of district maps. But human minds cannot handle an infinite number of alternatives. A limited number of alternatives could be achieved by calling for the maps to be generated starting from Virginia's points around its periphery opposite where two other states abut each other, the District of Columbia, or a body of water. By this writer's count that would produce six maps.

So this outlines a process and some rules to guide it, leaving the decisions up to the humans who are charged with making them. Ladies and gentlemen, let's go!

| From: | RICHARD POTEKHEN |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Lynchburg Split |
| Date: | Monday, November 29, 2021 3:01:13 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
> I urge you not to split the city of Lynchburg when redistricting. The biggest reason is to maintain population diversity. We are a mixed-race city, and the Black areas should not be separated from the mix.
$>$
> Thanks for your attention. RICHARD POTEKHEN, 3635 East Woodside Avenue, Lynchburg, VA 24503
$>$
> Sent from my iPhone

| From: | $\underline{\text { Dave Marsden }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Communities of Interest in Burke Virginia (Fairfax County) |
| Date: | Monday, November 29, 2021 5:45:26 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

- Mason Magisterial District (Fairfax County Board of Supervisors)
- Burke Centre Conservancy (1700-acre Planned Residential Community)
- Lake Barcroft Watershed Improvement District (WID)
- Lake Barcroft Association (former known as Barcroft Lake Management Association)
- Bailey's Crossroads (Census Designated Place of 24,000 people)
- Fort Buffalo in Lake Barcroft (historically black community)
- Sleepy Hollow corridor (Columbia Pike to Seven Corners)
--
Senator Dave Marsden
Virginia State Senate
P.O. 10889

Burke, VA
22009

| From: | $\underline{\text { Cathy Hosek }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on the Redistricting process |
| Date: | Monday, November 29, 2021 8:44:04 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Cathy Hosek. I live at 1906 Rampart Drive near the Mount Vernon Estate in the Fort Hunt area along the Potomac River. I have been working on the local Fairfax County Magisterial redistricting for Fairfax County and have learned some important things about communities of interest.
Our community of interest starts at 495/95N at the northern most edge and goes south along the Richmond Highway Corridor (Route 1) all the way down to Fort Belvoir/the Fairfax County Parkway.

Most of the families in this area fall into 2 high schools attendance areas - West Potomac and Mount Vernon High School. It also includes neighborhoods on both sides of the corridor in both Mount Vernon and Lee Districts of Fairfax County.
We have several projects happening in our community. One of these is the EMBARK project which is a plan to upgrade the Richmond Highway Corridor/Route 1. This plan will add density as well as improve transportation while keeping a Main Street feel.
On the east side of our community is the George Washington Parkway which is another item of interest. We are working with the Park Service to make this vital connector in our community safer.

It is imperative that the communities along the Potomac River from Alexandria City south to Fort Belvoir remain in one block, especially at the House of Delegate level. It makes no sense to put any part of Fairfax County with the City of Alexandria as we have entirely different school systems and revenue streams. Alexandria and Arlington both have a meals tax, but we do not in Fairfax County.
We need a political structure attuned to fight for our needs and to support our concerns. We are hopeful that this current redistricting will result in the drawing of boundaries that conform more closely to the Mount Vernon District and keep our entire community intact. Our current map is very gerrymandered and one community Hayfield Farms is totally surrounded by our current 36th District. Please consider making the 36th District more compact and reflective of the communities within the boundaries.
Do not look specifically at post office names and addresses as those do not adequately represent the communities of interest.

For example, the city of Alexandria uses Alexandria, but so does the eastern edge of Fairfax County. These two areas do not share the same interests and it would be a disservice to both the representative and the constituents of this district if they were to be in the same District.

Thank you for your time,
~Cathy Hosek
Fairfax County Resident and member of the current 36th and 44th Districts

Truss Leinbach
Nov2l, 2021
855 College Ave
Harrisonburg. VA 22802

Clerk of the Supreme Court Supreme Court of Virginia 100 N . Ninth St.
Richmond, VA 23219
Reference to the Rules and Procedures for Implementing the requirements of Article il, Section A
Per the enclosed Letter to the Editors in the Daily News Record, Thursday. Nous, thin really in a very confusing numbering system for legislative Districts.
Thank you for your consideration.


## Letters To The Editor

## Wouldn't It Be Nice ...

... If each voting district in Virginia had a unique name so there would be no confusion?

Virginia is divided into 11 congressional districts, 40 state Senate Districts, and 100 state House districts. Each set of districts is identified numerically starting with the number one. This results in multiple districts identified by the same number. There are three districts for each number 1-11. There are two districts for each number 12-40.

When referred to by number only, it is hard to know if it is a congressional, Senate or House district being referenced. If you have ever had trouble
following a political discussion for this reason, you are not alone!

Duplication has also resulted in some Rockingham County residents residing in two different districts numbered 26 : House District 26 and Senate District 26.

One solution would be to leave the congressional districts as they are (111) and renumber the state districts as follows:

Senate Districts would be numbered 100-139; and House Districts would be numbered 200-299.

Not only would this give each district a distinct number, it would immediately
identify them as congressional, Senate, or House. It would give each category room for expansion.

If you agree, now is the time to contact the Virginia Supreme Court, which is currently redrawing voting districts. Your comments should be in letter form, addressed to the clerk of the Supreme Court of Virginia, and emailed to Redistricting@vacourts.gov. It should reference the Rules and Procedures for Im plementing the Requirements of Article II, Section 6-A.
vorve oy mratnet varue, expectanions for wnen he their movements carry extra weight on the S\&P 500.

Yields in the U.S. government bond market, center of some of Wall Street's most turbulent action recently, pulled back following a week

Federal Reserve would raise interest rates off their record lows.

Stocks have been powering mostly higher over the last month as companies have widely reported much
and earmings ior tne satest quarter than expected. Home improvement retailer Lowe's inched up $0.4 \%$ as it raised its revenue forecast for the year following strong third-quarter financial results.

## US Home Construction Dips 0.7\% In October, But Permits Jump

SILVER SPRING, Md. (AP) - Construction of new homes in the U.S. fell $0.7 \%$ in October, but a big jump in the number of permits last month points to anticipation by builders that supply chain problems that have dogged them for


| From: | Soukarya Samanta |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting plan submission |
| Date: | Tuesday, November 30, 2021 1:13:53 PM |
| Attachments: | VA court numbered submit by ZOOM.png |
|  | VA court counties submit by ZOOM.pnq |
|  | VA court submit by ZOOM. geoison |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear sir/madam,
I wish to present to you a redistricting plan that best reflects the various "Communities of Interest" across Virginia, its population growth, minority representation, competitiveness and partisan fairness. It is also much more compact, and has fewer county and town splits than the current map.
My plan is in the attached pictures and the geojson file and can also be found here (https://davesredistricting.org/join/89eb4b13-6142-4b40-8395-210ec796286b).

Here is a character outline of the various districts:

- 1st: Successor of current 2nd, it now consists of Jamestown and the entire Eastern shore. A competitive district won by Biden \& Youngkin.
- 2nd: Successor of current 3rd, it continues to be plurality black mandated by the VRA.
- 3rd: Successor of current 4th, it also continues to be plurality black mandated by the VRA.
- 4th: Successor of current 7th, it now becomes a very competitive Trump-won district (by 1.4 points) to achieve partisan proportionality in the 54-44 Biden state.
- 5th: Sheds most of the Northern portions that are better suited for other districts.
- 6th: Successor of current 9th, it consists of Southwest VA, and unites Roanoke Valley and with it Craig county (as per a COI submitted to the commission).
- 7th: Successor of current 6th, it consists of the Shenandoah Valley and takes in some of the rural parts of Loudon, and counties to its south.
- 8th: Successor of current 1st, it takes in some minority areas of Prince William to make up for the loss of minorities in the neighbouring 1st (current 2nd). May (or may not) become more competitive later in the decade.
- 9th: Successor of current 11th, it remains majority-minority but has significantly altered geography to respect the COIs submitted to the commission.
- 10th: Consisting of eastern Loudon \& western Fairfax, the new 10th has a $26.4 \%$ Asian VAP, $49.4 \%$ minority VAP, and $52.1 \%$ non-white population. It has the potential to be majority-minority VAP later in the decade reflecting minority growth in the state. It also becomes a safe Democratic district. Some parts of this district are specifically drawn to respect the COIs submitted to the commission.
- 11th: Successor of current 8th, it consists of immediate neighbours of DC. This district is specifically drawn to respect the COIs submitted to the commission.

This map produces a 6-5 Biden split, and a 6-5 Youngkin split accurately reflecting partisanship of the state. Minority representation is also significantly improved, and county/city/town splits are minimized.

In this map I have numbered the various districts in a sequential manner, the way the Pennsylvania Supreme Court did in 2018. Many citizens have to switch district numbers regardless, so it would be great if Virginia does the numbering in sequential manner giving the map a much cleaner look.
The new 1st now consists of Jamestown, the first permanent English settlement in the New World, colloquially making it the new "America's first district". The numbers then go clockwise and reach NoVA. The districts extending into NoVA are given higher numbers because if Virginia ever gets a 12th district, it would be here, and the numbers in the rest of the state no longer need to be changed.

Hopefully this plan would be considered by the Court for a fair redistricting process.
Thank you.
Yours faithfully,
Soukarya Samanta



```
From: Mark Mildorf
To: Redistricting
Subject: Comments - 36th Senate District
Date: Wednesday, December 01, 2021 4:20:33 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I'm a resident of the 36 th Senatorial District in Virginia. I have yet to provide any comments on the process of redistricting. Now that a new phase has begun involving experts that may not be familiar with Virginia, now seems a good time to do so.

It is a certainty that the boundary lines of the 36th Senatorial District will not remain as they are now. They will either get better or get worse.

How can the boundaries get better? This is pretty easy. The current map treats communities poorly as the border meanders about like an old river. In the northern end of the district, the Groveton community is cut to pieces as is Fort Hunt and many others. The Edison, West Potomac and Mount Vernon High school attendance areas are carved up. In the southern end of the district, parts of the district are contiguous - by water - there being no continuous land access within the district. So to improve the district, minimize the wandering boundaries we have now and make the district more compact.

The positives of the current district are that the currently included areas share concerns about 1) transportation and 2) the quality of the Potomac River as we all live downstream from the cities of Alexandria, Arlington and Washington, DC. Also, all of the district is located in counties and not independent cities. Virginia counties and independent cities are rather different in the powers they have and the things they need from the state legislature..

How can the boundaries get worse? This is also pretty easy. It can get worse by ignoring the natural, physical and community boundaries of Cameron Run and the Capital Betway and including even more of Fairfax County south of the City of Alexandria in a Senate District dominated by the City. Don't be fooled by the "Alexandria area of Fairfax". We live in Belle View or Hybla Valley or Waynewood or Mount Vernon. etc. and not in the City of Alexandria.

| From: | cragghines@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Maintain the integrity of "South" Arlington |
| Date: | Wednesday, December 01, 2021 3:14:07 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219
RE: Rules and Proceduares for Implementing the Requirements of Article II, Section 6-A

To Whom It May Concern,
Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Sectio 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting of the Virginia House of Delegates.

I urge the Court to recognize in its redistricting of the House of Delegates the historic communities of interest in Arlington County. That is especially true of "South" Arlington, generally thought of as the part of the County south of U.S. 50 (Arlington Boulevard).

South Arlington is historically home to residents so varied in racial, ethnic, and economic backgrounds and conditions that the area is known as Virginia's "World in a Zip Code." It would seem consummately unwise to use pieces of South Arlington to bring up pieces of white, wealthier, and more politically connected North Arlington to the required population for a House of Delegates district.

Central to South Arlington is the Columbia Pike Corridor, essentially the "Main Street" from the Pentagon to Arlington County's border with Fairfax County. New district boundaries should not break up the well-established cultural and social communities along and on both sides of Columbia Pike.

Sincerely,
Cragg Hines
Cragg Hines
5100 Little Falls Road
Arlington, Virginia 22207

```
From: Pete Durgan
To:
Subject:
Date:
Redistricting
Columbia Pike, Arlington and Redistricting
Wednesday, December 01, }2021\mathrm{ 2:44:05 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of the Court
Supreme Court of Virginia
100 North Ninth St
Richmond, VA 23219
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6A

To Whom It May Concern
Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

Columbia Pike in Arlington is a unique neighborhood in Virginia. It is home to immigrants from all over the world. Economically, it is much less affluent than neighborhoods in North Arlington. To divide these neighborhoods in different districts will seriously reduce the voices of our immigrant population, which is primarily Latino. This would not be in the interest of the state of Virginia. For these reasons I consider Columbia Pike to be a Community of Interest that should be protected. Other thoughts about Columbia Pike to reinforce keeping the neighborhoods together are:

1. Columbia Pike is the area with the highest bus use in Virginia. We have no metro stops, but our neighbors make heavy use of the buses to get to the Metro stations.
2. The area south of Arlington Blvd in Arlington historically has been the less affluent side of the county. Today, the Columbia Pike area is disproportionately populated by some of the poorest residents in NOVA.
3. The African American population of Arlington centers around the Columbia Pike neighborhoods. This is a remnant of our history since Reconstruction in the late 1980s, as former slaves and their descendants were red-lined out of most areas in North Arlington.
4. The Columbia Pike area is often called "the world in a zip code," reflecting the diverse cultures that live here. We do not have ethnic
neighborhoods in Arlington, we have one area where everyone lives together. It's rare and it needs full representation in our government.
5. Latinos in particular, are the largest cohort of immigrants, and they are often the poorest. They live in substantial numbers along Columbia Pike. In Virginia, they comprise $10.5 \%$ of Virginia's population. They need their voices heard and breaking Columbia Pike up will greatly reduce their voices. Do not draw them out as they are an important block of Virginians.

In summary, keep the Columbia Pike neighborhoods together in one district.
Sincerely,
Maria Durgan
Maria Durgan
2000 6th St. South
Arlington VA, 22204

| From: | Charley Conrad |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Comment |
| Date: | Wednesday, December 01, 2021 2:43:53 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney<br>Clerk of Court<br>Supreme Court of Virginia<br>100 North Ninth Street<br>Richmond, Virginia 23219<br>To Whom It May Concern:<br>Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates:

I live in south Arlington one block off of Columbia Pike. Columbia Pike runs from the Air Force Memorial to the County line and is a dynamic and diverse community.

I am concerned that this redistricting is going to mess up our diverse community that thrives south from Arlington Boulevard.

Due to excellent representation we have something special and we have something that is working and has been working for a long time.

I want to make sure we have strong representation to watch over south Arlington. We have for so long got short changed by "other priorities" in North Arlington. It smacks of a north Arlington privilege. I well remember how the North Arlington folks worked to kill the Columbia Pike streetcar project because they didn't want to have to pay for it. I was told that specifically many times. It is an us or them mentality.

Bottom line here is please preserve strong representation for our south Arlington and Columbia Pike corridor so we have an advocacy voice speaking up for some of the poorest and some of the most diverse populations in Arlington.

## Sincerely,

Charles B (Charley) Conrad
4500 S Four Mile Run Drive \#106
Arlington VA 22204

| From: | Alan Stein |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, December 01, 2021 12:39:57 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Court
I would like to see that districts be drawn based on county and city boundaries without regard to voter makeup of the district. Where it is needed to expand or contract the size of the district based on population, lines should not be drawn in illogical ways with jutting fingers but with a maximum of 5 straight lines to form only convex shapes. These districts could combine or divide adjacent localities.
Sincerely,
Alan Stein
1037 Radcliff Landing
VA Beach, VA 23464
(757)474-2363 home (757)452-0094 cell

| From: | Ljupiter |
| :--- | :--- |
| To: | Redistricting |
| Subject: | State Senate District 36 |
| Date: | Wednesday, December 01, 2021 4:45:03 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to address the Redistricting issues affecting State Senate District 36 to highlight what I believe are important aspects of this Districts Communities of Interest.

Non residents of this area may be unfamiliar with the cohesive qualities of this Mt. Vernon, VA community.

One of the most focused interests in this Community is the Route 1 , Richmond Highway, influence. This road not only is the main thoroughfare in the community, the road also delimits the focus of community activities in its access to activities, schools, commerce, and diversity. Extending the redistricting bounderies away from the corridor places those outlying communities outside of the focused community of interest.

Another focus of the Community is the governmental boundaries in the area. The bulk of the District is within Fairfax County and should remain so. Extending the District North into the City of Alexandria and South into Prince William County creates jurisdictional tensions and even some conflicts with those other governing bodies which a representative would have a difficult time reconciling. The Governmental boundaries focus the Communities of Interest on the practical functions of the existing Government structure such as Schools, Public Safety, Parks and Recreation, and local Government authority. Any necessary extension of redistricting into those Northern and Southern areas should be minimized to avoid government conflict. Encompassing the Alexandria City communities is especially disruptive in my view. The Alexandria City adjoining areas have very separate, strong Community affiliations which generally isolate themselves from Fairfax County interests. To the extent necessary to accommodate redistricting I believe westward expansion within Fairfax County is more condusive to Community adhesion then Northern or Southern diversions

Jay Jupiter

| From: | Sherry McMurtrie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Public Comments Submission |
| Date: | Wednesday, December 01, 2021 10:19:26 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

## To Whom It May Concern,

Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

As a resident of South Arlington, I am concerned about the future representation if South Arlington, particularly the Columbia Pike Corridor, does not stay whole, in one district. The Columbia Pike Corridor is South Arlington's Main Street. It needs representation with political cohesion to benefit the shared socio-economic status of those living along the Pike. It is imperative that South Arlington not be divided up for representation along with affluent North Arlington neighborhoods. South Arlington has unique needs that will be neglected if it does not have it's own representation.

Sincerely,
Sherry Skinner
4500 S. Four Mile Run Drive
\#924
Arlington, VA 22204

| From: | Richard Skinner |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Redistricting |
| Date: | Wednesday, December 01, 2021 10:30:48 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth St
Richmond VA 23219
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
To Whom It May Concern,
Pursuant to Rule 4 (a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

I am writing to urge that the Court keep the Columbia Pike Corridor as a community of interest. The region includes highly diverse neighborhoods along Columbia Pike. Long neglected due to WMATA's refusal to serve the area with a Metro line, the Corridor's many socioeconomically disadvantaged residents ride to work on Virginia's busiest bus route. Columbia Pike serves as South Arlington's "Main Street," with retail serving a racially and ethnically varied clientele. The area's diversity and relative deprivation give it needs that are not always met by Arlington County. Residents of North Arlington have often voted as a bloc to halt projects in South Arlington, such as the Columbia Pike streetcar.

Please consider keeping the neighborhoods south of Arlington Boulevard (Route 50) and on either side of Columbia Pike as one community of interest within South Arlington. It has long been our tradition and practice to keep these neighborhoods together in one district.

Richard M. Skinner
--
Richard M. Skinner
4500 South Four Mile Run Drive, \#924
Arlington VA 22204
(571)-212-8117
richardmskinner.com
https://www.linkedin.com/in/richard-m-skinner/

| From: | LShiver |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Political Redistricting Comment |
| Date: | Thursday, December 02, 2021 10:38:33 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney

Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219

May It Please The Court:
Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting the following comments regarding the Commonwealth's political redistricting effort. In particular, I respectfully take issue with comments by map drawers that have referred to the Mt. Vernon District of Fairfax County as part of the Alexandria postal code area and, therefore, suited to be a part of legislative districts encompassing the City of Alexandria. Forensic examination and my personal experience living in these two communities belie that conflation.

For the first four years of my elementary school education, my family lived in the City of Alexandria. Because we lived in a city, we could walk almost everywhere-to the bakery on the corner of Prince and West Street or to the old Charles Houston elementary school, where my mother taught students.

When I entered the fourth grade, my family moved to the Mt. Vernon District of Fairfax County. Our mailing address stayed the same-Alexandria, Virginia-but Mt. Vernon was worlds apart from Alexandria. There were no stores within walking distance. Mt. Vernon was, and remains, the suburbs. Further, Mt. Vernon is not just separated from Alexandria in terms of urban density. It is physically cut off from the City of Alexandria by Huntington Creek and Camron Run tributaries that pour into the Potomac River. The two areas are also separated by the 495 Interstate Highway and have different school boards, library systems and other local administrative bodies.

In light of the above facts, I urge the Court to recognize the distinct communities of interest that characterize and distinguish Fairfax County from the City of Alexandria. I am also requesting that the election map be redrawn to reflect these important distinctions.

Sincerely,

Jube Shiver, Jr.
7943 Richmond Highway, STE 10
Alexandria, Virginia 22306
(703) 780-6700

| From: | lles, Stephanie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting in Norfolk |
| Date: | Thursday, December 02, 2021 10:41:25 AM |
| Attachments: | 2019-US-Congressional-Districts-and-Polling-Locations---Map.pdf <br>  <br>  <br> 2019-Senate-Districts-and-Polling-Locations---Map.pdf <br> 2019-House-Districts-and-Polling-Locations---Map.pdf |
| Importance: | High |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Good morning -

Congratulations on your appointment as Special Masters for Virginia redistricting! We realize you have a limited time frame of thirty (30) days to complete the arduous task of drawing new Congressional, Virginia Senate, and House of Delegate lines. All of this while taking in new census data population changes and preventing gerrymandering.

When considering redrawing of districts, you also must consider Senate Bill 740 effective 7/1/2020 that remedies split precincts:

## CHAPTER 1268

An Act to amend and reenact § 24.2-307 of the Code of Virginia, relating to county and city precincts; required to be wholly contained within election districts; waiver for administration of a split precinct.

Approved April 22, 2020

Be it enacted by the General Assembly of Virginia:

1. That § 24.2-307 of the Code of Virginia is amended and reenacted as follows:

## § 24.2-307. Requirements for county and city precincts.

The governing body of each county and city shall establish by ordinance as many precincts as it deems necessary. Each governing body is authorized to increase or decrease the number of precincts and alter precinct boundaries subject to the requirements of this chapter.

At the time any precinct is established, it shall have no more than 5,000 registered voters. The general registrar shall notify the governing body whenever the number of voters who voted in a precinct in an election for President of the United States exceeds 4,000 . Within six months of receiving the notice, the governing body shall proceed to revise the precinct boundaries, and any newly established or redrawn precinct shall have no more than 5,000 registered voters.

At the time any precinct is established, each precinct in a county shall have no fewer than 100 registered voters and each precinct in a city shall have no fewer than 500 registered voters.

Each precinct shall be wholly contained within-any a single congressional district, Senate district, House of Delegates district, and election district used for the election of one or more members of the governing body or school board for the county or city. In each year ending in one, the governing body of each county and city shall establish the precinct boundaries to be consistent with any congressional district, Senate district, House of Delegates district, and local election district that was adopted by the appropriate authority by June 15 of that year. If congressional districts, Senate districts, House of Delegates districts, or local election districts have not been adopted by the appropriate authority by June 15 of a year ending in one, the governing body may use the congressional districts, Senate districts, House of Delegates districts, or local election districts as such districts existed on June 15 of that year as the basis for establishing the precinct boundaries to be used for the elections to be held in November of that year. Such governing body shall establish precinct boundaries to be consistent with any subsequent changes to the congressional districts, Senate districts, House of Delegates districts, or local election districts. If a governing body is unable to establish a precinct with the minimum number of registered voters without splitting the precinct between two or more congressional districts, Senate districts, House of Delegates districts, or local election districts, it shall apply to the State Board for a waiver to administer a split precinct. The State Board may grant the waiver or direct the governing body to establish a precinct with fewer than the minimum number of registered voters as permitted by § 24.2-309. A governing body granted a waiver to administer a split precinct or directed to establish a precinct with fewer than the minimum number of registered voters may use such a precinct for any election held that year.

The governing body shall establish by ordinance one polling place for each precinct.

[^21]Specifically:

1. Precinct 101: Granby - House Districts 79 \& 100
2. Precinct 104: Titustown - Congressional Districts 2 \& 3
3. Precinct 106: Second Presbyterian - House Districts 79 \& 89
4. Precinct 218: Willard - House Districts 79 \& 89
5. Precinct 305: Lafayette-Winona - House Districts 79, 89 \& 90
6. Precinct 503: East Ocean View - House Districts 83 \& 90

We also currently have split Senate Districts in the following precincts:

1. Precinct 203: Ghent Square - Senate Districts 5 \& 6
2. Precinct 218: Willard -Senate Districts 5 \& 6
3. Precinct 509: Tarrallton - Senate Districts 6 \& 7

Attached are copies of our current Congressional, Senate and House District maps for the City of Norfolk to assist with your redistricting in the hopes of remedying precincts with split districts.

Should you have any questions or concerns, please call or email.
Thank you for your consideration and attention in this matter.

Stephanie L. Iles
CERA, VREO, \& Virginia Certified General Registrar (2021)
Director of Elections \& General Registrar
Norfolk Office of Elections
810 Union Street (City Hall Building)
Room 808
Norfolk, VA 23510
Phone: 757-664-4353/Fax: 757-664-4685
Email: Stephanie.Iles@norfolk.gov

## House Districts \& Polling Locations

City of Norfolk, Virginia
 only. Data provided by the Norfolk Board of Elections. Date: August 2019

## Senate Districts \& Polling Locations

## City of Norfolk, Virginia




## Congressional Districts \& Polling Locations

City of Norfolk, Virginia



| From: | $\underline{\text { Kem Clawson }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Comments |
| Date: | Thursday, December 02, 2021 12:11:43 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I reside in what is currently VA senate district 36.
I believe our districts should be non-partisan and aligned by communities as much as possible.
In my opinion, the current bounds of Senate district 36 do not represent communities well at all.

I am in SUPPORT of the last "Consensus" map presented by the VA Commission. (State Senate - Statewide C2)

Lorton VA 22079

| From: | Lohn Warner |
| :--- | :--- |
| To: | $\frac{\text { Redistricting }}{\text { Subject: }}$ |
| The Only Solution |  |
| Date: | Thursday, December 02, 2021 12:44:15 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ladies and Gentlemen:

The only way to establish a fair and equitable redistricting map is to eliminate humans from the actual district assignment process. The best and preferred method for each Virginia citizen to be assigned to a specific district is to use a computer-aided grid system. There are current grid systems and applicable charts that at are available today. Have members of the Redistricting Committee select a viable grid system and get on with it.

As long as humans are directly involved in any type of district selection process, personnel opinions, prejudices, and preferences will interfere with a fair process. A computer-aided grid system will eliminate personnal priorities and place citizens into population balanced districts without regard to the influences of gerrymandering. A computer program directed grid based on East-West and North-South construction can be developed to ensure districts are of equal population without any sort of political favoritism. District boundary lines will go through cities, small towns, mountain ares and bodies of water without regard to political influence. Let the boundry lines fall where they may and the result will be fair districts where each citizen's vote will count toward equitable representation.

A grid system eliminating human involvement is the only way to defeat gerrymandering and achieve fair redistricting for all Virginians.

John D. Warmer, Jr. (Major, USAF, Ret.)
Yorktown, Virginia
December 2, 2021

| From: | Greg Brandon |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Clerk: Redistricting Feedback from Fairfax County |
| Date: | Thursday, December 02, 2021 4:52:18 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS <br> Hello,

As the Supreme Court of Virginia begins to consider redistricting maps for the Commonwealth, I wish to convey my thoughts as a citizen of Fairfax County.

Please do the minimum necessary to achieve the prescribed district-level variances. I think the variances should be the same for state house, state senate, and congressional districts - 10 percent.

This will avoid the likelihood of splitting precincts with lower variances. The onus will be on localities to heal the split precincts which will mean finding additional polling locations and recruiting and hiring more Election Officers.

Greg Brandon
McLean, Virginia

Muriel-Theresa Pitney,
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, VA 23219
Dear Ms. Pitney:
I am submitting the following public comments for the special masters tasked with drawing new congressional district boundaries for the Commonwealth pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia.

I am a native of and resident of Amelia County, located 35 miles southwest of Richmond. We are a rural county that is considered an exurb in the Richmond region. We border the counties of Chesterfield and Powhatan, which have experienced substantial population growth over the past decade as the Richmond suburbs have moved further west.

For almost 40 years Amelia County has been part of congressional districts that included counties to our east and north. As such, I am writing to you to advocate for keeping Amelia in a district with geographic communities of interest. Amelia is currently in the 7th congressional district. Prior to 2017 we were in the 4th district, which ran east to the Tidewater region. I have seen several draft maps that propose moving Amelia into the 5th district, which includes most of Southside Virginia. The last time Amelia was part of the 5th district was 1982 and it would not be respecting communities of interest to put the county in a Southside-anchored district now.

Most Amelia residents travel east to Richmond and its suburbs to work, shop and do activities. Also, our population is growing and has even more potential to do so over the next decade as more people relocate to the Richmond area, unlike most of Southside where population is declining. Therefore we have more in common with the communities and our neighbors to the north and east than we do with the Southside localities to our west. I ask that you take this into consideration as you draft the new congressional district boundaries.

Sincerely,
Lauren Whittington
17051 Red Lodge Lane
Amelia, VA 23002

| From: | Rosalia Fajardo |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Rules and Regulations |
| Date: | Friday, December 03, 2021 2:06:31 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
https://www.virginiaredistricting.org/legdistricting/comments/plan/147/1
In reference to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A," at the beginning of your email. Then simply link the maps you want to submit and whatever text you want to attach with them, eg "Please consider these maps created by our coalition.

Thank you.

## Rosalia Fajardo <br> Executive Director/ CEO <br> Multicultural Families <br> 703 867-6529

Muriel-Theresa Pitney,
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, VA 23219
Dear Ms. Pitney:
I am submitting the following public comments for the special masters tasked with drawing new congressional district boundaries for the Commonwealth pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia.

I am a native of and resident of Amelia County, located 35 miles southwest of Richmond. We are a rural county that is considered an exurb in the Richmond region. We border the counties of Chesterfield and Powhatan, which have experienced substantial population growth over the past decade as the Richmond suburbs have moved further west.

For almost 40 years Amelia County has been part of congressional districts that included counties to our east and north. As such, I am writing to you to advocate for keeping Amelia in a district with geographic communities of interest. Amelia is currently in the 7th congressional district. Prior to 2017 we were in the 4th district, which ran east to the Tidewater region. I have seen several draft maps that propose moving Amelia into the 5th district, which includes most of Southside Virginia. The last time Amelia was part of the 5th district was 1982 and it would not be respecting communities of interest to put the county in a Southside-anchored district now.

Most Amelia residents travel east to Richmond and its suburbs to work, shop and do activities. Also, our population is growing and has even more potential to do so over the next decade as more people relocate to the Richmond area, unlike most of Southside where population is declining. Therefore we have more in common with the communities and our neighbors to the north and east than we do with the Southside localities to our west. I ask that you take this into consideration as you draft the new congressional district boundaries.

Sincerely,
Lauren Whittington
17051 Red Lodge Lane
Amelia, VA 23002 FOUNDATION

November 3, 2021
Muriel-Theresa Pitney
Clerk, Supreme Court of Virginia
100 North $9^{\text {th }}$ Street, $5^{\text {th }}$ Floor
Richmond, Virginia 23219

Dear Honorable Members of the Supreme Court of Virginia,
Fair Lines America is a non-partisan, not-for-profit organization based in Virginia dedicated to educating the public about the redistricting process and advocating through public education and litigation efforts for fair and constitutional redistricting. We write to the Court to express our concerns over the ongoing exclusion of central absentee votes in the election results data being used for redistricting purposes. In Virginia's 2021 election, 1,201,153 voters casted their vote via absentee ballots, ${ }^{1}$ and as the process stands today, the political composition reports the Court and its special masters will use to draw and assess new congressional and legislative districts will act as though those voters do not exist. If these central absentee votes are not reallocated back to their originating districts and precincts in some form, then the election data being used for redistricting will be an incomplete and distorted version of the official election results as reported by the Virginia Department of Elections, and such errors will materially impede the court's ability to enact lawful redistricting plans using the best data available.

Attached to this letter is a data file containing statewide and district-based election results from 2016 to 2021 in Virginia, with one set of results excluding central absentee votes and one set of results reallocating central absentee votes back to their originating district and precinct. (See "Attachment C"). The discussion below will explain the methodology used to reallocate the central absentee votes in the accompanying data file and will highlight the anomalies and risks that come with using incomplete data when redistricting.

## I. Methodology

In Virginia, votes cast prior to election day (Early Voting), by mail (Absentee Voting), and provisional votes are reported by electoral district within each jurisdiction, rather than by precinct. Elections for statewide and federal offices summarize these categories of votes by congressional district within each jurisdiction, while State Senate and House of Delegate elections are summarized by their respective district types within each jurisdiction. For example, Candidate A running for Governor received 1,000 early, absentee, or provisional votes in the portion of Fairfax County falling within the boundaries of the $8^{\text {th }}$ Congressional District.

[^22]FAIR LINES AMERICA FOUNDATION

Votes cast on election day at polling places are reported by district and precinct, with the district type again depending on the office. Using this election day data, one can calculate the share of the vote that each district portion of a precinct contributes to a candidate's jurisdictionwide election day vote total within that same district. For example, if Candidate A running for Governor received 10 votes in the portion of Precinct 01 falling within the boundaries of the $8^{\text {th }}$ Congressional District and received 100 votes in the portion of the jurisdiction falling within the boundaries of the $8^{\text {th }}$ Congressional District, that precinct portion contributed $10 \%$ to the candidate's election day vote total.

That same ratio can then be used to estimate how many "centrally-reported" votes should be allocated to that precinct portion. Using the example above, $10 \%$ of the 1,000 early, absentee, or provisional votes that Candidate A received would be allocated to the portion of Precinct 01 falling within the boundary of the $8^{\text {th }}$ Congressional District, or 100 votes. This would result in an estimated 110 total votes for Candidate A coming from that precinct portion. This process is then repeated for each candidate, precinct, and jurisdiction.

## II. Discussion

Failing to properly account for and reallocate "central absentee precinct" votes back to their appropriate districts and precincts produces election results which are substantially and materially inaccurate when compared to those officially reported by the Virginia Department of Elections. These discrepancies range in magnitude from small differences in the final vote percentages received by candidates in a given race to large numbers of votes remaining uncounted, sometimes in such substantial quantities that it changes the winning candidate in a given election.

The general impact of failing to reallocate central absentee votes to the appropriate precincts can be seen when examining the 2020 and 2021 statewide races in Virginia. In the 2020 U.S. Presidential election, when central absentee votes are excluded from the district-bydistrict statewide election results, Donald Trump would appear to have won the state with $61.81 \%$ of the vote over Joe Biden's $35.62 \%$. But the Virginia Department of Elections' official results, with central absentee votes included, show that Joe Biden received $54.08 \%$ of the vote, while Donald Trump received $43.98 \%$. A similar trend appears in the 2021 Gubernatorial Election as well. With central absentee votes excluded, Glenn Youngkin would appear to have won the state with $56.72 \%$ over Terry McAuliffe's $42.44 \%$, but the official election results with central absentee votes included show that Youngkin's true statewide margin of victory was far smaller, receiving 50.57\% to McAuliffe's 48.64\%.

The risks associated with not properly accounting for central absentee votes are even more pronounced in the context of district-based elections. For example, in Virginia's 2020 U.S. Congressional elections, central absentee votes were outcome determinative in four of the eleven races: Congressional Districts 2, 4, 7 and 10. If one were to look at election results for these
races without properly accounting for central absentee votes, the Republican candidates would incorrectly appear to win all four, with margins of victory above $20 \%$ in three out of the four races. The official results with central absentee votes included, however, reveal the Democratic candidates won all four of those races. Although not outcome determinative, central absentee votes also significantly impact the final margins of victory in all of the remaining congressional races, causing changes of at least $27 \%$ or more in every district other than the $9^{\text {th }}$ Congressional District.

These inaccuracies are even more numerous and widespread in the context of the 2021 Virginia House of Delegates elections. Central absentee votes were outcome determinative in nine House of Delegates races: Districts 10, 21, 31, 40, 51, 72, 73, 76, and 93. Without accounting for central absentee votes, the Republican candidates in each of these races would appear to have won, with margins of victory ranging from $\sim 1.5 \%$ to $\sim 11.5 \%$. But including central absentee votes reveals that all of these races were actually won by the Democratic candidates, with margins of victory of at least $3 \%$ or more in all but one of the districts.

In addition to impacting the overall outcomes of certain races, failing to account for central absentee votes will also significantly misrepresent how competitive several of the House of Delegates races really were. The Virginia Department of Elections' official 2021 elections results show that the Democratic candidates won in House Districts 13, 34, 50, 68, and 94 by relatively comfortable margins ( $\sim 8.5 \%, \sim 14 \%, \sim 9.5 \%, \sim 6.5 \%$, and $\sim 12 \%$, respectively). But if these races were viewed without accounting for central absentee votes, the Democratic candidates' margins of victory drop to $\sim 1 \%, \sim 2.5 \%, \sim 0.5 \%, \sim 1 \%$, and $\sim 1.5 \%$, respectively, and one would believe these races were far more competitive than they really were on Election Day. And this distortion of competitiveness goes both ways. In 2021, Republican candidates won in House Districts $27,28,63,83,85$, and 91 , and if these races were considered without reallocated central absentee votes, the margins of victory in each would appear to be relatively safe at $9.5 \%$ or more. After including central absentee votes, however, the Republican candidates' true margins of victory are revealed as ranging from $\sim 0 \%$ to $\sim 3.5 \%$.

Issues stemming from improperly allocated central absentee votes are not limited to changing the ultimate winners of races or inaccurately representing a district as competitive or not competitive; any inaccuracies in the final vote numbers and percentages for individual candidates across districts and precincts, even seemingly minor ones, will have compounding effects when used for redistricting purposes. Discrepancies in election results at the precinct level, even if small individually, add up when those precincts are joined together to form districts, and, in the absence of central absentee vote reallocation, could result in maps being adopted or districts being drawn which do not actually achieve the real-world result that the mapdrawing authorities intended. Relatedly, if map drawers conduct analyses on newly drawn congressional or legislative districts using election results data that fail to repatriate central absentee votes to their appropriate precincts, the resulting reports will not be an accurate

FAIR LINES AMERICA FOUNDATION
representation of those districts' true political composition because the underlying preferences of central absentee voters residing therein are wholly excluded and the overall voting preferences of remaining voters will be improperly distorted.

## III. Conclusion

Overall, when comparing election results without reallocated central absentee votes to those which do include them, a clear trend emerges - failing to reallocate central absentee votes to the appropriate districts and precincts has the effect of artificially inflating the level of Republican support in districts and precincts across the state while artificially deflating the level of Democratic support in those districts and precincts. Proceeding with the use of such erroneous data would have direct and serious implications on the accuracy of plan reports and the efforts of map-drawers to comply with Virginia's redistricting criteria, including the prohibition on undue favoring or disfavoring of political parties.

In the interest of providing data to this Court and its special masters, we have attached hereto a data file that uses the methodology described in Attachment A to allocate central absentee votes to precincts. (See compressed file "Attachment D").

While there may be other entirely reasonable methods available to make an appropriate allocation of central absentee votes to precincts for the purposes of redistricting political analysis, we are not taking the position that the specific methodology described in the attachment or included in the data files we submitted are the only reasonable method. Rather, this is the data allocation method we have selected and implemented on data provided to this Court, its special masters and the public with which to evaluate maps under consideration.

We urge the Court to direct its Special Masters to either utilize the data we are providing or to conduct their own reallocation of central absentee votes to their originating districts and precincts in some form to ensure Virginia's redistricting process and resulting maps accurately reflect the Commonwealth and its voters.

Sincerely,

Drew C. Marvel<br>Counsel to Fair Lines America

## ATTACHMENT A

## Virginia Central Absentee Allocation Methodology

In Virginia, votes cast prior to election day (Early Voting), by mail (Absentee Voting), and provisional votes are reported by electoral district within each jurisdiction, rather than by precinct. Elections for statewide and federal offices summarize these categories of votes by congressional district within each jurisdiction, while State Senate and House of Delegate elections are summarized by their respective district types within each jurisdiction. For example, Candidate A running for Governor received 1,000 early, absentee, or provisional votes in the portion of Fairfax County falling within the boundary of the $8^{\text {th }}$ Congressional District.

Votes cast on election day at polling places are reported by district and precinct, with the district type again depending on the office. Using this election day data, one can calculate the share of the vote that each district portion of a precinct contributes to a candidate's jurisdictionwide election day vote total within that same district. For example, if Candidate A running for Governor received 10 votes in the portion of Precinct 01 falling within the boundaries of the $8^{\text {th }}$ Congressional District and received 100 votes in the portion of the jurisdiction falling within the boundaries of the $8^{\text {th }}$ Congressional District, that precinct portion contributed $10 \%$ to the candidate's election day vote total.

That same ratio can then be used to estimate how many "centrally-reported" votes should be allocated to that precinct portion. Using the example above, $10 \%$ of the 1,000 early, absentee, or provisional votes that Candidate A received would be allocated to the portion of Precinct 01 falling within the boundary of the $8^{\text {th }}$ Congressional District, or 100 votes. This would result in an estimated 110 total votes for Candidate A coming from that precinct portion. This process is then repeated for each candidate, precinct, and jurisdiction.

## ATTACHMENT B

Election Results Changes Looking at Precinct Only Data vs. Election Results Including Central Absentee Votes

## House of Delegates Races

2021

- Changes Outcome of Race
o HD $10-\mathrm{R}+8.5 \% \rightarrow \mathrm{D}+10 \%$
0 HD $21-\mathrm{R}+9.5 \% \rightarrow \mathrm{D}+1 \%$
o HD $31-\mathrm{R}+4.5 \% \rightarrow \mathrm{D}+4 \%$
o HD $40-\mathrm{R}+3 \% \rightarrow \mathrm{D}+5.5 \%$
o HD $51-\mathrm{R}+4 \% \rightarrow \mathrm{D}+7 \%$
0 HD $72-\mathrm{R}+3.5 \% \rightarrow \mathrm{D}+6 \%$
o HD $73-\mathrm{R}+1.5 \% \rightarrow \mathrm{D}+5 \%$
o HD $76-\mathrm{R}+1.5 \% \rightarrow \mathrm{D}+9.5 \%$
o HD $93-\mathrm{R}+11.5 \% \rightarrow \mathrm{D}+3 \%$
- Competitive -> Not Competitive
o HD $13-\mathrm{D}+\mathbf{1} \rightarrow \mathbf{D}+\mathbf{8 . 5}$
- $50.47 \%$ D v. $49.31 \%$ R -> $54.21 \%$ D v. $45.60 \%$ R
o HD 34 - D+2.5 $\rightarrow$ D+14
- $51.24 \% \mathrm{D}$ v. $48.60 \% \mathrm{R}->57.07 \% \mathrm{D}$ v. $42.84 \% \mathrm{R}$
$0 \quad$ HD 50 - D+0.5 $\rightarrow$ D+9.5
- $50.16 \%$ D v. $49.61 \%$ R -> $54.71 \%$ D v. $45.10 \%$ R

0 HD 68 - D+1 $\rightarrow$ D+6.5

- $50.36 \% \mathrm{D}$ v. $49.51 \% \mathrm{R}$-> $53.10 \% \mathrm{D}$ v. $46.78 \% \mathrm{R}$
o HD $94-\mathrm{D}+\mathbf{1 . 5} \boldsymbol{\rightarrow} \mathbf{D + 1 2}$
- $50.61 \%$ D v. $49.19 \%$ R -> $55.99 \%$ D v. $43.79 \%$ R
- Not Competitive -> Competitive
$0 \quad \mathbf{H D} 27-\mathbf{R}+10.5 \rightarrow \mathbf{R + 3 . 5}$
- $44.71 \%$ D v. $55.10 \%$ R -> $48.08 \%$ D v. $51.70 \%$ R
o HD $\mathbf{2 8}-\mathbf{R}+\mathbf{1 2} \rightarrow \mathbf{R}+\mathbf{2}$
- $43.92 \%$ D v. $55.96 \%$ R -> $48.93 \%$ D v. $50.95 \%$ R
o HD $\mathbf{6 3 - R}+\mathbf{1 1} \rightarrow \mathbf{R}+\mathbf{1 . 5}$
- $44.22 \%$ D v. $55.62 \%$ R -> $49.16 \%$ D v. $50.70 \%$ R
o HD $83-\mathbf{R}+\mathbf{1 1} \rightarrow \mathbf{R}+\mathbf{2 . 5}$
- $44.37 \%$ D v. $55.49 \%$ R -> $48.77 \%$ D v. $51.11 \% \mathrm{R}$
$0 \quad \mathbf{H D} 85-\mathbf{R}+\mathbf{9 . 5} \rightarrow \mathbf{R}+\mathbf{0 . 5}$
- $45.02 \%$ D v. $54.86 \% \mathrm{R}->49.73 \%$ v. $50.17 \% \mathrm{R}$ $0 \quad \mathbf{H D} 91-\mathbf{R}+\mathbf{1 2 . 5} \rightarrow \mathbf{R}+0$
- $42.79 \%$ D v. $55.28 \% \mathrm{R}$-> $49.03 \%$ D v. $49.26 \% \mathrm{R}$
- Substantial Swings
o HD 75-R+14 $\boldsymbol{\rightarrow} \mathbf{R + 5}$
- $42.96 \%$ D v. $56.90 \%$ R -> $47.35 \%$ D v. $52.52 \%$ R
o HD 79-D+4 $\boldsymbol{\rightarrow}$ D+12.5
- $52.01 \%$ D v. 47.76 \% R -> 56.06\% D v. $43.61 \%$ R
o HD 96-R+26.5 $\rightarrow \mathbf{R}+11.5$
- $36.69 \%$ D v. $63.19 \%$ R -> $44.15 \%$ D v. 55.73 \% R
o HD $\mathbf{1 0 0}-\mathbf{R}+\mathbf{2 8} \rightarrow \mathbf{R}+\mathbf{1 3}$
- $35.85 \%$ D v. $63.99 \%$ R -> $43.38 \%$ D v. $56.50 \%$ R


## Governor's Race

2021

- Changes Outcome of Race


## o CD 10

- $46.39 \%$ D v. $53.03 \%$ R -> 52.04\% D v. $47.41 \% \mathrm{R}$
- Substantial Swings
o CD $\mathbf{1}-\mathbf{R}+\mathbf{2 9} \rightarrow \mathbf{R}+\mathbf{1 8}$
- $35.15 \% \mathrm{D}$ v. $64.12 \% \mathrm{R}->40.71 \% \mathrm{D}$ v. $58.60 \% \mathrm{R}$
o $\mathbf{C D} 2-\mathrm{R}+19 \rightarrow \mathbf{R}+8$
- $40.01 \%$ D v. $59.11 \% \mathrm{R}->45.50 \%$ D v. $53.72 \% \mathrm{R}$
o CD 3-D+14 $\boldsymbol{\rightarrow}$ D+25
- $56.36 \%$ D v. $42.44 \% \mathrm{R}->61.87 \% \mathrm{D}$ v. $37.01 \% \mathrm{R}$
o CD 4-D $+6 \rightarrow \mathbf{D}+13$
- $52.14 \%$ D v. $46.10 \%$ R -> $55.92 \%$ D v. $42.61 \% \mathrm{R}$
o CD 5-R+33 $\boldsymbol{\rightarrow} \mathbf{R + 2 0}$
- $33.17 \%$ D v. $66.25 \%$ R -> $39.72 \%$ D v. $59.69 \%$ R
o CD 6-R+47 $\rightarrow \mathbf{R}+33$
- $26.08 \% \mathrm{D}$ v. $73.19 \% \mathrm{R}$-> $33.29 \% \mathrm{D}$ v. $66.00 \% \mathrm{R}$
o CD 7-R+20.5 $\boldsymbol{\rightarrow} \mathbf{R + 1 0 . 5}$
- $39.29 \%$ D v. $59.90 \%$ R -> $44.29 \%$ D v. $54.96 \% \mathrm{R}$
o CD 8-D+35 $\rightarrow$ D+45.5
- $67.16 \%$ D v. $32.08 \%$ R $->72.45 \%$ D v. $26.84 \%$ R
o CD 9-R+61 $\boldsymbol{\rightarrow} \mathbf{R + 5 0}$
- $19.16 \%$ D v. $80.25 \%$ R $->24.82 \%$ D v. $74.56 \% \mathrm{R}$
o CD 11-D+24 $\rightarrow \mathbf{D}+\mathbf{3 4}$
- $61.43 \%$ D v. $37.75 \%$ R $->66.65 \%$ D v. $32.60 \%$ R


## Congressional Races

2020

- Changes Outcome of Race
o CD 2
- $37.10 \%$ D v. $59.67 \%$ R -> $51.53 \%$ D v. $45.79 \%$ R
o CD 4
- $49.31 \%$ D v. $50.49 \%$ R -> $61.61 \%$ D v. 38.23 \% R
o CD 7
- $34.42 \%$ D v. $65.33 \% \mathrm{R}$-> $50.81 \% \mathrm{D}$ v. $48.99 \% \mathrm{R}$
o CD 10
- $37.33 \%$ D v. $62.49 \%$ R -> $56.50 \%$ D v. $43.36 \% \mathrm{R}$
- Substantial Swings
o CD 1 - $\mathbf{R}+\mathbf{4 8} \rightarrow \mathbf{R}+16.5$
- $25.95 \%$ D v. $73.90 \%$ R -> $41.70 \%$ D v. $58.15 \%$ R
o CD 3-D+10 $\boldsymbol{\rightarrow}$ D+37
- $54.89 \%$ D v. $44.79 \%$ R $->68.33 \%$ D v. $31.42 \%$ R
o CD 5-R+37.5 $\rightarrow \mathbf{R + 5}$
- $31.05 \%$ D v. $68.61 \%$ R -> $47.30 \%$ D v. $52.44 \% \mathrm{R}$
o CD 6 - R+59.5 $\rightarrow \mathbf{R}+29$
- $20.08 \%$ D v. $79.78 \% \mathrm{R}->35.28 \% \mathrm{D}$ v. $64.59 \% \mathrm{R}$
o CD 8-D+15 $\boldsymbol{\rightarrow}$ D+52
- $57.46 \%$ D v. $42.20 \% \mathrm{R}$-> $75.73 \%$ D v. $23.96 \% \mathrm{R}$
o CD 11 -D+11 $\rightarrow$ D+43
- $55.39 \%$ D v. $44.26 \% \mathrm{R}$-> $71.34 \%$ D v. $28.30 \% \mathrm{R}$


## Presidential Race

2020

- Changes Outcome of Race
o CD 2
- $35.79 \%$ D v. $61.10 \%$ R -> 51.22\% D v. $46.53 \% \mathrm{R}$
o CD 4
- $48.73 \%$ D v. $48.77 \%$ R -> $61.58 \%$ D v. $36.68 \%$ R
o CD 7
- $32.50 \%$ D v. $64.97 \%$ R -> $49.62 \%$ D v. $48.51 \% \mathrm{R}$
- CD 10
- $38.27 \%$ D v. $58.89 \%$ R -> $58.57 \%$ D v. $39.36 \% \mathrm{R}$
- Substantial Swings

$$
\text { o CD } 1-\mathrm{R}+40 \rightarrow \mathrm{R}+4.5
$$

- $28.93 \%$ D v. $68.66 \%$ R -> $46.87 \%$ D v. 51.23 \% R
o CD 3 - D+7.5 $\rightarrow$ D+35.5
- $52.16 \% \mathrm{D}$ v. $44.89 \% \mathrm{R}->66.86 \% \mathrm{D}$ v. $31.11 \% \mathrm{R}$
o CD 5 - R+41.5 $\rightarrow \mathbf{R}+8.5$
- $28.21 \% \mathrm{D}$ v. $69.76 \% \mathrm{R}$-> $44.96 \% \mathrm{D}$ v. $53.39 \% \mathrm{R}$
o CD 6 - R+53.5 $\rightarrow \mathbf{R}+21$
- $21.99 \%$ D v. $75.46 \%$ R $->38.40 \%$ D v. $59.50 \%$ R
o CD 8-D+20 $\boldsymbol{\rightarrow}$ D+56
- $58.11 \%$ D v. $38.24 \%$ R -> $76.90 \%$ D v. $20.92 \% \mathrm{R}$
o CD 9-R+66 $\rightarrow \mathbf{R + 4 2}$
- $16.10 \%$ D v. $82.29 \%$ R -> $28.28 \%$ D v. 70.24 \% R
o CD 11 - D+11.5 $\boldsymbol{\rightarrow}$ D+41.5
- $54.25 \%$ D v. $42.79 \%$ R -> $69.84 \%$ D v. $28.09 \%$ R


## ATTACHMENT C

## 2016-2021 Virginia Election Results Tables: Excluding Absentee Votes v. With Absentee Results

## 2021 Elections

- Governor - pg. 2-3
- Lieutenant Governor - pg. 4-5
- Attorney General - pg. 6-7
- Virginia House of Delegates - pg. 8-15

2020 Elections

- President - pg. 16-17
- U.S. Senate - pg. 18-19
- U.S. House of Representatives - pg. 20-21
- Virginia House of Delegates - pg. 22-23

2019 Elections

- Virginia Senate - pg. 24-26
- Virginia House of Delegates - pg. 27-34

2018 Elections

- U.S. Senate - pg. 35-36
- U.S. House of Representatives - pg. 37-38
- Virginia House of Delegates - pg. 39-40

2017 Elections

- Governor - pg. 41-42
- Lieutenant Governor - pg. 43-44
- Attorney General - pg. 45-46
- Virginia House of Delegates - pg. 47-54

2016 Elections

- President - pg. 55-56
- U.S. House of Representatives - pg. 57-58
- Virginia Senate - pg. 59-60
- Virginia House of Delegates - pg. 61-62

| ElectionName OfficeCode | 2021 November General GOV | Results Exluding Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE21GOVD | GE21GOVO | GE21GOVR | GE21GOVW | Grand Total |
| Congressional | 42.44\% | 0.75\% | 56.72\% | 0.09\% | 100.00\% |
| 1 | 35.15\% | 0.68\% | 64.12\% | 0.06\% | 100.00\% |
| 2 | 40.01\% | 0.81\% | 59.11\% | 0.07\% | 100.00\% |
| 3 | 56.36\% | 1.10\% | 42.44\% | 0.11\% | 100.00\% |
| 4 | 52.14\% | 1.66\% | 46.10\% | 0.09\% | 100.00\% |
| 5 | 33.17\% | 0.51\% | 66.25\% | 0.07\% | 100.00\% |
| 6 | 26.08\% | 0.65\% | 73.19\% | 0.08\% | 100.00\% |
| 7 | 39.29\% | 0.74\% | 59.90\% | 0.07\% | 100.00\% |
| 8 | 67.16\% | 0.61\% | 32.08\% | 0.14\% | 100.00\% |
| 9 | 19.16\% | 0.52\% | 80.25\% | 0.07\% | 100.00\% |
| 10 | 46.39\% | 0.48\% | 53.03\% | 0.10\% | 100.00\% |
| 11 | 61.43\% | 0.69\% | 37.75\% | 0.12\% | 100.00\% |
| Grand Total | 42.44\% | 0.75\% | 56.72\% | 0.09\% | 100.00\% |


| ElectionName OfficeCode | 2021 November GOV |  | Results With Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE21GOVD |  | GE21GOVO | GE21GOVR | GE21GOVW | Grand Total |
| Congressional |  | 48.64\% | 0.70\% | 50.57\% | 0.08\% | 100.00\% |
| 1 |  | 40.71\% | 0.63\% | 58.60\% | 0.06\% | 100.00\% |
| 2 |  | 45.50\% | 0.72\% | 53.72\% | 0.06\% | 100.00\% |
| 3 |  | 61.87\% | 1.03\% | 37.01\% | 0.09\% | 100.00\% |
| 4 |  | 55.92\% | 1.39\% | 42.61\% | 0.08\% | 100.00\% |
| 5 |  | 39.72\% | 0.52\% | 59.69\% | 0.06\% | 100.00\% |
| 6 |  | 33.29\% | 0.63\% | 66.00\% | 0.07\% | 100.00\% |
| 7 |  | 44.29\% | 0.68\% | 54.96\% | 0.06\% | 100.00\% |
| 8 |  | 72.45\% | 0.58\% | 26.84\% | 0.12\% | 100.00\% |
| 9 |  | 24.82\% | 0.55\% | 74.56\% | 0.07\% | 100.00\% |
| 10 |  | 52.04\% | 0.46\% | 47.41\% | 0.09\% | 100.00\% |
| 11 |  | 66.65\% | 0.65\% | 32.60\% | 0.10\% | 100.00\% |
| Grand Total |  | 48.64\% | 0.70\% | 50.57\% | 0.08\% | 100.00\% |


| ElectionName OfficeCode | 2021 Novembe LTG |  | Results Exluding Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE21LTGD |  | GE21LTGR | GE21LTGW | Grand Total |
| Congressional |  | 43.13\% | 56.74\% | 0.13\% | 100.00\% |
| 1 |  | 35.75\% | 64.15\% | 0.10\% | 100.00\% |
| 2 |  | 40.41\% | 59.49\% | 0.10\% | 100.00\% |
| 3 |  | 56.76\% | 43.09\% | 0.14\% | 100.00\% |
| 4 |  | 53.28\% | 46.56\% | 0.16\% | 100.00\% |
| 5 |  | 33.63\% | 66.28\% | 0.09\% | 100.00\% |
| 6 |  | 26.77\% | 73.12\% | 0.11\% | 100.00\% |
| 7 |  | 39.99\% | 59.90\% | 0.11\% | 100.00\% |
| 8 |  | 68.01\% | 31.80\% | 0.20\% | 100.00\% |
| 9 |  | 20.04\% | 79.86\% | 0.10\% | 100.00\% |
| 10 |  | 47.03\% | 52.84\% | 0.13\% | 100.00\% |
| 11 |  | 62.31\% | 37.51\% | 0.18\% | 100.00\% |
| Grand Total |  | 43.13\% | 56.74\% | 0.13\% | 100.00\% |


| ElectionName <br> OfficeCode | 2021 November General <br> LTG |  | Results With Absentees |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |



| ElectionName OfficeCode | 2021 November <br> ATG | General | Results With Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels | GE21ATGD | GE21ATGR | GE21ATGW | Grand Total |
| Congressional |  | 49.55\% | 50.36\% | 0.09\% | 100.00\% |
| 1 |  | 41.43\% | 58.49\% | 0.07\% | 100.00\% |
| 2 |  | 46.09\% | 53.84\% | 0.07\% | 100.00\% |
| 3 |  | 62.98\% | 36.91\% | 0.12\% | 100.00\% |
| 4 |  | 57.21\% | 42.66\% | 0.12\% | 100.00\% |
| 5 |  | 40.68\% | 59.25\% | 0.06\% | 100.00\% |
| 6 |  | 34.44\% | 65.48\% | 0.08\% | 100.00\% |
| 7 |  | 44.94\% | 54.98\% | 0.08\% | 100.00\% |
| 8 |  | 73.31\% | 26.57\% | 0.12\% | 100.00\% |
| 9 |  | 25.76\% | 74.17\% | 0.08\% | 100.00\% |
| 10 |  | 52.99\% | 46.92\% | 0.09\% | 100.00\% |
| 11 |  | 67.62\% | 32.26\% | 0.12\% | 100.00\% |
| Grand Total |  | 49.55\% | 50.36\% | 0.09\% | 100.00\% |


| ElectionName OfficeCode | 2021 November General SLL | Results Exluding Absentees |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE21SLLD | GE21SLLI | GE21SLLL | GE21SLLR | GE21SLLW | Grand Total |
| House of Delegates | 41.68\% | 0.40\% | 0.11\% | 57.40\% | 0.41\% | 100.00\% |
| 1 | 0.00\% | 0.00\% | 0.00\% | 97.62\% | 2.38\% | 100.00\% |
| 2 | 52.17\% | 0.00\% | 0.00\% | 47.60\% | 0.23\% | 100.00\% |
| 3 | 0.00\% | 0.00\% | 0.00\% | 98.25\% | 1.75\% | 100.00\% |
| 4 | 0.00\% | 0.00\% | 0.00\% | 96.88\% | 3.12\% | 100.00\% |
| 5 | 0.00\% | 0.00\% | 0.00\% | 99.23\% | 0.77\% | 100.00\% |
| 6 | 0.00\% | 0.00\% | 0.00\% | 97.50\% | 2.50\% | 100.00\% |
| 7 | 27.35\% | 0.00\% | 0.00\% | 72.29\% | 0.36\% | 100.00\% |
| 8 | 22.04\% | 0.00\% | 0.00\% | 77.23\% | 0.73\% | 100.00\% |
| 9 | 18.20\% | 0.00\% | 0.00\% | 81.52\% | 0.27\% | 100.00\% |
| 10 | 45.79\% | 0.00\% | 0.00\% | 54.06\% | 0.15\% | 100.00\% |
| 11 | 57.58\% | 0.00\% | 0.00\% | 42.21\% | 0.21\% | 100.00\% |
| 12 | 37.32\% | 0.00\% | 0.00\% | 62.14\% | 0.53\% | 100.00\% |
| 13 | 50.47\% | 0.00\% | 0.00\% | 49.31\% | 0.22\% | 100.00\% |
| 14 | 30.91\% | 0.00\% | 0.00\% | 68.99\% | 0.10\% | 100.00\% |
| 15 | 15.77\% | 0.00\% | 0.00\% | 84.10\% | 0.13\% | 100.00\% |
| 16 | 26.30\% | 0.00\% | 0.00\% | 73.60\% | 0.10\% | 100.00\% |
| 17 | 0.00\% | 0.00\% | 0.00\% | 94.45\% | 5.55\% | 100.00\% |
| 18 | 26.80\% | 0.00\% | 0.00\% | 73.06\% | 0.14\% | 100.00\% |
| 19 | 15.38\% | 0.00\% | 2.04\% | 82.43\% | 0.15\% | 100.00\% |
| 20 | 28.84\% | 0.00\% | 0.00\% | 71.06\% | 0.10\% | 100.00\% |
| 21 | 45.23\% | 0.00\% | 0.00\% | 54.63\% | 0.14\% | 100.00\% |
| 22 | 19.87\% | 0.00\% | 1.67\% | 78.30\% | 0.16\% | 100.00\% |
| 23 | 26.10\% | 0.00\% | 0.00\% | 73.73\% | 0.18\% | 100.00\% |
| 24 | 19.70\% | 0.00\% | 0.00\% | 80.08\% | 0.23\% | 100.00\% |
| 25 | 31.12\% | 0.00\% | 0.00\% | 68.72\% | 0.16\% | 100.00\% |
| 26 | 34.09\% | 0.00\% | 0.00\% | 65.74\% | 0.16\% | 100.00\% |
| 27 | 44.71\% | 0.00\% | 0.00\% | 55.10\% | 0.19\% | 100.00\% |
| 28 | 43.92\% | 0.00\% | 0.00\% | 55.96\% | 0.12\% | 100.00\% |


| 29 | $26.20 \%$ | $0.00 \%$ | $0.00 \%$ | $73.68 \%$ | $0.11 \%$ | $100.00 \%$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| 30 | $28.03 \%$ | $0.00 \%$ | $0.00 \%$ | $71.84 \%$ | $0.13 \%$ | $100.00 \%$ |
| 31 | $47.60 \%$ | $0.00 \%$ | $0.00 \%$ | $52.22 \%$ | $0.18 \%$ | $100.00 \%$ |
| 32 | $54.09 \%$ | $2.35 \%$ | $0.00 \%$ | $43.36 \%$ | $0.20 \%$ | $100.00 \%$ |
| 33 | $35.84 \%$ | $0.00 \%$ | $0.00 \%$ | $64.03 \%$ | $0.13 \%$ | $100.00 \%$ |
| 34 | $51.24 \%$ | $0.00 \%$ | $0.00 \%$ | $48.60 \%$ | $0.16 \%$ | $100.00 \%$ |
| 35 | $62.38 \%$ | $0.00 \%$ | $0.00 \%$ | $37.45 \%$ | $0.17 \%$ | $100.00 \%$ |
| 36 | $66.09 \%$ | $0.00 \%$ | $0.00 \%$ | $33.68 \%$ | $0.23 \%$ | $100.00 \%$ |
| 37 | $61.95 \%$ | $0.00 \%$ | $0.00 \%$ | $37.86 \%$ | $0.19 \%$ | $100.00 \%$ |
| 38 | $63.74 \%$ | $0.00 \%$ | $0.00 \%$ | $35.92 \%$ | $0.34 \%$ | $100.00 \%$ |
| 39 | $62.22 \%$ | $0.00 \%$ | $0.00 \%$ | $37.53 \%$ | $0.25 \%$ | $100.00 \%$ |
| 40 | $48.35 \%$ | $0.00 \%$ | $0.00 \%$ | $51.53 \%$ | $0.11 \%$ | $100.00 \%$ |
| 41 | $60.22 \%$ | $0.00 \%$ | $0.00 \%$ | $39.59 \%$ | $0.19 \%$ | $100.00 \%$ |
| 42 | $56.04 \%$ | $0.00 \%$ | $0.00 \%$ | $43.76 \%$ | $0.20 \%$ | $100.00 \%$ |
| 43 | $65.77 \%$ | $0.00 \%$ | $0.00 \%$ | $34.08 \%$ | $0.15 \%$ | $100.00 \%$ |
| 44 | $62.88 \%$ | $0.00 \%$ | $0.00 \%$ | $36.97 \%$ | $0.15 \%$ | $100.00 \%$ |
| 45 | $69.85 \%$ | $0.00 \%$ | $0.00 \%$ | $29.85 \%$ | $0.30 \%$ | $100.00 \%$ |
| 46 | $91.44 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.56 \%$ | $100.00 \%$ |
| 47 | $72.52 \%$ | $0.00 \%$ | $0.00 \%$ | $27.23 \%$ | $0.25 \%$ | $100.00 \%$ |
| 48 | $65.65 \%$ | $0.00 \%$ | $0.00 \%$ | $34.13 \%$ | $0.22 \%$ | $100.00 \%$ |
| 49 | $72.70 \%$ | $4.42 \%$ | $0.00 \%$ | $22.70 \%$ | $0.18 \%$ | $100.00 \%$ |
| 50 | $50.16 \%$ | $0.00 \%$ | $0.00 \%$ | $49.61 \%$ | $0.23 \%$ | $100.00 \%$ |
| 51 | $47.80 \%$ | $0.00 \%$ | $0.00 \%$ | $52.07 \%$ | $0.13 \%$ | $100.00 \%$ |
| 52 | $66.18 \%$ | $0.00 \%$ | $0.00 \%$ | $33.57 \%$ | $0.25 \%$ | $100.00 \%$ |
| 53 | $65.65 \%$ | $0.00 \%$ | $0.00 \%$ | $34.14 \%$ | $0.21 \%$ | $100.00 \%$ |
| 54 | $34.43 \%$ | $0.00 \%$ | $0.00 \%$ | $65.44 \%$ | $0.13 \%$ | $100.00 \%$ |
| 55 | $31.16 \%$ | $0.00 \%$ | $0.00 \%$ | $68.74 \%$ | $0.11 \%$ | $100.00 \%$ |
| 56 | $33.28 \%$ | $0.00 \%$ | $0.00 \%$ | $66.56 \%$ | $0.16 \%$ | $100.00 \%$ |
| 57 | $74.38 \%$ | $0.00 \%$ | $0.00 \%$ | $25.39 \%$ | $0.24 \%$ | $100.00 \%$ |
| 58 | $29.18 \%$ | $0.00 \%$ | $0.00 \%$ | $70.72 \%$ | $0.10 \%$ | $100.00 \%$ |
| 59 | $25.60 \%$ | $3.08 \%$ | $0.00 \%$ | $71.20 \%$ | $0.12 \%$ | $100.00 \%$ |
| 60 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $95.69 \%$ | $4.31 \%$ | $100.00 \%$ |
| 61 | $26.55 \%$ | $0.00 \%$ | $2.38 \%$ | $70.99 \%$ | $0.09 \%$ | $100.00 \%$ |
| 62 | $40.05 \%$ | $0.00 \%$ | $0.00 \%$ | $59.69 \%$ | $0.26 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |  |


| 63 | $44.22 \%$ | $0.00 \%$ | $0.00 \%$ | $55.62 \%$ | $0.15 \%$ | $100.00 \%$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| 64 | $30.14 \%$ | $0.00 \%$ | $0.00 \%$ | $69.75 \%$ | $0.10 \%$ | $100.00 \%$ |
| 65 | $29.23 \%$ | $0.00 \%$ | $0.00 \%$ | $70.62 \%$ | $0.14 \%$ | $100.00 \%$ |
| 66 | $44.92 \%$ | $0.00 \%$ | $0.00 \%$ | $54.77 \%$ | $0.31 \%$ | $100.00 \%$ |
| 67 | $55.47 \%$ | $0.00 \%$ | $0.00 \%$ | $44.37 \%$ | $0.16 \%$ | $100.00 \%$ |
| 68 | $50.36 \%$ | $0.00 \%$ | $0.00 \%$ | $49.51 \%$ | $0.13 \%$ | $100.00 \%$ |
| 69 | $83.09 \%$ | $0.00 \%$ | $0.00 \%$ | $16.75 \%$ | $0.16 \%$ | $100.00 \%$ |
| 70 | $68.14 \%$ | $31.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.86 \%$ | $100.00 \%$ |
| 71 | $83.89 \%$ | $0.00 \%$ | $0.00 \%$ | $15.84 \%$ | $0.27 \%$ | $100.00 \%$ |
| 72 | $48.15 \%$ | $0.00 \%$ | $0.00 \%$ | $51.67 \%$ | $0.18 \%$ | $100.00 \%$ |
| 73 | $49.06 \%$ | $0.00 \%$ | $0.00 \%$ | $50.80 \%$ | $0.14 \%$ | $100.00 \%$ |
| 74 | $68.19 \%$ | $0.00 \%$ | $0.00 \%$ | $31.46 \%$ | $0.36 \%$ | $100.00 \%$ |
| 75 | $42.96 \%$ | $0.00 \%$ | $0.00 \%$ | $56.90 \%$ | $0.14 \%$ | $100.00 \%$ |
| 76 | $47.66 \%$ | $2.87 \%$ | $0.00 \%$ | $49.31 \%$ | $0.17 \%$ | $100.00 \%$ |
| 77 | $56.23 \%$ | $0.00 \%$ | $0.00 \%$ | $43.37 \%$ | $0.41 \%$ | $100.00 \%$ |
| 78 | $28.22 \%$ | $0.00 \%$ | $0.00 \%$ | $71.55 \%$ | $0.23 \%$ | $100.00 \%$ |
| 79 | $52.01 \%$ | $0.00 \%$ | $0.00 \%$ | $47.76 \%$ | $0.23 \%$ | $100.00 \%$ |
| 80 | $60.35 \%$ | $0.00 \%$ | $0.00 \%$ | $39.45 \%$ | $0.20 \%$ | $100.00 \%$ |
| 81 | $35.39 \%$ | $0.00 \%$ | $0.00 \%$ | $64.22 \%$ | $0.39 \%$ | $100.00 \%$ |
| 82 | $36.14 \%$ | $0.00 \%$ | $0.00 \%$ | $63.77 \%$ | $0.09 \%$ | $100.00 \%$ |
| 83 | $44.37 \%$ | $0.00 \%$ | $0.00 \%$ | $55.49 \%$ | $0.14 \%$ | $100.00 \%$ |
| 84 | $39.99 \%$ | $0.00 \%$ | $0.00 \%$ | $59.82 \%$ | $0.20 \%$ | $100.00 \%$ |
| 85 | $45.02 \%$ | $0.00 \%$ | $0.00 \%$ | $54.86 \%$ | $0.12 \%$ | $100.00 \%$ |
| 86 | $59.81 \%$ | $0.00 \%$ | $0.00 \%$ | $39.88 \%$ | $0.31 \%$ | $100.00 \%$ |
| 87 | $54.83 \%$ | $0.00 \%$ | $0.00 \%$ | $45.03 \%$ | $0.14 \%$ | $100.00 \%$ |
| 88 | $35.82 \%$ | $0.00 \%$ | $2.06 \%$ | $62.01 \%$ | $0.10 \%$ | $100.00 \%$ |
| 89 | $76.93 \%$ | $0.00 \%$ | $0.00 \%$ | $22.75 \%$ | $0.32 \%$ | $100.00 \%$ |
| 90 | $58.47 \%$ | $0.00 \%$ | $0.00 \%$ | $41.28 \%$ | $0.25 \%$ | $100.00 \%$ |
| 91 | $42.79 \%$ | $0.00 \%$ | $1.81 \%$ | $55.28 \%$ | $0.12 \%$ | $100.00 \%$ |
| 92 | $68.57 \%$ | $0.00 \%$ | $0.00 \%$ | $31.19 \%$ | $0.23 \%$ | $100.00 \%$ |
| 93 | $44.78 \%$ | $0.00 \%$ | $0.00 \%$ | $55.09 \%$ | $0.13 \%$ | $100.00 \%$ |
| 94 | $50.61 \%$ | $0.00 \%$ | $0.00 \%$ | $49.19 \%$ | $0.20 \%$ | $100.00 \%$ |
| 95 | $58.96 \%$ | $0.00 \%$ | $0.00 \%$ | $40.82 \%$ | $0.22 \%$ | $100.00 \%$ |
| 96 | $36.69 \%$ | $0.00 \%$ | $0.00 \%$ | $63.19 \%$ | $0.12 \%$ | $100.00 \%$ |


| 97 | $23.65 \%$ | $0.00 \%$ | $0.00 \%$ | $76.05 \%$ | $0.30 \%$ | $100.00 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 98 | $22.97 \%$ | $0.00 \%$ | $0.00 \%$ | $76.91 \%$ | $0.12 \%$ | $100.00 \%$ |
| 99 | $29.14 \%$ | $0.00 \%$ | $0.00 \%$ | $70.76 \%$ | $0.09 \%$ | $100.00 \%$ |
| 100 | $35.86 \%$ | $0.00 \%$ | $0.00 \%$ | $63.99 \%$ | $0.15 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{4 1 . 6 8 \%}$ | $\mathbf{0 . 4 0 \%}$ | $\mathbf{0 . 1 1 \%}$ | $\mathbf{5 7 . 4 0 \%}$ | $\mathbf{0 . 4 1 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |


| ElectionName OfficeCode | 2021 November General SLL | Results With Absentees |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE21SLLD | GE21SLLI | GE21SLLL | GE21SLLR | GE21SLLW | Grand Total |
| House of Delegates | 47.54\% | 0.38\% | 0.09\% | 51.56\% | 0.43\% | 100.00\% |
| 1 | 0.00\% | 0.00\% | 0.00\% | 97.33\% | 2.67\% | 100.00\% |
| 2 | 57.21\% | 0.00\% | 0.00\% | 42.57\% | 0.22\% | 100.00\% |
| 3 | 0.00\% | 0.00\% | 0.00\% | 97.79\% | 2.21\% | 100.00\% |
| 4 | 0.00\% | 0.00\% | 0.00\% | 95.84\% | 4.16\% | 100.00\% |
| 5 | 0.00\% | 0.00\% | 0.00\% | 98.86\% | 1.14\% | 100.00\% |
| 6 | 0.00\% | 0.00\% | 0.00\% | 96.81\% | 3.19\% | 100.00\% |
| 7 | 33.96\% | 0.00\% | 0.00\% | 65.66\% | 0.38\% | 100.00\% |
| 8 | 28.51\% | 0.00\% | 0.00\% | 70.72\% | 0.77\% | 100.00\% |
| 9 | 23.09\% | 0.00\% | 0.00\% | 76.62\% | 0.29\% | 100.00\% |
| 10 | 50.92\% | 0.00\% | 0.00\% | 48.94\% | 0.14\% | 100.00\% |
| 11 | 64.49\% | 0.00\% | 0.00\% | 35.34\% | 0.16\% | 100.00\% |
| 12 | 44.57\% | 0.00\% | 0.00\% | 55.08\% | 0.35\% | 100.00\% |
| 13 | 54.21\% | 0.00\% | 0.00\% | 45.60\% | 0.18\% | 100.00\% |
| 14 | 34.31\% | 0.00\% | 0.00\% | 65.58\% | 0.12\% | 100.00\% |
| 15 | 22.19\% | 0.00\% | 0.00\% | 77.69\% | 0.12\% | 100.00\% |
| 16 | 29.93\% | 0.00\% | 0.00\% | 69.94\% | 0.13\% | 100.00\% |
| 17 | 0.00\% | 0.00\% | 0.00\% | 92.85\% | 7.15\% | 100.00\% |
| 18 | 33.94\% | 0.00\% | 0.00\% | 65.92\% | 0.14\% | 100.00\% |
| 19 | 19.69\% | 0.00\% | 1.82\% | 78.31\% | 0.18\% | 100.00\% |
| 20 | 36.21\% | 0.00\% | 0.00\% | 63.71\% | 0.08\% | 100.00\% |
| 21 | 50.51\% | 0.00\% | 0.00\% | 49.37\% | 0.12\% | 100.00\% |
| 22 | 25.56\% | 0.00\% | 1.63\% | 72.65\% | 0.16\% | 100.00\% |
| 23 | 33.24\% | 0.00\% | 0.00\% | 66.57\% | 0.19\% | 100.00\% |
| 24 | 26.71\% | 0.00\% | 0.00\% | 73.09\% | 0.20\% | 100.00\% |
| 25 | 37.67\% | 0.00\% | 0.00\% | 62.18\% | 0.16\% | 100.00\% |
| 26 | 40.60\% | 0.00\% | 0.00\% | 59.25\% | 0.15\% | 100.00\% |
| 27 | 48.08\% | 0.00\% | 0.00\% | 51.70\% | 0.21\% | 100.00\% |
| 28 | 48.93\% | 0.00\% | 0.00\% | 50.95\% | 0.12\% | 100.00\% |


| 29 | $33.37 \%$ | $0.00 \%$ | $0.00 \%$ | $66.52 \%$ | $0.12 \%$ | $100.00 \%$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| 30 | $34.44 \%$ | $0.00 \%$ | $0.00 \%$ | $65.42 \%$ | $0.14 \%$ | $100.00 \%$ |
| 31 | $52.04 \%$ | $0.00 \%$ | $0.00 \%$ | $47.81 \%$ | $0.15 \%$ | $100.00 \%$ |
| 32 | $57.89 \%$ | $2.15 \%$ | $0.00 \%$ | $39.79 \%$ | $0.17 \%$ | $100.00 \%$ |
| 33 | $41.69 \%$ | $0.00 \%$ | $0.00 \%$ | $58.18 \%$ | $0.12 \%$ | $100.00 \%$ |
| 34 | $57.07 \%$ | $0.00 \%$ | $0.00 \%$ | $42.82 \%$ | $0.11 \%$ | $100.00 \%$ |
| 35 | $68.73 \%$ | $0.00 \%$ | $0.00 \%$ | $31.13 \%$ | $0.14 \%$ | $100.00 \%$ |
| 36 | $71.66 \%$ | $0.00 \%$ | $0.00 \%$ | $28.15 \%$ | $0.19 \%$ | $100.00 \%$ |
| 37 | $66.75 \%$ | $0.00 \%$ | $0.00 \%$ | $33.08 \%$ | $0.17 \%$ | $100.00 \%$ |
| 38 | $68.85 \%$ | $0.00 \%$ | $0.00 \%$ | $30.82 \%$ | $0.33 \%$ | $100.00 \%$ |
| 39 | $66.45 \%$ | $0.00 \%$ | $0.00 \%$ | $33.31 \%$ | $0.24 \%$ | $100.00 \%$ |
| 40 | $52.65 \%$ | $0.00 \%$ | $0.00 \%$ | $47.26 \%$ | $0.10 \%$ | $100.00 \%$ |
| 41 | $65.14 \%$ | $0.00 \%$ | $0.00 \%$ | $34.66 \%$ | $0.20 \%$ | $100.00 \%$ |
| 42 | $60.01 \%$ | $0.00 \%$ | $0.00 \%$ | $39.83 \%$ | $0.15 \%$ | $100.00 \%$ |
| 43 | $70.17 \%$ | $0.00 \%$ | $0.00 \%$ | $29.70 \%$ | $0.13 \%$ | $100.00 \%$ |
| 44 | $67.74 \%$ | $0.00 \%$ | $0.00 \%$ | $32.13 \%$ | $0.14 \%$ | $100.00 \%$ |
| 45 | $73.68 \%$ | $0.00 \%$ | $0.00 \%$ | $26.05 \%$ | $0.28 \%$ | $100.00 \%$ |
| 46 | $92.19 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.81 \%$ | $100.00 \%$ |
| 47 | $78.21 \%$ | $0.00 \%$ | $0.00 \%$ | $21.51 \%$ | $0.28 \%$ | $100.00 \%$ |
| 48 | $72.13 \%$ | $0.00 \%$ | $0.00 \%$ | $27.63 \%$ | $0.24 \%$ | $100.00 \%$ |
| 49 | $76.54 \%$ | $3.88 \%$ | $0.00 \%$ | $19.38 \%$ | $0.20 \%$ | $100.00 \%$ |
| 50 | $54.71 \%$ | $0.00 \%$ | $0.00 \%$ | $45.10 \%$ | $0.19 \%$ | $100.00 \%$ |
| 51 | $53.41 \%$ | $0.00 \%$ | $0.00 \%$ | $46.47 \%$ | $0.12 \%$ | $100.00 \%$ |
| 52 | $70.04 \%$ | $0.00 \%$ | $0.00 \%$ | $29.76 \%$ | $0.19 \%$ | $100.00 \%$ |
| 53 | $71.96 \%$ | $0.00 \%$ | $0.00 \%$ | $27.86 \%$ | $0.18 \%$ | $100.00 \%$ |
| 54 | $39.03 \%$ | $0.00 \%$ | $0.00 \%$ | $60.86 \%$ | $0.11 \%$ | $100.00 \%$ |
| 55 | $36.07 \%$ | $0.00 \%$ | $0.00 \%$ | $63.81 \%$ | $0.12 \%$ | $100.00 \%$ |
| 56 | $38.23 \%$ | $0.00 \%$ | $0.00 \%$ | $61.63 \%$ | $0.14 \%$ | $100.00 \%$ |
| 57 | $78.47 \%$ | $0.00 \%$ | $0.00 \%$ | $21.30 \%$ | $0.23 \%$ | $100.00 \%$ |
| 58 | $36.70 \%$ | $0.00 \%$ | $0.00 \%$ | $63.21 \%$ | $0.09 \%$ | $100.00 \%$ |
| 59 | $32.21 \%$ | $3.12 \%$ | $0.00 \%$ | $64.56 \%$ | $0.12 \%$ | $100.00 \%$ |
| 60 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $94.97 \%$ | $5.03 \%$ | $100.00 \%$ |
| 61 | $30.29 \%$ | $0.00 \%$ | $2.17 \%$ | $67.47 \%$ | $0.06 \%$ | $100.00 \%$ |
| 62 | $43.38 \%$ | $0.00 \%$ | $0.00 \%$ | $56.39 \%$ | $0.23 \%$ | $100.00 \%$ |


| $49.16 \%$ | $0.00 \%$ | $0.00 \%$ | $50.70 \%$ | $0.14 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $34.95 \%$ | $0.00 \%$ | $0.00 \%$ | $64.95 \%$ | $0.10 \%$ | $100.00 \%$ |
| $33.84 \%$ | $0.00 \%$ | $0.00 \%$ | $66.01 \%$ | $0.15 \%$ | $100.00 \%$ |
| $47.41 \%$ | $0.00 \%$ | $0.00 \%$ | $52.32 \%$ | $0.27 \%$ | $100.00 \%$ |
| $60.66 \%$ | $0.00 \%$ | $0.00 \%$ | $39.22 \%$ | $0.12 \%$ | $100.00 \%$ |
| $53.10 \%$ | $0.00 \%$ | $0.00 \%$ | $46.78 \%$ | $0.12 \%$ | $100.00 \%$ |
| $85.22 \%$ | $0.00 \%$ | $0.00 \%$ | $14.65 \%$ | $0.13 \%$ | $100.00 \%$ |
| $71.53 \%$ | $27.72 \%$ | $0.00 \%$ | $0.00 \%$ | $0.75 \%$ | $100.00 \%$ |
| $85.58 \%$ | $0.00 \%$ | $0.00 \%$ | $14.19 \%$ | $0.23 \%$ | $100.00 \%$ |
| $52.98 \%$ | $0.00 \%$ | $0.00 \%$ | $46.85 \%$ | $0.17 \%$ | $100.00 \%$ |
| $52.45 \%$ | $0.00 \%$ | $0.00 \%$ | $47.42 \%$ | $0.13 \%$ | $100.00 \%$ |
| $72.59 \%$ | $0.00 \%$ | $0.00 \%$ | $27.05 \%$ | $0.36 \%$ | $100.00 \%$ |
| $47.35 \%$ | $0.00 \%$ | $0.00 \%$ | $52.52 \%$ | $0.13 \%$ | $100.00 \%$ |
| $53.33 \%$ | $2.57 \%$ | $0.00 \%$ | $43.95 \%$ | $0.15 \%$ | $100.00 \%$ |
| $61.08 \%$ | $0.00 \%$ | $0.00 \%$ | $38.62 \%$ | $0.30 \%$ | $100.00 \%$ |
| $33.87 \%$ | $0.00 \%$ | $0.00 \%$ | $65.96 \%$ | $0.17 \%$ | $100.00 \%$ |
| $56.06 \%$ | $0.00 \%$ | $0.00 \%$ | $43.61 \%$ | $0.33 \%$ | $100.00 \%$ |
| $66.08 \%$ | $0.00 \%$ | $0.00 \%$ | $33.71 \%$ | $0.21 \%$ | $100.00 \%$ |
| $41.77 \%$ | $0.00 \%$ | $0.00 \%$ | $57.70 \%$ | $0.54 \%$ | $100.00 \%$ |
| $40.57 \%$ | $0.00 \%$ | $0.00 \%$ | $59.35 \%$ | $0.08 \%$ | $100.00 \%$ |
| $48.77 \%$ | $0.00 \%$ | $0.00 \%$ | $51.11 \%$ | $0.12 \%$ | $100.00 \%$ |
| $44.18 \%$ | $0.00 \%$ | $0.00 \%$ | $55.63 \%$ | $0.19 \%$ | $100.00 \%$ |
| $49.73 \%$ | $0.00 \%$ | $0.00 \%$ | $50.17 \%$ | $0.10 \%$ | $100.00 \%$ |
| $65.41 \%$ | $0.00 \%$ | $0.00 \%$ | $34.29 \%$ | $0.31 \%$ | $100.00 \%$ |
| $58.42 \%$ | $0.00 \%$ | $0.00 \%$ | $41.44 \%$ | $0.13 \%$ | $100.00 \%$ |
| $40.74 \%$ | $0.00 \%$ | $1.82 \%$ | $57.36 \%$ | $0.08 \%$ | $100.00 \%$ |
| $79.85 \%$ | $0.00 \%$ | $0.00 \%$ | $19.86 \%$ | $0.29 \%$ | $100.00 \%$ |
| $64.46 \%$ | $0.00 \%$ | $0.00 \%$ | $35.31 \%$ | $0.23 \%$ | $100.00 \%$ |
| $49.03 \%$ | $0.00 \%$ | $1.50 \%$ | $49.36 \%$ | $0.11 \%$ | $100.00 \%$ |
| $73.74 \%$ | $0.00 \%$ | $0.00 \%$ | $26.02 \%$ | $0.25 \%$ | $100.00 \%$ |
| $51.57 \%$ | $0.00 \%$ | $0.00 \%$ | $48.31 \%$ | $0.12 \%$ | $100.00 \%$ |
| $55.99 \%$ | $0.00 \%$ | $0.00 \%$ | $43.79 \%$ | $0.22 \%$ | $100.00 \%$ |
| $63.50 \%$ | $0.00 \%$ | $0.00 \%$ | $36.28 \%$ | $0.22 \%$ | $100.00 \%$ |
| $44.15 \%$ | $0.00 \%$ | $0.00 \%$ | $55.73 \%$ | $0.11 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |


| 97 | $27.30 \%$ | $0.00 \%$ | $0.00 \%$ | $72.39 \%$ | $0.31 \%$ | $100.00 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 98 | $27.96 \%$ | $0.00 \%$ | $0.00 \%$ | $71.92 \%$ | $0.12 \%$ | $100.00 \%$ |
| 99 | $34.53 \%$ | $0.00 \%$ | $0.00 \%$ | $65.38 \%$ | $0.10 \%$ | $100.00 \%$ |
| 100 | $43.38 \%$ | $0.00 \%$ | $0.00 \%$ | $56.50 \%$ | $0.12 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{4 7 . 5 4 \%}$ | $\mathbf{0 . 3 8 \%}$ | $\mathbf{0 . 0 9 \%}$ | $\mathbf{5 1 . 5 6 \%}$ | $\mathbf{0 . 4 3 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |




| ElectionName OfficeCode | 2020 Novembe USS |  | Results Exluding Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE20USSD |  | GE20USSR | GE20USSW | Grand Total |
| Congressional |  | 39.15\% | 60.71\% | 0.14\% | 100.00\% |
| 1 |  | 32.02\% | 67.86\% | 0.12\% | 100.00\% |
| 2 |  | 39.90\% | 59.96\% | 0.14\% | 100.00\% |
| 3 |  | 55.91\% | 43.90\% | 0.18\% | 100.00\% |
| 4 |  | 51.15\% | 48.71\% | 0.13\% | 100.00\% |
| 5 |  | 32.54\% | 67.35\% | 0.11\% | 100.00\% |
| 6 |  | 26.45\% | 73.44\% | 0.12\% | 100.00\% |
| 7 |  | 35.17\% | 64.69\% | 0.14\% | 100.00\% |
| 8 |  | 59.36\% | 40.44\% | 0.21\% | 100.00\% |
| 9 |  | 23.03\% | 76.85\% | 0.12\% | 100.00\% |
| 10 |  | 40.24\% | 59.61\% | 0.14\% | 100.00\% |
| 11 |  | 56.43\% | 43.40\% | 0.18\% | 100.00\% |
| Grand Total |  | 39.15\% | 60.71\% | 0.14\% | 100.00\% |


| ElectionName <br> OfficeCode | 2020 November General <br> USS |  |  | Results With Absentees |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| ElectionName OfficeCode | 2020 November General USR | Results Exluding Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  |  |  |  |
| Row Labels | GE20USRD | GE20USRI | GE20USRR | GE20USRW | Grand Total |
| Congressional | 34.50\% | 0.27\% | 64.72\% | 0.50\% | 100.00\% |
| 1 | 25.96\% | 0.00\% | 73.90\% | 0.14\% | 100.00\% |
| 2 | 37.10\% | 3.07\% | 59.67\% | 0.16\% | 100.00\% |
| 3 | 54.89\% | 0.00\% | 44.79\% | 0.33\% | 100.00\% |
| 4 | 49.31\% | 0.00\% | 50.49\% | 0.20\% | 100.00\% |
| 5 | 31.05\% | 0.00\% | 68.61\% | 0.34\% | 100.00\% |
| 6 | 20.08\% | 0.00\% | 79.78\% | 0.14\% | 100.00\% |
| 7 | 34.42\% | 0.00\% | 65.33\% | 0.25\% | 100.00\% |
| 8 | 57.46\% | 0.00\% | 42.20\% | 0.34\% | 100.00\% |
| 9 | 0.00\% | 0.00\% | 97.05\% | 2.95\% | 100.00\% |
| 10 | 37.33\% | 0.00\% | 62.49\% | 0.18\% | 100.00\% |
| 11 | 55.39\% | 0.00\% | 44.26\% | 0.35\% | 100.00\% |
| Grand Total | 34.50\% | 0.27\% | 64.72\% | 0.50\% | 100.00\% |



| ElectionName OfficeCode | 2020 November General SLL | Results Exluding Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  |  |  |
| Row Labels | GE20SLLD | GE20SLLR | GE20SLLW | Grand Total |
| House of Delegates | 20.99\% | 78.78\% | 0.23\% | 100.00\% |
| 29 | 20.99\% | 78.78\% | 0.23\% | 100.00\% |
| Grand Total | 20.99\% | 78.78\% | 0.23\% | 100.00\% |



| ElectionName OfficeCode | 2019 November General SLU | Results Exluding Absentees |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE19SLUD | GE19SLUI | GE19SLUL | GE19SLUR | GE19SLUW | Grand Total |
| State Senate | 53.09\% | 4.52\% | 0.53\% | 39.82\% | 2.03\% | 100.00\% |
| 1 | 89.72\% | 0.00\% | 0.00\% | 0.00\% | 10.28\% | 100.00\% |
| 2 | 92.72\% | 0.00\% | 0.00\% | 0.00\% | 7.28\% | 100.00\% |
| 3 | 37.41\% | 0.00\% | 0.00\% | 62.25\% | 0.34\% | 100.00\% |
| 4 | 36.54\% | 0.00\% | 0.00\% | 63.18\% | 0.28\% | 100.00\% |
| 5 | 79.10\% | 19.70\% | 0.00\% | 0.00\% | 1.20\% | 100.00\% |
| 6 | 59.29\% | 0.00\% | 0.00\% | 40.54\% | 0.17\% | 100.00\% |
| 7 | 49.47\% | 0.00\% | 0.00\% | 50.37\% | 0.16\% | 100.00\% |
| 8 | 47.52\% | 0.00\% | 0.00\% | 52.30\% | 0.18\% | 100.00\% |
| 9 | 79.92\% | 0.00\% | 19.07\% | 0.00\% | 1.02\% | 100.00\% |
| 10 | 54.16\% | 0.00\% | 0.00\% | 45.72\% | 0.12\% | 100.00\% |
| 11 | 45.40\% | 0.00\% | 0.00\% | 54.36\% | 0.24\% | 100.00\% |
| 12 | 48.78\% | 0.00\% | 0.00\% | 51.01\% | 0.21\% | 100.00\% |
| 13 | 54.13\% | 0.00\% | 0.00\% | 45.74\% | 0.13\% | 100.00\% |
| 14 | 39.31\% | 0.00\% | 0.00\% | 60.44\% | 0.25\% | 100.00\% |
| 15 | 31.11\% | 0.00\% | 0.00\% | 68.77\% | 0.12\% | 100.00\% |
| 16 | 63.89\% | 34.14\% | 0.00\% | 0.00\% | 1.97\% | 100.00\% |
| 17 | 47.92\% | 0.00\% | 0.00\% | 51.78\% | 0.30\% | 100.00\% |
| 18 | 92.37\% | 0.00\% | 0.00\% | 0.00\% | 7.63\% | 100.00\% |
| 19 | 28.19\% | 0.00\% | 0.00\% | 71.73\% | 0.08\% | 100.00\% |
| 20 | 0.00\% | 28.91\% | 0.00\% | 70.65\% | 0.45\% | 100.00\% |
| 21 | 65.30\% | 33.99\% | 0.00\% | 0.00\% | 0.71\% | 100.00\% |
| 22 | 36.70\% | 0.00\% | 0.00\% | 63.17\% | 0.13\% | 100.00\% |
| 23 | 0.00\% | 0.00\% | 0.00\% | 93.82\% | 6.18\% | 100.00\% |
| 24 | 28.05\% | 0.00\% | 0.00\% | 71.31\% | 0.64\% | 100.00\% |
| 25 | 67.00\% | 32.62\% | 0.00\% | 0.00\% | 0.38\% | 100.00\% |
| 26 | 34.46\% | 0.00\% | 0.00\% | 65.39\% | 0.15\% | 100.00\% |
| 27 | 35.04\% | 0.00\% | 0.00\% | 64.85\% | 0.11\% | 100.00\% |
| 28 | 42.17\% | 0.00\% | 0.00\% | 57.69\% | 0.14\% | 100.00\% |


| 29 | $91.23 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.77 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 30 | $91.54 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.46 \%$ | $100.00 \%$ |
| 31 | $91.52 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.48 \%$ | $100.00 \%$ |
| 32 | $72.79 \%$ | $0.00 \%$ | $0.00 \%$ | $27.02 \%$ | $0.19 \%$ | $100.00 \%$ |
| 33 | $64.82 \%$ | $0.00 \%$ | $0.00 \%$ | $35.06 \%$ | $0.12 \%$ | $100.00 \%$ |
| 34 | $91.17 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.83 \%$ | $100.00 \%$ |
| 35 | $92.51 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.49 \%$ | $100.00 \%$ |
| 36 | $91.67 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.33 \%$ | $100.00 \%$ |
| 37 | $90.44 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $9.56 \%$ | $100.00 \%$ |
| 38 | $0.00 \%$ | $35.48 \%$ | $0.00 \%$ | $63.40 \%$ | $1.12 \%$ | $100.00 \%$ |
| 39 | $66.11 \%$ | $0.00 \%$ | $0.00 \%$ | $33.77 \%$ | $0.13 \%$ | $100.00 \%$ |
| 40 | $0.00 \%$ | $23.28 \%$ | $0.00 \%$ | $\mathbf{7 6 . 3 6 \%}$ | $0.36 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{5 3 . 0 9 \%}$ | $\mathbf{4 . 5 2 \%}$ | $\mathbf{0 . 5 3 \%}$ | $\mathbf{3 9 . 8 2 \%}$ | $\mathbf{2 . 0 3 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |


| ElectionName OfficeCode | 2019 November General <br> SLU | Results With Absentees |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE19SLUD | GE19SLUI | GE19SLUL | GE19SLUR | GE19SLUW | Grand Total |
| State Senate | 53.52\% | 4.47\% | 0.52\% | 39.44\% | 2.05\% | 100.00\% |
| 1 | 89.80\% | 0.00\% | 0.00\% | 0.00\% | 10.20\% | 100.00\% |
| 2 | 92.76\% | 0.00\% | 0.00\% | 0.00\% | 7.24\% | 100.00\% |
| 3 | 37.97\% | 0.00\% | 0.00\% | 61.68\% | 0.34\% | 100.00\% |
| 4 | 36.73\% | 0.00\% | 0.00\% | 62.99\% | 0.28\% | 100.00\% |
| 5 | 79.21\% | 19.60\% | 0.00\% | 0.00\% | 1.19\% | 100.00\% |
| 6 | 59.65\% | 0.00\% | 0.00\% | 40.17\% | 0.18\% | 100.00\% |
| 7 | 49.48\% | 0.00\% | 0.00\% | 50.35\% | 0.16\% | 100.00\% |
| 8 | 47.74\% | 0.00\% | 0.00\% | 52.09\% | 0.17\% | 100.00\% |
| 9 | 80.04\% | 0.00\% | 18.95\% | 0.00\% | 1.01\% | 100.00\% |
| 10 | 54.08\% | 0.00\% | 0.00\% | 45.81\% | 0.12\% | 100.00\% |
| 11 | 45.25\% | 0.00\% | 0.00\% | 54.50\% | 0.26\% | 100.00\% |
| 12 | 49.05\% | 0.00\% | 0.00\% | 50.75\% | 0.20\% | 100.00\% |
| 13 | 54.25\% | 0.00\% | 0.00\% | 45.62\% | 0.13\% | 100.00\% |
| 14 | 39.60\% | 0.00\% | 0.00\% | 60.14\% | 0.25\% | 100.00\% |
| 15 | 31.59\% | 0.00\% | 0.00\% | 68.29\% | 0.12\% | 100.00\% |
| 16 | 63.81\% | 34.24\% | 0.00\% | 0.00\% | 1.94\% | 100.00\% |
| 17 | 48.11\% | 0.00\% | 0.00\% | 51.58\% | 0.31\% | 100.00\% |
| 18 | 92.48\% | 0.00\% | 0.00\% | 0.00\% | 7.52\% | 100.00\% |
| 19 | 28.51\% | 0.00\% | 0.00\% | 71.41\% | 0.09\% | 100.00\% |
| 20 | 0.00\% | 29.04\% | 0.00\% | 70.51\% | 0.45\% | 100.00\% |
| 21 | 65.47\% | 33.82\% | 0.00\% | 0.00\% | 0.71\% | 100.00\% |
| 22 | 37.11\% | 0.00\% | 0.00\% | 62.76\% | 0.13\% | 100.00\% |
| 23 | 0.00\% | 0.00\% | 0.00\% | 93.85\% | 6.15\% | 100.00\% |
| 24 | 28.35\% | 0.00\% | 0.00\% | 70.97\% | 0.67\% | 100.00\% |
| 25 | 67.50\% | 32.13\% | 0.00\% | 0.00\% | 0.37\% | 100.00\% |
| 26 | 34.98\% | 0.00\% | 0.00\% | 64.88\% | 0.15\% | 100.00\% |
| 27 | 35.70\% | 0.00\% | 0.00\% | 64.19\% | 0.11\% | 100.00\% |
| 28 | 42.43\% | 0.00\% | 0.00\% | 57.43\% | 0.14\% | 100.00\% |
| 29 | 91.08\% | 0.00\% | 0.00\% | 0.00\% | 8.92\% | 100.00\% |
| 30 | 91.67\% | 0.00\% | 0.00\% | 0.00\% | 8.33\% | 100.00\% |
| 31 | 91.62\% | 0.00\% | 0.00\% | 0.00\% | 8.38\% | 100.00\% |
| 32 | 73.51\% | 0.00\% | 0.00\% | 26.29\% | 0.19\% | 100.00\% |
| 33 | 64.89\% | 0.00\% | 0.00\% | 34.99\% | 0.12\% | 100.00\% |
| 34 | 91.20\% | 0.00\% | 0.00\% | 0.00\% | 8.80\% | 100.00\% |
| 35 | 92.49\% | 0.00\% | 0.00\% | 0.00\% | 7.51\% | 100.00\% |
| 36 | 91.70\% | 0.00\% | 0.00\% | 0.00\% | 8.30\% | 100.00\% |
| 37 | 90.28\% | 0.00\% | 0.00\% | 0.00\% | 9.72\% | 100.00\% |
| 38 | 0.00\% | 35.38\% | 0.00\% | 63.52\% | 1.11\% | 100.00\% |
| 39 | 65.89\% | 0.00\% | 0.00\% | 33.97\% | 0.14\% | 100.00\% |
| 40 | 0.00\% | 23.34\% | 0.00\% | 76.31\% | 0.35\% | 100.00\% |
| Grand Total | 53.52\% | 4.47\% | 0.52\% | 39.44\% | 2.05\% | 100.00\% |



| 29 | 34.98\% | 0.00\% | 0.00\% | 64.93\% | 0.08\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 41.77\% | 0.00\% | 0.00\% | 0.00\% | 58.23\% | 100.00\% |
| 31 | 52.27\% | 0.00\% | 0.00\% | 47.54\% | 0.19\% | 100.00\% |
| 32 | 92.75\% | 0.00\% | 0.00\% | 0.00\% | 7.25\% | 100.00\% |
| 33 | 42.66\% | 0.00\% | 0.00\% | 57.23\% | 0.11\% | 100.00\% |
| 34 | 57.69\% | 0.00\% | 0.00\% | 42.22\% | 0.09\% | 100.00\% |
| 35 | 92.65\% | 0.00\% | 0.00\% | 0.00\% | 7.35\% | 100.00\% |
| 36 | 92.78\% | 0.00\% | 0.00\% | 0.00\% | 7.22\% | 100.00\% |
| 37 | 91.97\% | 0.00\% | 0.00\% | 0.00\% | 8.03\% | 100.00\% |
| 38 | 93.22\% | 0.00\% | 0.00\% | 0.00\% | 6.78\% | 100.00\% |
| 39 | 67.99\% | 0.00\% | 0.00\% | 31.80\% | 0.21\% | 100.00\% |
| 40 | 52.75\% | 0.00\% | 0.00\% | 47.13\% | 0.12\% | 100.00\% |
| 41 | 71.11\% | 19.30\% | 7.85\% | 0.00\% | 1.75\% | 100.00\% |
| 42 | 59.53\% | 0.00\% | 0.00\% | 40.38\% | 0.09\% | 100.00\% |
| 43 | 77.64\% | 20.77\% | 0.00\% | 0.00\% | 1.59\% | 100.00\% |
| 44 | 70.52\% | 0.00\% | 0.00\% | 29.34\% | 0.14\% | 100.00\% |
| 45 | 91.25\% | 0.00\% | 0.00\% | 0.00\% | 8.75\% | 100.00\% |
| 46 | 91.99\% | 0.00\% | 0.00\% | 0.00\% | 8.01\% | 100.00\% |
| 47 | 95.95\% | 0.00\% | 0.00\% | 0.00\% | 4.05\% | 100.00\% |
| 48 | 94.02\% | 0.00\% | 0.00\% | 0.00\% | 5.98\% | 100.00\% |
| 49 | 83.53\% | 15.67\% | 0.00\% | 0.00\% | 0.80\% | 100.00\% |
| 50 | 53.73\% | 0.00\% | 0.00\% | 46.00\% | 0.27\% | 100.00\% |
| 51 | 54.62\% | 0.00\% | 0.00\% | 45.26\% | 0.12\% | 100.00\% |
| 52 | 73.24\% | 0.00\% | 0.00\% | 26.38\% | 0.38\% | 100.00\% |
| 53 | 93.71\% | 0.00\% | 0.00\% | 0.00\% | 6.29\% | 100.00\% |
| 54 | 42.02\% | 0.00\% | 0.00\% | 57.87\% | 0.11\% | 100.00\% |
| 55 | 39.48\% | 0.00\% | 0.00\% | 60.37\% | 0.16\% | 100.00\% |
| 56 | 38.39\% | 0.00\% | 0.00\% | 61.50\% | 0.11\% | 100.00\% |
| 57 | 96.07\% | 0.00\% | 0.00\% | 0.00\% | 3.93\% | 100.00\% |
| 58 | 36.70\% | 0.00\% | 0.00\% | 63.23\% | 0.07\% | 100.00\% |
| 59 | 36.13\% | 0.00\% | 0.00\% | 63.76\% | 0.11\% | 100.00\% |
| 60 | 33.50\% | 0.00\% | 0.00\% | 66.37\% | 0.14\% | 100.00\% |
| 61 | 32.81\% | 0.00\% | 0.00\% | 67.05\% | 0.14\% | 100.00\% |
| 62 | 45.09\% | 0.00\% | 0.00\% | 54.71\% | 0.20\% | 100.00\% |


| 63 | $54.27 \%$ | $45.05 \%$ | $0.00 \%$ | $0.00 \%$ | $0.68 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 64 | $39.61 \%$ | $0.00 \%$ | $0.00 \%$ | $60.27 \%$ | $0.12 \%$ | $100.00 \%$ |
| 65 | $34.60 \%$ | $0.00 \%$ | $0.00 \%$ | $65.32 \%$ | $0.08 \%$ | $100.00 \%$ |
| 66 | $48.09 \%$ | $1.24 \%$ | $0.00 \%$ | $50.59 \%$ | $0.08 \%$ | $100.00 \%$ |
| 67 | $89.41 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $10.59 \%$ | $100.00 \%$ |
| 68 | $54.49 \%$ | $0.00 \%$ | $0.00 \%$ | $45.39 \%$ | $0.13 \%$ | $100.00 \%$ |
| 69 | $97.60 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.40 \%$ | $100.00 \%$ |
| 70 | $94.66 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $5.34 \%$ | $100.00 \%$ |
| 71 | $88.15 \%$ | $0.00 \%$ | $11.49 \%$ | $0.00 \%$ | $0.36 \%$ | $100.00 \%$ |
| 72 | $53.12 \%$ | $0.00 \%$ | $0.00 \%$ | $46.76 \%$ | $0.13 \%$ | $100.00 \%$ |
| 73 | $52.09 \%$ | $0.00 \%$ | $0.00 \%$ | $47.75 \%$ | $0.16 \%$ | $100.00 \%$ |
| 74 | $95.61 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.39 \%$ | $100.00 \%$ |
| 75 | $50.66 \%$ | $0.00 \%$ | $0.00 \%$ | $49.21 \%$ | $0.13 \%$ | $100.00 \%$ |
| 76 | $55.97 \%$ | $0.00 \%$ | $0.00 \%$ | $43.90 \%$ | $0.13 \%$ | $100.00 \%$ |
| 77 | $91.35 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.65 \%$ | $100.00 \%$ |
| 78 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $91.28 \%$ | $8.72 \%$ | $100.00 \%$ |
| 79 | $87.26 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $12.74 \%$ | $100.00 \%$ |
| 80 | $65.45 \%$ | $10.71 \%$ | $0.00 \%$ | $23.63 \%$ | $0.20 \%$ | $100.00 \%$ |
| 81 | $47.28 \%$ | $0.00 \%$ | $0.00 \%$ | $52.57 \%$ | $0.15 \%$ | $100.00 \%$ |
| 82 | $40.30 \%$ | $0.00 \%$ | $0.00 \%$ | $59.58 \%$ | $0.12 \%$ | $100.00 \%$ |
| 83 | $50.06 \%$ | $0.00 \%$ | $0.00 \%$ | $49.77 \%$ | $0.17 \%$ | $100.00 \%$ |
| 84 | $48.66 \%$ | $0.00 \%$ | $0.00 \%$ | $51.23 \%$ | $0.12 \%$ | $100.00 \%$ |
| 85 | $51.66 \%$ | $0.00 \%$ | $0.00 \%$ | $48.19 \%$ | $0.15 \%$ | $100.00 \%$ |
| 86 | $88.90 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $11.10 \%$ | $100.00 \%$ |
| 87 | $61.88 \%$ | $0.00 \%$ | $0.00 \%$ | $38.03 \%$ | $0.09 \%$ | $100.00 \%$ |
| 88 | $43.97 \%$ | $0.00 \%$ | $0.00 \%$ | $55.84 \%$ | $0.19 \%$ | $100.00 \%$ |
| 89 | $96.14 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.86 \%$ | $100.00 \%$ |
| 90 | $91.72 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $8.28 \%$ | $100.00 \%$ |
| 91 | $54.59 \%$ | $0.00 \%$ | $0.00 \%$ | $45.15 \%$ | $0.26 \%$ | $100.00 \%$ |
| 92 | $93.41 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.59 \%$ | $100.00 \%$ |
| 93 | $55.45 \%$ | $0.00 \%$ | $0.00 \%$ | $44.42 \%$ | $0.13 \%$ | $100.00 \%$ |
| 94 | $57.66 \%$ | $0.00 \%$ | $1.90 \%$ | $40.31 \%$ | $0.14 \%$ | $100.00 \%$ |
| 95 | $90.17 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $9.83 \%$ | $100.00 \%$ |
| 96 | $45.96 \%$ | $0.00 \%$ | $1.08 \%$ | $52.89 \%$ | $0.08 \%$ | $100.00 \%$ |
| 5 |  |  |  |  |  |  |


| 97 | $26.26 \%$ | $0.00 \%$ | $0.00 \%$ | $55.87 \%$ | $17.87 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 98 | $30.60 \%$ | $0.00 \%$ | $0.00 \%$ | $69.27 \%$ | $0.13 \%$ | $100.00 \%$ |
| 99 | $37.36 \%$ | $0.00 \%$ | $0.00 \%$ | $62.55 \%$ | $0.08 \%$ | $100.00 \%$ |
| 100 | $47.25 \%$ | $0.00 \%$ | $0.00 \%$ | $52.67 \%$ | $0.07 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{5 2 . 2 6 \%}$ | $\mathbf{1 . 0 8 \%}$ | $\mathbf{0 . 4 3 \%}$ | $\mathbf{4 3 . 6 9 \%}$ | $\mathbf{2 . 5 4 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |


| ElectionName OfficeCode | 2019 November General SLL | Results With Absentees |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE19SLLD | GE19SLLI | GE19SLLL | GE19SLLR | GE19SLLW | Grand Total |
| House of Delegates | 52.66\% | 1.08\% | 0.42\% | 43.31\% | 2.53\% | 100.00\% |
| 1 | 0.00\% | 0.00\% | 0.00\% | 95.69\% | 4.31\% | 100.00\% |
| 2 | 60.56\% | 0.00\% | 0.00\% | 38.73\% | 0.71\% | 100.00\% |
| 3 | 0.00\% | 0.00\% | 0.00\% | 98.03\% | 1.97\% | 100.00\% |
| 4 | 36.99\% | 0.00\% | 0.00\% | 62.91\% | 0.09\% | 100.00\% |
| 5 | 0.00\% | 0.00\% | 0.00\% | 97.66\% | 2.34\% | 100.00\% |
| 6 | 22.99\% | 0.00\% | 0.00\% | 76.85\% | 0.16\% | 100.00\% |
| 7 | 33.19\% | 0.00\% | 0.00\% | 66.74\% | 0.07\% | 100.00\% |
| 8 | 33.50\% | 0.00\% | 0.00\% | 66.35\% | 0.15\% | 100.00\% |
| 9 | 0.00\% | 0.00\% | 0.00\% | 96.31\% | 3.69\% | 100.00\% |
| 10 | 52.31\% | 0.00\% | 0.00\% | 47.62\% | 0.07\% | 100.00\% |
| 11 | 94.38\% | 0.00\% | 0.00\% | 0.00\% | 5.62\% | 100.00\% |
| 12 | 53.56\% | 0.00\% | 0.00\% | 46.38\% | 0.06\% | 100.00\% |
| 13 | 55.91\% | 0.00\% | 0.00\% | 43.87\% | 0.21\% | 100.00\% |
| 14 | 38.62\% | 0.00\% | 0.00\% | 61.25\% | 0.13\% | 100.00\% |
| 15 | 25.52\% | 0.00\% | 0.00\% | 74.35\% | 0.12\% | 100.00\% |
| 16 | 0.00\% | 0.00\% | 24.97\% | 74.56\% | 0.47\% | 100.00\% |
| 17 | 0.00\% | 0.00\% | 0.00\% | 93.53\% | 6.47\% | 100.00\% |
| 18 | 38.86\% | 0.00\% | 0.00\% | 60.30\% | 0.84\% | 100.00\% |
| 19 | 0.00\% | 0.00\% | 0.00\% | 97.03\% | 2.97\% | 100.00\% |
| 20 | 41.38\% | 0.00\% | 0.00\% | 58.47\% | 0.16\% | 100.00\% |
| 21 | 54.52\% | 0.00\% | 0.00\% | 45.28\% | 0.20\% | 100.00\% |
| 22 | 30.92\% | 0.00\% | 0.00\% | 68.96\% | 0.12\% | 100.00\% |
| 23 | 35.91\% | 0.00\% | 0.00\% | 63.84\% | 0.25\% | 100.00\% |
| 24 | 32.64\% | 1.23\% | 0.00\% | 66.04\% | 0.08\% | 100.00\% |
| 25 | 39.92\% | 1.79\% | 0.00\% | 58.05\% | 0.25\% | 100.00\% |
| 26 | 45.85\% | 0.00\% | 0.00\% | 53.99\% | 0.16\% | 100.00\% |
| 27 | 49.63\% | 0.00\% | 0.00\% | 50.25\% | 0.12\% | 100.00\% |
| 28 | 51.75\% | 0.00\% | 0.00\% | 47.71\% | 0.54\% | 100.00\% |


| 29 | 35.56\% | 0.00\% | 0.00\% | 64.35\% | 0.08\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 42.12\% | 0.00\% | 0.00\% | 0.00\% | 57.88\% | 100.00\% |
| 31 | 52.61\% | 0.00\% | 0.00\% | 47.20\% | 0.19\% | 100.00\% |
| 32 | 92.61\% | 0.00\% | 0.00\% | 0.00\% | 7.39\% | 100.00\% |
| 33 | 43.14\% | 0.00\% | 0.00\% | 56.75\% | 0.11\% | 100.00\% |
| 34 | 58.35\% | 0.00\% | 0.00\% | 41.57\% | 0.09\% | 100.00\% |
| 35 | 92.75\% | 0.00\% | 0.00\% | 0.00\% | 7.25\% | 100.00\% |
| 36 | 92.94\% | 0.00\% | 0.00\% | 0.00\% | 7.06\% | 100.00\% |
| 37 | 91.89\% | 0.00\% | 0.00\% | 0.00\% | 8.11\% | 100.00\% |
| 38 | 93.26\% | 0.00\% | 0.00\% | 0.00\% | 6.74\% | 100.00\% |
| 39 | 68.35\% | 0.00\% | 0.00\% | 31.42\% | 0.23\% | 100.00\% |
| 40 | 52.34\% | 0.00\% | 0.00\% | 47.55\% | 0.12\% | 100.00\% |
| 41 | 71.58\% | 18.90\% | 7.75\% | 0.00\% | 1.77\% | 100.00\% |
| 42 | 59.66\% | 0.00\% | 0.00\% | 40.23\% | 0.11\% | 100.00\% |
| 43 | 77.80\% | 20.58\% | 0.00\% | 0.00\% | 1.61\% | 100.00\% |
| 44 | 70.67\% | 0.00\% | 0.00\% | 29.19\% | 0.14\% | 100.00\% |
| 45 | 91.46\% | 0.00\% | 0.00\% | 0.00\% | 8.54\% | 100.00\% |
| 46 | 92.03\% | 0.00\% | 0.00\% | 0.00\% | 7.97\% | 100.00\% |
| 47 | 96.11\% | 0.00\% | 0.00\% | 0.00\% | 3.89\% | 100.00\% |
| 48 | 94.18\% | 0.00\% | 0.00\% | 0.00\% | 5.82\% | 100.00\% |
| 49 | 83.43\% | 15.71\% | 0.00\% | 0.00\% | 0.86\% | 100.00\% |
| 50 | 53.26\% | 0.00\% | 0.00\% | 46.46\% | 0.28\% | 100.00\% |
| 51 | 54.56\% | 0.00\% | 0.00\% | 45.32\% | 0.12\% | 100.00\% |
| 52 | 72.99\% | 0.00\% | 0.00\% | 26.58\% | 0.42\% | 100.00\% |
| 53 | 93.84\% | 0.00\% | 0.00\% | 0.00\% | 6.16\% | 100.00\% |
| 54 | 41.94\% | 0.00\% | 0.00\% | 57.95\% | 0.11\% | 100.00\% |
| 55 | 39.81\% | 0.00\% | 0.00\% | 60.04\% | 0.15\% | 100.00\% |
| 56 | 38.93\% | 0.00\% | 0.00\% | 60.97\% | 0.11\% | 100.00\% |
| 57 | 96.10\% | 0.00\% | 0.00\% | 0.00\% | 3.90\% | 100.00\% |
| 58 | 37.45\% | 0.00\% | 0.00\% | 62.47\% | 0.08\% | 100.00\% |
| 59 | 36.68\% | 0.00\% | 0.00\% | 63.21\% | 0.11\% | 100.00\% |
| 60 | 33.66\% | 0.00\% | 0.00\% | 66.21\% | 0.13\% | 100.00\% |
| 61 | 33.08\% | 0.00\% | 0.00\% | 66.77\% | 0.14\% | 100.00\% |
| 62 | 44.72\% | 0.00\% | 0.00\% | 55.09\% | 0.19\% | 100.00\% |


| 63 | 55.04\% | 44.27\% | 0.00\% | 0.00\% | 0.69\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 | 39.77\% | 0.00\% | 0.00\% | 60.12\% | 0.11\% | 100.00\% |
| 65 | 34.88\% | 0.00\% | 0.00\% | 65.04\% | 0.08\% | 100.00\% |
| 66 | 47.03\% | 1.23\% | 0.00\% | 51.67\% | 0.08\% | 100.00\% |
| 67 | 89.34\% | 0.00\% | 0.00\% | 0.00\% | 10.66\% | 100.00\% |
| 68 | 54.60\% | 0.00\% | 0.00\% | 45.27\% | 0.13\% | 100.00\% |
| 69 | 97.62\% | 0.00\% | 0.00\% | 0.00\% | 2.38\% | 100.00\% |
| 70 | 94.65\% | 0.00\% | 0.00\% | 0.00\% | 5.35\% | 100.00\% |
| 71 | 88.19\% | 0.00\% | 11.45\% | 0.00\% | 0.36\% | 100.00\% |
| 72 | 53.25\% | 0.00\% | 0.00\% | 46.63\% | 0.12\% | 100.00\% |
| 73 | 52.19\% | 0.00\% | 0.00\% | 47.66\% | 0.15\% | 100.00\% |
| 74 | 95.66\% | 0.00\% | 0.00\% | 0.00\% | 4.34\% | 100.00\% |
| 75 | 50.98\% | 0.00\% | 0.00\% | 48.89\% | 0.13\% | 100.00\% |
| 76 | 56.33\% | 0.00\% | 0.00\% | 43.52\% | 0.15\% | 100.00\% |
| 77 | 91.41\% | 0.00\% | 0.00\% | 0.00\% | 8.59\% | 100.00\% |
| 78 | 0.00\% | 0.00\% | 0.00\% | 91.29\% | 8.71\% | 100.00\% |
| 79 | 87.40\% | 0.00\% | 0.00\% | 0.00\% | 12.60\% | 100.00\% |
| 80 | 65.97\% | 10.59\% | 0.00\% | 23.24\% | 0.20\% | 100.00\% |
| 81 | 47.74\% | 0.00\% | 0.00\% | 52.11\% | 0.15\% | 100.00\% |
| 82 | 40.69\% | 0.00\% | 0.00\% | 59.20\% | 0.11\% | 100.00\% |
| 83 | 49.97\% | 0.00\% | 0.00\% | 49.85\% | 0.18\% | 100.00\% |
| 84 | 48.73\% | 0.00\% | 0.00\% | 51.15\% | 0.12\% | 100.00\% |
| 85 | 51.64\% | 0.00\% | 0.00\% | 48.21\% | 0.15\% | 100.00\% |
| 86 | 88.91\% | 0.00\% | 0.00\% | 0.00\% | 11.09\% | 100.00\% |
| 87 | 62.00\% | 0.00\% | 0.00\% | 37.91\% | 0.10\% | 100.00\% |
| 88 | 44.15\% | 0.00\% | 0.00\% | 55.67\% | 0.18\% | 100.00\% |
| 89 | 96.14\% | 0.00\% | 0.00\% | 0.00\% | 3.86\% | 100.00\% |
| 90 | 91.80\% | 0.00\% | 0.00\% | 0.00\% | 8.20\% | 100.00\% |
| 91 | 54.73\% | 0.00\% | 0.00\% | 45.01\% | 0.26\% | 100.00\% |
| 92 | 93.48\% | 0.00\% | 0.00\% | 0.00\% | 6.52\% | 100.00\% |
| 93 | 55.65\% | 0.00\% | 0.00\% | 44.23\% | 0.12\% | 100.00\% |
| 94 | 57.71\% | 0.00\% | 1.88\% | 40.28\% | 0.13\% | 100.00\% |
| 95 | 90.19\% | 0.00\% | 0.00\% | 0.00\% | 9.81\% | 100.00\% |
| 96 | 46.35\% | 0.00\% | 1.09\% | 52.48\% | 0.08\% | 100.00\% |


| 97 | $26.55 \%$ | $0.00 \%$ | $0.00 \%$ | $55.67 \%$ | $17.78 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 98 | $30.95 \%$ | $0.00 \%$ | $0.00 \%$ | $68.92 \%$ | $0.13 \%$ | $100.00 \%$ |
| 99 | $37.49 \%$ | $0.00 \%$ | $0.00 \%$ | $62.43 \%$ | $0.08 \%$ | $100.00 \%$ |
| 100 | $48.04 \%$ | $0.00 \%$ | $0.00 \%$ | $51.89 \%$ | $0.07 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{5 2 . 6 6 \%}$ | $\mathbf{1 . 0 8 \%}$ | $\mathbf{0 . 4 2 \%}$ | $\mathbf{4 3 . 3 1 \%}$ | $\mathbf{2 . 5 3 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |




| ElectionName OfficeCode | 2018 November General USR | Results Exluding Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE18USRD | GE18USRL | GE18USRR | GE18USRW | Grand Total |
| Congressional | 55.44\% | 0.43\% | 43.39\% | 0.74\% | 100.00\% |
| 1 | 44.00\% | 0.00\% | 55.88\% | 0.13\% | 100.00\% |
| 2 | 50.61\% | 0.00\% | 49.24\% | 0.15\% | 100.00\% |
| 3 | 91.10\% | 0.00\% | 0.00\% | 8.90\% | 100.00\% |
| 4 | 62.32\% | 1.43\% | 36.15\% | 0.10\% | 100.00\% |
| 5 | 45.65\% | 0.00\% | 54.17\% | 0.18\% | 100.00\% |
| 6 | 39.59\% | 0.00\% | 60.29\% | 0.11\% | 100.00\% |
| 7 | 49.76\% | 1.22\% | 48.95\% | 0.07\% | 100.00\% |
| 8 | 75.12\% | 0.00\% | 24.65\% | 0.23\% | 100.00\% |
| 9 | 34.19\% | 0.00\% | 65.72\% | 0.09\% | 100.00\% |
| 10 | 54.96\% | 0.00\% | 44.86\% | 0.18\% | 100.00\% |
| 11 | 70.45\% | 1.88\% | 27.50\% | 0.17\% | 100.00\% |
| Grand Total | 55.44\% | 0.43\% | 43.39\% | 0.74\% | 100.00\% |





| ElectionName OfficeCode | 2017 November General GOV | Results Exluding Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  |  |  |  |
| Row Labels | GE17GOVD | GE17GOVL | GE17GOVR | GE17GOVW | Grand Total |
| Congressional | 53.43\% | 1.10\% | 45.41\% | 0.06\% | 100.00\% |
| 1 | 44.34\% | 1.16\% | 54.45\% | 0.05\% | 100.00\% |
| 2 | 51.46\% | 1.20\% | 47.29\% | 0.06\% | 100.00\% |
| 3 | 67.99\% | 1.12\% | 30.82\% | 0.07\% | 100.00\% |
| 4 | 61.75\% | 1.05\% | 37.14\% | 0.05\% | 100.00\% |
| 5 | 44.66\% | 0.95\% | 54.35\% | 0.05\% | 100.00\% |
| 6 | 37.99\% | 1.25\% | 60.70\% | 0.06\% | 100.00\% |
| 7 | 47.46\% | 1.19\% | 51.31\% | 0.05\% | 100.00\% |
| 8 | 75.35\% | 0.93\% | 23.65\% | 0.07\% | 100.00\% |
| 9 | 30.75\% | 1.14\% | 68.05\% | 0.06\% | 100.00\% |
| 10 | 55.32\% | 1.06\% | 43.56\% | 0.05\% | 100.00\% |
| 11 | 69.74\% | 1.02\% | 29.16\% | 0.07\% | 100.00\% |
| Grand Total | 53.43\% | 1.10\% | 45.41\% | 0.06\% | 100.00\% |


| ElectionName OfficeCode | 2017 November General GOV | Results With Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17GOVD | GE17GOVL | GE17GOVR | GE17GOVW | Grand Total |
| Congressional | 53.89\% | 1.07\% | 44.98\% | 0.06\% | 100.00\% |
| 1 | 44.60\% | 1.14\% | 54.21\% | 0.05\% | 100.00\% |
| 2 | 51.42\% | 1.18\% | 47.34\% | 0.06\% | 100.00\% |
| 3 | 67.92\% | 1.12\% | 30.90\% | 0.07\% | 100.00\% |
| 4 | 61.65\% | 1.04\% | 37.26\% | 0.05\% | 100.00\% |
| 5 | 45.07\% | 0.94\% | 53.94\% | 0.05\% | 100.00\% |
| 6 | 38.40\% | 1.23\% | 60.31\% | 0.07\% | 100.00\% |
| 7 | 47.55\% | 1.16\% | 51.24\% | 0.05\% | 100.00\% |
| 8 | 75.88\% | 0.89\% | 23.17\% | 0.06\% | 100.00\% |
| 9 | 31.18\% | 1.12\% | 67.64\% | 0.06\% | 100.00\% |
| 10 | 55.61\% | 1.01\% | 43.31\% | 0.06\% | 100.00\% |
| 11 | 69.95\% | 0.98\% | 28.99\% | 0.07\% | 100.00\% |
| Grand Total | 53.89\% | 1.07\% | 44.98\% | 0.06\% | 100.00\% |


| ElectionName OfficeCode | 2017 November General LTG | Results Exluding Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17LTGD | GE17LTGR GE17LTGW |  | Grand Total |
| Congressional | 52.23\% | 47.67\% | 0.10\% | 100.00\% |
| 1 | 43.07\% | 56.82\% | 0.11\% | 100.00\% |
| 2 | 48.54\% | 51.37\% | 0.08\% | 100.00\% |
| 3 | 66.62\% | 33.26\% | 0.11\% | 100.00\% |
| 4 | 60.94\% | 38.99\% | 0.07\% | 100.00\% |
| 5 | 43.42\% | 56.50\% | 0.08\% | 100.00\% |
| 6 | 36.21\% | 63.69\% | 0.10\% | 100.00\% |
| 7 | 46.46\% | 53.42\% | 0.12\% | 100.00\% |
| 8 | 74.64\% | 25.25\% | 0.11\% | 100.00\% |
| 9 | 30.12\% | 69.77\% | 0.11\% | 100.00\% |
| 10 | 53.90\% | 46.01\% | 0.09\% | 100.00\% |
| 11 | 69.34\% | 30.53\% | 0.13\% | 100.00\% |
| Grand Total | 52.23\% | 47.67\% | 0.10\% | 100.00\% |


| ElectionName OfficeCode | 2017 Novembe LTG |  | Results With Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17LTGD |  | GE17LTGR GE17LTGW |  | Grand Total |
| Congressional |  | 52.72\% | 47.18\% | 0.10\% | 100.00\% |
| 1 |  | 43.37\% | 56.52\% | 0.11\% | 100.00\% |
| 2 |  | 48.52\% | 51.40\% | 0.08\% | 100.00\% |
| 3 |  | 66.55\% | 33.34\% | 0.11\% | 100.00\% |
| 4 |  | 60.85\% | 39.08\% | 0.07\% | 100.00\% |
| 5 |  | 43.87\% | 56.06\% | 0.08\% | 100.00\% |
| 6 |  | 36.63\% | 63.26\% | 0.10\% | 100.00\% |
| 7 |  | 46.57\% | 53.31\% | 0.12\% | 100.00\% |
| 8 |  | 75.19\% | 24.70\% | 0.11\% | 100.00\% |
| 9 |  | 30.59\% | 69.30\% | 0.11\% | 100.00\% |
| 10 |  | 54.24\% | 45.67\% | 0.09\% | 100.00\% |
| 11 |  | 69.55\% | 30.33\% | 0.12\% | 100.00\% |
| Grand Total |  | 52.72\% | 47.18\% | 0.10\% | 100.00\% |



| ElectionName OfficeCode | 2017 Novembe <br> ATG |  | Results With Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17ATGD |  | GE17ATGR | GE17ATGW | Grand Total |
| Congressional |  | 53.33\% | 46.56\% | 0.10\% | 100.00\% |
| 1 |  | 43.83\% | 56.06\% | 0.11\% | 100.00\% |
| 2 |  | 49.76\% | 50.14\% | 0.11\% | 100.00\% |
| 3 |  | 67.16\% | 32.73\% | 0.11\% | 100.00\% |
| 4 |  | 61.12\% | 38.79\% | 0.09\% | 100.00\% |
| 5 |  | 44.88\% | 55.03\% | 0.08\% | 100.00\% |
| 6 |  | 38.10\% | 61.80\% | 0.11\% | 100.00\% |
| 7 |  | 46.66\% | 53.25\% | 0.09\% | 100.00\% |
| 8 |  | 75.26\% | 24.63\% | 0.11\% | 100.00\% |
| 9 |  | 31.40\% | 68.50\% | 0.10\% | 100.00\% |
| 10 |  | 55.40\% | 44.52\% | 0.08\% | 100.00\% |
| 11 |  | 69.41\% | 30.47\% | 0.12\% | 100.00\% |
| Grand Total |  | 53.33\% | 46.56\% | 0.10\% | 100.00\% |


| ElectionName OfficeCode | 2017 November General SLL | Results Exluding Absentees |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17SLLD | GE17SLLG | GE17SLLI | GE17SLLL | GE17SLLR | GE17SLLW | Grand Total |
| House of Delegates | 52.56\% | 0.27\% | 1.09\% | 0.27\% | 44.36\% | 1.46\% | 100.00\% |
| 1 | 23.76\% | 0.00\% | 0.00\% | 0.00\% | 76.02\% | 0.22\% | 100.00\% |
| 2 | 62.91\% | 0.00\% | 0.00\% | 0.00\% | 36.95\% | 0.15\% | 100.00\% |
| 3 | 21.22\% | 0.00\% | 0.00\% | 0.00\% | 78.56\% | 0.22\% | 100.00\% |
| 4 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.30\% | 3.70\% | 100.00\% |
| 5 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 97.32\% | 2.68\% | 100.00\% |
| 6 | 0.00\% | 0.00\% | 17.61\% | 0.00\% | 81.59\% | 0.80\% | 100.00\% |
| 7 | 33.22\% | 0.00\% | 0.00\% | 0.00\% | 66.65\% | 0.13\% | 100.00\% |
| 8 | 35.66\% | 0.00\% | 0.00\% | 0.00\% | 64.12\% | 0.22\% | 100.00\% |
| 9 | 29.46\% | 0.00\% | 0.00\% | 0.00\% | 70.42\% | 0.12\% | 100.00\% |
| 10 | 51.96\% | 0.00\% | 0.00\% | 0.00\% | 47.96\% | 0.09\% | 100.00\% |
| 11 | 96.94\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.06\% | 100.00\% |
| 12 | 54.01\% | 0.00\% | 0.00\% | 0.00\% | 45.83\% | 0.16\% | 100.00\% |
| 13 | 53.83\% | 0.00\% | 0.00\% | 0.00\% | 45.76\% | 0.41\% | 100.00\% |
| 14 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.87\% | 3.13\% | 100.00\% |
| 15 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 94.47\% | 5.53\% | 100.00\% |
| 16 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.11\% | 3.89\% | 100.00\% |
| 17 | 39.15\% | 0.00\% | 0.00\% | 0.00\% | 60.71\% | 0.14\% | 100.00\% |
| 18 | 33.71\% | 5.34\% | 0.00\% | 0.00\% | 60.82\% | 0.13\% | 100.00\% |
| 19 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.34\% | 3.66\% | 100.00\% |
| 20 | 42.27\% | 0.00\% | 0.00\% | 2.87\% | 54.79\% | 0.08\% | 100.00\% |
| 21 | 52.75\% | 0.00\% | 0.00\% | 0.00\% | 47.01\% | 0.23\% | 100.00\% |
| 22 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.28\% | 3.72\% | 100.00\% |
| 23 | 33.76\% | 0.00\% | 0.00\% | 0.00\% | 66.12\% | 0.12\% | 100.00\% |
| 24 | 0.00\% | 0.00\% | 27.08\% | 0.00\% | 72.58\% | 0.34\% | 100.00\% |
| 25 | 41.21\% | 0.00\% | 0.00\% | 0.00\% | 58.66\% | 0.12\% | 100.00\% |
| 26 | 45.13\% | 0.00\% | 0.00\% | 0.00\% | 54.73\% | 0.14\% | 100.00\% |
| 27 | 49.69\% | 0.00\% | 0.00\% | 0.00\% | 50.19\% | 0.13\% | 100.00\% |
| 28 | 49.62\% | 0.00\% | 0.00\% | 0.00\% | 50.20\% | 0.18\% | 100.00\% |


| 29 | $35.30 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $64.48 \%$ | $0.22 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 30 | $37.45 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.46 \%$ | $0.09 \%$ | $100.00 \%$ |
| 31 | $53.82 \%$ | $0.00 \%$ | $1.73 \%$ | $0.00 \%$ | $44.31 \%$ | $0.14 \%$ | $100.00 \%$ |
| 32 | $58.55 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $41.35 \%$ | $0.11 \%$ | $100.00 \%$ |
| 33 | $44.55 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $55.29 \%$ | $0.16 \%$ | $100.00 \%$ |
| 34 | $60.12 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $39.82 \%$ | $0.06 \%$ | $100.00 \%$ |
| 35 | $92.94 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.06 \%$ | $100.00 \%$ |
| 36 | $93.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.00 \%$ | $100.00 \%$ |
| 37 | $93.62 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.38 \%$ | $100.00 \%$ |
| 38 | $73.18 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $26.59 \%$ | $0.23 \%$ | $100.00 \%$ |
| 39 | $92.67 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.33 \%$ | $100.00 \%$ |
| 40 | $49.81 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $50.03 \%$ | $0.16 \%$ | $100.00 \%$ |
| 41 | $90.85 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $9.15 \%$ | $100.00 \%$ |
| 42 | $60.98 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $38.87 \%$ | $0.16 \%$ | $100.00 \%$ |
| 43 | $93.46 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.54 \%$ | $100.00 \%$ |
| 44 | $92.79 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.21 \%$ | $100.00 \%$ |
| 45 | $95.10 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.90 \%$ | $100.00 \%$ |
| 46 | $96.50 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.50 \%$ | $100.00 \%$ |
| 47 | $96.13 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.87 \%$ | $100.00 \%$ |
| 48 | $94.46 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $5.54 \%$ | $100.00 \%$ |
| 49 | $81.23 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $18.56 \%$ | $0.21 \%$ | $100.00 \%$ |
| 50 | $54.80 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $45.00 \%$ | $0.20 \%$ | $100.00 \%$ |
| 51 | $52.87 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $46.91 \%$ | $0.21 \%$ | $100.00 \%$ |
| 52 | $93.50 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.50 \%$ | $100.00 \%$ |
| 53 | $73.52 \%$ | $0.00 \%$ | $25.41 \%$ | $0.00 \%$ | $0.00 \%$ | $1.07 \%$ | $100.00 \%$ |
| 54 | $41.89 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $57.89 \%$ | $0.21 \%$ | $100.00 \%$ |
| 55 | $39.68 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $60.08 \%$ | $0.23 \%$ | $100.00 \%$ |
| 56 | $39.94 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $59.93 \%$ | $0.13 \%$ | $100.00 \%$ |
| 57 | $96.91 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.09 \%$ | $100.00 \%$ |
| 58 | $38.24 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $61.67 \%$ | $0.10 \%$ | $100.00 \%$ |
| 59 | $33.66 \%$ | $1.13 \%$ | $3.39 \%$ | $0.00 \%$ | $61.64 \%$ | $0.18 \%$ | $100.00 \%$ |
| 60 | $37.92 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $61.89 \%$ | $0.20 \%$ | $100.00 \%$ |
| 61 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $97.30 \%$ | $2.70 \%$ | $100.00 \%$ |
| 62 | $48.40 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $51.45 \%$ | $0.15 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |  |  |


| $94.96 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $5.04 \%$ | $100.00 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $37.41 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.51 \%$ | $0.08 \%$ | $100.00 \%$ |
| $35.62 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $64.22 \%$ | $0.17 \%$ | $100.00 \%$ |
| $36.67 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $63.18 \%$ | $0.15 \%$ | $100.00 \%$ |
| $57.94 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $41.91 \%$ | $0.14 \%$ | $100.00 \%$ |
| $50.31 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $49.58 \%$ | $0.11 \%$ | $100.00 \%$ |
| $86.64 \%$ | $4.65 \%$ | $0.00 \%$ | $8.41 \%$ | $0.00 \%$ | $0.30 \%$ | $100.00 \%$ |
| $96.83 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.17 \%$ | $100.00 \%$ |
| $98.01 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $1.99 \%$ | $100.00 \%$ |
| $52.75 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $47.00 \%$ | $0.24 \%$ | $100.00 \%$ |
| $51.67 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $48.15 \%$ | $0.18 \%$ | $100.00 \%$ |
| $75.88 \%$ | $0.00 \%$ | $23.37 \%$ | $0.00 \%$ | $0.00 \%$ | $0.75 \%$ | $100.00 \%$ |
| $94.58 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $5.42 \%$ | $100.00 \%$ |
| $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $93.93 \%$ | $6.07 \%$ | $100.00 \%$ |
| $82.46 \%$ | $16.97 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.56 \%$ | $100.00 \%$ |
| $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $94.82 \%$ | $5.18 \%$ | $100.00 \%$ |
| $95.18 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.82 \%$ | $100.00 \%$ |
| $96.95 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.05 \%$ | $100.00 \%$ |
| $40.58 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $59.24 \%$ | $0.17 \%$ | $100.00 \%$ |
| $40.76 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $59.12 \%$ | $0.11 \%$ | $100.00 \%$ |
| $43.56 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $56.32 \%$ | $0.13 \%$ | $100.00 \%$ |
| $48.21 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $51.53 \%$ | $0.25 \%$ | $100.00 \%$ |
| $50.90 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $48.88 \%$ | $0.22 \%$ | $100.00 \%$ |
| $68.24 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $31.59 \%$ | $0.16 \%$ | $100.00 \%$ |
| $62.90 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $36.88 \%$ | $0.22 \%$ | $100.00 \%$ |
| $36.98 \%$ | $0.97 \%$ | $9.14 \%$ | $0.00 \%$ | $52.76 \%$ | $0.16 \%$ | $100.00 \%$ |
| $84.47 \%$ | $0.00 \%$ | $0.00 \%$ | $15.05 \%$ | $0.00 \%$ | $0.48 \%$ | $100.00 \%$ |
| $97.24 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.76 \%$ | $100.00 \%$ |
| $43.58 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $56.24 \%$ | $0.18 \%$ | $100.00 \%$ |
| $97.33 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.67 \%$ | $100.00 \%$ |
| $60.43 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $39.40 \%$ | $0.17 \%$ | $100.00 \%$ |
| $48.40 \%$ | $0.00 \%$ | $0.00 \%$ | $2.87 \%$ | $48.62 \%$ | $0.11 \%$ | $100.00 \%$ |
| $97.13 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.87 \%$ | $100.00 \%$ |
| $42.60 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $57.24 \%$ | $0.16 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |  |


| 97 | $27.56 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $72.25 \%$ | $0.20 \%$ | $100.00 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 98 | $34.47 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $65.43 \%$ | $0.10 \%$ | $100.00 \%$ |
| 99 | $37.69 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.20 \%$ | $0.12 \%$ | $100.00 \%$ |
| 100 | $47.28 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $52.53 \%$ | $0.19 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{5 2 . 5 6 \%}$ | $\mathbf{0 . 2 7 \%}$ | $\mathbf{1 . 0 9 \%}$ | $\mathbf{0 . 2 7 \%}$ | $\mathbf{4 4 . 3 6 \%}$ | $\mathbf{1 . 4 6 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |


| ElectionName OfficeCode | 2017 November General SLL | Results With Absentees |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes Row Labels | Column Labels GE17SLLD | GE17SLLG | GE17SLLI | GE17SLLL | GE17SLLR | GE17SLLW | Grand Total |
| House of Delegates | 53.09\% | 0.26\% | 1.08\% | 0.26\% | 43.81\% | 1.50\% | 100.00\% |
| 1 | 23.75\% | 0.00\% | 0.00\% | 0.00\% | 76.03\% | 0.22\% | 100.00\% |
| 2 | 63.04\% | 0.00\% | 0.00\% | 0.00\% | 36.80\% | 0.16\% | 100.00\% |
| 3 | 21.64\% | 0.00\% | 0.00\% | 0.00\% | 78.13\% | 0.24\% | 100.00\% |
| 4 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.23\% | 3.77\% | 100.00\% |
| 5 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 97.26\% | 2.74\% | 100.00\% |
| 6 | 0.00\% | 0.00\% | 17.89\% | 0.00\% | 81.30\% | 0.81\% | 100.00\% |
| 7 | 33.54\% | 0.00\% | 0.00\% | 0.00\% | 66.34\% | 0.12\% | 100.00\% |
| 8 | 35.91\% | 0.00\% | 0.00\% | 0.00\% | 63.87\% | 0.22\% | 100.00\% |
| 9 | 29.61\% | 0.00\% | 0.00\% | 0.00\% | 70.27\% | 0.12\% | 100.00\% |
| 10 | 51.90\% | 0.00\% | 0.00\% | 0.00\% | 48.01\% | 0.09\% | 100.00\% |
| 11 | 96.93\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.07\% | 100.00\% |
| 12 | 54.35\% | 0.00\% | 0.00\% | 0.00\% | 45.49\% | 0.16\% | 100.00\% |
| 13 | 53.71\% | 0.00\% | 0.00\% | 0.00\% | 45.89\% | 0.40\% | 100.00\% |
| 14 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.83\% | 3.17\% | 100.00\% |
| 15 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 94.28\% | 5.72\% | 100.00\% |
| 16 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.11\% | 3.89\% | 100.00\% |
| 17 | 39.29\% | 0.00\% | 0.00\% | 0.00\% | 60.56\% | 0.15\% | 100.00\% |
| 18 | 34.32\% | 5.18\% | 0.00\% | 0.00\% | 60.37\% | 0.13\% | 100.00\% |
| 19 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.30\% | 3.70\% | 100.00\% |
| 20 | 42.57\% | 0.00\% | 0.00\% | 2.83\% | 54.53\% | 0.07\% | 100.00\% |
| 21 | 52.45\% | 0.00\% | 0.00\% | 0.00\% | 47.30\% | 0.24\% | 100.00\% |
| 22 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 96.18\% | 3.82\% | 100.00\% |
| 23 | 34.21\% | 0.00\% | 0.00\% | 0.00\% | 65.66\% | 0.14\% | 100.00\% |
| 24 | 0.00\% | 0.00\% | 27.69\% | 0.00\% | 71.89\% | 0.42\% | 100.00\% |
| 25 | 41.90\% | 0.00\% | 0.00\% | 0.00\% | 57.97\% | 0.13\% | 100.00\% |
| 26 | 45.33\% | 0.00\% | 0.00\% | 0.00\% | 54.52\% | 0.15\% | 100.00\% |
| 27 | 49.71\% | 0.00\% | 0.00\% | 0.00\% | 50.16\% | 0.13\% | 100.00\% |
| 28 | 49.73\% | 0.00\% | 0.00\% | 0.00\% | 50.08\% | 0.19\% | 100.00\% |


| 29 | $35.58 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $64.21 \%$ | $0.21 \%$ | $100.00 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 30 | $37.77 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.14 \%$ | $0.09 \%$ | $100.00 \%$ |
| 31 | $53.99 \%$ | $0.00 \%$ | $1.68 \%$ | $0.00 \%$ | $44.19 \%$ | $0.14 \%$ | $100.00 \%$ |
| 32 | $58.47 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $41.41 \%$ | $0.11 \%$ | $100.00 \%$ |
| 33 | $45.09 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $54.76 \%$ | $0.15 \%$ | $100.00 \%$ |
| 34 | $60.92 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $39.02 \%$ | $0.06 \%$ | $100.00 \%$ |
| 35 | $92.93 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.07 \%$ | $100.00 \%$ |
| 36 | $92.92 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.08 \%$ | $100.00 \%$ |
| 37 | $93.52 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.48 \%$ | $100.00 \%$ |
| 38 | $73.51 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $26.26 \%$ | $0.23 \%$ | $100.00 \%$ |
| 39 | $92.62 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.38 \%$ | $100.00 \%$ |
| 40 | $49.74 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $50.09 \%$ | $0.16 \%$ | $100.00 \%$ |
| 41 | $90.84 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $9.16 \%$ | $100.00 \%$ |
| 42 | $60.97 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $38.89 \%$ | $0.15 \%$ | $100.00 \%$ |
| 43 | $93.34 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.66 \%$ | $100.00 \%$ |
| 44 | $92.77 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $7.23 \%$ | $100.00 \%$ |
| 45 | $95.16 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.84 \%$ | $100.00 \%$ |
| 46 | $96.41 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.59 \%$ | $100.00 \%$ |
| 47 | $96.21 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.79 \%$ | $100.00 \%$ |
| 48 | $94.62 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $5.38 \%$ | $100.00 \%$ |
| 49 | $81.30 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $18.49 \%$ | $0.21 \%$ | $100.00 \%$ |
| 50 | $54.32 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $45.49 \%$ | $0.20 \%$ | $100.00 \%$ |
| 51 | $52.97 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $46.83 \%$ | $0.20 \%$ | $100.00 \%$ |
| 52 | $93.48 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.52 \%$ | $100.00 \%$ |
| 53 | $74.28 \%$ | $0.00 \%$ | $24.57 \%$ | $0.00 \%$ | $0.00 \%$ | $1.15 \%$ | $100.00 \%$ |
| 54 | $41.92 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $57.87 \%$ | $0.21 \%$ | $100.00 \%$ |
| 55 | $39.90 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $59.86 \%$ | $0.23 \%$ | $100.00 \%$ |
| 56 | $40.39 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $59.47 \%$ | $0.14 \%$ | $100.00 \%$ |
| 57 | $96.89 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.11 \%$ | $100.00 \%$ |
| 58 | $38.71 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $61.20 \%$ | $0.09 \%$ | $100.00 \%$ |
| 59 | $34.08 \%$ | $1.15 \%$ | $3.35 \%$ | $0.00 \%$ | $61.21 \%$ | $0.20 \%$ | $100.00 \%$ |
| 60 | $37.95 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $61.86 \%$ | $0.19 \%$ | $100.00 \%$ |
| 61 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $97.22 \%$ | $2.78 \%$ | $100.00 \%$ |
| 62 | $48.18 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $51.66 \%$ | $0.16 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |  |  |


| $95.10 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.90 \%$ | $100.00 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $37.50 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.41 \%$ | $0.09 \%$ | $100.00 \%$ |
| $35.82 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $64.01 \%$ | $0.17 \%$ | $100.00 \%$ |
| $36.40 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $63.45 \%$ | $0.15 \%$ | $100.00 \%$ |
| $57.86 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $42.00 \%$ | $0.14 \%$ | $100.00 \%$ |
| $50.37 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $49.51 \%$ | $0.12 \%$ | $100.00 \%$ |
| $86.58 \%$ | $4.65 \%$ | $0.00 \%$ | $8.45 \%$ | $0.00 \%$ | $0.32 \%$ | $100.00 \%$ |
| $96.82 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.18 \%$ | $100.00 \%$ |
| $97.97 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.03 \%$ | $100.00 \%$ |
| $52.71 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $47.06 \%$ | $0.24 \%$ | $100.00 \%$ |
| $51.48 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $48.35 \%$ | $0.17 \%$ | $100.00 \%$ |
| $75.95 \%$ | $0.00 \%$ | $23.29 \%$ | $0.00 \%$ | $0.00 \%$ | $0.75 \%$ | $100.00 \%$ |
| $93.66 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $6.34 \%$ | $100.00 \%$ |
| $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $93.92 \%$ | $6.08 \%$ | $100.00 \%$ |
| $82.60 \%$ | $16.85 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.55 \%$ | $100.00 \%$ |
| $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $94.74 \%$ | $5.26 \%$ | $100.00 \%$ |
| $95.27 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $4.73 \%$ | $100.00 \%$ |
| $96.94 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $3.06 \%$ | $100.00 \%$ |
| $40.88 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $58.95 \%$ | $0.18 \%$ | $100.00 \%$ |
| $41.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $58.89 \%$ | $0.11 \%$ | $100.00 \%$ |
| $43.29 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $56.59 \%$ | $0.13 \%$ | $100.00 \%$ |
| $48.11 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $51.64 \%$ | $0.25 \%$ | $100.00 \%$ |
| $50.73 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $49.06 \%$ | $0.21 \%$ | $100.00 \%$ |
| $68.52 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $31.31 \%$ | $0.16 \%$ | $100.00 \%$ |
| $61.73 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $38.04 \%$ | $0.23 \%$ | $100.00 \%$ |
| $37.27 \%$ | $0.96 \%$ | $8.92 \%$ | $0.00 \%$ | $52.70 \%$ | $0.15 \%$ | $100.00 \%$ |
| $84.47 \%$ | $0.00 \%$ | $0.00 \%$ | $15.03 \%$ | $0.00 \%$ | $0.50 \%$ | $100.00 \%$ |
| $97.28 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.72 \%$ | $100.00 \%$ |
| $43.61 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $56.22 \%$ | $0.18 \%$ | $100.00 \%$ |
| $97.33 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.67 \%$ | $100.00 \%$ |
| $59.98 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $39.86 \%$ | $0.16 \%$ | $100.00 \%$ |
| $48.51 \%$ | $0.00 \%$ | $0.00 \%$ | $2.82 \%$ | $48.55 \%$ | $0.12 \%$ | $100.00 \%$ |
| $97.09 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $2.91 \%$ | $100.00 \%$ |
| $42.90 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $56.94 \%$ | $0.16 \%$ | $100.00 \%$ |
|  |  |  |  |  |  |  |


| 97 | $27.61 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $72.19 \%$ | $0.19 \%$ | $100.00 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 98 | $34.85 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $65.05 \%$ | $0.10 \%$ | $100.00 \%$ |
| 99 | $37.72 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $62.15 \%$ | $0.12 \%$ | $100.00 \%$ |
| 100 | $47.68 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $52.13 \%$ | $0.18 \%$ | $100.00 \%$ |
| Grand Total | $\mathbf{5 3 . 0 9 \%}$ | $\mathbf{0 . 2 6 \%}$ | $\mathbf{1 . 0 8 \%}$ | $\mathbf{0 . 2 6 \%}$ | $\mathbf{4 3 . 8 1 \%}$ | $\mathbf{1 . 5 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |




| ElectionName <br> OfficeCode | 2016 November General <br> USR |  | Results Exluding Absentees |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |



| ElectionName OfficeCode | 2016 Novembe <br> SLU |  | Results Exluding Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  |  |  |  |  |
| Row Labels | GE16SLUD |  | GE16SLUI | GE16SLUR | GE16SLUW | Grand Total |
| State Senate |  | 74.89\% | 2.35\% | 20.91\% | 1.85\% | 100.00\% |
| 1 |  | 57.79\% | 4.24\% | 37.68\% | 0.29\% | 100.00\% |
| 5 |  | 96.21\% | 0.00\% | 0.00\% | 3.79\% | 100.00\% |
| Grand Total |  | 74.89\% | 2.35\% | 20.91\% | 1.85\% | 100.00\% |


| ElectionName OfficeCode | 2016 Novembe <br> SLU |  | Results With Absentees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  | GE16SLUI | GE16SLUR | GE16SLUW | Grand Total |
| Row Labels | GE16SLUD |  |  |  |  |  |
| State Senate |  | 75.27\% | 2.29\% | 20.55\% | 1.89\% | 100.00\% |
| 1 |  | 58.07\% | 4.17\% | 37.42\% | 0.34\% | 100.00\% |
| 5 |  | 96.23\% | 0.00\% | 0.00\% | 3.77\% | 100.00\% |
| Grand Total |  | 75.27\% | 2.29\% | 20.55\% | 1.89\% | 100.00\% |


| ElectionName OfficeCode | 2016 Novembe SLL |  | Results Exluding Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  | GE16SLLR GE16SLLW Grand Total |  |  |
| Row Labels | GE16SLLD |  |  |  |  |
| House of Delegates |  | 71.62\% | 26.88\% | 1.49\% | 100.00\% |
| 77 |  | 96.79\% | 0.00\% | 3.21\% | 100.00\% |
| 93 |  | 53.41\% | 46.34\% | 0.25\% | 100.00\% |
| Grand Total |  | 71.62\% | 26.88\% | 1.49\% | 100.00\% |


| ElectionName OfficeCode | 2016 Novembe SLL |  | Results With Absentees |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum of CandidateVotes | Column Labels |  | GE16SLLR GE16SLLW |  |  |
| Row Labels | GE16SLLD |  |  |  | Grand Total |
| House of Delegates |  | 71.89\% | 26.67\% | 1.44\% | 100.00\% |
| 77 |  | 96.94\% | 0.00\% | 3.06\% | 100.00\% |
| 93 |  | 53.52\% | 46.23\% | 0.25\% | 100.00\% |
| Grand Total |  | 71.89\% | 26.67\% | 1.44\% | 100.00\% |

ElectionNa OfficeTitle District FirstName MiddleNan LastName Party CandidateField

2016 Nove President and Vice Pre Hilla
2016 Nove President and Vice Pre Evan
2016 Nove President and Vice Pre Gary
2016 Nove President and Vice Pre Donald J
2016 Nove President and Vice President
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member S $\epsilon$
2016 Nove Member S $\epsilon$
2016 Nove Member $S_{\epsilon}$
2016 Nove Member S $\epsilon$
2016 Nove Member S $\epsilon$
2016 Nove Member $S_{\epsilon}$
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2016 Nove Member H
2
11
5
3
7

| 93 MICHAEL | PAUL | MULLIN | Democratic GE16SLLD |
| :--- | :--- | :--- | :--- | :--- |
| 77 CLIFTON | EUGENE | HAYES | DemocraticGE16SLLD |
| 93 HEATHER | LYNN | CORDASCC Republican GE16SLLR |  |
| 77 |  | WRITE IN VOTES | GE16SLLW |
| 93 |  | WRITE IN VOTES | GE16SLLW |


| 1 Taylor | Montgome Mason |  | DemocraticGE16SLUD |
| :--- | :--- | :--- | :--- |
| 5 LIONELL |  | SPRUILL | DemocraticGE16SLUD |
| 1 JOHN | BERNARD | BLOOM | Independe GE16SLUI |
| 1 THOMAS | RICHARD | HOLSTON | Republican GE16SLUR |
| 5 |  | WRITE IN VOTES | GE16SLUW |
| 1 |  |  | WRITE IN VOTES |

1 MATTHEW DEW ROWE DemocraticGE16USRD
6 Kai Degner DemocraticGE16USRD
8 DONALD STERNOFF BEYER DemocraticGE16USRD
11 GERALD EDWARD CONNOLLY Democratic GE16USRD

| 4 A. | Donald | McEachin | DemocraticGE16USRD |
| :---: | :--- | :--- | :--- |
| 10 LuAnn | L. | Bennett | Democrati،GE16USRD |
| 3 ROBERT | CORTEZ | SCOTT | Democrati، GE16USRD |
| 7 EILEEN | MCNEIL | BEDELL | DemocraticGE16USRD |
| 2 Shaun | D. | Brown | DemocraticGE16USRD |
| 5 Jane | D. | Dittmar | DemocraticGE16USRD |
| 9 DEREK | W | KITTS | DemocraticGE16USRD |
| 8 JULIO |  | GRACIA | Independe GE16USRI |
| 1 Glenda | Gail | Parker | Independe GE16USRI |
| 9 Janice | Allen | Boyd | Independe GE16USRI |

6 ROBERT WILLIAM GOODLATT Republican GE16USRR 2 SCOTT WILLIAM TAYLOR Republican GE16USRR 5 Tom A. Garrett Republican GE16USRR
4 Michael L. Wade Republican GE16USRR

8 CHARLES ALAN HERNICK Republican GE16USRR
9 HOWARD MORGAN GRIFFITH Republican GE16USRR
7 DAVID A BRAT Republican GE16USRR

3 Martin L Williams Republican GE16USRR 10 BARBARA JEAN COMSTOCH Republican GE16USRR 1 ROBERT JOSEPH WITTMAN Republican GE16USRR

Clinton DemocratirGE16PRSD Stein Green GE16PRSG
McMullin Independe GE16PRSI
Johnson Libertarian GE16PRSL
Trump Republican GE16PRSR
WRITE IN VOTES GE16PRSW
MULLIN DemocraticGE16SLLD
HAYES DemocraticGE16SLLD
CORDASCC Republican GE16SLLR
WRITE IN VOTES GE16SLLW
WRITE IN VOTES GE16SLLW

SPRUILL DemocraticGE16SLUD
Independe GE16SLUI
HOLSTON Republican GE16SLUR GE16 WRITE IN VOTES GE16SLUW ROWE DemocraticGE16USRD Degner DemocraticGE16 CONNOLLY Democratic GE16USRD Bennett DemocraticGE16USRD SCOTT DemocraticGE16USRD BEDELL DemocraticGE16USRD Brown DemocraticGE16USRD Dittmar Democratic GE16USRD KITTS Democratic GE16USRD GRACIA Independe GE16USRI
Parker Independe GE16USRI
Boyd Independe GE16USRI

BRAT Republican GE16USRR WRITE IN VOTES GE16USRW WRITE IN VOTES GE16USRW WRITE IN VOTES GE16USRW WRITE IN VOTES GE16USRW WRITE IN VOTES GE16USRW

| 2016 Nove Member H | 6 |  | WRITE IN VOTES WRITE IN VOTES |  | GE16USRW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 Nove Member H | 9 |  |  |  | GE16USRW |
| 2016 Nove Member H | 1 |  | WRITE IN VOTES |  | GE16USRW |
| 2016 Nove Member H | 4 |  | WRITE IN VOTES |  | GE16USRW |
| 2016 Nove Member H | 10 |  | WRITE IN VOTES |  | GE16USRW |
| 2016 Nove Member H | 8 |  | WRITE IN VOTES |  | GE16USRW |
| 2017 Nove Attorney General |  | RANKIN | HERRING Demo |  | DemocraticGE17ATGD |
| 2017 Nove Attorney General | JOHN | DONLEY | ADAMS | Repubil | GE17ATGR |
| 2017 Nove Attorney General |  |  |  |  | GE17ATGW |
| 2017 Nove Governor | RALPH | SHEARER | NORTHAM D |  | GE17GOVD |
| 2017 Nove Governor | CLIFFORD | DANIEL | HYRA |  | GE17GOVL |
| 2017 Nove Governor | EDWARD | WALTER | GILLESPIE | Republican GE | a GE17GOVR |
| 2017 Nove Governor |  |  | WRITE IN | VOTES | GE17GOVW |
| 2017 Nove Lieutenant Governo | or JUSTIN | EDWARD | FAIRFAX | Demo | GE17LTGD |
| 2017 Nove Lieutenant Governo | or JILL | HOLTZM | VOGEL | Repub | , GE17LTGR |
| 2017 Nove Lieutenant Governo |  |  | WRITE IN | VOTES | GE17LTGW |
| 2017 Nove Member H | 86 JENNIFER | BARTON | BOYSKO | Dem | GE17SLLD |
| 2017 Nove Member H | 41 EILEEN |  | FILLER-COF | Dem | GE17SLLD |
| 2017 Nove Member H | 40 DONTE | THOMAS | TANNER | Dem | GE17SLLD |
| 2017 Nove Member H | 37 DAVID | LAWRENC | EBULOVA | Demo | tic GE17SLLD |
| 2017 Nove Member H | 28 JOSHUA | GREGORY | COLE | Demo | iic GE17SLLD |
| 2017 Nove Member H | 91 MICHAEL | BRANDON | WADE | Demo | ic GE17SLLD |
| 2017 Nove Member H | 46 CHARNIE | LERHOND | HERRING | Dem | GE17SLLD |
| 2017 Nove Member H | 98 SHEILA |  | CROWLEY | Dem | GE17SLLD |
| 2017 Nove Member H | 18 TRISTAN | DAILEY | SHIELDS | Dem | GE17SLLD |
| 2017 Nove Member H | 30 SAMUEL | BENJAMIN | HIXON | Dem | ic GE17SLLD |
| 2017 Nove Member H | 77 CLIFTON | EUGENE | HAYES | Demo | ic GE17SLLD |
| 2017 Nove Member H | 8 STEVEN | GLYNN | MCBRIDE | Demo | ic GE17SLLD |
| 2017 Nove Member H | 33 TIA | LYNN | WALBRIDG | Demo | GE17SLLD |
| 2017 Nove Member H | 95 MARCIA | SIMONE | PRICE | Dem | GE17SLLD |
| 2017 Nove Member H | 21 KELLY | KRISTEN | CONVIRS-F | Dem | GE17SLLD |
| 2017 Nove Member H | 81 KIMBERLY | ANNE | TUCKER | Demo | tic GE17SLLD |
| 2017 Nove Member H | 62 SHELIA |  | BYNUM-CC | Demo | iic GE17SLLD |
| 2017 Nove Member H | 63 LASHRECSE | DIANNA | AIRD | Demo | ic GE17SLLD |
| 2017 Nove Member H | 27 LARRY | VINCENT | BARNETT | Demo | ic GE17SLLD |
| 2017 Nove Member H | 66 KATIE | ANN | SPONSLER | Dem | GE17SLLD |
| 2017 Nove Member H | 65 FRANCIS | M | STEVENS | Dem | GE17SLLD |
| 2017 Nove Member H | 70 DELORES | LOUISE | MCQUINN | Dem | GE17SLLD |
| 2017 Nove Member H | 68 DAWN | MARIE | ADAMS | Demo | tic GE17SLLD |
| 2017 Nove Member H | 69 BETSY | BROOKS | CARR | Demo | iic GE17SLLD |
| 2017 Nove Member H | 80 MATTHEW |  | JAMES | Demo | tic GE17SLLD |
| 2017 Nove Member H | 32 DAVID | ALAN | REID | Demo | iic GE17SLLD |
| 2017 Nove Member H | 92 JEION | ANTONIA | WARD | Demo | iic GE17SLLD |
| 2017 Nove Member H | 67 KARRIE | KRISTINE | DELANEY | Dem | GE17SLLD |
| 2017 Nove Member H | 10 GWENDOL' | WALLACE | GOODITIS | Dem | tic GE17SLLD |
| 2017 Nove Member H | 42 KATHY | KHANH LIN | ITRAN | Demo | ic GE17SLLD |
| 2017 Nove Member H | 36 KENNETH | RAY | PLUM | Demo | iic GE17SLLD |

2017 Nove Member H
2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H

| 1 ALICIA | DELYNN | KALLEN | Democratir GE17SLLD |
| :---: | :---: | :---: | :---: |
| 93 MICHAEL | PAUL | MULLIN | Democratir GE17SLLD |
| 96 KELLY | ANNE | DELUCIA | Democratir GE17SLLD |
| 64 ReBECCA | SUE | COLAW | Democratir GE17SLLD |
| 72 SCHUYLER | THOMAS | VanValkenl | I Democratir GE17SLLD |
| 71 JEFFREY | MICHAEL | BOURNE | Democratir GE17SLLD |
| 73 debra | hain | rodman | Democratir GE17SLLD |
| 13 DANICA | ANTHONY | ROEM | Democratir GE17SLLD |
| 51 hala | sophia | ayala | Democratir GE17SLLD |
| 97 CORI | ELIZABETH | JOHNSON | Democratir GE17SLLD |
| 2 JENNIFER | DENISE | CARROLL | Democratir GE17SLLD |
| 56 MELISSA | MISCIONE | DART | Democratir GE17SLLD |
| 50 LEE | JIN | CARTER | Democratir GE17SLLD |
| 12 CHRIST | LAIRD | HURST | Democratir GE17SLLD |
| 52 LUKE | EDWARD | TORIAN | Democratir GE17SLLD |
| 29 CASEY | SCOTT | TURBEN | Democratir GE17SLLD |
| 9 STEPHANIE | CHRISTINE | COOK | Democratir GE17SLLD |
| 7 FLOURET | MARIE MO | KETNER | Democratir GE17SLLD |
| 88 STEPHEN | RONALD | AYCOCK | Democratic GE17SLLD |
| 31 ELIZABETH | ROSALINA | GUZMAN | Democratir GE17SLLD |
| 26 BRENT | MICHAEL | FINNEGAN | Democratir GE17SLLD |
| 39 VIVIAN | EDNA | WATTS | Democratir GE17SLLD |
| 44 PAUL | EUGENE | KRIZEK | Democratir GE17SLLD |
| 35 MARK | LEE | KEAM | Democratir GE17SLLD |
| 43 MARK | DAVID | SICKLES | Democratir GE17SLLD |
| 53 MARCUS | B | SIMON | Democratir GE17SLLD |
| 38 LAURA | KAYE | KORY | Democratir GE17SLLD |
| 34 KATHLEEN | JOHNSON | MURPHY | Democratir GE17SLLD |
| 74 LAMONT |  | BAGBY | Democratir GE17SLLD |
| 87 JOHN | JOSEPH | BELL | Democratir GE17SLLD |
| 83 DAVID | EVAN | ROSE-CAR | Democratir GE17SLLD |
| 82 LEIGH ANNE |  | BOWLING | Democratir GE17SLLD |
| 17 DJUNA | LAUREN | OSBORNE | Democratir GE17SLLD |
| 25 ANGELA | MARCKES | LYNN | Democratir GE17SLLD |
| 57 DAVID | JOSEPH | TOSCANO | Democratir GE17SLLD |
| 3 WILLIAM | CAREY | BUNCH | Democratir GE17SLLD |
| 58 KELLEN | JAMES | SQUIRE | Democratic GE17SLLD |
| 89 JERRAULD | CHARLES C | Jones | Democratir GE17SLLD |
| 59 TRACY | LLOYD | CARVER | Democratir GE17SLLD |
| 85 CHERYL | BALDWIN | TURPIN | Democratir GE17SLLD |
| 20 MICHELE | DIXON | EDWARDS | Democratir GE17SLLD |
| 90 JOSEPH | CARNELL | LINDSEY | Democratir GE17SLLD |
| 48 RICHARD | C | SULLIVAN | Democratir GE17SLLD |
| 47 PATRICK | A | HOPE | Democratir GE17SLLD |
| 45 MARK | HERBERT | LEVINE | Democratir GE17SLLD |
| 49 ALFONSO | HOFFMAN | LOPEZ | Democratir GE17SLLD |
| 79 STEPHEN | EDWARD | HERETICK | Democratir GE17SLLD |

2017 Nove Member H
2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H

| SALAM |  | RASOUL | Democratic GE17SLLD |  |
| :---: | :---: | :---: | :---: | :---: |
| 75 ROSLYN | CAIN | TY | Democratic GE17SLLD |  |
| 60 JAMAAL | MAALIK | JOHNSTON Democrati، GE17SLLD |  |  |
| 23 NATALIE | ALLENE | SHORT | Democrati، GE17SLLD |  |
| 100 WILLIE | CALVIN | RANDA | Democratir GE17SLLD |  |
| 55 MORGAN | KATHLEEN | G | Democratir GE17SLLD |  |
| ALFRED |  | D | Democratic GE17SLLD |  |
| 84 VERONICA | RICHARD | N | Democratic GE17SLLD |  |
| SHELLY | ANNE | SIMONDS | Democratir GE17SLLD |  |
| 99 Francis |  | Edwards | Democratic GE17SLLD |  |
| 59 Marcus | Tim | Su | Green | G |
| MONTIGUE TRENT |  | MAGRUDE | Green | G |
| JE | BE | ST | Gr | GE17SLLG |
| 88 GERALD | LEE | ANDERSON Green |  | GE17SLLG |
| 18 WILTON |  | KING | Green GE17SLLG |  |
| 24 JOHN | CRAWFORI WINFREY |  | Independe GE17SLLI |  |
| D | WADE | BA | Independe GE17SLLI |  |
| 31 NATHAN | DANIEL | LAR | Independe GE17SLLI |  |
| 88 AMANDA | MICHELE | BLALOCK | Independe GE17SLLI |  |
| 6 KENNETH | DAVID | BROWNIN( Independe GE17SLLI |  |  |
| M | STEVEN | CASE | Independe GE17SLLI |  |
| PR | TA | BR | Independe GE17SLLI |  |
| 69 JACOB | ALAN | CROCKER | Libertarian GE17SLLL |  |
| 89 TERRY | RICHARD | HURST | Libertarian GE17SLLL |  |
| 20 WILLIAM | MICHAEL | HAMMER | Libertarian GE17SLLL |  |
| 94 MICHAEL | DAVID | BARTLEY | Libertarian GE17SLLL |  |
| 93 HE | LY | CORDASCC | Republican GE17SLLR |  |
| 85 NORMAN | DEWEY | H | Republican GE17SLLR |  |
| 61 THOMAS | COLE | WRIGHT | Republican GE17SLLR |  |
| TERR | GENE | KILGORE | Republican GE17SLLR |  |
| 84 GLENN | RA | DAVIS | Republican GE17SLLR |  |
| 72 EDWARD | SEAYERS | WHITLOCK Republican GE17SLLR |  |  |
| 82 JASON | STUART | MIYARES | Republican GE17SLLR |  |
| LEE | SCOT | LIN | (Republican GE17SLLR |  |
| 32 THOMAS | ALEXANDEIGREASON Republican GE17SLLR |  |  |  |
| 73 JOHN | MAURICE | O'BANNON Republican GE17SLLR |  |  |
| 64 EMILY | MARIE | BREWER | Republican GE17SLLR |  |
| BENJAM | LEE | CLINE | Republican GE17SLLR |  |
| 87 SUBBA | RAO | KOLLA | Republican GE17SLLR |  |
| 38 PAUL | BYRNE | HARING | Republican GE17SLLR |  |
| 16 LESLIE | RAY | ADAMS | Republican GE17SLLR |  |
| 40 TIMOTHY | DOUGLAS | HUGO | Republican GE17SLLR |  |
| 15 CHRISTO | TODD | GILBERT | Republican GE17SLLR |  |
| 88 MARK | LANZE | COLE | Republican GE17SLLR |  |
| 59 CHARLES | MATTHEW FARISS |  | Republican GE17SLLR |  |
| 96 BRENDA | LOWE | POGGE | Republican GE17SLLR |  |
| 12 JOSEPH | RYAN | YOST | Republican GE17SLLR |  |

2017 Nove Member H
2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H

| RD | STEVEN | LANDES | Republican GE17SLLR |
| :---: | :---: | :---: | :---: |
| 58 ROBERT | BERNARD | BELL | Rep |
| 29 CHRISTOPF | EDMAN | COLLIN | Re |
| 5 ISR | DEAN | OQUINN | Republican GE17SLLR |
| 50 JACKSON | HUNTER | MILLER | Republican GE17SLLR |
| MICHAEL | DAVID | MAKEE | Republican GE17SLLR |
| 97 CHRISTOP | KILIAN | PEACE | Rep |
| CHARLES | DOUGLAS | POINDEXTE Republican GE17SLLR |  |
| 51 ric | lee | an | Republican GE17SLLR |
| 7 LARRY | NICHOLAS | RUS | Republican GE17SLLR |
| 19 TERRY | LEE | AUSTIN | Republican GE17SLLR |
| 100 ROBERT | SPURG | BLOXOM | Republic |
| 13 ROBERT | GERARD | MARSHALL Republican GE17SLLR |  |
| 56 JOHN | JOSEP | MCGUIRE Republican GE17SLLR |  |
| 4 DANIEL | WEBSTER | MARSHALL Republican GE17SLLR |  |
| 49 A |  | ROOSEVEL Republican GE17SLLR |  |
| 42 LOLITA | ISA | MANCHEN Republican GE17SLLR |  |
| 30 NICHOLAS | JASON | FREITAS | Republican GE17SLLR |
| 18 MICHAEL | JAMES | WEBERT | Republican GE17SLLR |
| 78 JAMES | ASBURY | LEFTWICH | Republican GE17SLLR |
| 23 THOMAS | SCOTT | GARRETT | Republican |
| 8 GREGORY | DAVID | habeeb | Republica |
| 10 JO | RANDALL | MINCHEW | Rep |
| 83 CHRIST | TRICK | Stolle | Republican GE17SLLR |
| 33 DAVID | ALFRED | LAROCK | Republican G |
| 17 CHRISTO | trac | HEAD | Republican GE17SLLR |
| 27 ROXANN | LAIN | NSON Republi |  |
| 65 ROBER | LEE | WAR | Republican |
| 62 RILEY | EDWARD | INGRA | Republican |
| 66 MARVIN | KIRKLAND | COX | Republican G |
| 68 GEORGE | MANUEL | LOUPASSI | Republican |
| 60 JAMES | EASLEY | EDMUNDS | Republican GE17SLLR |
| 21 RONALD JC ASUNCION VILLANUEV Republican GE17SLLR |  |  |  |
| 76 STEVEN | CHRISTOPF JONES |  | Republican GE17SLLR |
| 55 HYLAND | FRANKLIN | FOWLER | Republican GE17SLLR |
| 99 MARGAR | BEVANS | RANSONE | Republican GE17SLLR |
| 94 DAVID | ETIENNE | YANCEY | Republican GE17SLLR |
| 6 JEFFREY | LYNN | CAMPBE | Republican GE |
| 22 KATHY | JAYNE | BYRON | Republican GE17SLLR |
| 81 BARRY | DEAN | KNIGHT | Republican GE17SLLR |
| 3 JAMES | WILLIAM J(MOREFIEL[ Republican GE17SLLR |  |  |
| 34 CHERYL | ANNE | BUFORD | Republican GE17SLLR |
| 98 MYRON | KEITH | HODGES | Republican GE17SLLR |
| 86 Linda | Colleen | Schulz | Republican GE17SLLR |
| 4 TODD | EDWARD | PILLION | Republican GE17SLLR |
| 54 ROBERT | DICKSON | ORROCK | Republican GE17SLLR |
| 26 TONY | OBRIAN | WILT | Republican GE17S |

2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H. 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member $\mathrm{H}^{\prime}$ 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H 2017 Nove Member H

| 20 RICHARD | PRESTON | BELL Repub | Republican GE17SLLR |
| :---: | :---: | :---: | :---: |
| 91 GORDON | CLAIR | HELSEL Repub | GE17SLLR |
| 67 JAMES | MARK | LEMUNYOP Republican GE17SLLR |  |
| 28 ROBERT | MICHAEL | THOMAS Republican GE17SLLR |  |
| 89 |  | WRITE IN VOTES | GE17SLLW |
| 52 |  | WRITE IN VOTES | GE17SLLW |
| 83 |  | WRITE IN VOTES | GE17SLLW |
| 77 |  | WRITE IN VOTES | GE17SLLW |
| 84 |  | WRITE IN VOTES | GE17SLLW |
| 85 |  | WRITE IN VOTES | GE17SLLW |
| 15 |  | WRITE IN VOTES | GE17SLLW |
| 94 |  | WRITE IN VOTES | GE17SLLW |
| 11 |  | WRITE IN VOTES | GE17SLLW |
| 26 |  | WRITE IN VOTES | GE17SLLW |
| 92 |  | WRITE IN VOTES | GE17SLLW |
| 51 |  | WRITE IN VOTES | GE17SLLW |
| 79 |  | WRITE IN VOTES | GE17SLLW |
| 13 |  | WRITE IN VOTES | GE17SLLW |
| 28 |  | WRITE IN VOTES | GE17SLLW |
| 91 |  | WRITE IN VOTES | GE17SLLW |
| 90 |  | WRITE IN VOTES | GE17SLLW |
| 50 |  | WRITE IN VOTES | GE17SLLW |
| 82 |  | WRITE IN VOTES | GE17SLLW |
| 46 |  | WRITE IN VOTES | GE17SLLW |
| 21 |  | WRITE IN VOTES | GE17SLLW |
| 78 |  | WRITE IN VOTES | GE17SLLW |
| 76 |  | WRITE IN VOTES | GE17SLLW |
| 81 |  | WRITE IN VOTES | GE17SLLW |
| 80 |  | WRITE IN VOTES | GE17SLLW |
| 2 |  | WRITE IN VOTES | GE17SLLW |
| 95 |  | WRITE IN VOTES | GE17SLLW |
| 37 |  | WRITE IN VOTES | GE17SLLW |
| 32 |  | WRITE IN VOTES | GE17SLLW |
| 55 |  | WRITE IN VOTES | GE17SLLW |
| 99 |  | WRITE IN VOTES | GE17SLLW |
| 54 |  | WRITE IN VOTES | GE17SLLW |
| 6 |  | WRITE IN VOTES | GE17SLLW |
| 74 |  | WRITE IN VOTES | GE17SLLW |
| 27 |  | WRITE IN VOTES | GE17SLLW |
| 60 |  | WRITE IN VOTES | GE17SLLW |
| 87 |  | WRITE IN VOTES | GE17SLLW |
| 63 |  | WRITE IN VOTES | GE17SLLW |
| 62 |  | WRITE IN VOTES | GE17SLLW |
| 65 |  | WRITE IN VOTES | GE17SLLW |
| 68 |  | WRITE IN VOTES | GE17SLLW |
| 69 |  | WRITE IN VOTES | GE17SLLW |
| 33 |  | WRITE IN VOTES | GE17SLLW |


| 2017 Nove Member H | 66 | WRITE IN VOTES | GE17SLLW |
| :---: | :---: | :---: | :---: |
| 2017 Nove Member H | 75 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 17 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 3 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 100 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 58 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 59 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 25 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 57 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 19 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 61 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 23 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 24 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 47 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 49 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 45 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 48 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 20 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 22 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 10 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 8 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 70 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 30 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 9 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 29 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 12 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 56 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 5 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 97 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 72 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 18 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 71 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 16 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 14 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 64 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 96 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 93 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 1 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 7 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 31 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 73 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 35 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 88 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 4 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 98 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 44 | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 39 | WRITE IN VOTES | GE17SLLW |


| 2017 Nove Member H | 43 |  | WRITE IN VOTES | GE17SLLW |
| :---: | :---: | :---: | :---: | :---: |
| 2017 Nove Member H | 86 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 34 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 36 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 53 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 41 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 42 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 40 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 67 |  | WRITE IN VOTES | GE17SLLW |
| 2017 Nove Member H | 38 |  | WRITE IN VOTES | GE17SLLW |
| 2018 Nove Member H | 8 EDWARD | CARTER | TURNER Demo | GE18SLLD |
| 2018 Nove Member H | 8 JOSEPH | PATRICK | MCNAMARRepub | GE18SLLR |
| 2018 Nove Member H | 8 |  | WRITE IN VOTES | GE18SLLW |
| 2018 Nove Member H | 1 LAVANGELI | AEREKA | WILLIAMS Demo | GE18USRD |
| 2018 Nove Member H | 4 Aston | Donald | McEachin Dem | GE18USRD |
| 2018 Nove Member H | 7 ABIGAIL | ANNE DAV | SPANBERG Demo | GE18USRD |
| 2018 Nove Member H | 9 ANTHONY | JUDE | FLACCAVER Demo | GE18USRD |
| 2018 Nove Member H | 5 LESLIE | CORKILL | COCKBUR^ Demo | GE18USRD |
| 2018 Nove Member H | 8 DONALD | STERNOFF | BEYER Demo | GE18USRD |
| 2018 Nove Member H | 11 GERALD | EDWARD | CONNOLLY Demo | GE18USRD |
| 2018 Nove Member H | 2 ELAINE | GOODMAN | LURIA Demo | GE18USRD |
| 2018 Nove Member H | 3 ROBERT | CORTEZ | SCOTT Demo | GE18USRD |
| 2018 Nove Member H | 6 JENNIFER | LYNN | LEWIS Demo | GE18USRD |
| 2018 Nove Member H | 10 JENNIFER | TOSINI | WEXTON Demo | GE18USRD |
| 2018 Nove Member H | 4 PETER | JOSEPH | WELLS Libert | GE18USRL |
| 2018 Nove Member H | 11 STEVAN | MICHAEL | PORTER Libert | GE18USRL |
| 2018 Nove Member H | 7 JOSEPH | BUCKLER | WALTON Libert | GE18USRL |
| 2018 Nove Member H | 10 BARBARA | JEAN | COMSTOCr Repub | GE18USRR |
| 2018 Nove Member H | 4 RYAN | ANDREW | MCADAMS Repub | GE18USRR |
| 2018 Nove Member H | 8 THOMAS | SIYOUNG | OH Repub | GE18USRR |
| 2018 Nove Member H | 11 JEFFERY | ANTHONY | DOVE Republic | GE18USRR |
| 2018 Nove Member H | 1 ROBERT | JOSEPH | WITTMAN Repub | GE18USRR |
| 2018 Nove Member H | 6 BENJAMIN | LEE | CLINE Republic | GE18USRR |
| 2018 Nove Member H | 2 SCOTT | WILLIAM | TAYLOR Republic | GE18USRR |
| 2018 Nove Member H | 7 DAVID | A | BRAT Republic | GE18USRR |
| 2018 Nove Member H | 9 HOWARD | MORGAN | GRIFFITH Repub | GE18USRR |
| 2018 Nove Member H | 5 DENVER | LEE | RIGGLEMA Repub | GE18USRR |
| 2018 Nove Member H | 8 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 3 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 11 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 5 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 2 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 10 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 7 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 4 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 6 |  | WRITE IN VOTES | GE18USRW |
| 2018 Nove Member H | 1 |  | WRITE IN VOTES | GE18USRW |


| 18 Nove Me | 9 |  | WRITE IN VOT | VOTES GE18USRW |
| :---: | :---: | :---: | :---: | :---: |
| 2018 Nove Member Un | tates TIMOTHY | MICHAEL | KAINE | DemocraticGE18USSD |
| 2018 Nove Member U | tes MATTHEW | JOSEPH | WATERS | Libertarian GE18USSL |
| 2018 Nove Member | tes COREY | ALAN | STEWART | Republican GE18USSR |
| 2018 Nove Member U | ates Senate |  | WRITE IN VO | VOTES GE18USSW |
| 2019 Nove Member H | 4 STARLA | JO | KISER | Democratir GE19SLLD |
| 2019 Nove Member H | 98 ELIZABETH | belt | WEBSTER | Democratir GE19SLLD |
| 2019 Nove Member H | 80 DON | LEONARD | SCOTT | Democratir GE19SLLD |
| 2019 Nove Member H | 83 NANCY | DAHLMAN | GUY | Democratir GE19SLLD |
| 2019 Nove Member H | 90 JOSEPH | CARNELL | LINDSEY | Democratir GE19SLLD |
| 2019 Nove Member H | 89 Jerrauld | CHARLES | JONES | Democratic GE19SLLD |
| 2019 Nove Member H | 67 KARRIE | KRISTINE | DELANEY | Democratir GE19SLLD |
| 2019 Nove Member H | 37 DAVID | LAWRENCE | BULOVA | Democratir GE19SLLD |
| 2019 Nove Member H | 41 EILEEN |  | FILLER-CO | Democratir GE19SLLD |
| 2019 Nove Member H | 86 IBRAHEE | SABRI | SAMIRAH | Democratir GE19SLLD |
| 2019 Nove Member H | 34 KATHLEEN | JOHNSON | MURPHY | Democratir GE19SLLD |
| 2019 Nove Member H | 42 KATHY | KHANH | TRAN | Democratir GE19SLLD |
| 2019 Nove Member H | 18 LAURA | LEIGH | GALANTE | Democratir GE19SLLD |
| 2019 Nove Member H | 36 KENNETH | RAY | PLUM | Democratir GE19SLLD |
| 2019 Nove Member H | 40 DANIEL | ISAAC | HELMER | Democratir GE19SLLD |
| 2019 Nove Member H | 30 ANN | FAULKNER | RIDGEWAY | Democratir GE19SLLD |
| 2019 Nove Member H | 68 DAWN | MARIE | ADAMS | Democratir GE19SLLD |
| 2019 Nove Member H | 33 MAVIS | BUNKER | TAINTOR | Democratir GE19SLLD |
| 2019 Nove Member H | 60 JANIE | SUE | ZIMMERM, | Democratir GE19SLLD |
| 2019 Nove Member H | 99 Francis |  | Edwards | Democratir GE19SLLD |
| 2019 Nove Member H | 55 MORGAN | KATHLEEN | GOODM | Democratir GE19SLLD |
| 2019 Nove Member H | 54 NERI | NEFTALI | CANAHU | ( Democratir GE19SLLD |
| 2019 Nove Member H | 71 JEFFREY | MICHAEL | BOURNE | Democratir GE19SLLD |
| 2019 Nove Member H | 6 JAMES | ROBERT | BARKER | Democratir GE19SLLD |
| 2019 Nove Member H | 69 BETSY | BROOKS | CARR | Democratic GE19SLLD |
| 2019 Nove Member H | 70 DELORES | LOUISE | MCQUINN | Democratir GE19SLLD |
| 2019 Nove Member H | 38 LAURA | KAYE | KORY | Democratir GE19SLLD |
| 2019 Nove Member H | 63 LASHREC | DIANNA | AIRD | Democratir GE19SLLD |
| 2019 Nove Member H | 27 LAWREN | EVINCENT | BARNETT | Democratir GE19SLLD |
| 2019 Nove Member H | 62 LINDSEY | MICHELLE | DOUGHERTD | Democratir GE19SLLD |
| 2019 Nove Member H | 65 MICHAEL | PATRICK | ASIP | Democratir GE19SLLD |
| 2019 Nove Member H | 66 SHEILA | CAROL | BYNUM-CCD | Democratir GE19SLLD |
| 2019 Nove Member H | 10 GWENDOL | WALLACE | GOODITIS | Democratir GE19SLLD |
| 2019 Nove Member H | 8 DARLENE | W | LEWIS | Democratir GE19SLLD |
| 2019 Nove Member H | 53 MARCUS | B | SIMON | Democratir GE19SLLD |
| 2019 Nove Member H | 56 JUANITA | JOAN | MATKINS | Democratir GE19SLLD |
| 2019 Nove Member H | 35 MARK | LEE | KEAM | Democratir GE19SLLD |
| 2019 Nove Member H | 13 DANICA | ANTHONY | ROEM | Democratir GE19SLLD |
| 2019 Nove Member H | 51 hala | sophia | ayala | Democratic GE19SLLD |
| 2019 Nove Member H | 2 JENNIFER | DENISE | CARROLL F | Democratir GE19SLLD |
| 2019 Nove Member H | 50 LEE | JIN | CARTER | Democratir GE19SLLD |
| 2019 Nove Member H | 52 LUKE | EDWARD | TORIAN | Democratir GE19SLLD |

2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member $\mathrm{H}^{\prime}$ 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member $\mathrm{H}^{\prime}$ 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H

| 26 BRENT | MICHAEL L | FINNEGAN | Democratic GE19SLLD |
| :---: | :---: | :---: | :---: |
| 28 JOSHUA | GREGORY | COLE | Democratir GE19SLLD |
| 91 MARTHA | MARTIN | MUGLER | Democratir GE19SLLD |
| 46 CHARNIEL | LE RHOND/ | HERRING | DemocraticGE19SLLD |
| 95 MARCIA | SIMONE | PRICE | Democratic GE19SLLD |
| 77 CLIFTON | EUGENE | HAYES | Democratir GE19SLLD |
| 76 CLINTON | LEROY | JENKINS | Democratir GE19SLLD |
| 21 Kelly | KRISTEN | CONVIRS | Democratic GE19SLLD |
| 81 LENARD | TYRONE | MYERS | Democratir GE19SLLD |
| 79 STEPHEN | EDWARD | HERETICK | Democratir GE19SLLD |
| 15 BEVERLY |  | HARRIS | Democratic GE19SLLD |
| 87 SUHAS |  | SUBR | Democratir GE19SLLD |
| 32 DAVID | ALAN | REID | Democratic GE19SLLD |
| 94 SHELLY | ANNE | SIMONDS | DemocraticGE19SLLD |
| 44 PAUL | EUGENE | KRIZEK | Democratic GE19SLLD |
| 39 VIVIAN | EDNA | WATTS | Democratir GE19SLLD |
| 31 ELIZABET | ROSALIN | GUZMAN | Democratic GE19SLLD |
| 88 JESSICA | HARBES | FOSTER | Democratic GE19SLLD |
| 7 RHONDA | GAIL | SELTZ | Democratir GE19SLLD |
| 29 IRINA | BORIS | KHANIN | Democratic GE19SLLD |
| 12 CHRISTO | LAIRD | HURST | Democratir GE19SLLD |
| 43 MARK | DAVID | SICKLES | Democratir GE19SLLD |
| 75 ROSLYN | CAIN | TYLER | Democratir GE19SLLD |
| 74 LAMONT |  | BAGBY | Democratir GE19SLLD |
| 73 RODNEY | TURNER | WILLETT | Democratir GE19SLLD |
| 72 SCHUYLER | THOMAS | VanValke | I Democratic GE19SLLD |
| 14 ERIC | WAYNE | STAMPS | Democratic GE19SLLD |
| 64 MICHELE | ERB | JOYCE | Democratir GE19SLLD |
| 96 MARK | COLLINS | DOWNEY | Democratir GE19SLLD |
| 93 MICHAEL | PAUL | MULLIN | Democratic GE19SLLD |
| 97 KEVIN | DWAYNE | WASHINGT | Democratic GE19SLLD |
| 11 SALAM |  | RASOUL | Democratir GE19SLLD |
| 92 JEION | ANTONIA | WARD | Democratir GE19SLLD |
| 45 MARK | HERBERT | LEVINE | Democratic GE19SLLD |
| 24 CHRISTIAN | RENAU | WORTH | Democratir GE19SLLD |
| 100 PHILIP | MYCHAEL | HERN | Democratic GE19SLLD |
| 22 JENNIFER | KAY | WOOFTER | Democratic GE19SLLD |
| 25 JENNIFER | LEIGH | KITCHEN | Democratir GE19SLLD |
| 20 JENNIFER | LYNN | LEWIS | Democratic GE19SLLD |
| 23 DAVID | ARTHUR | ZILLES | Democratic GE19SLLD |
| 82 GAYLE | HARRISON | JOHNSON | Democratir GE19SLLD |
| 47 PATRICK | A | HOPE | Democratic GE19SLLD |
| 84 KAREN | POWERS | MALLARD | Democratic GE19SLLD |
| 48 RICHARD | C | SULLIVAN | Democratir GE19SLLD |
| 59 TIMOTHY | JOSEPH | HICKEY | Democratic GE19SLLD |
| 61 TRUDY | BELL | BERRY | Democratic GE19SLLD |
| 85 ALEX | QUENTIN | ASKEW | Democratir GE19SLLD |

2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member $\mathrm{H}^{\prime}$ 2019 Nove Member H 2019 Nove Member H 2019 Nove Member $\mathrm{H}_{\text {- }}$ 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H

| 57 sally | lindquist | hudson | Democratic GE19SLLD |
| :---: | :---: | :---: | :---: |
| 58 ELIZABETH | ANN | ALCORN | Democratic GE19SLLD |
| 49 ALFONSO | HOFFMAN | LOPEZ | Democratic GE19SLLD |
| 43 GLENDA | GAIL | PARKER | Independe GE19SLLI |
| 41 JOHN | M | WOLFE | Independe GE19SLLI |
| 25 JANICE | LEE | ALLEN | Independe GE19SLLI |
| 49 TERRENCE | WAYNE | MODGLIN | Independe GE19SLLI |
| 24 BILLY | ELI | FISHPAW | Independe GE19SLLI |
| 63 LAWREN | CHARLES | HAAKE | Independe GE19SLLI |
| 80 RYAN | COLLIN | BENTON | Independe GE19SLLI |
| 66 LINNARD | KEITH | HARRIS | Independe GE19SLLI |
| 41 RACHEL | DOROTHY | MACE | Libertarian GE19SLLL |
| 16 DUSTIN | WILSON | EVANS | Libertarian GE19SLLL |
| 96 JAMES | WALTER | Jobe | Libertarian GE19SLLL |
| 71 PETER | JOSEPH | WELLS | Libertarian GE19SLLL |
| 94 MICHAEL | DAVID | BARTLEY | Libertarian GE19SLLL |
| 18 MICHAEL | JAMES | WEBERT | Republican GE19SLLR |
| 96 AMANDA | ETTER | BATTEN | Republican GE19SLLR |
| 10 JOHN | RANDALL | MINCHEW | Republican GE19SLLR |
| 7 LARRY | NICHOLAS | RUSH | Republican GE19SLLR |
| 93 HEATHER | LYNN | CORDAS | Republican GE19SLLR |
| 8 JOSEPH | PATRICK | MCNAM | R Republican GE19SLLR |
| 4 William | Creed | Wampler | Republican GE19SLLR |
| 1 TERRY | GENE | KILGORE | Republican GE19SLLR |
| 98 MYRON | KEITH | HODGES | Republican GE19SLLR |
| 80 JAMES | WILLIAM | EVANS | Republican GE19SLLR |
| 82 JASON | STUART | MIYARES | Republican GE19SLLR |
| 64 EMILY | MARIE | BREWER | Republican GE19SLLR |
| 88 MARK | LANZE | COLE | Republican GE19SLLR |
| 61 THOMAS | COLE | WRIGHT | Republican GE19SLLR |
| 31 DARRELL | HAMILTO | JORDAN | Republican GE19SLLR |
| 29 CHRISTOP | EDMAN | COLLINS | Republican GE19SLLR |
| 40 TIMOTHY | DOUGLAS | HUGO | Republican GE19SLLR |
| 12 Travis | Forrest | Hite | Republican GE19SLLR |
| 42 STEVEN | PAUL | ADRAGNA | Republican GE19SLLR |
| 83 CHRISTOP | PATRICK | STOLLE | Republican GE19SLLR |
| 44 RICHARD | TERRENCE | HAYDEN | Republican GE19SLLR |
| 56 John | Joseph | McGuire | Republican GE19SLLR |
| 58 ROBERT | BERNARD | BELL | Republican GE19SLLR |
| 39 NICHOLAS | O'CONNEL | BELL | Republican GE19SLLR |
| 24 RONNIE | RAY | CAMPBELL | Republican GE19SLLR |
| 23 WENDELL | SCOTT | WALKER | Republican GE19SLLR |
| 19 TERRY | LEE | AUSTIN | Republican GE19SLLR |
| 84 GLENN | RAY | DAVIS | Republican GE19SLLR |
| 97 SCOTT | ANDREW | WYATT | Republican GE19SLLR |
| 34 GARY | G | PAN | Republican GE19SLLR |
| 72 GAY | DONNA | VANDERG | Republican GE19SLLR |

2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member $\mathrm{H}^{\prime}$ 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H 2019 Nove Member H

| 25 CHRISTOPF | SCOTT | RUNION | Republican GE19SLLR |
| :---: | :---: | :---: | :---: |
| 14 DANIEL | WEBSTER | MARSHALL | Republican GE19SLLR |
| 16 LESLIE | RAY | ADAMS | Republican GE19SLLR |
| 5 ISRAEL | DEAN | OQUINN | Republican GE19SLLR |
| 73 MARY | MARGAR | 7 KASTELBER | Republican GE19SLLR |
| 9 CHARLES | DOUGLAS | POINDEX | Republican GE19SLLR |
| 87 WILLIAM | M | DRENNAN | Republican GE19SLLR |
| 13 KElLY | SWEENEY | MCGINN | Republican GE19SLLR |
| 75 HOWARD | OTTO | WACHSM | Republican GE19SLLR |
| 78 JAMES | ASBURY | LEFTWICH | Republican GE19SLLR |
| 100 ROBERT | SPURGEO | , BLOXOM | Republican GE19SLLR |
| 85 NORMAN | DEWEY | HOLCOMB | Republican GE19SLLR |
| 52 MARIA | EUGENIA | MARTIN | Republican GE19SLLR |
| 51 richard | lee | anderson | Republican GE19SLLR |
| 50 IAN | TRAVIS | LOVEJOY | Republican GE19SLLR |
| 60 JAMES | EASLEY | EDMUNDS | Republican GE19SLLR |
| 28 PAUL | VINCENT | MILDE | Republican GE19SLLR |
| 33 DAVID | ALFRED | LAROCK | Republican GE19SLLR |
| 22 KATHY | JAYNE | BYRON | Republican GE19SLLR |
| 6 JEFFREY | LYNN | CAMPBELL | Republican GE19SLLR |
| 55 HYLAND | FRANKLIN | FOWLER | Republican GE19SLLR |
| 99 MARGARE | BEVANS | RANSONE | Republican GE19SLLR |
| 91 COLLEEN | HOLMES | HOLCOMB | Republican GE19SLLR |
| 26 TONY | OBRIAN | WILT | Republican GE19SLLR |
| 2 HEATHER | FUNDE | MITCHELL | Republican GE19SLLR |
| 81 BARRY | DEAN | KNIGHT | Republican GE19SLLR |
| 62 CARRIE | EMERSON | COYNER | Republican GE19SLLR |
| 59 Charles | MATTHE | FARISS | Republican GE19SLLR |
| 27 ROXANN | LAINE | ROBINSON | Republican GE19SLLR |
| 65 ROBERT | LEE | WARE | Republican GE19SLLR |
| 15 CHRISTOPF | TODD | GILBERT | Republican GE19SLLR |
| 66 MARVIN | KIRKLAND | COX | Republican GE19SLLR |
| 94 DAVID | ETIENNE | YANCEY | Republican GE19SLLR |
| 20 GIANFRANC |  | AVOLI | Republican GE19SLLR |
| 3 JAMES | WILLIAM | (MOREFIELI | Republican GE19SLLR |
| 17 CHRISTOP | TRACY | HEAD | Republican GE19SLLR |
| 68 GARRISON | RASHAD | COWARD | Republican GE19SLLR |
| 21 SHANNON | DENISE | KANE | Republican GE19SLLR |
| 76 STEVEN | CHRISTO | JONES | Republican GE19SLLR |
| 54 ROBERT | DICKSON | ORROCK | Republican GE19SLLR |
| 100 |  | WRITE IN VO | VOTES GE19SLLW |
| 5 |  | WRITE IN V | VOTES GE19SLLW |
| 78 |  | WRITE IN V | VOTES GE19SLLW |
| 61 |  | WRITE IN V | VOTES GE19SLLW |
| 79 |  | WRITE IN V | VOTES GE19SLLW |
| 56 |  | WRITE IN VOT | VOTES GE19SLLW |
| 95 |  | WRITE IN | TES GE |


| 2019 Nove Member H | 12 | WRITE IN VOTES | GE19SLLW |
| :---: | :---: | :---: | :---: |
| 2019 Nove Member H | 92 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 89 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 21 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 29 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 76 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 77 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 81 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 94 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 46 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 15 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 87 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 2 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 1 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 51 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 83 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 50 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 13 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 52 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 96 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 93 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 58 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 97 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 90 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 26 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 25 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 16 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 14 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 28 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 57 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 19 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 73 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 74 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 72 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 91 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 59 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 64 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 32 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 36 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 48 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 49 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 40 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 8 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 35 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 80 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 39 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 34 | WRITE IN VOTES | GE19SLLW |


| 2019 Nove Member H | 84 | WRITE IN VOTES | GE19SLLW |
| :---: | :---: | :---: | :---: |
| 2019 Nove Member H | 67 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 20 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 37 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 45 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 54 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 38 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 99 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 42 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 69 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 41 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 53 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 86 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 44 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 30 NICHOLAS J | FREITAS Write-In | GE19SLLW |
| 2019 Nove Member H | 98 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 85 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 43 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 33 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 47 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 55 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 7 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 88 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 17 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 75 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 31 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 11 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 65 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 68 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 62 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 63 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 9 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 30 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 71 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 27 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 24 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 23 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 18 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 82 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 3 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 66 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 60 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 22 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 6 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 70 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 4 | WRITE IN VOTES | GE19SLLW |
| 2019 Nove Member H | 10 | WRITE IN VOTES | GE19SLLW |

2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member $S_{\epsilon}$ 2019 Nove Member S $\epsilon$

| N | OS | L | D |
| :---: | :---: | :---: | :---: |
| 11 AMANDA | LEONARD | POHL | Democratic GE19SLUD |
| 24 ANNETTE | HEATHCO | HYDE | Democratic GE19SLUD |
| 16 J | DE | M | D |
| 10 GHAZALA | FIRDOUS | HASHMI | Democratic GE19SLUD |
| 17 | JO | R | Democratic GE19SLUD |
| 8 MELISSA |  | COTTER | D |
| 29 JEREMY | SCOTT | MCPIKE | Democratic GE19SLUD |
| 26 APRIL | DOROT | MOORE | Democratic GE19SLUD |
| 2 MAMIE | EVELYN | LOCKE | Democratic GE19SLUD |
| REBECCA | EAMES | RA | Democrati، GE19SLUD |
| 32 JANET | DENISON | HOWELL | Democratic GE19SLUD |
| 21 JOHN | SAUL | EDWARDS | Democratic GE19SLUD |
| 5 LIONELL |  | SPRUILL | Democratic GE19SLUD |
| 36 SCOTT | A | SU | Democratic GE19SLUD |
| 3 HERBER | CARROLL | JONES | Democratic GE19SLUD |
| 18 LILLIE | LO | S | Democratic GE19SLUD |
| 6 LYNWOO | WAYNE | LEWIS | Democratic GE19SLUD |
| 35 RICHARD | LAW | SA | Democratic GE19SLUD |
| 7 C | BA | TU | Democrati، GE19SLUD |
| 22 DA | SCO | CLAYTOR | Democratic GE19SLUD |
| 15 VIRGINIA | MAE | SMITH | Democratic GE19SLUD |
| 27 RONALD | JOSEPH | ROSS | Democratic GE19SLUD |
| 34 JOHN | CHAPMAN | PETERSEN | Democrati، GE19SLUD |
| 33 JENNIF | BARTON | BOYSKO | Democrati، GE19SLUD |
| 39 GEORGE | LINCOLN | BARKER | Democratic GE19SLUD |
| 37 DAVID | WILLIAM | MARSDEN | Democratic GE19SLUD |
| 30 ADAM | PAUL | EBBIN | Democrati، GE19SLUD |
| 25 ROBERT | CREIG | DEEDS | Democratic GE19SLUD |
| 19 FLO | MARIE MO | R | Democratic GE19SLUD |
| 31 BARBARA | Ann | FAVOLA | Democratic GE19SLUD |
| 1 TAYLOR | MONTGO | MASON | Democratic GE19SLUD |
| 28 qasim |  | rashid | Democratic GE19SLUD |
| 4 RAYMO | STANTON | SCOTT | Democratic GE19SLUD |
| 12 debra | hain | rodman | Democratic GE19SLUD |
| 9 JENNIFER | LEIGH | MCCLEL | I Democratic GE19SLUD |
| 20 SHERMAN | DAVID | WITCHER | Independe GE19SLUI |
| 5 JEFFREY | BENNETT | STAPLES | Independe GE19SLUI |
| 25 ELLIOTT | MICHAEL | HARDING | Independe GE19SLUI |
| 38 GEORGE | WILLIAM | MCCALL | Independe GE19SLUI |
| 21 STEVEN | LEE | NELSON | Independe GE19SLUI |
| 16 WAYLIN | K | ROSS | Independe GE19SLUI |
| 40 KENNETH | WILLIAM | HEATH | Independe GE19SLUI |
| 9 MARK | EDWARD | LEWIS | Libertarian GE19SLUL |
| 11 AMANDA | FREEMAN | CHASE | Republican GE19SLUR |
| 7 JENNIFER | ANN | KIGGANS | Republican GE19SLUR |
| 38 AUGUSTU | ENTON | CHAFIN | Republican GE19SLUR |


| 2019 Nove Member St | 8 WILLIAM | ROBERT | DESTEPH Repu | Republican GE19SLUR |
| :---: | :---: | :---: | :---: | :---: |
| 2019 Nove Member St | 15 FRANK | MILLER | RUFF Repu | n GE19SLUR |
| 2019 Nove Member St | 33 SUZANNE | DENISE | FOX Repub | n GE19SLUR |
| 2019 Nove Member S | 3 THOMAS | KENT | NORMENT Repu | n GE19SLUR |
| 2019 Nove Member S | 6 ELIZABETH | ANNE | LANKFORD Repu | n GE19SLUR |
| 2019 Nove Member St | 39 SAMUEL | WAYNE | HILLENBUR Repu | n GE19SLUR |
| 2019 Nove Member St | 40 TODD | EDWARD | PILLION Repubic | n GE19SLUR |
| 2019 Nove Member S | 22 MARK | JOSEPH | PEAKE Repub | n GE19SLUR |
| 2019 Nove Member St | 17 BRYCE | E | REEVES Repu | n GE19SLUR |
| 2019 Nove Member St | 14 JOHN | ALOYSIUS | COSGROVE Rep | n GE19SLUR |
| 2019 Nove Member St | 32 ARTHUR | GRAHAME | PURVES Repu | n GE19SLUR |
| 2019 Nove Member St | 28 RICHARD | HENRY | STUART Repu | n GE19SLUR |
| 2019 Nove Member St | 4 RYAN | TODD | MCDOUGL Repu | n GE19SLUR |
| 2019 Nove Member S | 19 DAVID | ROBERT | SUETTERLE Repu | n GE19SLUR |
| 2019 Nove Member S | 13 GEARY | MICHAEL | HIGGINS Repu | n GE19SLUR |
| 2019 Nove Member St | 27 JILL | holtzmar | VOGEL Repu | n GE19SLUR |
| 2019 Nove Member St | 26 MARK | DUDLEY | OBENSHAII Rep | GE19SLUR |
| 2019 Nove Member St | 20 WILLIAM | MARTIN | STANLEY Repu | n GE19SLUR |
| 2019 Nove Member S | 24 EMMETT | WILSON | HANGER Repu | n GE19SLUR |
| 2019 Nove Member S | 10 GLEN |  | STURTEVAI Repu | n GE19SLUR |
| 2019 Nove Member St | 12 SIOBHAN | STOLLE | DUNNAVAIRepu | n GE19SLUR |
| 2019 Nove Member S | 23 STEPHEN | DWAYNE | NEWMAN Repub | n GE19SLUR |
| 2019 Nove Member St | 7 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 8 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 37 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 2 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 4 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 18 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 15 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 38 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 19 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 23 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 24 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 30 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 31 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 32 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 22 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 11 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 25 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 17 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 6 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 20 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 9 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member S | 16 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 3 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 13 |  | WRITE IN VOTES | GE19SLUW |
| 2019 Nove Member St | 28 |  | WRITE IN VOTES | GE19SLUW |


| 2019 Nove Member St | 1 |  | WRITE IN VOTES |  | GE19SLUW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 Nove Member St | 14 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 12 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 40 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 10 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 21 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 33 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 5 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 39 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member S $\mathrm{f}^{\prime}$ | 35 |  | WRITE IN | Votes | GE19SLUW |
| 2019 Nove Member St | 34 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 36 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 27 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 26 |  | WRITE IN | VOTES | GE19SLUW |
| 2019 Nove Member St | 29 |  | WRITE IN | VOTES | GE19SLUW |
| 2020 Nove President and Vice | Pre Joseph | Robinette | Biden | Dem | GE2OPRSD |
| 2020 Nove President and Vice | PreJo |  | Jorgensen | Libe | GE20PRSL |
| 2020 Nove President and Vice | Pre Donald | J. | Trump | Rep | GE20PRSR |
| 2020 Nove President and Vice | President |  | WRITE IN | VOTES | GE20PRSW |
| 2020 Nove Member H | 29 IRINA | BORIS | KHANIN | Demo | GE20SLLD |
| 2020 Nove Member H | 29 WILLIAM | DAWSON | WILEY | Repub | GE20SLLR |
| 2020 Nove Member H | 29 |  | WRITE IN | VOTES | GE20SLLW |
| 2020 Nove Member H | 10 JENNIFER | TOSINI | WEXTON | Dem | GE20USRD |
| 2020 Nove Member H | 8 DONALD | STERNOFF | BEYER | Dem | GE20USRD |
| 2020 Nove Member H | 7 ABIGAIL | ANNE DAV | SPANBERG | Dem | GE20USRD |
| 2020 Nove Member H | 4 ASTON | DONALD | MCEACHIN | Demo | GE20USRD |
| 2020 Nove Member H | 11 GERALD | EDWARD | CONNOLLY | Demo | GE20USRD |
| 2020 Nove Member H | 6 NICHOLAS | ANTHONY | BETTS | Demo | GE20USRD |
| 2020 Nove Member H | 1 qasim |  | rashid | Demo | GE20USRD |
| 2020 Nove Member H | 2 ELAINE | GOODMAN | LURIA | Demo | GE20USRD |
| 2020 Nove Member H | 3 ROBERT | CORTEZ | SCOTT | Demo | GE20USRD |
| 2020 Nove Member H | 5 BRYANT | CAMERON | WEBB | Demo | GE20USRD |
| 2020 Nove Member H | 2 David | Bruce | Foster | Indep | GE20USRI |
| 2020 Nove Member H | 3 JOHN | WILLIAM | COLLICK | Repub | GE20USRR |
| 2020 Nove Member H | 8 JEFFREY | ALAN | JORDAN | Repub | GE20USRR |
| 2020 Nove Member H | 1 ROBERT | JOSEPH | WITTMAN | Repub | GE20USRR |
| 2020 Nove Member H | 10 ALISCIA | NICOLE | ANDREWS | Repub | GE20USRR |
| 2020 Nove Member H | 4 LEON |  | BENJAMIN | Repub | GE20USRR |
| 2020 Nove Member H | 7 NICHOLAS | J | FREITAS | Repub | GE20USRR |
| 2020 Nove Member H | 9 HOWARD | MORGAN | GRIFFITH | Repub | GE20USRR |
| 2020 Nove Member H | 5 ROBERT | GEORGE | GOOD | Repub | GE20USRR |
| 2020 Nove Member H | 11 MANGA | ALAMELU | ANANTATI | Repub | GE20USRR |
| 2020 Nove Member H | 2 SCOTT | WILLIAM | TAYLOR | Republis | GE20USRR |
| 2020 Nove Member H | 6 BENJAMIN | LEE | CLINE | Repub | GE20USRR |
| 2020 Nove Member H | 10 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member H | 11 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member H | 1 |  | WRITE IN | VOTES | GE20USRW |


| 2020 Nove Member H | 8 |  | WRITE IN | Votes | GE20USRW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 Nove Member H | 6 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member H | 7 |  | WRITE IN | Votes | GE20USRW |
| 2020 Nove Member H | 9 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member H | 5 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member H | 2 |  | WRITE IN | Votes | GE20USRW |
| 2020 Nove Member H | 4 |  | WRITE IN | Votes | GE20USRW |
| 2020 Nove Member H | 3 |  | WRITE IN | VOTES | GE20USRW |
| 2020 Nove Member United States MARK |  | ROBERT | WARNER | Den | GE20USSD |
| 2020 Nove Member United States DANIEL |  | MAC ART | GADE |  | GE20USSR |
| 2020 Nove Member United States Senate |  |  | WRITE IN | VOTES | GE20USSW |
| 2021 Nove Attorney General | MARK | RANKIN | HERRING | Dem | GE21ATGD |
| 2021 Nove Attorney General | JASON | STUART RE | MIYARES | Repub | n GE21ATGR |
| 2021 Nove Attorney General |  |  | WRITE IN | VOTES | GE21ATGW |
| 2021 Nove Governor | TERENCE | RICHARD | MCAULIFF | Demo | ii GE21GOVD |
| 2021 Nove Governor | PRINCESS | LATECE T | bLANDING | Liber | GE21GOVO |
| 2021 Nove Governor GLENN2021 Nove Governor | GLENN | ALLEN | YOUNGK | Rep | GE21GOVR |
|  |  |  | WRITE IN | VOTES | GE21GOVW |
| 2021 Nove Lieutenant Governo | r HALA | SOPHIA | AYALA | Demo | ii GE21LTGD |
| 2021 Nove Lieutenant Governo | r WINSOME | EARLE | SEARS | Repub | n GE21LTGR |
| 2021 Nove Lieutenant Governor |  |  | WRITE IN | VOTES | GE21LTGW |
| 2021 Nove Member H | 36 KENNETH | RAY | PLUM | Dem | GE21SLLD |
| 2021 Nove Member H | 38 LAURA | HEDEEN | KORY | Dem | GE21SLLD |
| 2021 Nove Member H | 53 MARCUS | B | SIMON | Dem | ir GE21SLLD |
| 2021 Nove Member H | 43 MARK | DAVID | SICKLES | Demo | ii GE21SLLD |
| 2021 Nove Member H | 44 PAUL | EUGENE | KRIZEK | Demo | ii GE21SLLD |
| 2021 Nove Member H | 35 SYDNEY | MARK LEE | KEAM | Demo | ii GE21SLLD |
| 2021 Nove Member H | 39 VIVIAN | EDNA | WATTS | Dem | ir GE21SLLD |
| 2021 Nove Member H | 31 ElIZABETH | ROSALINA | GUZMAN | Dem | GE21SLLD |
| 2021 Nove Member H | 88 LAKECIA | SHAWNE | EVANS | Dem | GE21SLLD |
| 2021 Nove Member H | 7 DEREK | W | KITTS | Dem | ir GE21SLLD |
| 2021 Nove Member H | 9 Bridgette | N | Craighead | Demo | ii GE21SLLD |
| 2021 Nove Member H | 29 DELMARA | faye | BAYLISS | Demo | ir GE21SLLD |
| 2021 Nove Member H | 12 CHRISTOPF LAIRD |  | HURST | Demo | ir GE21SLLD |
| 2021 Nove Member H | 56 BLAKELY | KATHRYN | LOCKHART | Demo | ic GE21SLLD |
| 2021 Nove Member H | 42 KATHY | KHANH LIN | TRAN | Demo | ir GE21SLLD |
| 2021 Nove Member H | 34 KATHLEEN | JOHNSON | MURPHY | Demo | ir GE21SLLD |
| 2021 Nove Member H | 71 JEFFREY | MICHAEL | BOURNE | Demo | ir GE21SLLD |
| 2021 Nove Member H | 97 RAYMOND | STANTON | SCOTT | Demo | ir GE21SLLD |
| 2021 Nove Member H | 68 DAWN | MARIE | ADAMS | Demo | ii GE21SLLD |
| 2021 Nove Member H | 27 DEBRA | DARLENE | GARDNER | Demo | ii GE21SLLD |
| 2021 Nove Member H | 62 JASMINE | ELICIA | GORE | Dem | ir GE21SLLD |
| 2021 Nove Member H | 66 KATIE | ANN | SPONSLER | Demo | ic GE21SLLD |
| 2021 Nove Member H | 63 LASHRECSE | D | AIRD | Demo | ii GE21SLLD |
| 2021 Nove Member H | 33 PAUL | WILLIAM | SIKER | Demo | ir GE21SLLD |
| 2021 Nove Member H | 10 Wendy | W. | Gooditis | Demo | ir GE21SLLD |
| 2021 Nove Member H | 8 DUSTIN | MICHAEL | WIMBISH | Demo | ir GE21SLLD |

2021 Nove Member H
2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member $\mathrm{H}^{\prime}$ 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H

| TE | HEATHCOC | HYDE | D |
| :---: | :---: | :---: | :---: |
| 18 DOUGLAS | JAMES | WARD | Democratir GE21SLLD |
| 85 ALEX | QUENTIN | ASKEW | Democratir GE21SLLD |
| 98 ELIZABETH | BELT | WEBSTER | Democratir GE21SLLD |
| 40 DANIEL | ISAAC | HELMER | Democratir GE21SLLD |
| 37 DAVID | LAWREN | BULOVA | Democratir GE21SLLD |
| 41 EILEEN |  | FILLER-CO | LD |
| 67 Karrie | K. | Delaney | Democratir GE21SLLD |
| 86 IRENE |  | SHIN | Democratir GE21SLLD |
| 73 Rodney | T. | Willett | Democratir GE21SLLD |
| 72 SCHUYLER | THOMAS | VanVal | Democratic GE21SLLD |
| 81 JEFFREY | ADAM | FELD | Democratir GE21SLLD |
| 21 KELLY | KRISTEN | CONVI | Democrati، GE21SLLD |
| 78 MELANIE | LYNN | CORNELIS | Democratic GE21SLLD |
| 79 NADARIUS | EMMAN | CLARK | Democratir GE21SLLD |
| 92 JEION | ANTONIA | WARD | Democratir GE21SLLD |
| 95 MARCIA | SIMONE | PRICE | Democratir GE21SLLD |
| 76 CLINTON | LEROY | JENKINS | Democratir GE21SLLD |
| 94 SHELLY | ANNE | SIMONDS | Democratir GE21SLLD |
| 89 JERRAULD | CHARLES | JONES | Democratir GE21SLLD |
| 83 NANCY | DAHLMAN | GUY | Democratic GE21SLLD |
| 80 DON | LEONARD | SCOTT | Democratir GE21SLLD |
| 65 CAITLIN | ALEXIS | COAKLEY | Democratic GE21SLLD |
| 69 BETSY | BROOKS | CARR | Democratic GE21SLLD |
| 11 SALAM |  | RASOUL | Democratir GE21SLLD |
| 90 ANGELIA | WILLIAMS | GRAVES | Democratir GE21SLLD |
| 77 CLIFTON | EUGENE | HAYES | Democratic GE21SLLD |
| 46 CHARNIEL | LE RHON | HERRING | Democratir GE21SLLD |
| 91 Martha | M. | Mugler | Democratir GE21SLLD |
| 16 CHANCE | BRIAN | TREVILLI | Democratir GE21SLLD |
| 14 SARAH | MARGAR | 1 DEITZ | Democratir GE21SLLD |
| 64 MICHAEL | HOWARD | DREWRY | Democratir GE21SLLD |
| 96 MARK | COLLINS | DOWNEY | Democratic GE21SLLD |
| 93 MICHAEL | PAUL | MULLIN | Democratir GE21SLLD |
| 32 DAVID | ALAN | REID | Democratic GE21SLLD |
| 87 SUHAS |  | SUBRAM | Democratir GE21SLLD |
| 15 EMILY | GARNETT | SCOTT | Democratir GE21SLLD |
| 51 BRIANA | DANYE | SEWELL | Democratir GE21SLLD |
| 2 CANDI | PATRICE | KING | Democratir GE21SLLD |
| 13 DANICA | ANTHONY | ROEM | Democratic GE21SLLD |
| 52 LUKE | EDWARD | TORIAN | Democratir GE21SLLD |
| 50 MICHELLE-, | E | LOPES-MAI | Democratir GE21SLLD |
| 26 WILLIAM | WESLEY | HELSLEY | Democratir GE21SLLD |
| 28 JOSHUA | GREGORY | COLE | Democratir GE21SLLD |
| 74 LAMONT |  | BAGBY | Democratir GE21SLLD |
| 70 DELORES | LOUISE | MCQUINN | Democratir GE21SLLD |
| 2 SCOTT | JSEPH | LAX | DemocraticGE21SL |

2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member $\mathrm{H}^{\prime}$
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H 2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H

| ERIC | MATTHEW | BUTTERWC | Democratir GE21SLLD |
| :---: | :---: | :---: | :---: |
| 75 Roslyn | C. | Tyler | Democratic GE21SLLD |
| 19 WENDY | SUZANNE | ROWDEN | DemocraticGE21SLLD |
| 24 SAMUEL | RHODES | SOGHOR | Democratic GE |
| 58 SARA | HUTCHINSI | RATCLIFFE | Democratic GE21SLLD |
| 57 sally | lindquist | hudson | Democratic GE21SLLD |
| 49 ALFONSO | HOFFMAN | LOPEZ | Democratic GE21SLLD |
| 61 TRUDY | BELL | BERRY | DemocraticGE |
| 25 JENNIFER | LEIGH | KITCHEN | Demo |
| 99 LINWOOD | THOMAS | BLIZZARD | DemocraticGE21SLLD |
| 22 GREGORY | KENT | EATON | Democratir GE21SLLD |
| 45 Elizabeth | Barclay | Bennett | Democratic GE21SLLD |
| 59 BENJAMIN | ABRAM | MOSES | DemocraticGE21SLLD |
| 23 NATALIE | ALLENE | SHORT | Democratic GE21SLLD |
| 20 RANDALL | KNISLEY | WOLF | Democratic GE21SLLD |
| 55 RACHEL | ANNE | LEVY | Democratic GE21 |
| 48 RICHARD | C | SULLIVAN | Democratic GE21SLLD |
| 84 Kimberly | A. | Melnyk | Democratic GE21SLLD |
| 47 PATRICK | A | HOPE | Democratic GE21SLLD |
| 100 Finale | MENYAN | Norton | Democratic GE21SLLD |
| 76 CRAIG | LEE | WARren | Independe GE21SLLI |
| 32 NICHOLAS | MATT | Allegro | Independe GE21SLLI |
| 70 DAVID | BROWN | VAUGHT | Independe GE21SLLI |
| 59 LOUIS | VINCENT | SCICLI | Independe GE21SLLI |
| 49 TERRENCE | WAYNE | MODGLIN | Independe GE21SLLI |
| 61 JOSEPH | JOHN | PASCHAL | Libertarian GE21SLLL |
| 88 TIMOTHY | MICHAEL | LEWIS | Libertarian GE21SLLL |
| 19 DEAN | DOUGLAS | DAVISON | Libertarian GE2 |
| 91 CHARLES | THOMAS | WEST | Libertarian GE21SL |
| 22 SARAH | RACHEL | JEROSE | Libertarian GE21SL |
| 47 LAURA | ANN | HALL | Republican GE21SLLR |
| 97 SCOTT | ANDREW | WYATT | Republican GE21SLLR |
| 7 MARIE | ELIZABE | MARCH | Republican GE21SLLR |
| 32 Harold | Scott | Pio | Republican GE21SLLR |
| 87 GREGORY | JON | MOULTH | ( Republican GE21SLLR |
| 24 RONNIE | RAY | CAMPBEL | Republican GE21SLLR |
| 1 TERRY | GENE | KILGORE | Republican GE21SLLR |
| 72 CHRISTO | THOMAS | HOLMES | Republican GE21SLLR |
| 9 WREN | MONTGO | WILLIAMS | Republican GE21SLLR |
| 93 JORDAN | MACKEN | GRA | Republican GE21SLLR |
| 96 AMANDA | ETTER | BATTEN | Republican GE21SLLR |
| 74 JAMES | LEE | BROOKS | Republican GE21SLLR |
| 45 JUSTIN | DAVID | MADDOX | Republican GE21SLLR |
| 56 JOHN | JOSEPH | MCGUIRE | Republican GE21SLLR |
| 64 EMILY | MARIE | BREWER | Republican GE21SLLR |
| 16 LESLIE | RAY | ADAMS | Republican GE21SLLR |
| 14 DANIEL | WEBSTER | MARSHA | epublican GE21S |

2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member $H^{\prime}$ 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H 2021 Nove Member H

| M | DAWSON | W | Republican GE21SLLR |
| :---: | :---: | :---: | :---: |
| EDWARD | WILLIAM | MONROE | Republican GE21SLLR |
| 12 JASON | SHERMAN | BALLARD | R |
| 23 WENDELL | SCO | WALKER |  |
| 5 | D. | 0 | Republican GE21SLLR |
| 73 | MARGARE1 KASTELBER Republican GE21SLLR |  |  |
| 13 CHRIST | M | ST | R |
| 25 CHRISTOPF | SCO | RU | Republican GE21SLLR |
| 9 CHARLES | MA | FARISS | Republican GE21SLLR |
| LES | RUSSELL | HA | Republican GE21SLLR |
| 89 Hahns | L. | Co | Republican GE21SLLR |
| S SYLVIA | MA | BR | Republican GE21SLLR |
| 83 TIMOTHY | VITOW | A | R |
| DAVID | GERARD | WILSON | Republican GE21SLLR |
| 80 DEANNA | RA | STANTON | Republican GE21SLLR |
| 71 NANCYE | A | H | R |
| 69 SHEILA | M | FU | R |
| 11 CHARLES | HENRY | NAVE | Republican GE21SLLR |
| 82 ANNE | FERRELL | TA | Republican GE21SLLR |
| 84 GLENN | R | DA | Republican GE21SLLR |
| 85 KA | STARLING | GREENHAL | R |
| 100 ROBERT | SPURGEONBLOXOM |  | Republican GE21SLLR |
| 15 CH | TODD | GILBERT | Republican GE21SLLR |
| 92 BENJ | JAMES | SI | Republican GE21SLLR |
| 76 M | JOSE | DILLENDER Republican GE21SLLR |  |
| 61 THOM | COLE | W | Republican GE21SLLR |
| 2 GINA | RENEE | CIARCIA | Republican GE21SLLR |
| MARIA | EUGENIA | MARTIN | Republican GE21SLLR |
| 50 STEVE | THOM | PLEICKHAR Republican GE21SLLR |  |
| 26 To | O | W | Republican GE21SLLR |
| 19 TERRY | LEE | AUSTIN | Republican GE21SLLR |
| TANYA | MONIQUE | GOULD | Republican GE21SLLR |
| 28 TARA | ANNE | DURANT | Republican GE21SLLR |
| 81 BARRY | DEA | KNIGHT | Republican GE21SLLR |
| 77 GEOFFREY | RAY | BURKE | Republican GE21SLLR |
| 78 JAMES | ASBURY | LEFTWICH | Republican GE21SLLR |
| 58 ROBERT | BERNARD | BELL | Republican GE21SLLR |
| 57 PHILIP | ANDREW | H | Republican GE21SLLR |
| 79 LAWREN | OSEPH | MASON | Republican GE21SLLR |
| 91 AIJALON | CARLTON | CORDOZA | Republican GE21SLLR |
| TIMOTHY | DAVID | COX | Republican GE21SLLR |
| 30 NICHOLAS | J | FREITAS | Republican GE21SLLR |
| 88 PHILLIP | ANDREW | SCOTT | Republican GE21SLLR |
| 3 JAMES | WILLIAM J( | ( MOREF | Republican GE21SLLR |
| 63 kimberly | ann | taylor | Republican GE21SLLR |
| 99 MARGAR | BEVANS | RANSONE | Republican GE21SLLR |
| 68 MARK | LAWRENC | EARLEY | Republican GE21S |

2021 Nove Member H
2021 Nove Member H 2021 Nove Member H

2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H 2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H
2021 Nove Member H

|  | 7 CHRISTOP | TRACY | HEAD | Rep | GE21SLLR |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | JAMES | EASLEY | EDMUNDS | Repu | GE21SLLR |
|  | JOHN | M | WOLFE | Rep | GE21SLLR |
| 40 | HAROLD | YOUNG | PYON | Repu | GE21SLLR |
| 34 | GARY | G | PAN | Rep | GE21SLLR |
| 75 | HOWARD | OTTO | WACHSM | Rep | GE21SLLR |
| 54 | ROBERT | DICKSON | ORROCK | Rep | GE21SLLR |
| 42 | EDWARD | FRANCIS | MCGOVERI | Repu | GE21SLLR |
| 43 | BRENTON | HOWARD | HAMMON | Repu | GE21SLLR |
| 65 | ROBERT | LEE | WARE | Rep | GE21SLLR |
| 27 | 7 ROXANN | LAINE | ROBINSO | Rep | GE21SLLR |
| 33 | 3 DAVID | ALFRED | LAROCK | Rep | GE21SLLR |
| 10 | NICHOLAS | SCHAR | CLEMENTE | Repu | GE21SLLR |
| 55 | HYLAND | FRANKLIN | FOWLER | Rep | GE21SLLR |
|  | JOSEPH | PATRICK | MCNAMAR | Repu | GE21SLLR |
| 18 | MICHAEL | JAMES | WEBERT | Rep | GE21SLLR |
|  | William | Creed | Wampler | Rep | GE21SLLR |
| 98 | MYRON | KEITH | HODGES | Rep | GE21SLLR |
| 66 | 6 MICHAEL | ALLEN | CHERRY | Rep | GE21SLLR |
| 37 | 7 KENNETH | WADE | METEIVER | Rep | E21SLLR |
| 86 | JULIE | ANNA | PERRY | Rep | GE21SLLR |
| 20 | GIANFRANC |  | AVOLI | Repub | GE21SLLR |
| 31 | BENJAMIN | WILLIAM | BALDWIN | Rep | GE21SLLR |
| 53 | Sarah |  | White | Rep | GE21SLLR |
| 22 | 2 KATHY | JAYNE | BYRON | Rep | GE21SLLR |
| 36 | 6 MATTHEW | JOHN | LANG | Rep | GE21SLLR |
| 35 | KEVIN | EDWARD | MCGRATH | Rep | GE21SLLR |
| 39 | MAUREEN | TERESE | BRODY | Rep | GE21SLLR |
|  | 6 JEFFREY | LYNN | CAMPBELL | Rep | GE21SLLR |
| 67 | ROBERT | LEWIS | FRIZZELLE | Rep | GE21SLLR |
| 44 | RICHARD | TERRENCE | HAYDEN | Repub | GE21SLLR |
| 62 | Carrie | Emerson | Coyner | Repu | GE21SLLR |
| 38 | Thomas | Lee | Pafford | Repu | GE21SLLR |
| 49 | TIMOTHY | EDWARD | KILCULLEN | Repub | GE21SLLR |
| 30 |  |  | WRITE IN | VOTES | GE21SLLW |
| 6 | 6 |  | WRITE IN V | VOTES | GE21SLLW |
| 66 |  |  | WRITE IN | VOTES | GE21SLLW |
| 8 | 8 |  | WRITE IN | VOTES | GE21SLLW |
| 18 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 99 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 4 | 4 |  | WRITE IN V | VOTES | GE21SLLW |
| 68 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 54 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 27 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 98 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 81 |  |  | WRITE IN V | VOTES | GE21SLLW |
| 76 |  |  | WRITE IN V | VOTES | GE21SLLW |


| 2021 Nove Member H | 21 | WRITE IN VOTES | GE21SLLW |
| :---: | :---: | :---: | :---: |
| 2021 Nove Member H | 78 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 79 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 65 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 55 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 95 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 94 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 84 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 69 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 71 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 58 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 80 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 59 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 25 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 70 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 11 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 92 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 57 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 63 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 89 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 90 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 100 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 82 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 85 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 10 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 33 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 83 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 77 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 26 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 46 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 75 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 96 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 93 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 47 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 17 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 64 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 48 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 3 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 49 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 16 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 14 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 45 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 72 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 74 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 73 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 22 | WRITE IN VOTES | GE21SLLW |
| 2021 Nove Member H | 97 | WRITE IN VOTES | GE21SLLW |


| 2021 Nove Member H | 5 |
| :---: | :---: |
| 2021 Nove Member H | 56 |
| 2021 Nove Member H | 31 |
| 2021 Nove Member H | 12 |
| 2021 Nove Member H, | 88 |
| 2021 Nove Member H | 29 |
| 2021 Nove Member H | 20 |
| 2021 Nove Member H | 9 |
| 2021 Nove Member H |  |
| 2021 Nove Member H | 87 |
| 2021 Nove Member H | 32 |
| 2021 Nove Member H | 60 |
| 2021 Nove Member H | 38 |
| 2021 Nove Member H | 91 |
| 2021 Nove Member H | 67 |
| 2021 Nove Member H, | 39 |
| 2021 Nove Member H | 28 |
| 2021 Nove Member H | 37 |
| 2021 Nove Member H | 36 |
| 2021 Nove Member H | 7 |
| 2021 Nove Member H | 86 |
| 2021 Nove Member H | 40 |
| 2021 Nove Member H | 61 |
| 2021 Nove Member H | 44 |
| 2021 Nove Member H | 19 |
| 2021 Nove Member H | 53 |
| 2021 Nove Member H | 34 |
| 2021 Nove Member H | 42 |
| 2021 Nove Member H | 41 |
| 2021 Nove Member H | 23 |
| 2021 Nove Member H | 13 |
| 2021 Nove Member H | 52 |
| 2021 Nove Member H | 50 |
| 2021 Nove Member H | 51 |
| 2021 Nove Member H | 2 |
| 2021 Nove Member H | 24 |
| 2021 Nove Member H | 43 |
| 2021 Nove Member H | 15 |
| 2021 Nove Member H | 35 |
| 2021 Nove Member H | 62 |


| WRITE IN VOTES | GE21SLLW |
| :--- | :--- |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |
| WRITE IN VOTES | GE21SLLW |

LocalityCoc LocalityNar PrecinctNa GE16PRSD GE16PRSG GE16PRSI GE16PRSL GE16PRSR GE16PRSW GE16SLLD

| COMACI $101-\mathrm{CHIN}$ | 502.6978 | 7.965517 | 11.66667 | 29.84348 | 1284.531 | 5.3 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ACCOMACI 201 - ATLA | 198.1354 | 1.137931 | 8.166667 | 14.92174 | 597.9339 | 1.06 | 0 |
| 1 ACCOMACI202-GREE | 341.9251 | 7.965517 | 4.666667 | 19.51304 | 753.6345 | 3.18 | 0 |
| 1 ACCOMACI301-NEW | 807.2602 | 3.413793 | 4.666667 | 24.10435 | 640.1028 | 5.3 | 0 |
| 1 ACCOMACI 401 - BLOX | 159.6405 | 1.137931 | 3.5 | 10.33043 | 369.7891 | 0 | 0 |
| 1 ACCOMACI 402 - PARK | 246.8201 | 5.689655 | 8.166667 | 18.36522 | 528.7336 | 1.06 |  |
| 1 ACCOMACI 403 -SAXIS | 47.55249 | 1.137931 | 3.5 | 1.147826 | 165.432 | 0 |  |
| 1 ACCOMACI501-MAPF | 449.4843 | 7.965517 | 1.166667 | 11.47826 | 262.7449 | 5.3 | 0 |
| 1 ACCOMACI502-RUE | 435.8979 | 2.275862 | 4.666667 | 10.33043 | 128.6693 | 2.12 | 0 |
| 1 ACCOMACI601-ACCC | 550.2503 | 9.103448 | 15.16667 | 18.36522 | 688.7593 | 4.24 | 0 |
| 1 ACCOMACI602-TANE | 30.56946 | 1.137931 | 1.166667 | 1.147826 | 238.9573 | 2.12 | 0 |
| 1 ACCOMACI 701 - NANL | 911.4228 | 7.965517 | 22.16667 | 40.17391 | 1055.305 | 14.84 |  |
| 1 ACCOMACI801-BOBT | 228.7049 | 4.551724 | 3.5 | 13.77391 | 398.983 | 4.24 |  |
| 1 ACCOMACI 802 - MELF | 493.6402 | 0 | 5.833333 | 16.06957 | 423.8519 | 3.18 |  |
| 1 ACCOMACI803-WACI | 156.2439 | 0 | 2.333333 | 6.886957 | 377.3579 | 1.06 |  |
| 1 ACCOMACI901-PAIN ${ }^{-1}$ | 1179.755 | 4.551724 | 11.66667 | 27.54783 | 668.2154 | 0 |  |
| 3 ALBEMARL 101 - WOO | 1390.25 | 15.40342 | 25.99466 | 92.7014 | 752.5641 | 23.91928 |  |
| 3 ALBEMARL 103 - BRAN | 636.809 | 11.00244 | 5.651014 | 26.00161 | 230.1961 | 5.695067 |  |
| 3 ALBEMARL 104 - AGNC | 1289.946 | 25.30562 | 37.29669 | 53.13373 | 449.325 | 13.66816 |  |
| 3 ALBEMARL 105 - DUNL | 1589.69 | 18.70416 | 68.94237 | 68.96079 | 655.1734 | 21.64126 |  |
| 3 ALBEMARL 106 - NORT | 1354.094 | 9.9022 | 67.81217 | 114.181 | 997.1474 | 18.22422 |  |
| 3 ALBEMARL 201 -JACK | 1046.186 | 14.30318 | 36.16649 | 42.95918 | 587.664 | 19.36323 |  |
| 3 ALBEMARL 202 - UNIV | 2158.853 | 24.20538 | 54.24973 | 168.4452 | 450.4317 | 21.64126 |  |
| 3 ALBEMARL 203 -GEOR | 1560.532 | 23.10513 | 45.20811 | 74.61332 | 440.4713 | 26.19731 |  |
| 3 ALBEMARL 204 - BELFI | 502.6826 | 2.200489 | 18.08324 | 41.82868 | 320.9464 | 9.112108 |  |
| 3 ALBEMARL 301 - IVY | 1973.408 | 20.90465 | 49.72892 | 88.17938 | 905.2903 | 13.66816 |  |
| 3 ALBEMARL 302 -RED + | 1286.448 | 19.8044 | 19.21345 | 63.30827 | 816.7534 | 21.64126 |  |
| 3 ALBEMARL 304 -EAST | 463.0278 | 3.300733 | 20.34365 | 28.26262 | 271.1444 | 4.556054 |  |
| 3 ALBEMARL 305 - COUN | 1116.165 | 19.8044 | 41.8175 | 64.43878 | 614.2251 | 21.64126 | 0 |
| 3 ALBEMARL 306 - PORT | 685.7943 | 23.10513 | 6.781217 | 36.17615 | 429.4042 | 6.834081 |  |
| 3 ALBEMARL 307 - YELLC | 304.4087 | 5.501222 | 14.69264 | 19.21858 | 223.5558 | 9.112108 | 0 |
| 3 ALBEMARL 401 - SCOT | 519.011 | 13.20293 | 13.56243 | 46.3507 | 652.96 | 6.834081 |  |
| 3 ALBEMARL 402 - MON | 519.011 | 12.10269 | 9.041622 | 28.26262 | 605.3714 | 11.39013 |  |
| 3 ALBEMARL 405 - CALE | 2563.565 | 36.30807 | 87.02561 | 160.5317 | 890.9031 | 37.58744 |  |
| 3 ALBEMARL 406 - STON | 1060.182 | 15.40342 | 45.20811 | 82.52685 | 1103.392 | 21.64126 |  |
| 3 ALBEMARL 501 - KESW | 627.4785 | 7.701711 | 10.17182 | 23.7406 | 439.3646 | 13.66816 |  |
| 3 ALBEMARL $502-$ STON | 622.8132 | 6.601467 | 21.47385 | 42.95918 | 586.5573 | 11.39013 |  |
| 3 ALBEMARL 503 - HOLL | 1132.494 | 14.30318 | 55.37994 | 78.00483 | 723.7896 | 23.91928 | 0 |
| 3 ALBEMARL 504 - FREE | 1897.598 | 22.00489 | 55.37994 | 128.8776 | 910.8239 | 30.75336 | 0 |
| 3 ALBEMARL 506 - BAKE | 1302.776 | 23.10513 | 70.07257 | 100.6149 | 1038.096 | 19.36323 | 0 |
| 3 ALBEMARL 601 - CROZ | 1838.115 | 24.20538 | 40.6873 | 137.9216 | 1196.356 | 28.47534 | 0 |
| 3 ALBEMARL 602 - FREE | 564.4974 | 6.601467 | 12.43223 | 28.26262 | 491.3801 | 10.25112 | 0 |
| 3 ALBEMARL 603 -EARL' | 1237.462 | 16.50367 | 48.59872 | 92.7014 | 1156.514 | 26.19731 | 0 |
| 3 ALBEMARL 604 - BROV | 2101.703 | 15.40342 | 77.98399 | 171.8367 | 1319.201 | 29.61435 | 0 |
| 5 ALLEGHAN 101 - ARRI7 | 152.3486 | 2.258065 | 7.208955 | 12.77922 | 559.0828 | 1 | 0 |
| 5 ALLEGHAN 103 - DAM | 56.30275 | 1.129032 | 4.119403 | 2.12987 | 210.3267 | 0 | 0 |


| 5 ALLEGHAN 201 - HUM | 113.7095 | 0 | 8.238806 | 3.194805 | 311.1977 | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 202 - DOLL | 142.4128 | 0 | 3.089552 | 19.16883 | 386.3144 | 2 |  |
| 5 ALLEGHAN 301 - CALL/ | 81.69419 | 1.129032 | 0 | 7.454545 | 348.7561 | 0 |  |
| 5 ALLEGHAN 302 - GRIFF | 194.2997 | 1.129032 | 2.059701 | 21.2987 | 482.893 | 1 |  |
| 5 ALLEGHAN 401 - LOW | 151.2446 | 2.258065 | 6.179104 | 11.71429 | 359.487 | 1 |  |
| 5 ALLEGHAN 402 -JACK | 155.6606 | 3.387097 | 12.35821 | 14.90909 | 494.697 | 1 |  |
| 5 ALLEGHAN 501-IRON | 114.8135 | 1.129032 | 3.089552 | 9.584416 | 166.3298 | 1 |  |
| 5 ALLEGHAN 502 - PETEI | 207.5474 | 6.774194 | 7.208955 | 17.03896 | 591.2756 | 0 |  |
| 5 ALLEGHAN 601 - DISTF | 438.2783 | 6.774194 | 6.179104 | 28.75325 | 565.5214 | 1 |  |
| 5 ALLEGHAN 701 - DISTF | 357.6881 | 9.032258 | 9.268657 | 15.97403 | 398.1185 | 5 |  |
| 7 AMELIA CC 101 - NUM | 387.3308 | 3 | 9.647059 | 30.28696 | 830.8896 | 2.3 |  |
| 7 AMELIA CC 201 - NUM | 463.8692 | 2 | 12.05882 | 23.55652 | 936.435 | 8.05 |  |
| 7 AMELIA CC 301 - NUM | 350.2213 | 1 | 1.205882 | 24.67826 | 1001.559 | 4.6 |  |
| 7 AMELIA CC 401 - NUM | 350.2213 | 1 | 10.85294 | 25.8 | 942.0491 | 6.9 |  |
| 7 AMELIA CC 501 - NUM | 576.3575 | 4 | 7.235294 | 24.67826 | 997.0675 | 1.15 |  |
| 9 AMHERST (101-WRIG | 611.7878 | 1.12069 | 6.489796 | 13.87542 | 466.3833 | 2.289855 |  |
| 9 AMHERST (102-NEW | 474.7206 | 5.603448 | 19.46939 | 23.48148 | 856.6443 | 6.869565 |  |
| 9 AMHERST (103-COOL | 134.8385 | 2.241379 | 10.81633 | 14.94276 | 527.4956 | 2.289855 |  |
| 9 AMHERST ( 201 - COUF | 803.459 | 15.68966 | 29.20408 | 59.77104 | 1192.226 | 11.44928 |  |
| 9 AMHERST ( 202 - TEMF | 222.8735 | 4.482759 | 7.571429 | 13.87542 | 610.0509 | 6.869565 |  |
| 9 AMHERST ( 301 - MON | 241.8178 | 2.241379 | 10.81633 | 22.41414 | 636.8545 | 3.434783 |  |
| 9 AMHERST (302-ELON | 528.2102 | 8.965517 | 12.97959 | 38.42424 | 1554.611 | 13.73913 |  |
| 9 AMHERST ( 303 -PLEA! | 122.5804 | 2.241379 | 2.163265 | 11.74074 | 345.2309 | 3.434783 |  |
| 9 AMHERST ( 401 - AMEL | 792.3153 | 15.68966 | 28.12245 | 56.56902 | 1594.281 | 13.73913 |  |
| 9 AMHERST ( 402 -LONC | 216.1873 | 0 | 9.734694 | 8.538721 | 413.8482 | 4.57971 |  |
| 9 AMHERST ( 501 - MADI | 908.2096 | 6.724138 | 21.63265 | 53.367 | 1521.375 | 10.30435 |  |
| 11 APPOMATר101-VERA | 111.5546 | 3.444444 | 3.409091 | 11.14754 | 480.3418 | 2.153846 |  |
| 11 APPOMATר102-PAMF | 302.4846 | 5.740741 | 7.954545 | 14.4918 | 751.4681 | 4.307692 |  |
| 11 APPOMATา 201 - CHAP | 157.6782 | 5.740741 | 3.409091 | 5.57377 | 224.1595 | 1.076923 |  |
| 11 APPOMAT1202-SPOU | 223.1092 | 1.148148 | 2.272727 | 20.06557 | 1028.999 | 6.461538 |  |
| 11 APPOMAT7301-US 41 | 175.913 | 3.444444 | 6.818182 | 8.918033 | 581.7473 | 7.538462 |  |
| 11 APPOMAT7302-STON | 229.5451 | 1.148148 | 9.090909 | 15.60656 | 667.1414 | 8.615385 |  |
| 11 APPOMAT7401-COUF | 352.8987 | 8.037037 | 10.22727 | 39.01639 | 975.6276 | 15.07692 |  |
| 11 APPOMAT7501-OAKV | 320.7195 | 0 | 3.409091 | 16.72131 | 734.3892 | 7.538462 |  |
| 11 APPOMAT7502-AGEE | 149.097 | 2.296296 | 3.409091 | 4.459016 | 271.1263 | 3.230769 |  |
| 13 ARLINGTOI 001 - ARLIN | 1964.878 | 20.83307 | 24.91835 | 32.62018 | 315.668 | 22.31687 |  |
| 13 ARLINGTOI 002 - ASHT | 1904.281 | 15.6248 | 49.8367 | 62.63075 | 354.3212 | 34.13169 |  |
| 13 ARLINGTOI 003 - AURC | 1105.907 | 9.114467 | 52.32853 | 61.32595 | 320.8217 | 32.81893 |  |
| 13 ARLINGTOI 004 - BALLS | 1787.63 | 18.22893 | 51.08261 | 127.8711 | 414.8779 | 44.63374 |  |
| 13 ARLINGTOI 005 - BARC | 1631.591 | 9.114467 | 29.90202 | 71.76441 | 360.7634 | 30.19342 |  |
| 13 ARLINGTOI 006 - CRYS | 1422.53 | 10.41653 | 38.62344 | 45.66826 | 429.0507 | 28.88066 |  |
| 13 ARLINGTOI 007 - CHER | 1772.481 | 9.114467 | 63.54179 | 71.76441 | 383.9553 | 40.69547 |  |
| 13 ARLINGTOI 008 - HUM | 2290.591 | 13.02067 | 48.59078 | 108.299 | 530.8376 | 49.88477 |  |
| 13 ARLINGTOI 009 - COLU | 2196.664 | 26.04134 | 51.08261 | 80.89806 | 443.2236 | 30.19342 |  |
| 13 ARLINGTOI 010 - WILSI | 2407.241 | 31.2496 | 62.29587 | 105.6894 | 484.4537 | 51.19753 |  |
| 13 ARLINGTOI 011 - EAST | 1190.744 | 6.510334 | 27.41018 | 41.75384 | 334.9946 | 42.00823 |  |
| 13 ARLINGTOI 012 - FAIRL | 1793.69 | 10.41653 | 79.73871 | 82.20286 | 429.0507 | 61.69959 |  |


| LINGTOr 013 - GLEN | 1372.537 | 11.7186 | 17.44284 | 37.83941 | 329.8408 | 13.12757 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 ARLINGTOI 014 - CLAR | 1490.702 | 10.41653 | 33.63977 | 104.3846 | 288.6107 | 28.88066 |  |
| 13 ARLINGTOIO15-LYON | 2058.805 | 13.02067 | 79.73871 | 88.7269 | 439.3583 | 53.82305 |  |
| 13 ARLINGTOIO16-LYON | 1872.467 | 11.7186 | 59.80403 | 92.64132 | 400.705 | 40.69547 |  |
| 13 ARLINGTOI017-OVER | 1895.191 | 19.531 | 62.29587 | 79.59325 | 434.2045 | 30.19342 |  |
| 13 ARLINGTOIO18-PARK | 2576.915 | 19.531 | 83.47646 | 159.1865 | 516.6647 | 57.76132 |  |
| 13 ARLINGTOI 019 -ROSS | 2220.903 | 23.4372 | 43.60711 | 82.20286 | 411.0126 | 53.82305 |  |
| 13 ARLINGTOIO20-THRIF | 1352.842 | 19.531 | 46.09894 | 66.54518 | 444.512 | 49.88477 |  |
| 13 ARLINGTOIO21-VIRGI | 2602.669 | 33.85374 | 127.0836 | 123.9567 | 626.1822 | 57.76132 |  |
| 13 ARLINGTOIO22-ABINI | 2016.386 | 13.02067 | 83.47646 | 84.81248 | 353.0327 | 56.44856 |  |
| 13 ARLINGTOIO23-WEST | 1877.012 | 15.6248 | 44.85303 | 61.32595 | 399.4166 | 45.9465 |  |
| 13 ARLINGTOIO24-WOO | 2260.292 | 13.02067 | 72.26321 | 103.0798 | 456.108 | 32.81893 |  |
| 13 ARLINGTOI 025 -ARLIN | 1507.366 | 11.7186 | 26.16427 | 52.19229 | 377.5131 | 21.00412 |  |
| 13 ARLINGTOIO26-FILLN | 2682.96 | 31.2496 | 53.57445 | 116.1279 | 479.2999 | 42.00823 |  |
| 13 ARLINGTOIO27-JEFFE | 1740.667 | 16.92687 | 57.3122 | 71.76441 | 454.8196 | 43.32099 |  |
| 13 ARLINGTOIO28-WAKI | 2466.324 | 26.04134 | 38.62344 | 82.20286 | 416.1663 | 34.13169 |  |
| 13 ARLINGTOIO29-DOM | 1719.458 | 11.7186 | 66.03362 | 62.63075 | 362.0518 | 27.5679 |  |
| 13 ARLINGTOI030-GLEB | 2080.014 | 15.6248 | 51.08261 | 65.24037 | 277.0147 | 24.94239 |  |
| 13 ARLINGTOIO31-LEXIN | 1802.78 | 16.92687 | 41.11527 | 54.80191 | 412.301 | 47.25926 |  |
| 13 ARLINGTOIO32-OAKR | 792.3141 | 6.510334 | 39.86936 | 33.92499 | 260.265 | 27.5679 |  |
| 13 ARLINGTOIO33-ROCK | 1537.665 | 10.41653 | 44.85303 | 60.02114 | 493.4728 | 52.51029 |  |
| 13 ARLINGTOI 034 - YORK | 1533.12 | 15.6248 | 53.57445 | 60.02114 | 404.5704 | 43.32099 |  |
| 13 ARLINGTOI 035 - MADI | 1343.753 | 18.22893 | 34.88569 | 52.19229 | 628.759 | 45.9465 |  |
| 13 ARLINGTOIO36-MARS | 1860.348 | 14.32273 | 33.63977 | 78.28844 | 530.8376 | 65.63786 |  |
| 13 ARLINGTOI037-NOTT | 1519.486 | 16.92687 | 41.11527 | 57.41152 | 466.4155 | 42.00823 |  |
| 13 ARLINGTOI 038 -ARLIN | 1852.773 | 26.04134 | 43.60711 | 53.4971 | 262.8419 | 14.44033 |  |
| 13 ARLINGTOIO39-ASHL | 1043.794 | 13.02067 | 22.42651 | 26.09615 | 289.8992 | 28.88066 |  |
| 13 ARLINGTOI 040 - VIRGI | 2213.329 | 14.32273 | 93.4438 | 139.6144 | 514.0878 | 53.82305 |  |
| 13 ARLINGTOI 041 - NAVY | 1766.421 | 16.92687 | 51.08261 | 106.9942 | 333.7061 | 38.06996 |  |
| 13 ARLINGTOIO42-SHIRL | 1672.495 | 22.13514 | 48.59078 | 54.80191 | 347.879 | 38.06996 |  |
| 13 ARLINGTOI 043 -CAMF | 1913.37 | 14.32273 | 19.93468 | 20.87692 | 220.3234 | 6.563786 |  |
| 13 ARLINGTOI044-DAW: | 1546.755 | 15.6248 | 43.60711 | 61.32595 | 228.054 | 27.5679 |  |
| 13 ARLINGTOIO45-BUCK | 1845.198 | 23.4372 | 39.86936 | 73.06921 | 323.3986 | 11.81481 |  |
| 13 ARLINGTOI046-CENT | 2328.464 | 15.6248 | 72.26321 | 130.4807 | 497.3381 | 48.57202 |  |
| 13 ARLINGTOI 047 -FOUR | 1669.465 | 13.02067 | 46.09894 | 43.05864 | 248.669 | 17.06584 |  |
| 13 ARLINGTOIO48-AUSA | 1396.776 | 13.02067 | 51.08261 | 69.15479 | 381.3784 | 28.88066 |  |
| 13 ARLINGTOIO49-MON | 1280.125 | 6.510334 | 23.67243 | 78.28844 | 224.1887 | 30.19342 |  |
| 13 ARLINGTOI050-CRYS | 1631.591 | 7.812401 | 53.57445 | 75.67883 | 416.1663 | 31.50617 |  |
| 13 ARLINGTOI051-TAYL( | 586.2822 | 2.604134 | 6.229587 | 20.87692 | 122.4019 | 5.251029 |  |
| 13 ARLINGTOI052-GUNS | 1617.957 | 18.22893 | 63.54179 | 49.58268 | 310.5142 | 26.25514 |  |
| 15 AUGUSTA (101-JOLIV | 296.2923 | 3.157895 | 15.01709 | 23.00997 | 633.6985 | 5.459459 |  |
| 15 AUGUSTA (102-STUA | 345.3031 | 4.210526 | 19.30769 | 38.34995 | 820.3942 | 10.91892 |  |
| 15 AUGUSTA (103-VERO | 451.1218 | 11.57895 | 33.25214 | 54.78564 | 1394.35 | 8.735135 |  |
| 15 AUGUSTA ( 201 - CRIM | 388.7444 | 13.68421 | 31.10684 | 61.35992 | 1613.051 | 7.643243 |  |
| 15 AUGUSTA ( 202 - NEW | 242.826 | 7.368421 | 10.7265 | 43.82851 | 901.4735 | 7.643243 |  |
| 15 AUGUSTA ( 203 - WEYE | 463.3745 | 13.68421 | 30.03419 | 71.22134 | 1364.479 | 13.1027 |  |
| 15 AUGUSTA (301-FORT | 693.9478 | 14.73684 | 41.83333 | 101.9013 | 990.709 | 0.74595 |  |


| RT | 125.8685 | 3.157895 | 12.87179 | 26.29711 | 571.8222 | 2.183784 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA (303-MOU | 133.6657 | 2.105263 | 7.508547 | 30.67996 | 828.9288 | 2.183784 | 0 |
| 15 AUGUSTA (304-CHUR | 168.196 | 5.263158 | 8.581197 | 20.81854 | 690.2406 | 0 |  |
| 15 AUGUSTA (401-BUFF, | 216.0929 | 5.263158 | 8.581197 | 19.72283 | 813.9932 | 3.275676 |  |
| 15 AUGUSTA ( 402 - CHUR | 170.4238 | 9.473684 | 8.581197 | 31.77567 | 771.3199 | 5.459459 |  |
| 15 AUGUSTA (403-CRAIC | 125.8685 | 7.368421 | 6.435897 | 12.05284 | 560.0871 | 8.735135 |  |
| 15 AUGUSTA (404-DEER | 35.64419 | 4.210526 | 1.07265 | 5.478564 | 285.9111 | 0 |  |
| 15 AUGUSTA ( 405 -CEDA | 368.6946 | 7.368421 | 15.01709 | 48.21137 | 918.5428 | 9.827027 |  |
| 15 AUGUSTA (501-GREE | 294.0646 | 3.157895 | 10.7265 | 41.63709 | 1291.934 | 9.827027 |  |
| 15 AUGUSTA (502-MIDC | 184.9042 | 6.315789 | 12.87179 | 25.2014 | 608.0945 | 4.367568 |  |
| 15 AUGUSTA (503-SPOT | 180.4487 | 1.052632 | 3.217949 | 17.53141 | 682.7728 | 2.183784 |  |
| 15 AUGUSTA ( 504 - WHIT | 379.8334 | 7.368421 | 18.23504 | 53.68993 | 1411.419 | 9.827027 |  |
| 15 AUGUSTA (601-SHER. | 258.4204 | 6.315789 | 18.23504 | 33.9671 | 913.2086 | 9.827027 |  |
| 15 AUGUSTA (602-RIDGI | 587.0153 | 10.52632 | 36.47009 | 72.31705 | 1990.709 | 12.01081 |  |
| 15 AUGUSTA (603-LYND | 473.3994 | 12.63158 | 40.76068 | 60.26421 | 1242.86 | 12.01081 |  |
| 15 AUGUSTA (801-DOOI | 285.1535 | 9.473684 | 20.38034 | 47.11565 | 1055.097 | 2.183784 |  |
| 15 AUGUSTA ( 802 - FISHE | 700.6311 | 11.57895 | 50.41453 | 84.36989 | 1610.917 | 14.19459 |  |
| 15 AUGUSTA (803-WILSI | 607.0651 | 18.94737 | 40.76068 | 73.41276 | 1196.986 | 19.65405 |  |
| 17 BATH COUI 101 - WARI | 122.1989 | 0 | 2.095238 | 7.84 | 262.501 | 3 |  |
| 17 BATH COUI 102 - MOU | 12.5625 | 2.5 | 2.095238 | 0 | 64.81507 | 0 |  |
| 17 BATH COUI 201 -HOT | 145.0398 | 2.5 | 4.190476 | 12.32 | 194.4452 | 3 |  |
| 17 BATH COUI 301 -FAIR\ | 44.53977 | 2.5 | 5.238095 | 11.2 | 289.5073 | 0 |  |
| 17 BATH COUI302-BURN | 21.69886 | 0 | 0 | 1.12 | 87.50035 | 0 |  |
| 17 BATH COUI401-MILLE | 133.6193 | 2.5 | 4.190476 | 7.84 | 338.1186 | 1.5 |  |
| 17 BATH COUI501-HEAL | 123.3409 | 5 | 4.190476 | 15.68 | 311.1124 | 1.5 |  |
| 19 BEDFORD ( 101 -GOOI | 352.5031 | 3.214286 | 18.72247 | 45.612 | 1476.573 | 12.45918 |  |
| 19 BEDFORD (102-HARC | 185.3484 | 1.071429 | 9.911894 | 15.204 | 597.7636 | 6.795918 |  |
| 19 BEDFORD (103-CHAN | 299.0591 | 5.357143 | 8.810573 | 48.87 | 1018.252 | 5.663265 |  |
| 19 BEDFORD ( 104 - STEW | 252.4377 | 5.357143 | 7.709251 | 28.236 | 933.9381 | 3.397959 |  |
| 19 BEDFORD ( 201 - BEDF | 176.2516 | 4.285714 | 9.911894 | 20.634 | 490.7499 | 5.663265 |  |
| 19 BEDFORD ( 202 - STAU | 203.5421 | 2.142857 | 7.709251 | 19.548 | 692.8869 | 3.397959 |  |
| 19 BEDFORD ( 203 - MON | 461.6654 | 13.92857 | 14.31718 | 41.268 | 1408.474 | 11.32653 |  |
| 19 BEDFORD ( 204 - Quak | 153.5094 | 1.071429 | 9.911894 | 9.774 | 444.2692 | 2.265306 |  |
| 19 BEDFORD ( $205-$ SAUN | 346.8176 | 7.5 | 11.01322 | 30.408 | 986.9045 | 6.795918 |  |
| 19 BEDFORD ( 301 - NEW | 503.9683 | 2.184615 | 52.26844 | 77.48498 | 2225.343 | 7.252747 |  |
| 19 BEDFORD ( 302 - BEDF | 293.3736 | 5.357143 | 13.21586 | 24.978 | 965.2855 | 4.530612 |  |
| 19 BEDFORD ( 303 - BETH | 183.0742 | 1.071429 | 7.709251 | 18.462 | 620.4635 | 3.397959 |  |
| 19 BEDFORD ( 304 -FORE | 212.3784 | 1.092308 | 17.79351 | 20.51073 | 625.9115 | 8.461538 |  |
| 19 BEDFORD ( 305 -HUDL | 146.6868 | 2.142857 | 9.911894 | 15.204 | 528.583 | 3.397959 |  |
| 19 BEDFORD ( 401 -FORE | 475.2685 | 3.276923 | 43.37168 | 53.55579 | 1391.516 | 16.92308 |  |
| 19 BEDFORD ( 402 -THON | 324.8816 | 5.461538 | 35.58702 | 39.88197 | 895.5516 | 4.835165 |  |
| 19 BEDFORD ( 403 -KNIGI | 603.8436 | 12.01538 | 63.38938 | 70.64807 | 1767.28 | 9.67033 |  |
| 19 BEDFORD ( 404 -FORE | 367.3573 | 9.830769 | 41.14749 | 33.04506 | 1310.299 | 1.208791 |  |
| 19 BEDFORD ( 502 -BIG IS | 114.7992 | 1.092308 | 5.560472 | 13.67382 | 363.8517 | 6.043956 |  |
| 19 BEDFORD ( $503-$ SEDA | 142.351 | 4.369231 | 3.336283 | 21.65021 | 492.7158 | 7.252747 |  |
| 19 BEDFORD (504-SUCK | 216.9704 | 2.184615 | 11.12094 | 21.65021 | 713.6257 | 4.835165 |  |
| 19 BEDFORD ( $505-\mathrm{BOON}$ | 530.3721 | 5.461538 | 15.56932 | 76.34549 | 1236.663 | 22.96703 |  |


| 06－BOON | 579.7357 | 14.2 | 68.94985 | 79.76395 | 1913.47 | 13.2967 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD（601－MON | 272.074 | 9.830769 | 18.9056 | 22.7897 | 963.7738 | 7.252747 | 0 |
| 19 BEDFORD（602－SHAD | 274.0428 | 9.642857 | 12.11454 | 32.58 | 1072.299 | 5.663265 | 0 |
| 19 BEDFORD（ $603-$ THAX | 73.91195 | 3.214286 | 5.506608 | 5.43 | 281.0462 | 1.132653 |  |
| 19 BEDFORD（ 604 －BEDF | 567.4164 | 10.71429 | 23.12775 | 55.386 | 1287.408 | 9.061224 |  |
| 19 BEDFORD（701－GOOI | 305.8818 | 10.71429 | 34.14097 | 30.408 | 1458.197 | 7.928571 | 0 |
| 19 BEDFORD（ 702 －LIBER | 255.8491 | 3.214286 | 11.01322 | 14.118 | 709.1011 | 4.530612 |  |
| 19 BEDFORD（ 703 －THAX | 164.8805 | 5.357143 | 5.506608 | 26.064 | 588.0351 | 3.397959 |  |
| 19 BEDFORD（ 704 －BEDF | 727.7484 | 9.642857 | 29.73568 | 60.816 | 1198.77 | 10.19388 | 0 |
| 21 BLAND COI 101 －BAST | 53.03415 | 4.533333 | 1.105263 | 8.714286 | 335.6087 | 2 | 0 |
| 21 BLAND COI 102 －CERE： | 57.45366 | 2.266667 | 0 | 8.714286 | 334.5433 | 1 | 0 |
| 21 BLAND COI 201 －DAVI！ | 23.20244 | 2.266667 | 0 | 1.089286 | 106.5424 | 0 |  |
| 21 BLAND COI 202 －SEDD | 111.5927 | 1.133333 | 4.421053 | 18.51786 | 587.0489 | 8 |  |
| 21 BLAND COI 301 －HOLL | 51.92927 | 1.133333 | 3.315789 | 6.535714 | 339.8704 | 1 |  |
| 21 BLAND COI 302 －MECr | 26.51707 | 0 | 2.210526 | 4.357143 | 174.7296 | 0 |  |
| 21 BLAND COI 401 －ROCK | 129.2707 | 5.666667 | 9.947368 | 13.07143 | 694.6567 | 2 |  |
| 23 BOTETOUR 101 －DALE＇ | 560.0321 | 9.989011 | 19.53416 | 56.09481 | 1280.897 | 14.31646 | 0 |
| 23 BOTETOUR 102－GREE | 446.6514 | 13.31868 | 14.93789 | 61.70429 | 1541.64 | 13.21519 |  |
| 23 BOTETOUR 201 －BLUE | 475.2829 | 7.769231 | 19.53416 | 60.58239 | 1463.417 | 7.708861 |  |
| 23 BOTETOUR 202 －RAINI | 451.2324 | 6.659341 | 24.13043 | 51.60722 | 1475.368 | 4.405063 |  |
| 23 BOTETOUR 301 －BUCH | 413.4388 | 9.989011 | 18.38509 | 44.87585 | 1262.428 | 3.303797 |  |
| 23 BOTETOUR 302 －MILL | 375.6453 | 11.0989 | 12.63975 | 41.51016 | 1207.02 | 7.708861 |  |
| 23 BOTETOUR 403 －EAGL | 234.7783 | 8.879121 | 9.192547 | 30.2912 | 849.5857 | 2.202532 |  |
| 23 BOTETOUR 406 －FINC | 564.6131 | 13.31868 | 26.42857 | 63.94808 | 1624.208 | 18.72152 |  |
| 23 BOTETOUR501－TROU | 287.4602 | 6.659341 | 12.63975 | 21.31603 | 890.87 | 0 |  |
| 23 BOTETOUR $502-\mathrm{CLOV}$ | 684.8654 | 13.31868 | 27.57764 | 65.06998 | 1779.567 | 15.41772 |  |
| 25 BRUNSWIC 101 －BROC | 208.2905 | 4.166667 | 2.5 | 3.540984 | 179.5776 | 1.5 |  |
| 25 BRUNSWIC 102 －ROCK | 265.5979 | 2.777778 | 3.75 | 9.442623 | 351.1993 | 0 | 0 |
| 25 BRUNSWIC $103-$ TILLN | 251.271 | 4.166667 | 1.25 | 14.16393 | 469.4022 | 0 |  |
| 25 BRUNSWIC 201 －DRON | 130.0438 | 0 | 0 | 2.360656 | 105.7007 | 0 |  |
| 25 BRUNSWIC 202 －EDGE | 534.502 | 2.777778 | 1.25 | 7.081967 | 200.0358 | 0 |  |
| 25 BRUNSWIC 203 －FITZH | 385.7231 | 0 | 3.75 | 4.721311 | 194.353 | 0 |  |
| 25 BRUNSWIC 301 －ALBEI | 82.65494 | 1.388889 | 1.25 | 1.180328 | 84.10597 | 0 |  |
| 25 BRUNSWIC 302 －DANI | 363.6818 | 0 | 2.5 | 5.901639 | 353.4724 | 3 |  |
| 25 BRUNSWIC $303-E L M C$ | 182.9429 | 1.388889 | 1.25 | 2.360656 | 163.6657 | 0 |  |
| 25 BRUNSWIC 304 －SEYM | 193.9636 | 1.388889 | 2.5 | 3.540984 | 147.7537 | 0 | 0 |
| 25 BRUNSWIC 401 －STUR | 719.649 | 0 | 1.25 | 7.081967 | 421.6664 | 3 |  |
| 25 BRUNSWIC 402 －KING＇ | 298.6599 | 0 | 0 | 0 | 105.7007 | 0 |  |
| 25 BRUNSWIC 501 －TOTA | 864.0197 | 6.944444 | 8.75 | 10.62295 | 269.3664 | 7.5 |  |
| 27 BUCHANA「 102 －BLAC | 60.50845 | 0 | 1.156863 | 2.218182 | 376.9233 | 0 | 0 |
| 27 BUCHANA「 103 －HURL | 122.1805 | 2.285714 | 4.627451 | 5.545455 | 822.1776 | 3.409091 | 0 |
| 27 BUCHANAP 201 －GRAS | 31.41785 | 0 | 0 | 2.218182 | 80.45438 | 0 | 0 |
| 27 BUCHANA「 202 －BULL | 96.5808 | 1.142857 | 3.470588 | 8.872727 | 478.3178 | 3.409091 |  |
| 27 BUCHANAP 203 －ROCK | 103.5625 | 0 | 3.470588 | 7.763636 | 546.6489 | 2.272727 |  |
| 27 BUCHANA 301 －SLATE | 155.9256 | 2.285714 | 3.470588 | 5.545455 | 591.8356 | 2.272727 | 0 |
| 27 BUCHANA「 302 －NORT | 126.835 | 9.142857 | 5.784314 | 9.981818 | 514.6876 | 1.136364 | 0 |
| 27 BUCHANAP 403 －SOUT | 162.9074 | 2.285714 | 16.19608 | 22.18182 | 729.6 | 2.272727 |  |


| OAKV | 15.12711 | 0 | 0 | 2.218182 | 62.82054 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANAP 501 －PRAT | 136.144 | 1.142857 | 1.156863 | 9.981818 | 454.0713 | 1.136364 |  |
| 27 BUCHANA「502－FOX | 63.99932 | 0 | 1.156863 | 1.109091 | 112.4157 | 0 |  |
| 27 BUCHANA「 503 －VANS | 111.7079 | 3.428571 | 4.627451 | 11.09091 | 457.3776 | 3.409091 |  |
| 27 BUCHANAR 601 －COUN | 87.27181 | 0 | 0 | 4.436364 | 305.2858 | 0 |  |
| 27 BUCHANA 602 －GARE | 102.3989 | 0 | 3.470588 | 6.654545 | 445.2544 | 1.136364 |  |
| 27 BUCHANA「 603 －HURF | 102.3989 | 1.142857 | 1.156863 | 2.218182 | 268.916 | 2.272727 |  |
| 27 BUCHANAP 701 －WHIT | 161.7437 | 1.142857 | 6.941176 | 5.545455 | 569.7934 | 2.272727 |  |
| 27 BUCHANAP 702 －CONT | 80.29006 | 0 | 2.313725 | 14.41818 | 479.4199 | 0 |  |
| 29 BUCKINGH． 101 －NEW | 471.3572 | 1.173913 | 5.471698 | 14.57143 | 525.0885 | 2.068966 |  |
| 29 BUCKINGH． 102 －GEOI | 88.4469 | 1.173913 | 2.188679 | 2.081633 | 171.0842 | 2.068966 |  |
| 29 BUCKINGH． 201 －WHIT | 309.5641 | 0 | 5.471698 | 3.122449 | 316.3443 | 1.034483 |  |
| 29 BUCKINGH． 301 －CURE | 262.1048 | 1.173913 | 9.849057 | 9.367347 | 442.2364 | 10.34483 |  |
| 29 BUCKINGH． 302 －NEW | 133.749 | 1.173913 | 3.283019 | 9.367347 | 395.9684 | 1.034483 |  |
| 29 BUCKINGH． 401 －MAYS | 437.92 | 5.869565 | 12.03774 | 19.77551 | 686.4887 | 1.034483 |  |
| 29 BUCKINGH． 501 －WRIG | 156.4 | 2.347826 | 4.377358 | 6.244898 | 342.1683 | 2.068966 |  |
| 29 BUCKINGH． 502 －GLEN | 323.5862 | 10.56522 | 7.660377 | 9.367347 | 329.2563 | 2.068966 |  |
| 29 BUCKINGH． 601 －SLATE | 592.1628 | 2.347826 | 1.09434 | 22.89796 | 381.9804 | 7.241379 |  |
| 29 BUCKINGH． 701 －GOLE | 352.709 | 1.173913 | 6.566038 | 5.204082 | 359.3844 | 1.034483 |  |
| 31 CAMPBELL 101 －BROC | 487.6368 | 13.16129 | 53.46615 | 52.72654 | 1637.825 | 7.564516 |  |
| 31 CAMPBELL 102 －NEW | 465.4715 | 13.16129 | 43.64583 | 77.47573 | 1746.084 | 8.645161 |  |
| 31 CAMPBELL 201 －WALk | 466.5797 | 8.774194 | 50.19271 | 57.03074 | 1265.884 | 20.53226 |  |
| 31 CAMPBELL 202 －BEDF | 471.0128 | 4.387097 | 37.09896 | 64.56311 | 1768.594 | 15.12903 |  |
| 31 CAMPBELL 301 －EVIN（ | 193.9464 | 0 | 5.455729 | 18.29288 | 614.1844 | 2.16129 |  |
| 31 CAMPBELL 302 －OTTE | 180.6473 | 2.193548 | 12.0026 | 11.83657 | 585.2438 | 3.241935 |  |
| 31 CAMPBELL 303 －ALTA＇ | 723.6973 | 7.677419 | 16.36719 | 63.48706 | 1216.578 | 14.04839 |  |
| 31 CAMPBELL 401 －THRE | 239.3853 | 4.387097 | 14.1849 | 21.52104 | 1071.875 | 3.241935 |  |
| 31 CAMPBELL 402 －COUF | 495.3946 | 4.387097 | 28.36979 | 66.71521 | 1844.697 | 15.12903 |  |
| 31 CAMPBELL 501 －SPRIN | 469.9045 | 12.06452 | 60.01302 | 78.55178 | 1845.769 | 15.12903 |  |
| 31 CAMPBELL 502 －Yellc | 411.1665 | 4.387097 | 18.54948 | 31.2055 | 987.1969 | 3.241935 |  |
| 31 CAMPBELL 601 －KING！ | 444.4144 | 3.290323 | 28.36979 | 46.27023 | 1098.672 | 0 |  |
| 31 CAMPBELL 602 －CONC | 525.3178 | 12.06452 | 24.00521 | 41.96602 | 1522.063 | 9.725806 |  |
| 31 CAMPBELL 701 －BROC | 385.6764 | 5.483871 | 3.273438 | 10.76052 | 746.025 | 5.403226 |  |
| 31 CAMPBELL 702 －GLAD | 512.0186 | 4.387097 | 13.09375 | 10.76052 | 1113.678 | 4.322581 |  |
| 31 CAMPBELL 703 －MORI | 191.7299 | 2.193548 | 10.91146 | 11.83657 | 486.6313 | 6.483871 |  |
| 33 CAROLINE 101 －BOW | 431.3263 | 6.906977 | 18.56738 | 38.67868 | 784.6008 | 6.045593 |  |
| 33 CAROLINE 102 －SPAR | 365.5685 | 6.906977 | 5.460993 | 9.945946 | 612.3178 | 5.037994 |  |
| 33 CAROLINE 201 －NORT | 530.5202 | 9.209302 | 13.10638 | 34.25826 | 543.1852 | 5.037994 |  |
| 33 CAROLINE 202 －SOUT | 522.7184 | 17.26744 | 20.75177 | 48.62462 | 793.3795 | 0 |  |
| 33 CAROLINE 301 －PORT | 241.8548 | 6.906977 | 14.19858 | 12.15616 | 396.1411 | 616.6505 |  |
| 33 CAROLINE 302 －WOO | 687.6701 | 12.66279 | 16.38298 | 30.94294 | 843.8574 | 7.053191 |  |
| 33 CAROLINE 401 －DAW | 1103.393 | 6.906977 | 8.737589 | 57.46547 | 714.3708 | 0 |  |
| 33 CAROLINE 402 －CARN | 395.6611 | 2.302326 | 4.368794 | 14.36637 | 234.8316 | 6.045593 |  |
| 33 CAROLINE 501 －WEST | 742.2824 | 10.36047 | 14.19858 | 20.997 | 494.902 | 4.030395 |  |
| 33 CAROLINE 502 －MILFI | 449.1589 | 4.604651 | 13.10638 | 16.57658 | 546.4772 | 3.022796 |  |
| 33 CAROLINE 601 －CHILE | 585.1326 | 10.36047 | 16.38298 | 55.25526 | 661.6983 | 4.030395 |  |
| 33 CAROLINE 602 －LAKE | 376.7139 | 4.604651 | 8.737589 | 28.73273 | 521.2383 | 6.045593 |  |


| LL C 101 - MT B | 103.6215 | 6.088235 | 0 | 7.512195 | 464.7946 | 1.061538 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 CARROLL C 102 - ST PA | 117.1373 | 2.029412 | 7.135135 | 10.73171 | 674.2795 | 6.369231 |  |
| 35 CARROLL C 103 -LAME | 78.84243 | 1.014706 | 5.945946 | 5.365854 | 361.1433 | 1.061538 |  |
| 35 CARROLL C 105 -FANC | 134.0321 | 3.044118 | 4.756757 | 12.87805 | 486.616 | 9.553846 |  |
| 35 CARROLL C 201 - HILLS | 348.033 | 12.17647 | 11.89189 | 25.7561 | 1106.342 | 5.307692 |  |
| 35 CARROLL C 202 -LAUR | 112.632 | 3.044118 | 3.567568 | 8.585366 | 422.243 | 7.430769 |  |
| 35 CARROLL C 203 -GLAD | 181.3376 | 4.058824 | 5.945946 | 10.73171 | 598.9959 | 3.184615 |  |
| 35 CARROLL C 301 - HILLS | 376.191 | 8.117647 | 10.7027 | 24.68293 | 1326.738 | 8.492308 |  |
| 35 CARROLL C 302 -SYLV - | 111.5057 | 2.029412 | 3.567568 | 13.95122 | 520.4391 | 2.123077 |  |
| 35 CARROLL C 303 -DUGS | 47.30546 | 2.029412 | 2.378378 | 2.146341 | 276.04 | 3.184615 |  |
| 35 CARROLL C 402 - Woo | 254.5484 | 8.117647 | 13.08108 | 32.19512 | 974.323 | 5.307692 |  |
| 35 CARROLL C 403 - OAKL | 110.3794 | 3.044118 | 5.945946 | 11.80488 | 550.9889 | 2.123077 |  |
| 35 CARROLL C 405 - OAKL | 119.39 | 4.058824 | 2.378378 | 11.80488 | 466.9768 | 0 |  |
| 35 CARROLL C 406 - WOO | 42.80018 | 0 | 1.189189 | 3.219512 | 173.4797 | 1.061538 |  |
| 35 CARROLL C 501 - VAUG | 63.07394 | 1.014706 | 2.378378 | 8.585366 | 358.9611 | 0 |  |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 166.6954 | 3.044118 | 4.756757 | 15.02439 | 878.3091 | 10.61538 |  |
| 35 CARROLL C $503-$ WOO | 88.97931 | 1.014706 | 1.189189 | 6.439024 | 486.616 | 0 |  |
| 35 CARROLL C 504 -LAUR | 102.4952 | 5.073529 | 1.189189 | 8.585366 | 535.714 | 2.123077 |  |
| 36 CHARLES C 101 - PREC | 772.3977 | 6 | 10.4 | 33.5 | 606.6516 | 5.833333 |  |
| 36 CHARLES C 201 - PREC | 911.0643 | 4 | 7.8 | 16.75 | 378.4615 | 3.5 |  |
| 36 CHARLES C 301 - PREC | 812.538 | 5 | 20.8 | 16.75 | 490.8869 | 4.666667 |  |
| 37 CHARLOTTI 101 - COUN | 359.3515 | 1.222222 | 7.388889 | 21.52041 | 541.3426 | 1.076923 |  |
| 37 CHARLOTT। 201 -RED ( | 338.2784 | 3.666667 | 4.222222 | 9.061224 | 521.2144 | 0 |  |
| 37 CHARLOTTI302-DRAK | 258.4225 | 1.222222 | 5.277778 | 13.59184 | 427.989 | 1.076923 |  |
| 37 CHARLOTT। 401 - KEYSI | 303.896 | 2.444444 | 7.388889 | 22.65306 | 534.9863 | 4.307692 |  |
| 37 CHARLOTTI501-CULLI | 298.3505 | 0 | 4.222222 | 7.928571 | 477.7798 | 1.076923 |  |
| 37 CHARLOTT। 602 -PHEN | 273.9501 | 1.222222 | 3.166667 | 16.9898 | 580.5396 | 2.153846 |  |
| 37 CHARLOTTI 702 - BACC | 322.7509 | 1.222222 | 6.333333 | 19.2551 | 395.1483 | 4.307692 |  |
| 41 CHESTERFII 101 - BELLI | 727.1489 | 5.253456 | 12.47059 | 39.11243 | 801.9948 | 10.3346 |  |
| 41 CHESTERFII 102 - SOUT | 1100.519 | 18.91244 | 24.94118 | 78.22485 | 1296.051 | 20.6692 |  |
| 41 CHESTERFII 103 -ENON | 1182.337 | 17.86175 | 18.13904 | 73.75486 | 1858.913 | 20.6692 |  |
| 41 CHESTERFII 104 - NORT | 954.1669 | 14.70968 | 35.14439 | 92.75232 | 1697.612 | 6.889734 |  |
| 41 CHESTERFII 105 - DREV | 1135.974 | 17.17183 | 16.58502 | 47.54715 | 734.934 | 11.4964 |  |
| 41 CHESTERFII 106 - HARR | 1798.858 | 15.76037 | 37.41176 | 82.69484 | 1668.285 | 22.96578 |  |
| 41 CHESTERFII 107 - WELL | 1189.251 | 10.50691 | 19.27273 | 63.69738 | 1144.901 | 17.22433 |  |
| 41 CHESTERFII 108 -ECOF | 1190.404 | 16.81106 | 46.48128 | 88.28233 | 1918.696 | 19.52091 |  |
| 41 CHESTERFII 109 -ELIZA | 1674.402 | 13.65899 | 28.34225 | 100.5748 | 1860.041 | 26.41065 |  |
| 41 CHESTERFII110-DUTC | 714.4728 | 7.354839 | 20.40642 | 51.4049 | 867.4177 | 14.92776 |  |
| 41 CHESTERFII 111 -IRON | 1642.135 | 18.91244 | 38.54545 | 101.6923 | 1867.937 | 28.70722 |  |
| 41 CHESTERFII 112 - CARV | 1019.852 | 6.304147 | 26.07487 | 61.46238 | 984.7278 | 13.77947 |  |
| 41 CHESTERFII201-GATE | 783.6153 | 9.456221 | 14.73797 | 63.69738 | 1076.094 | 8.038023 |  |
| 41 CHESTERFII 202 -BEUL | 1621.863 | 12.87887 | 23.21903 | 63.02762 | 888.0452 | 19.54388 |  |
| 41 CHESTERFII 203 - BIRD | 331.8841 | 5.253456 | 7.935829 | 22.34996 | 469.2403 | 10.3346 |  |
| 41 CHESTERFII204-JACO | 804.2294 | 17.17183 | 21.0077 | 51.97014 | 723.9975 | 14.94532 |  |
| 41 CHESTERFII 205 - FALLI | 1817.335 | 21.46479 | 12.16235 | 47.54715 | 810.396 | 11.4964 |  |
| 41 CHESTERFII 206 - BELM | 1237.62 | 18.24507 | 12.16235 | 36.48967 | 235.1351 | 5.748201 |  |
| 41 CHESTERFII 207 - CHIPF | 634.4476 | 6.439437 | 4.422673 | 17.69196 | 209.9811 | 5.748201 |  |


| ESTERFII 208 - MEAL | 1617.395 | 12.87887 | 6.63401 | 48.6529 | 648.5355 | 5.748201 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII 209 - SALEI | 1312.556 | 15.76037 | 27.20856 | 119.5723 | 1565.638 | 13.77947 |  |
| 41 CHESTERFII 210 - FIVE I | 1893.29 | 21.46479 | 34.27572 | 109.469 | 1134.117 | 20.69353 |  |
| 41 CHESTERFII 211 - NASH | 1098.214 | 8.40553 | 15.87166 | 113.9848 | 2023.599 | 11.48289 |  |
| 41 CHESTERFII212-ST. Ll | 638.9156 | 5.366197 | 15.47936 | 33.17243 | 720.7165 | 4.598561 |  |
| 41 CHESTERFII213-SOUT | 2769.006 | 21.46479 | 13.26802 | 70.76785 | 717.4356 | 19.54388 |  |
| 41 CHESTERFII 214 - HOPk | 321.6918 | 2.146479 | 0 | 11.05748 | 48.12068 | 3.448921 |  |
| 41 CHESTERFII215-Nortr | 655.6704 | 8.585915 | 5.528341 | 26.53794 | 294.1923 | 2.299281 |  |
| 41 CHESTERFII301-ETTRI | 2778.377 | 21.01382 | 12.47059 | 36.87743 | 513.2316 | 29.85551 |  |
| 41 CHESTERFII302-DEER | 390.9448 | 5.366197 | 14.37369 | 47.54715 | 659.472 | 5.748201 |  |
| 41 CHESTERFII303-MAT( | 1453.145 | 14.70968 | 13.60428 | 37.99493 | 1579.174 | 10.3346 |  |
| 41 CHESTERFII304-WINF | 814.7295 | 5.253456 | 13.60428 | 62.57988 | 2251.451 | 9.186312 |  |
| 41 CHESTERFII305-BEAC | 233.9322 | 2.101382 | 11.3369 | 31.28994 | 801.9948 | 6.889734 |  |
| 41 CHESTERFII306-WINT | 733.8593 | 11.80563 | 32.06438 | 92.8828 | 2229.956 | 10.34676 |  |
| 41 CHESTERFII307-COSB | 1337.031 | 22.53803 | 54.17775 | 128.2667 | 1781.559 | 19.54388 |  |
| 41 CHESTERFII308-SOUT | 492.5905 | 9.659155 | 17.69069 | 32.06668 | 407.9321 | 8.047482 |  |
| 41 CHESTERFII309-SKINC | 1275.597 | 11.80563 | 45.3324 | 174.7081 | 2531.804 | 24.14245 |  |
| 41 CHESTERFII310-TOM | 1042.147 | 16.09859 | 40.90973 | 123.8437 | 1441.433 | 19.54388 |  |
| 41 CHESTERFII313-WOO | 1337.031 | 13.95211 | 47.54374 | 140.43 | 1838.429 | 31.04029 |  |
| 41 CHESTERFII315-BAILE | 755.082 | 12.87887 | 26.53604 | 93.98855 | 1831.867 | 9.197122 |  |
| 41 CHESTERFII316-SPRIN | 990.7659 | 13.95211 | 43.12106 | 111.6805 | 1470.962 | 18.39424 |  |
| 41 CHESTERFII317-BIRK[ | 1154.963 | 8.585915 | 39.80406 | 87.35406 | 1792.495 | 9.197122 |  |
| 41 CHESTERFII318-WEST | 347.3824 | 5.366197 | 6.63401 | 19.90346 | 522.7655 | 2.299281 |  |
| 41 CHESTERFII401-HARB | 645.6175 | 5.366197 | 17.69069 | 74.08509 | 837.7373 | 17.2446 |  |
| 41 CHESTERFII402-GENI ${ }^{-}$ | 1891.056 | 27.90423 | 44.22673 | 147.0644 | 2046.222 | 28.74101 |  |
| 41 CHESTERFII403-BRAN | 1194.057 | 22.53803 | 35.38139 | 127.161 | 1349.566 | 31.04029 |  |
| 41 CHESTERFII404-PROV | 1202.993 | 7.512676 | 34.27572 | 109.469 | 988.6612 | 12.64604 |  |
| 41 CHESTERFII405-LA PR | 1102.464 | 9.659155 | 22.11337 | 116.1035 | 1230.358 | 6.897842 |  |
| 41 CHESTERFII406-SMOI | 832.154 | 13.95211 | 29.85304 | 122.738 | 1137.398 | 14.94532 |  |
| 41 CHESTERFII407-MON | 599.8211 | 7.512676 | 24.3247 | 58.60463 | 778.6801 | 18.39424 |  |
| 41 CHESTERFII408-REAN | 1872.067 | 24.68451 | 44.22673 | 112.7863 | 1201.923 | 17.2446 |  |
| 41 CHESTERFII409-MAN | 702.5837 | 2.146479 | 22.11337 | 40.91266 | 581.8227 | 5.748201 |  |
| 41 CHESTERFII410-WAG: | 694.7648 | 11.80563 | 24.3247 | 57.49888 | 710.8736 | 8.047482 |  |
| 41 CHESTERFII411-SWIF | 1079.008 | 15.02535 | 30.95871 | 124.9495 | 1256.606 | 16.09496 |  |
| 41 CHESTERFII413-SHEN | 1058.902 | 27.90423 | 35.38139 | 105.046 | 973.3501 | 10.34676 |  |
| 41 CHESTERFII414-CREN | 1583.885 | 31.12394 | 35.38139 | 131.584 | 1991.54 | 13.79568 |  |
| 41 CHESTERFII415-EVER | 1137.091 | 25.75775 | 51.96641 | 121.6322 | 1344.098 | 17.2446 |  |
| 41 CHESTERFII416-EVER | 637.7986 | 4.292958 | 24.3247 | 46.4414 | 581.8227 | 5.748201 |  |
| 41 CHESTERFII417-EDGE | 529.451 | 9.659155 | 9.951015 | 64.13336 | 598.2275 | 6.897842 |  |
| 41 CHESTERFII501-HUGI | 899.1731 | 18.24507 | 51.96641 | 86.24832 | 718.5292 | 14.94532 |  |
| 41 CHESTERFII502-CRES | 625.5118 | 18.24507 | 11.05668 | 72.97934 | 637.599 | 5.748201 |  |
| 41 CHESTERFII503-MIDL | 949.4375 | 5.366197 | 28.74738 | 106.1518 | 1372.533 | 16.09496 |  |
| 41 CHESTERFII504-ROBII | 1444.262 | 16.09859 | 63.02309 | 170.2851 | 1890.924 | 26.44173 |  |
| 41 CHESTERFII505-BON, | 1266.661 | 20.39155 | 40.90973 | 122.738 | 1138.491 | 25.29209 |  |
| 41 CHESTERFII506-GREE | 1252.14 | 15.02535 | 40.90973 | 141.5357 | 1054.28 | 16.09496 |  |
| 41 CHESTERFII507-SALIS | 1213.046 | 6.439437 | 38.69839 | 171.3909 | 1854.833 | 24.14245 |  |
| 41 CHESTERFII 508 - BELG | 1123.687 | 12.87887 | 25.43037 | 119.4207 | 1194.268 | 16.09496 |  |


| 09 - CRAN | 922.6298 | 15.02535 | 27.64171 | 69.6621 | 678.0641 | 8.047482 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII510-SYCAI | 1037.679 | 16.09859 | 57.49475 | 151.4874 | 1399.874 | 26.44173 | 0 |
| 41 CHESTERFII511-BLAC | 666.8402 | 6.439437 | 15.47936 | 100.623 | 923.0421 | 27.59137 | 0 |
| 41 CHESTERFII513-BEAU | 865.6636 | 12.87887 | 13.26802 | 42.01841 | 332.4701 | 12.64604 | 0 |
| 41 CHESTERFII514-WATr | 1154.963 | 23.61127 | 65.23443 | 158.1219 | 1578.14 | 19.54388 | 0 |
| 41 CHESTERFII515-DAVI! | 1581.651 | 17.17183 | 12.16235 | 37.59542 | 393.7146 | 4.598561 | 0 |
| 41 CHESTERFII516-POCC | 1019.808 | 6.439437 | 16.58502 | 29.85519 | 304.0352 | 6.897842 | 0 |
| 41 CHESTERFII517-ROSE | 307.1709 | 2.146479 | 11.05668 | 43.12416 | 477.9258 | 8.047482 | 0 |
| 41 CHESTERFII518-MIDL | 975.1281 | 5.366197 | 40.90973 | 124.9495 | 1566.109 | 26.44173 | 0 |
| 43 CLARKE CO 101 - RUSS | 503.3436 | 10.10204 | 23.43333 | 42.94937 | 1129.327 | 14.55738 | 0 |
| 43 CLARKE CO 201 - BERR | 680.6443 | 14.59184 | 29.6 | 60.56962 | 707.2327 | 8.491803 | 0 |
| 43 CLARKE CO 301 - MILLI | 449.7964 | 5.612245 | 13.56667 | 42.94937 | 660.0838 | 13.34426 | 0 |
| 43 CLARKE CO 302 - PINE | 191.58 | 3.367347 | 9.866667 | 18.72152 | 312.0804 | 6.065574 | 0 |
| 43 CLARKE CO 401 - Whit | 602.1084 | 7.857143 | 8.633333 | 48.4557 | 913.7895 | 19.40984 | 0 |
| 43 CLARKE CO 501 - BUCK | 452.1763 | 11.22449 | 12.33333 | 35.24051 | 679.1679 | 3.639344 | 0 |
| 43 CLARKE CO 502 - BLUE | 171.351 | 2.244898 | 13.56667 | 12.11392 | 259.3186 | 8.491803 | 0 |
| 45 CRAIG COU 101 - COUF | 86 | 4 | 4 | 9 | 415.194 | 2 | 0 |
| 45 CRAIG COU 201 - AMM | 95 | 2 | 8 | 12 | 485.2267 | 2 | 0 |
| 45 CRAIG COU301-GIVEI | 91 | 2 | 4 | 7 | 226.1057 | 0 | 0 |
| 45 CRAIG COU 303 - MAR | 70 | 2 | 4 | 6 | 180.0842 | 1 | 0 |
| 45 CRAIG COU 401 - BARB | 45 | 4 | 6 | 6 | 169.079 | 3 | 0 |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 16 | 0 | 0 | 1 | 31.01449 | 0 | 0 |
| 45 CRAIG COU 403 - CRAIC | 55 | 1 | 0 | 5 | 185.0865 | 0 | 0 |
| 45 CRAIG COU501-CRAIC | 83 | 5 | 4 | 8 | 448.2094 | 1 | 0 |
| 47 CULPEPER 101 - WEST | 1270.922 | 29.13103 | 37.66981 | 85.21401 | 1381.957 | 14.4 | 0 |
| 47 CULPEPER 201 - EAST | 1289.82 | 20.63448 | 17.12264 | 61.35409 | 1083.304 | 14.4 | 0 |
| 47 CULPEPER 302 -EGGE | 387.4185 | 13.35172 | 18.26415 | 31.81323 | 1001.754 | 4.8 | 0 |
| 47 CULPEPER 303 -CARD | 334.2666 | 10.92414 | 7.990566 | 29.54086 | 737.2642 | 1.2 | 0 |
| 47 CULPEPER 304 - WILL | 240.9554 | 3.641379 | 7.990566 | 11.36187 | 301.9587 | 3.6 | 0 |
| 47 CULPEPER 401 - ELDO | 427.5777 | 16.9931 | 11.41509 | 26.1323 | 966.4883 | 7.2 | 0 |
| 47 CULPEPER 402 - BROV | 668.5331 | 13.35172 | 28.53774 | 51.1284 | 1426.039 | 9.6 | 0 |
| 47 CULPEPER 501 - JEFFE | 578.7654 | 9.710345 | 30.82075 | 61.35409 | 1251.916 | 10.8 | 0 |
| 47 CULPEPER 502 - RIXEY | 488.9977 | 14.56552 | 25.11321 | 55.67315 | 1216.651 | 9.6 | 0 |
| 47 CULPEPER 601 - MITC | 107.485 | 4.855172 | 2.283019 | 5.680934 | 189.5507 | 0 | 0 |
| 47 CULPEPER 602 - PEAR | 728.772 | 7.282759 | 23.9717 | 51.1284 | 1197.917 | 8.4 | 0 |
| 47 CULPEPER 603 - SOUT | 303.5566 | 4.855172 | 13.69811 | 27.26848 | 331.7138 | 7.2 | 0 |
| 47 CULPEPER 702 - BRAN | 507.8962 | 14.56552 | 7.990566 | 52.26459 | 1240.896 | 14.4 | 0 |
| 47 CULPEPER 703 -LIGNI | 300.0131 | 8.496552 | 3.424528 | 30.67704 | 649.101 | 2.4 | 0 |
| 47 CULPEPER 704 -RICH/ | 124.0212 | 3.641379 | 5.707547 | 3.40856 | 372.4892 | 0 | 0 |
| 49 CUMBERLA 101 - PREC | 424.2566 | 7.2 | 3.310345 | 25.05495 | 610.8038 | 6 | 0 |
| 49 CUMBERLA 201 - PREC | 318.4624 | 7.2 | 8.827586 | 21.92308 | 686.0789 | 7 | 0 |
| 49 CUMBERLA 301 - PREC | 546.2439 | 3.6 | 7.724138 | 13.57143 | 370.9988 | 3 | 0 |
| 49 CUMBERLA 401 - PREC | 347.6098 | 1.2 | 6.62069 | 15.65934 | 575.317 | 3 | 0 |
| 49 CUMBERLA 501 - PREC | 399.4274 | 4.8 | 5.517241 | 18.79121 | 453.8014 | 3 | 0 |
| 51 DICKENSOP 101 - SOUT | 294.3596 | 3.818182 | 8.135135 | 21.03896 | 1011.088 | 10.29412 | 0 |
| 51 DICKENSOP 201 - NORf | 76.94876 | 1.272727 | 5.810811 | 4.207792 | 342.2662 | 3.088235 | 0 |
| 51 DICKENSOP 202 - FRYIN | 25.64959 | 0 | 0 | 1.051948 | 154.8614 | 2.058824 | 0 |


| INC | 145.3477 | 2.545455 | 6.972973 | 4.207792 | 469.073 | 3.088235 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 DICKENSOP 301 -WEST | 19.54254 | 1.272727 | 1.162162 | 4.207792 | 180.6717 | 0 | 0 |
| 51 DICKENSOP 302 - HERA | 43.97072 | 0 | 2.324324 | 0 | 344.5106 | 4.117647 |  |
| 51 DICKENSOP 303 -RIDGI | 112.3696 | 1.272727 | 2.324324 | 7.363636 | 592.5133 | 2.058824 |  |
| 51 DICKENSOP 401 - HAYS | 322.452 | 1.272727 | 6.972973 | 17.88312 | 839.3939 | 4.117647 |  |
| 51 DICKENSOP 501 -TARP | 95.2699 | 1.272727 | 3.486486 | 9.467532 | 224.4369 | 1.029412 |  |
| 51 DICKENSOP 502 - NORT | 199.0897 | 1.272727 | 5.810811 | 11.57143 | 773.185 | 5.147059 |  |
| 53 DINWIDDIE 101 - WHIT | 130.8122 | 2.358974 | 6.493151 | 5.505618 | 413.8452 | 2.545455 |  |
| 53 DINWIDDIE 102-ROCK | 241.9448 | 1.179487 | 7.575342 | 12.11236 | 644.0051 | 2.545455 | 0 |
| 53 DINWIDDIE 103-CHUF | 244.26 | 0 | 11.90411 | 19.82022 | 1044.572 | 3.818182 |  |
| 53 DINWIDDIE 201 - ROHC | 416.747 | 1.179487 | 2.164384 | 9.910112 | 341.9202 | 0 |  |
| 53 DINWIDDIE 202-SUTH | 699.2088 | 4.717949 | 9.739726 | 27.52809 | 1148.586 | 6.363636 |  |
| 53 DINWIDDIE 301 -REAN | 207.2159 | 3.538462 | 3.246575 | 18.7191 | 368.4771 | 0 |  |
| 53 DINWIDDIE 302 - NEW | 394.752 | 5.897436 | 5.410959 | 11.01124 | 606.3828 | 0 |  |
| 53 DINWIDDIE 303 -LITTL | 694.5783 | 4.717949 | 8.657534 | 16.51685 | 588.6782 | 6.363636 |  |
| 53 DINWIDDIE 401-DINW | 538.2982 | 5.897436 | 12.9863 | 14.31461 | 812.1988 | 3.818182 | 0 |
| 53 DINWIDDIE 402 - MCKE | 347.2892 | 5.897436 | 4.328767 | 13.21348 | 473.5982 | 6.363636 |  |
| 53 DINWIDDIE 403-CHER | 312.5602 | 1.179487 | 0 | 4.404494 | 262.2495 | 3.818182 |  |
| 53 DINWIDDIE 501-EDGE | 192.1667 | 1.179487 | 0 | 7.707865 | 77.45765 | 0 |  |
| 53 DINWIDDIE 502-CHES | 1345.167 | 8.25641 | 6.493151 | 35.23596 | 665.0293 | 6.363636 |  |
| 57 ESSEX COU 101-GREA | 610.4893 | 6 | 8.333333 | 25.36735 | 570.6537 | 7.27451 |  |
| 57 ESSEX COU 201 - NORT | 819.6699 | 3.6 | 1.190476 | 17.29592 | 448.1277 | 39.4902 |  |
| 57 ESSEX COU 301 - SOUT | 519.5411 | 6 | 7.142857 | 38.05102 | 935.9629 | 3.117647 |  |
| 57 ESSEX COU 401 - CENT | 592.2996 | 2.4 | 8.333333 | 32.28571 | 702.2558 | 3.117647 |  |
| 59 FAIRFAX CC 104 - CHAP | 1114.874 | 7.06163 | 43.46149 | 71.36 | 662.3714 | 26.37192 |  |
| 59 FAIRFAX CC 105 - FAIR | 2358.089 | 38.83897 | 68.81402 | 114.4221 | 1205.637 | 61.53449 |  |
| 59 FAIRFAX CC 106 - HERI7 | 2285.493 | 43.54672 | 24.14527 | 68.89931 | 663.5868 | 16.32548 |  |
| 59 FAIRFAX CC 108 - KING! | 1222.473 | 11.76938 | 45.87601 | 68.89931 | 655.0792 | 25.11612 |  |
| 59 FAIRFAX CC 109 - LITTL | 735.0393 | 4.707753 | 22.93801 | 35.68 | 371.9003 | 18.83709 |  |
| 59 FAIRFAX CC 110 - NORT | 2253.083 | 38.83897 | 49.4978 | 79.97241 | 1006.318 | 32.65095 |  |
| 59 FAIRFAX CC 113 -CANT | 2075.481 | 17.65408 | 62.7777 | 102.1186 | 963.7808 | 47.72062 |  |
| 59 FAIRFAX C 1114 - OLDE | 954.1251 | 8.238569 | 28.97432 | 47.98345 | 493.4363 | 28.88354 |  |
| 59 FAIRFAX CC 115 - RAVE | 928.1978 | 9.415507 | 36.2179 | 62.74759 | 511.6667 | 20.09289 |  |
| 59 FAIRFAX CC 116 - WAKI | 1236.733 | 10.59245 | 47.08328 | 49.21379 | 525.0357 | 30.13934 |  |
| 59 FAIRFAX CC 117 - WOO | 1330.071 | 11.76938 | 44.66875 | 67.66897 | 749.8773 | 35.16256 |  |
| 59 FAIRFAX CC 118 -LAKE | 2237.527 | 24.71571 | 61.57044 | 121.8041 | 799.7071 | 38.92998 |  |
| 59 FAIRFAX CC 119 - LAUR | 2079.37 | 22.36183 | 95.37381 | 114.4221 | 1023.333 | 32.65095 |  |
| 59 FAIRFAX C 120 - SIDEE | 1375.444 | 21.18489 | 54.32686 | 75.05103 | 1000.242 | 55.25546 | 0 |
| 59 FAIRFAX CC 121 - VILLA | 1055.242 | 18.83101 | 45.87601 | 40.60138 | 555.4197 | 16.32548 |  |
| 59 FAIRFAX CC 123 - ROBII | 2072.889 | 27.06958 | 65.19223 | 125.4952 | 1078.025 | 59.02288 | 0 |
| 59 FAIRFAX CC 125 - SIGN, | 1492.117 | 12.94632 | 36.2179 | 68.89931 | 780.2614 | 43.95321 | 0 |
| 59 FAIRFAX CC 126 - BON | 1292.476 | 21.18489 | 36.2179 | 82.4331 | 546.9122 | 21.3487 |  |
| 59 FAIRFAX CC 127 - BURK | 2336.051 | 35.30815 | 88.13023 | 114.4221 | 1081.671 | 45.20901 | 0 |
| 59 FAIRFAX CC 128 - CARD | 1221.176 | 23.53877 | 36.2179 | 41.83172 | 571.2194 | 42.6974 | 0 |
| 59 FAIRFAX CC 129 - KEEN | 930.7905 | 10.59245 | 25.35253 | 40.60138 | 437.5297 | 12.55806 | 0 |
| 59 FAIRFAX CC 130 -TERR, | 1231.547 | 12.94632 | 49.4978 | 67.66897 | 655.0792 | 30.13934 | 0 |
| 59 FAIRFAX CC 131 - EAGL | 1636.013 | 25.89264 | 54.32686 | 89.81517 | 833.7372 | 27.62773 |  |


| FAX CC 132 - MON | 2049.554 | 32.95427 | 48.29054 | 79.97241 | 808.2146 | 22.60451 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 133 - DANE | 409.6515 | 9.415507 | 8.450844 | 19.68552 | 160.4276 | 6.279029 | 0 |
| 59 FAIRFAX CC 134 - UNIV | 2590.138 | 49.43141 | 47.08328 | 178.4 | 489.7902 | 26.37192 |  |
| 59 FAIRFAX CC 201 - Arms | 1890.101 | 20.00795 | 61.57044 | 84.89379 | 810.6454 | 47.72062 |  |
| 59 FAIRFAX CC 202 - FLINT | 1371.555 | 11.76938 | 59.15591 | 72.59034 | 822.799 | 50.23224 |  |
| 59 FAIRFAX CC 203 - FLOR | 1879.73 | 25.89264 | 36.2179 | 65.20828 | 1016.041 | 28.88354 |  |
| 59 FAIRFAX CC 204 - MADI | 521.139 | 7.06163 | 16.90169 | 18.45517 | 155.5661 | 8.790641 |  |
| 59 FAIRFAX CC 208 -REST( | 1868.063 | 29.42346 | 38.63243 | 84.89379 | 526.251 | 35.16256 |  |
| 59 FAIRFAX CC 209 -REST( | 1930.288 | 35.30815 | 47.08328 | 75.05103 | 458.1909 | 26.37192 |  |
| 59 FAIRFAX CC 213 - VIENI | 1913.436 | 30.6004 | 83.30118 | 105.8097 | 944.335 | 55.25546 |  |
| 59 FAIRFAX CC 214 - VIENI | 1534.897 | 21.18489 | 65.19223 | 72.59034 | 740.1545 | 43.95321 |  |
| 59 FAIRFAX CC 216 - VIENI | 897.085 | 9.415507 | 30.18159 | 40.60138 | 376.7617 | 16.32548 |  |
| 59 FAIRFAX CC 218 - VIENI | 1240.622 | 8.238569 | 44.66875 | 43.06207 | 432.6683 | 32.65095 |  |
| 59 FAIRFAX CC 219 - WEST | 1779.91 | 10.59245 | 56.74138 | 98.42759 | 791.1996 | 41.44159 |  |
| 59 FAIRFAX CC 220 - DOG | 2437.167 | 34.13121 | 62.7777 | 93.50621 | 700.0476 | 35.16256 |  |
| 59 FAIRFAX CC 221 - HUN7 | 1429.891 | 8.238569 | 27.76706 | 54.13517 | 606.4648 | 33.90676 |  |
| 59 FAIRFAX CC 222 -REST( | 1413.038 | 24.71571 | 24.14527 | 49.21379 | 279.5329 | 17.58128 |  |
| 59 FAIRFAX CC 223 -GLAD | 2214.192 | 28.24652 | 79.67939 | 114.4221 | 681.8172 | 36.41837 |  |
| 59 FAIRFAX CC 224 - SOUT | 2571.989 | 35.30815 | 50.70507 | 108.2703 | 774.1846 | 47.72062 |  |
| 59 FAIRFAX CC 225 - HUGF | 2303.642 | 36.48509 | 50.70507 | 102.1186 | 556.635 | 37.67418 |  |
| 59 FAIRFAX CC 226 - WOLI | 1681.386 | 15.3002 | 85.71571 | 97.19724 | 901.7974 | 74.09255 |  |
| 59 FAIRFAX CC 227 - SUNR | 907.4559 | 11.76938 | 27.76706 | 31.98897 | 422.9454 | 36.41837 |  |
| 59 FAIRFAX CC 229 - FOX ${ }^{\text {r }}$ | 2405.921 | 23.5493 | 72.17164 | 118.004 | 1322.855 | 54.28006 |  |
| 59 FAIRFAX C $233-$ NORT | 1586.751 | 20.00795 | 35.01064 | 67.66897 | 885.9977 | 55.25546 |  |
| 59 FAIRFAX CC 234 - ALDR | 1453.226 | 12.94632 | 48.29054 | 52.90483 | 623.4799 | 41.44159 |  |
| 59 FAIRFAX CC 235 - FRYIN | 1743.612 | 23.53877 | 37.42517 | 62.74759 | 568.7887 | 17.58128 |  |
| 59 FAIRFAX CC 236 - STUA | 724.6684 | 9.415507 | 22.93801 | 36.91034 | 323.2859 | 20.09289 |  |
| 59 FAIRFAX C 237 -MCN, | 2066.407 | 31.77734 | 41.04696 | 88.58483 | 601.6034 | 25.11612 |  |
| 59 FAIRFAX CC 238 - CAMI | 1486.931 | 25.89264 | 31.38885 | 94.73655 | 803.3532 | 41.44159 |  |
| 59 FAIRFAX C $240-\mathrm{COLV}$ | 1174.434 | 4.957746 | 36.71891 | 54.36139 | 766.1273 | 37.06931 |  |
| 59 FAIRFAX CC 301 - CHAll | 1309.411 | 17.35211 | 39.25124 | 53.0355 | 822.5524 | 51.63225 |  |
| 59 FAIRFAX CC 302 - CHES | 1180.687 | 4.819897 | 47.79457 | 50.25641 | 583.9991 | 37.12445 |  |
| 59 FAIRFAX C $303-\mathrm{CHUR}$ | 740.2832 | 4.957746 | 20.25871 | 27.84364 | 346.0739 | 37.06931 |  |
| 59 FAIRFAX CC 304 - COOF | 887.7833 | 7.43662 | 26.58955 | 30.49541 | 552.9658 | 39.71711 |  |
| 59 FAIRFAX CC 305 - EL NII | 1053.676 | 10.84477 | 44.11806 | 36.4359 | 453.6751 | 33.28399 |  |
| 59 FAIRFAX C 306 -GREA | 871.0852 | 7.43662 | 11.39552 | 43.75429 | 690.8938 | 42.36492 |  |
| 59 FAIRFAX CC 307 - HAYC | 1214.384 | 10.84477 | 47.79457 | 50.25641 | 486.8708 | 56.32675 |  |
| 59 FAIRFAX C 309 - KENN | 1554.317 | 18.59155 | 46.84826 | 79.55325 | 870.2002 | 47.66054 |  |
| 59 FAIRFAX C 310 - KIRBY | 970.7299 | 13.25472 | 53.92208 | 35.17949 | 397.1194 | 32.00384 |  |
| 59 FAIRFAX C 311 -LANG | 854.3871 | 6.197183 | 29.12189 | 25.19186 | 537.9191 | 41.04102 |  |
| 59 FAIRFAX CC 312 -LONe | 1191.056 | 12.04974 | 80.88312 | 43.97436 | 540.9676 | 39.68476 |  |
| 59 FAIRFAX C 314 -MCLE | 1011.628 | 18.59155 | 41.78358 | 43.75429 | 579.2975 | 29.12588 |  |
| 59 FAIRFAX C 315 - PIMN | 1739.278 | 31.32933 | 80.88312 | 66.58974 | 796.6977 | 29.44353 |  |
| 59 FAIRFAX C 316 - SALO | 414.731 | 3.614923 | 6.127509 | 21.35897 | 249.5828 | 11.52138 |  |
| 59 FAIRFAX CC 317 -WEST | 1108.11 | 15.66467 | 26.96104 | 59.05128 | 510.2308 | 30.72368 |  |
| 59 FAIRFAX CC 318 -WEST | 668.7538 | 10.84477 | 26.96104 | 35.17949 | 328.269 | 14.08169 |  |
| 59 FAIRFAX CC 319 - HERN | 2102.705 | 23.53877 | 83.30118 | 104.5793 | 952.8425 | 52.74385 |  |


| ERN | 2424.204 | 23.53877 | 60.36317 | 110.731 | 825.2297 | 32.65095 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 321 - CLEAI | 2084.482 | 24.78873 | 116.4876 | 120.6558 | 1149.818 | 51.63225 | 0 |
| 59 FAIRFAX CC 322 - FORE | 1210.614 | 19.83099 | 43.04975 | 64.96849 | 1141.041 | 68.843 |  |
| 59 FAIRFAX CC $323-\mathrm{SHOL}$ | 1122.948 | 8.676056 | 21.52488 | 53.0355 | 590.5826 | 34.4215 |  |
| 59 FAIRFAX CC 324 - HERN | 1995.107 | 45.9006 | 51.91233 | 100.8883 | 720.7087 | 28.88354 |  |
| 59 FAIRFAX CC 325 - HUTC | 1449.337 | 20.00795 | 15.69443 | 44.29241 | 351.2391 | 17.58128 |  |
| 59 FAIRFAX CC 327 -SUGA | 1842.359 | 18.59155 | 56.97761 | 98.11568 | 1031.952 | 47.66054 |  |
| FAIRFAX C( 328 - HICKC | 1374.812 | 14.87324 | 45.58209 | 67.62026 | 993.0815 | 52.95615 |  |
| 59 FAIRFAX CC 329 - SENEI | 1497.265 | 14.87324 | 31.65423 | 66.29438 | 1141.041 | 47.66054 | 0 |
| 59 FAIRFAX CC 331 - SPRIN | 940.6607 | 4.957746 | 46.84826 | 57.01316 | 534.1575 | 33.0976 |  |
| 59 FAIRFAX CC 332 - COAT | 2083.26 | 34.13121 | 39.83969 | 67.66897 | 589.4498 | 33.90676 |  |
| 59 FAIRFAX CC 333 - SALO | 728.3714 | 7.229846 | 34.31405 | 33.92308 | 377.4478 | 24.32292 |  |
| 59 FAIRFAX CC 401 - BUSH | 1715.95 | 19.27959 | 64.95159 | 67.84615 | 815.1398 | 38.40461 |  |
| 59 FAIRFAX CC 402 - CAMI | 655.7935 | 6.024871 | 17.15702 | 26.38462 | 245.8944 | 28.16338 |  |
| 59 FAIRFAX CC 403 - FORE | 789.285 | 7.229846 | 13.48052 | 18.84615 | 272.9427 | 12.80154 |  |
| 59 FAIRFAX CC 404 - FRAN | 1968.676 | 27.71441 | 44.11806 | 79.15385 | 636.8664 | 28.16338 |  |
| 59 FAIRFAX CC 405 -GRO\ | 1302.515 | 14.45969 | 12.25502 | 42.71795 | 315.9742 | 14.08169 |  |
| 59 FAIRFAX CC 406 - HAYF | 1086.077 | 10.84477 | 42.89256 | 46.48718 | 754.8957 | 26.88322 |  |
| 59 FAIRFAX CC 408 - MOU | 1550.057 | 16.86964 | 31.86305 | 65.33333 | 319.6627 | 28.16338 |  |
| 59 FAIRFAX CC 409 - PION | 2258.988 | 27.71441 | 36.76505 | 52.76923 | 736.4536 | 28.16338 |  |
| 59 FAIRFAX CC 410 - ROSE | 2238.252 | 32.53431 | 64.95159 | 101.7692 | 1143.409 | 40.96491 |  |
| 59 FAIRFAX CC 411 - VIRGI | 1314.179 | 15.66467 | 44.11806 | 51.51282 | 496.7066 | 16.642 |  |
| 59 FAIRFAX CC 413 - FAIRF | 1631.707 | 15.66467 | 9.804014 | 18.84615 | 218.846 | 12.80154 |  |
| 59 FAIRFAX CC 415 - CRES | 1442.486 | 30.12436 | 40.44156 | 65.33333 | 639.3253 | 16.642 |  |
| 59 FAIRFAX CC 417 - GARF | 2130.681 | 22.89451 | 30.63754 | 52.76923 | 743.8304 | 26.88322 |  |
| 59 FAIRFAX CC418-LYNB | 1306.403 | 14.45969 | 29.41204 | 47.74359 | 408.1846 | 6.400768 |  |
| 59 FAIRFAX CC 419 - LANE | 1986.821 | 31.32933 | 56.37308 | 72.87179 | 575.3928 | 34.56414 |  |
| 59 FAIRFAX CC 420 - VILLA | 2168.266 | 22.89451 | 60.04959 | 105.5385 | 802.8451 | 42.24507 |  |
| 59 FAIRFAX CC 421 - KING: | 1957.012 | 21.68954 | 50.24557 | 87.94872 | 687.2747 | 35.8443 |  |
| 59 FAIRFAX CC 422 - VAN I | 2081.431 | 12.04974 | 57.59858 | 86.69231 | 666.3737 | 28.16338 |  |
| 59 FAIRFAX CC 423 - CLERI | 1416.566 | 13.25472 | 44.11806 | 70.35897 | 635.6369 | 42.24507 |  |
| 59 FAIRFAX CC 424 - HUN7 | 1438.598 | 10.84477 | 45.34357 | 74.12821 | 598.7528 | 28.16338 |  |
| 59 FAIRFAX CC 426 - GREE | 1094.133 | 1.176938 | 20.52348 | 9.842759 | 549.3429 | 25.11612 |  |
| 59 FAIRFAX CC 427 - ISLAN | 1463.223 | 13.25472 | 40.44156 | 60.30769 | 560.6391 | 33.28399 |  |
| 59 FAIRFAX CC 428 - PINEI | 1858.514 | 16.86964 | 29.41204 | 43.97436 | 299.9911 | 19.2023 |  |
| 59 FAIRFAX CC 429 - HYBL | 2260.284 | 14.45969 | 14.70602 | 30.15385 | 330.7279 | 11.52138 |  |
| 59 FAIRFAX CC501-BAILE | 2026.998 | 19.27959 | 52.69658 | 54.02564 | 486.8708 | 32.00384 |  |
| 59 FAIRFAX CC502-BARC | 723.372 | 5.884692 | 12.07263 | 20.91586 | 289.2558 | 20.09289 |  |
| 59 FAIRFAX CC503-BELVI | 882.825 | 11.76938 | 24.14527 | 28.29793 | 311.1323 | 15.06967 |  |
| 59 FAIRFAX CC504-BRIST | 1676.201 | 24.71571 | 24.14527 | 34.44966 | 461.8369 | 16.32548 |  |
| 59 FAIRFAX CC 505 - GLEN | 1696.509 | 24.09949 | 36.76505 | 38.94872 | 484.4119 | 17.92215 | 0 |
| 59 FAIRFAX CC506-HOLN | 448.4279 | 3.614923 | 0 | 8.794872 | 103.2756 | 3.840461 |  |
| 59 FAIRFAX CC507-LINCC | 1817.04 | 19.27959 | 37.99055 | 62.82051 | 550.8034 | 25.60307 | 0 |
| 59 FAIRFAX CC508-MASC | 1503.784 | 20.00795 | 47.08328 | 71.36 | 618.6184 | 21.3487 | 0 |
| 59 FAIRFAX CC509-PLAZ | 727.0754 | 13.25472 | 8.578512 | 16.33333 | 125.4061 | 7.680921 | 0 |
| 59 FAIRFAX CC510-PARK | 1228.641 | 21.68954 | 20.83353 | 30.15385 | 488.1003 | 25.60307 | 0 |
| 59 FAIRFAX CC511-RAVE | 1362.48 | 16.47714 | 37.42517 | 62.74759 | 464.2677 | 48.97643 |  |


| C(512-SLEEF | 776.523 | 8.238569 | 35.01064 | 24.6069 | 313.563 | 27.62773 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC513-SAIN 7 | 1320.884 | 10.76066 | 37.60755 | 45.83554 | 562.6518 | 36.71054 |  |
| 59 FAIRFAX CC514-CROS | 772.4366 | 6.024871 | 9.804014 | 12.5641 | 124.1766 | 8.961075 |  |
| 59 FAIRFAX CC515-WEST | 1071.821 | 14.45969 | 19.60803 | 32.66667 | 354.0879 | 10.24123 |  |
| 59 FAIRFAX CC516-WEY/ | 1870.178 | 26.50943 | 33.08855 | 51.51282 | 496.7066 | 26.88322 |  |
| 59 FAIRFAX CC 517 - WILLS | 1211.792 | 16.86964 | 18.38253 | 35.17949 | 288.9259 | 10.24123 |  |
| 59 FAIRFAX CC518-COLU | 1580.27 | 27.06958 | 38.63243 | 50.44414 | 607.6802 | 18.83709 |  |
| 59 FAIRFAX CC519-HUM | 986.5342 | 9.415507 | 24.14527 | 39.37103 | 454.5448 | 15.06967 |  |
| 59 FAIRFAX CC520-SKYLI | 1534.505 | 25.30446 | 26.96104 | 27.64103 | 288.9259 | 16.642 |  |
| 59 FAIRFAX CC521-BROC | 1210.496 | 14.45969 | 28.18654 | 27.64103 | 563.0981 | 23.04276 |  |
| 59 FAIRFAX CC522-CAMI | 697.4447 | 7.06163 | 25.35253 | 35.68 | 430.2376 | 16.32548 |  |
| 59 FAIRFAX CC523-POE | 1381.573 | 15.66467 | 28.18654 | 42.71795 | 566.7865 | 33.28399 |  |
| 59 FAIRFAX CC525-WALI | 1936.276 | 22.89451 | 60.04959 | 56.53846 | 736.4536 | 40.96491 |  |
| 59 FAIRFAX CC526-BREN | 2141.049 | 14.45969 | 34.31405 | 72.87179 | 512.6897 | 34.56414 |  |
| 59 FAIRFAX CC527-EDSA | 1207.904 | 10.84477 | 26.96104 | 47.74359 | 468.4287 | 14.08169 |  |
| 59 FAIRFAX CC 528 -RIDGI | 610.5882 | 5.884692 | 20.52348 | 33.21931 | 341.5163 | 23.86031 |  |
| 59 FAIRFAX CC530-HOLN | 1180.989 | 16.47714 | 13.2799 | 35.68 | 247.9335 | 12.55806 |  |
| 59 FAIRFAX CC 601 - BELLE | 1057.564 | 19.27959 | 46.56907 | 41.46154 | 579.0812 | 38.40461 |  |
| 59 FAIRFAX CC 602 - BELLE | 1218.272 | 14.45969 | 40.44156 | 62.82051 | 497.9361 | 42.24507 |  |
| 59 FAIRFAX CC 604 - BUCK | 2063.287 | 30.12436 | 33.08855 | 79.15385 | 480.7235 | 28.16338 |  |
| 59 FAIRFAX CC 605 -FORT | 1087.373 | 12.04974 | 35.53955 | 40.20513 | 654.079 | 71.6886 |  |
| 59 FAIRFAX CC 606 - HOLL | 1254.561 | 9.639794 | 40.44156 | 60.30769 | 655.3085 | 57.60691 |  |
| 59 FAIRFAX CC607-HUN1 | 2225.291 | 36.14923 | 55.14758 | 111.8205 | 599.9822 | 33.28399 |  |
| 59 FAIRFAX CC 608 - KIRKS | 1130.142 | 10.84477 | 30.63754 | 30.15385 | 322.1216 | 25.60307 |  |
| 59 FAIRFAX CC 609 - MARI | 1069.228 | 18.07461 | 34.31405 | 57.79487 | 570.4749 | 53.76645 |  |
| 59 FAIRFAX CC 610 - SHER' | 1124.958 | 6.024871 | 20.83353 | 37.69231 | 367.6121 | 32.00384 |  |
| 59 FAIRFAX CC611-STRA | 1259.746 | 20.48456 | 60.04959 | 70.35897 | 754.8957 | 53.76645 |  |
| 59 FAIRFAX CC 612 - WAY | 688.1943 | 3.614923 | 23.28453 | 26.38462 | 372.5299 | 24.32292 |  |
| 59 FAIRFAX CC 613 -WEST | 1420.454 | 21.68954 | 57.59858 | 104.2821 | 1276.192 | 78.08936 |  |
| 59 FAIRFAX CC 614 - RIVEF | 933.1449 | 12.04974 | 53.92208 | 51.51282 | 634.4074 | 40.96491 |  |
| 59 FAIRFAX CC 615 - WOO | 1384.165 | 15.66467 | 42.89256 | 60.30769 | 720.4705 | 56.32675 |  |
| 59 FAIRFAX CC616-GUNS | 1044.604 | 10.84477 | 39.21606 | 55.28205 | 903.6618 | 21.76261 |  |
| 59 FAIRFAX CC617-LORT | 1433.414 | 14.45969 | 22.05903 | 18.84615 | 330.7279 | 17.92215 |  |
| 59 FAIRFAX CC 618 - NEWI | 2702.922 | 36.48509 | 100.2029 | 115.6524 | 1195.915 | 59.02288 |  |
| 59 FAIRFAX CC 619 - BELVI | 1158.655 | 16.86964 | 31.86305 | 49 | 569.2454 | 24.32292 |  |
| 59 FAIRFAX CC 621 -GROS | 1368.612 | 26.50943 | 49.02007 | 57.79487 | 360.2352 | 17.92215 |  |
| 59 FAIRFAX CC 622 -LORT | 2094.392 | 21.68954 | 36.76505 | 59.05128 | 554.4918 | 23.04276 |  |
| 59 FAIRFAX CC 623 - ALBA | 1695.213 | 25.30446 | 45.34357 | 80.41026 | 628.2601 | 24.32292 |  |
| 59 FAIRFAX CC 625 -LORT | 1092.557 | 22.89451 | 26.96104 | 41.46154 | 449.9867 | 14.08169 |  |
| 59 FAIRFAX C( 626 - SARA | 1893.506 | 27.71441 | 50.24557 | 79.15385 | 908.5796 | 47.36568 |  |
| 59 FAIRFAX CC 627 - WOO | 2373.039 | 21.68954 | 42.89256 | 74.12821 | 689.7337 | 23.04276 |  |
| 59 FAIRFAX CC 628 -LAUR | 2256.972 | 22.36183 | 32.59611 | 61.51724 | 765.677 | 31.39515 |  |
| 59 FAIRFAX CC 629 - SOUT | 1378.037 | 16.47714 | 30.18159 | 55.36552 | 894.5052 | 32.65095 |  |
| 59 FAIRFAX CC 701 - BLAK | 2395.684 | 31.77734 | 96.58108 | 105.8097 | 847.1062 | 28.88354 |  |
| 59 FAIRFAX CC 703 -FORT | 1259.746 | 13.25472 | 41.66706 | 49 | 319.6627 | 24.32292 |  |
| 59 FAIRFAX CC704-FREEI | 1171.914 | 15.3002 | 16.90169 | 35.68 | 514.0974 | 36.41837 |  |
| 59 FAIRFAX CC705-GRAF | 2220.107 | 25.30446 | 60.04959 | 82.92308 | 671.2916 | 42.24507 |  |


| CC707-MAN | 1145.987 | 12.94632 | 27.76706 | 41.83172 | 523.8203 | 21.3487 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC708-MAR | 2813.691 | 43.37907 | 82.10862 | 126.8974 | 768.4199 | 46.08553 |  |
| 59 FAIRFAX CC709-MOSI | 1798.059 | 25.89264 | 50.70507 | 73.82069 | 571.2194 | 40.18579 |  |
| 59 FAIRFAX CC 710 - PINE | 1369.908 | 16.86964 | 57.59858 | 76.64103 | 431.5446 | 33.28399 |  |
| 59 FAIRFAX CC 711 - PRICE | 1053.945 | 11.76938 | 26.5598 | 52.90483 | 499.5131 | 22.60451 |  |
| 59 FAIRFAX CC 712 - SHRE' | 837.2383 | 13.25472 | 37.99055 | 45.23077 | 308.5974 | 15.36184 |  |
| 59 FAIRFAX CC 713 - TIMB | 1848.145 | 24.09949 | 53.92208 | 66.58974 | 547.1149 | 33.28399 |  |
| 59 FAIRFAX CC 714 - WALk | 1769.539 | 17.65408 | 51.91233 | 67.66897 | 724.3548 | 23.86031 |  |
| 59 FAIRFAX CC717-WOO | 1118.764 | 17.65408 | 48.29054 | 46.7531 | 360.962 | 17.58128 |  |
| 59 FAIRFAX CC718-PINE | 1327.478 | 17.65408 | 26.5598 | 46.7531 | 508.0206 | 21.3487 |  |
| 59 FAIRFAX CC 720 - THOR | 1541.379 | 16.47714 | 50.70507 | 72.59034 | 645.3564 | 42.6974 |  |
| 59 FAIRFAX CC 721 - MERF | 3352.401 | 51.78529 | 96.58108 | 185.7821 | 865.3366 | 55.25546 |  |
| 59 FAIRFAX CC 726 -MAG، | 1903.875 | 36.14923 | 75.98111 | 80.41026 | 655.3085 | 34.56414 |  |
| 59 FAIRFAX CC 727 - OAKT | 1116.171 | 17.65408 | 55.53412 | 49.21379 | 720.7087 | 43.95321 |  |
| 59 FAIRFAX CC729-NOTT | 1700.832 | 31.77734 | 66.39949 | 77.51172 | 635.6335 | 42.6974 |  |
| 59 FAIRFAX CC730-PEND | 1903.065 | 34.13121 | 56.74138 | 94.73655 | 862.9059 | 32.65095 |  |
| 59 FAIRFAX CC 731 - TYSO | 1371.555 | 17.65408 | 38.63243 | 66.43862 | 483.7134 | 26.37192 |  |
| 59 FAIRFAX CC732-OAK I | 1568.602 | 23.53877 | 65.19223 | 83.66345 | 995.3801 | 52.74385 |  |
| 59 FAIRFAX CC 733 -KILMI | 2180.487 | 29.42346 | 42.25422 | 78.74207 | 736.5084 | 43.95321 |  |
| 59 FAIRFAX CC734-HUN7 | 1173.211 | 12.94632 | 36.2179 | 62.74759 | 315.9937 | 15.06967 |  |
| 59 FAIRFAX CC $735-$ ROTC | 706.5192 | 24.71571 | 16.90169 | 9.842759 | 274.6714 | 8.790641 |  |
| 59 FAIRFAX CC 801 - BURK | 2483.836 | 24.71571 | 85.71571 | 113.1917 | 1012.395 | 42.6974 |  |
| 59 FAIRFAX CC 802 - CEDA | 683.1847 | 5.884692 | 24.14527 | 24.6069 | 289.2558 | 13.81386 |  |
| 59 FAIRFAX CC 803 -CLIFT | 1504.222 | 14.87324 | 63.30846 | 103.4192 | 1786.794 | 59.57567 |  |
| 59 FAIRFAX CC 804 - COLC | 841.8635 | 8.676056 | 24.05721 | 38.45074 | 674.5932 | 25.15417 |  |
| 59 FAIRFAX CC 805 - FAIRF | 704.104 | 8.676056 | 29.12189 | 31.8213 | 555.4736 | 21.18246 |  |
| 59 FAIRFAX CC 806 - SYDEI | 1538.786 | 16.47714 | 70.02128 | 86.12414 | 900.582 | 38.92998 |  |
| 59 FAIRFAX CC 807 - HUN1 | 1039.685 | 10.59245 | 48.29054 | 57.82621 | 589.4498 | 22.60451 |  |
| 59 FAIRFAX CC 811 - POHII | 1120.06 | 14.12326 | 30.18159 | 40.60138 | 415.6532 | 18.83709 |  |
| 59 FAIRFAX CC 812 - VALLI | 1402.668 | 11.76938 | 48.29054 | 65.20828 | 738.9391 | 26.37192 |  |
| 59 FAIRFAX CC 815 - WOO | 1129.906 | 7.43662 | 37.98507 | 62.31671 | 1070.823 | 62.22348 |  |
| 59 FAIRFAX CC 824 - ORAN | 1842.136 | 25.89264 | 85.71571 | 110.731 | 1147.3 | 48.97643 |  |
| 59 FAIRFAX CC 825 -CHER | 1332.664 | 8.238569 | 49.4978 | 61.51724 | 850.7523 | 43.95321 |  |
| 59 FAIRFAX CC 827 -IRVIN | 1235.436 | 21.18489 | 51.91233 | 45.52276 | 713.4165 | 45.20901 |  |
| 59 FAIRFAX CC 833 - WHIT | 1651.57 | 16.47714 | 45.87601 | 75.05103 | 697.6169 | 22.60451 |  |
| 59 FAIRFAX CC 838 - SANG | 1024.151 | 8.676056 | 35.45274 | 49.05784 | 677.101 | 34.4215 |  |
| 59 FAIRFAX CC 839 - SILVE | 1566.84 | 14.87324 | 51.91294 | 91.48624 | 1139.787 | 50.30835 |  |
| 59 FAIRFAX CC 840 - WEST | 1470.079 | 20.00795 | 66.39949 | 49.21379 | 763.2463 | 55.25546 |  |
| 59 FAIRFAX CC 841 - POPE | 645.6606 | 7.43662 | 35.45274 | 38.45074 | 606.8831 | 27.80198 |  |
| 59 FAIRFAX CC 842 - PARK | 1033.203 | 12.94632 | 43.46149 | 40.60138 | 740.1545 | 43.95321 |  |
| 59 FAIRFAX CC 843 -FAIR I | 1696.943 | 24.71571 | 44.66875 | 98.42759 | 751.0927 | 20.09289 |  |
| 59 FAIRFAX CC 844 - CENT | 1604.901 | 37.66203 | 39.83969 | 93.50621 | 529.8971 | 23.86031 |  |
| 59 FAIRFAX CC $845-$ FOUN | 1580.755 | 9.915493 | 39.25124 | 95.4639 | 1458.275 | 55.60396 |  |
| 59 FAIRFAX C 846 -GREE | 1808.43 | 22.36183 | 56.74138 | 99.65793 | 803.3532 | 31.39515 |  |
| 59 FAIRFAX CC 847 -GREE | 1216.18 | 17.35211 | 34.18657 | 67.62026 | 683.3705 | 29.12588 |  |
| 59 FAIRFAX CC 848 -FAIR 1 | 1750.094 | 25.89264 | 32.59611 | 72.59034 | 747.4466 | 23.86031 |  |
| 59 FAIRFAX CC 849 - NEW | 846.038 | 4.957746 | 25.32338 | 53.0355 | 562.997 | 25.15417 |  |


| C( 850 - SOUT | 1284.364 | 7.43662 | 48.11443 | 57.01316 | 985.5582 | 42.36492 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 851 - WILL | 1173.211 | 15.3002 | 30.18159 | 54.13517 | 821.5836 | 32.65095 |  |
| 59 FAIRFAX CC 854 - NEW | 1228.703 | 27.26761 | 58.24378 | 68.94615 | 1148.564 | 51.63225 |  |
| 59 FAIRFAX CC901-CENT | 1787.688 | 34.13121 | 37.42517 | 87.35448 | 702.4783 | 18.83709 |  |
| 59 FAIRFAX CC $902-\mathrm{BROC}$ | 2415.661 | 32.22535 | 53.1791 | 91.48624 | 917.8481 | 25.15417 |  |
| 59 FAIRFAX CC903-CUB F | 1842.359 | 26.02817 | 83.56716 | 121.9817 | 1115.963 | 42.36492 |  |
| 59 FAIRFAX CC904-STON | 736.1087 | 6.197183 | 39.25124 | 67.62026 | 561.7431 | 13.23904 |  |
| 59 FAIRFAX CC 905 - FRAN | 544.0804 | 3.71831 | 21.52488 | 35.79896 | 248.2704 | 14.56294 |  |
| 59 FAIRFAX CC 908 - HIDD | 1141.038 | 13.6338 | 44.31592 | 63.6426 | 727.2567 | 27.80198 |  |
| 59 FAIRFAX CC 909 - OAK I | 1249.576 | 12.39437 | 29.12189 | 58.33905 | 601.8676 | 19.85856 |  |
| 59 FAIRFAX CC910-LONL | 2131.225 | 28.24652 | 65.19223 | 92.27586 | 765.677 | 32.65095 |  |
| 59 FAIRFAX CC911-NAVY | 1740.779 | 19.83099 | 45.58209 | 66.29438 | 907.8169 | 38.39321 |  |
| 59 FAIRFAX CC 913 -ROCK | 2003.774 | 33.46479 | 54.44527 | 111.3746 | 1312.824 | 60.89958 |  |
| 59 FAIRFAX CC 914 - VALE | 1064.505 | 12.39437 | 37.98507 | 66.29438 | 687.1321 | 47.66054 |  |
| 59 FAIRFAX CC 915 - VIRGI | 1086.769 | 11.15493 | 29.12189 | 68.94615 | 1073.331 | 33.0976 |  |
| 59 FAIRFAX CC 916 - WAPI | 1970.378 | 22.30986 | 63.30846 | 111.3746 | 1334.14 | 55.60396 |  |
| 59 FAIRFAX CC 917 - STON | 1054.764 | 6.197183 | 24.05721 | 74.2497 | 490.2713 | 27.80198 |  |
| 59 FAIRFAX CC918-CENT | 2360.682 | 35.30815 | 73.64307 | 129.1862 | 973.5037 | 42.6974 |  |
| 59 FAIRFAX CC 919 - GREE | 2120.854 | 34.13121 | 71.22854 | 94.73655 | 989.3033 | 38.92998 |  |
| 59 FAIRFAX CC 920 - CHAN | 1575.189 | 11.15493 | 31.65423 | 60.99083 | 786.1895 | 39.71711 |  |
| 59 FAIRFAX CC921-DEER | 1463.868 | 28.50704 | 62.04229 | 111.3746 | 1104.678 | 31.77369 |  |
| 59 FAIRFAX CC 923 - BULL | 839.0804 | 7.43662 | 34.18657 | 51.70961 | 840.1068 | 30.44979 |  |
| 59 FAIRFAX CC 924 - SPIN[ | 1148.58 | 17.65408 | 35.01064 | 59.05655 | 401.0689 | 18.83709 |  |
| 59 FAIRFAX CC 925 - OLD 1 | 1004.67 | 14.87324 | 25.32338 | 68.94615 | 559.2353 | 13.23904 |  |
| 59 FAIRFAX CC926-POW | 2481.244 | 27.06958 | 43.46149 | 124.2648 | 996.5955 | 31.39515 |  |
| 59 FAIRFAX CC 927 - ARMF | 1093.727 | 8.676056 | 22.79104 | 51.70961 | 535.4114 | 22.50636 |  |
| 59 FAIRFAX CC 928 - POPL | 1437.43 | 13.6338 | 30.38806 | 74.2497 | 830.0757 | 41.04102 |  |
| 59 FAIRFAX CC 929 - DIFFII | 293.6086 | 3.71831 | 7.597015 | 19.88831 | 254.5398 | 19.85856 |  |
| 59 FAIRFAX CC 930 -LEES | 1139.647 | 24.78873 | 54.44527 | 74.2497 | 601.8676 | 26.47808 |  |
| 59 FAIRFAX CC931-CARS | 1242.618 | 22.30986 | 43.04975 | 66.29438 | 560.4892 | 23.83027 |  |
| 59 FAIRFAX CC932-STON | 1017.194 | 16.11268 | 30.38806 | 46.40606 | 376.1672 | 15.88685 |  |
| 59 FAIRFAX CC933-COMI | 391.5024 | 8.238569 | 15.69443 | 15.99448 | 200.5345 | 6.279029 |  |
| 61 FAUQUIER 101 -KETTI | 239.5725 | 5.572917 | 22.52668 | 25.98252 | 710.8086 | 3.417391 |  |
| 61 FAUQUIER 102-CATLI | 528.1134 | 8.627907 | 26.72973 | 63.72197 | 1582.006 | 15.82609 |  |
| 61 FAUQUIER 103 -CASA | 386.9097 | 5.572917 | 4.742459 | 21.25843 | 629.0543 | 4.556522 |  |
| 61 FAUQUIER 104 -LOIS | 269.0599 | 7.395349 | 15.10811 | 21.97309 | 678.4618 | 10.17391 |  |
| 61 FAUQUIER 105-OPAL | 283.8935 | 1.114583 | 20.15545 | 29.52559 | 708.5377 | 9.113043 |  |
| 61 FAUQUIER 106 - BALD | 462.375 | 8.916667 | 36.75406 | 50.78402 | 719.8925 | 9.113043 |  |
| 61 FAUQUIER 201 - COUF | 1098.44 | 31.20833 | 42.68213 | 89.7578 | 1266.057 | 25.06087 |  |
| 61 FAUQUIER 202 - AIRLII | 736.6856 | 10.03125 | 29.64037 | 81.49064 | 1218.367 | 18.22609 |  |
| 61 FAUQUIER 203 -WARI | 1021.777 | 17.83333 | 53.35267 | 81.49064 | 1118.445 | 27.33913 |  |
| 61 FAUQUIER 301 - MORI | 380.2417 | 12.32558 | 12.78378 | 38.45291 | 1132.913 | 13.56522 |  |
| 61 FAUQUIER 302 -REMI | 723.5091 | 14.48958 | 41.49652 | 76.76654 | 1401.179 | 17.08696 |  |
| 61 FAUQUIER 303 -BEALI | 920.5851 | 24.65116 | 31.37838 | 120.852 | 1501.619 | 12.43478 |  |
| 61 FAUQUIER 401 - MARS | 831.3167 | 30.09375 | 23.7123 | 83.85268 | 1267.192 | 18.22609 |  |
| 61 FAUQUIER 402 -LEED! | 826.5253 | 10.03125 | 21.34107 | 47.24095 | 1004.897 | 20.50435 |  |
| 1 FAUQUIER 403 - WATE | 761.8407 | 18.94792 | 28.45476 | 70.86142 | 1406.856 | 18.22609 |  |


| UIER 404 - SPRIN | 385.7118 | 3.34375 | 21.34107 | 25.98252 | 663.1186 | 9.113043 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 501-THEF | 860.0654 | 12.26042 | 30.82599 | 42.51685 | 903.8397 | 9.113043 |  |
| 61 FAUQUIER 502 - NEW | 620.4929 | 12.26042 | 48.61021 | 67.31835 | 1272.87 | 17.08696 |  |
| 61 FAUQUIER 503-BROA | 591.7442 | 11.14583 | 26.08353 | 47.24095 | 1038.962 | 22.78261 |  |
| 61 FAUQUIER 504 - VINT | 1042.141 | 21.17708 | 59.28074 | 103.9301 | 1901.924 | 33.03478 |  |
| 63 FLOYD COL 101 - LOCU | 470.5945 | 15.62921 | 19.3375 | 37.48366 | 1110.021 | 13.88889 |  |
| 63 FLOYD COL 201 - LITTL | 561.7568 | 31.25843 | 29.575 | 48.36601 | 1076.486 | 20.83333 |  |
| 63 FLOYD COL 301 - COUF | 553.1334 | 27.65169 | 15.925 | 43.52941 | 865.2127 | 18.05556 |  |
| 63 FLOYD COL 401 - BURK | 380.6642 | 21.64045 | 7.9625 | 37.48366 | 1061.954 | 12.5 |  |
| 63 FLOYD COL 501 - INDIA | 333.8511 | 10.82022 | 18.2 | 18.13725 | 1179.327 | 9.722222 |  |
| 65 FLUVANNA 101 -PALN | 1476.181 | 19.15493 | 40.15789 | 113.7324 | 1551.943 | 17.11538 |  |
| 65 FLUVANNA 201 -COLU | 879.196 | 11.26761 | 27.53684 | 56.26761 | 1126.939 | 13.69231 |  |
| 65 FLUVANNA 301 -FORK | 1091.457 | 9.014085 | 27.53684 | 51.47887 | 1083.986 | 13.69231 |  |
| 65 FLUVANNA 401 -CUNN | 940.7035 | 15.77465 | 44.74737 | 85 | 1758.793 | 26.24359 |  |
| 65 FLUVANNA501-RIVAI | 1372.462 | 24.78873 | 78.02105 | 118.5211 | 1503.339 | 18.25641 |  |
| 67 FRANKLIN (102-BURA | 488.4949 | 6.571429 | 15.344 | 58.57297 | 1343.427 | 12.27536 |  |
| 67 FRANKLIN (103-SCRU | 727.7121 | 7.666667 | 21.92 | 69.41982 | 2162.616 | 10.04348 |  |
| 67 FRANKLIN (201-GLAD | 352.1188 | 4.380952 | 9.864 | 28.2018 | 1163.657 | 10.04348 |  |
| 67 FRANKLIN (202-PENH | 343.1761 | 1.095238 | 7.672 | 19.52432 | 800.889 | 13.3913 |  |
| 67 FRANKLIN 1203 - HODC | 81.60213 | 1.095238 | 1.096 | 4.338739 | 198.0693 | 2.231884 |  |
| 67 FRANKLIN (204-DUDL | 273.8701 | 3.285714 | 10.96 | 21.69369 | 695.3956 | 1.115942 |  |
| 67 FRANKLIN 301 -SNOV | 158.7329 | 3.285714 | 6.576 | 13.01622 | 606.0491 | 4.463768 |  |
| 67 FRANKLIN (302-FORK | 130.787 | 1.095238 | 7.672 | 14.1009 | 509.1674 | 5.57971 |  |
| 67 FRANKLIN (303-SONT | 520.9122 | 7.666667 | 14.248 | 35.79459 | 778.2833 | 3.347826 |  |
| 67 FRANKLIN (304-DICKI | 245.9242 | 4.380952 | 4.384 | 8.677477 | 294.9511 | 0 |  |
| 67 FRANKLIN (401-HENR | 230.2745 | 6.571429 | 9.864 | 21.69369 | 1053.858 | 6.695652 |  |
| 67 FRANKLIN (402-FERRI | 223.5675 | 7.666667 | 8.768 | 17.35495 | 515.6261 | 3.347826 |  |
| 67 FRANKLIN (403-ENDII | 150.908 | 5.47619 | 9.864 | 17.35495 | 547.9201 | 8.927536 |  |
| 67 FRANKLIN (501-WAID | 224.6853 | 2.190476 | 7.672 | 23.86306 | 651.2606 | 3.347826 |  |
| 67 FRANKLIN (502-CALL) | 287.2842 | 4.380952 | 12.056 | 22.77838 | 920.3765 | 5.57971 |  |
| 67 FRANKLIN (503-BOW | 172.147 | 6.571429 | 4.384 | 26.03243 | 454.2677 | 8.927536 |  |
| 67 FRANKLIN (504-GOG( | 243.6885 | 3.285714 | 12.056 | 16.27027 | 749.2188 | 8.927536 |  |
| 67 FRANKLIN 601 - BOO | 390.1252 | 8.761905 | 25.208 | 41.21802 | 1121.675 | 8.927536 |  |
| 67 FRANKLIN (602-BONE | 336.469 | 13.14286 | 17.536 | 39.04865 | 1076.464 | 4.463768 |  |
| 67 FRANKLIN (603-COOF | 215.7426 | 3.285714 | 15.344 | 22.77838 | 849.3299 | 5.57971 |  |
| 67 FRANKLIN 1701 - ROCK | 563.39 | 6.571429 | 19.728 | 31.45586 | 921.453 | 11.15942 |  |
| 67 FRANKLIN 1702 - ROCK | 486.2592 | 5.47619 | 20.824 | 29.28649 | 601.7432 | 4.463768 |  |
| 67 FRANKLIN 703 - ROCK | 409.1285 | 1.095238 | 10.96 | 19.52432 | 553.3024 | 11.15942 |  |
| 69 FREDERICK 101 - RUSS | 350.4816 | 7.459016 | 11.03659 | 50.19608 | 1202.3 | 5.54 |  |
| 69 FREDERICK 102 -GORE | 382.8509 | 22.37705 | 12.14024 | 49.10486 | 1462.871 | 15.512 |  |
| 69 FREDERICK 103 - KERN | 625.0627 | 21.31148 | 26.4878 | 65.47315 | 1323.395 | 14.404 |  |
| 69 FREDERICK 104 - CEDA | 361.6434 | 21.31148 | 13.2439 | 41.46633 | 862.8019 | 7.756 |  |
| 69 FREDERICK 201 -GAIN | 195.3321 | 4.262295 | 15.45122 | 22.9156 | 926.5931 | 6.648 |  |
| 69 FREDERICK 202 - ALBII | 448.7057 | 6.393443 | 29.79878 | 32.73657 | 1194.732 | 13.296 |  |
| 69 FREDERICK 203 - REDL | 588.2286 | 13.85246 | 29.79878 | 62.19949 | 1614.24 | 18.836 |  |
| 69 FREDERICK 204 - NAIN | 475.4941 | 9.590164 | 32.0061 | 39.28389 | 1246.63 | 11.08 |  |
| 69 FREDERICK 301 - CLEAI | 266.7678 | 3.196721 | 12.14024 | 41.46633 | 867.1268 | 6.648 |  |


| 202-NEFF' | 887.3658 | 26.63934 | 30.90244 | 90.57118 | 1414.217 | 21.052 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 69 FREDERICK 303 - WHIT | 711.0088 | 12.78689 | 23.17683 | 62.19949 | 1735.335 | 27.7 |  |
| 69 FREDERICK 401 - CARP | 666.3615 | 18.11475 | 34.21341 | 52.37852 | 1237.98 | 11.08 |  |
| 69 FREDERICK 402 - SHEN | 311.4152 | 10.65574 | 13.2439 | 44.73998 | 691.9715 | 3.324 |  |
| 69 FREDERICK 403 - PARK | 590.461 | 19.18033 | 45.25 | 70.92924 | 1159.052 | 14.404 |  |
| 69 FREDERICK 404 - ARMI | 609.4361 | 13.85246 | 33.10976 | 72.02046 | 1135.266 | 15.512 |  |
| 69 FREDERICK 501 - STEPY | 679.7557 | 17.04918 | 32.0061 | 92.75362 | 1296.365 | 9.972 |  |
| 69 FREDERICK 502 - NEW | 808.1167 | 19.18033 | 35.31707 | 108.0307 | 1548.286 | 11.08 |  |
| 69 FREDERICK 503 -CANT | 697.6146 | 18.11475 | 18.7622 | 61.10827 | 1435.841 | 9.972 |  |
| 69 FREDERICK 601 - MILLE | 505.6311 | 6.393443 | 12.14024 | 52.37852 | 873.614 | 15.512 |  |
| 69 FREDERICK 602 - ASH - | 735.5648 | 24.5082 | 38.62805 | 73.11168 | 1080.124 | 14.404 |  |
| 69 FREDERICK 603 -GREE | 1034.702 | 28.77049 | 44.14634 | 94.93606 | 1774.258 | 23.268 |  |
| 71 GILES COUI 101 - GLEN | 22.55639 | 1.026316 | 0 | 1.074866 | 99.71025 | 1.172414 |  |
| 71 GILES COUI 102 - RICH | 98.1203 | 4.105263 | 3.391304 | 13.97326 | 399.9248 | 2.344828 |  |
| 71 GILES COUI 103 - NARR | 356.391 | 4.105263 | 19.21739 | 48.36898 | 1246.378 | 10.55172 |  |
| 71 GILES COUI 201 - PEAR | 470.3008 | 8.210526 | 19.21739 | 55.89305 | 1541.174 | 10.55172 |  |
| 71 GILES COUI 202 - STAFI | 78.94737 | 2.052632 | 2.26087 | 11.82353 | 267.7003 | 2.344828 |  |
| 71 GILES COUI203-WHIT | 30.45113 | 0 | 2.26087 | 3.224599 | 178.8282 | 1.172414 |  |
| 71 GILES COUI301-EGGL | 192.8571 | 8.210526 | 5.652174 | 11.82353 | 455.199 | 1.172414 |  |
| 71 GILES COUI302-PEME | 384.5865 | 9.236842 | 18.08696 | 32.24599 | 1165.093 | 2.344828 |  |
| 71 GILES COUI 303 - NEWI | 315.7895 | 2.052632 | 7.913043 | 22.57219 | 555.993 | 2.344828 |  |
| 73 GLOUCESTI 101 - HARC | 400.5477 | 11.07438 | 25.94924 | 52.88394 | 1020.356 | 5.724638 |  |
| 73 GLOUCESTI 102 - SALEI | 333.7898 | 3.322314 | 8.649746 | 52.88394 | 892.5429 | 8.014493 |  |
| 73 GLOUCEST103-PEASI | 220.6407 | 8.859504 | 9.730964 | 30.84897 | 680.9533 | 5.724638 |  |
| 73 GLOUCESTI201-COUF | 527.2747 | 11.07438 | 15.13706 | 50.68045 | 962.3568 | 8.014493 |  |
| 73 GLOUCESTI202-BOTE | 683.4204 | 21.04132 | 31.35533 | 81.52941 | 1469.313 | 9.15942 |  |
| 73 GLOUCESTI301-WHIT | 369.9975 | 9.966942 | 16.21827 | 69.41017 | 1210.464 | 6.869565 |  |
| 73 GLOUCESTI302-ROAN | 588.3752 | 15.50413 | 32.43655 | 59.49444 | 1520.867 | 9.15942 |  |
| 73 GLOUCEST। 401 - HAYE | 655.1332 | 16.61157 | 11.8934 | 65.00318 | 1320.018 | 5.724638 |  |
| 73 GLOUCEST/402-SARA | 577.0603 | 14.39669 | 30.27411 | 67.20668 | 1083.725 | 3.434783 |  |
| 73 GLOUCESTI501-ACHII | 578.1918 | 14.39669 | 15.13706 | 81.52941 | 1768.975 | 12.5942 |  |
| 73 GLOUCESTI502-WALk | 469.5687 | 7.752066 | 16.21827 | 81.52941 | 1166.428 | 4.57971 |  |
| 75 GOOCHLAP 101 - FIFE | 418.959 | 4.695652 | 10.19531 | 27.34615 | 589.6902 | 1.151899 |  |
| 75 GOOCHLAR 102 - HADE | 549.4545 | 7.043478 | 16.99219 | 51.27404 | 1009.001 | 9.21519 |  |
| 75 GOOCHLAR 201 - THRE | 236.9522 | 2.347826 | 3.398438 | 13.67308 | 237.8675 | 9.21519 |  |
| 75 GOOCHLAR 202 - SAND | 873.4037 | 11.73913 | 26.05469 | 61.52885 | 1115.211 | 9.21519 |  |
| 75 GOOCHLAP 301 -GOOC | 467.0363 | 2.347826 | 9.0625 | 37.60096 | 816.4941 | 4.607595 |  |
| 75 GOOCHLAP 302 -GOOC | 184.2962 | 7.043478 | 7.929688 | 15.95192 | 379.4817 | 3.455696 |  |
| 75 GOOCHLAP 401 -SHAL | 524.2711 | 3.521739 | 21.52344 | 46.71635 | 744.5806 | 6.911392 |  |
| 75 GOOCHLAP 402 - CENT | 607.834 | 4.695652 | 27.1875 | 63.80769 | 1369.674 | 12.67089 |  |
| 75 GOOCHLAR 501 - MAN, | 647.8984 | 8.217391 | 11.32813 | 92.29327 | 1333.164 | 23.03797 |  |
| 75 GOOCHLAP 502 - BLAIR | 378.8946 | 2.347826 | 11.32813 | 63.80769 | 788.835 | 11.51899 |  |
| 77 GRAYSON (101-BRIDI | 80.36766 | 5.392157 | 5.740741 | 4.731183 | 207.0699 | 1.12 |  |
| 77 GRAYSON (102-FLATF | 43.01368 | 1.078431 | 0 | 2.365591 | 140.2731 | 0 |  |
| 77 GRAYSON (103-GRAN | 86.02735 | 3.235294 | 2.296296 | 5.913978 | 220.4292 | 2.24 |  |
| 77 GRAYSON (104-MOU | 65.65245 | 2.156863 | 5.740741 | 7.096774 | 121.3474 | 2.24 |  |
| 77 GRAYSON ( 105 - MOU | 39.61786 | 0 | 4.592593 | 3.548387 | 198.1636 | 0 |  |


| 77 GRAYSON (106-RUGE | 52.06919 | 0 | 4.592593 | 8.27957 | 188.1441 | 1.12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 GRAYSON (107-TROU | 19.24296 | 0 | 1.148148 | 1.182796 | 122.4607 | 4.48 | 0 |
| 77 GRAYSON ( 108 - COMI | 46.40949 | 2.156863 | 2.296296 | 3.548387 | 153.6325 | 1.12 | 0 |
| 77 GRAYSON ( 202 - ELK C | 89.42317 | 7.54902 | 6.888889 | 7.096774 | 391.8742 | 0 |  |
| 77 GRAYSON ( 203 - INDEI | 276.1931 | 8.627451 | 19.51852 | 22.47312 | 989.705 | 4.48 |  |
| 77 GRAYSON (301-BAYM | 140.3604 | 3.235294 | 6.888889 | 11.82796 | 647.9283 | 1.12 |  |
| 77 GRAYSON (302-FAIR | 161.8673 | 7.54902 | 13.77778 | 9.462366 | 826.053 | 3.36 |  |
| 77 GRAYSON ( 401 - FRIES | 110.93 | 1.078431 | 4.592593 | 5.913978 | 319.511 | 2.24 |  |
| 77 GRAYSON ( 402 - PROV | 113.1939 | 10.78431 | 9.185185 | 8.27957 | 742.557 | 2.24 |  |
| 77 GRAYSON ( 403 - OLDT | 82.63154 | 2.156863 | 5.740741 | 8.27957 | 322.8509 | 2.24 |  |
| 79 GREENE CC 101 - DYKE | 258.9694 | 6.827586 | 7.845638 | 23.61773 | 679.2077 | 11.11111 |  |
| 79 GREENE CC 102 - SWIF | 401.4026 | 9.103448 | 24.65772 | 74.22715 | 836.0329 | 18.88889 |  |
| 79 GREENE CC 201 - RUCK | 756.8969 | 14.7931 | 56.04027 | 107.9668 | 1407.009 | 25.55556 |  |
| 79 GREENE CC 301 - STAN | 615.6409 | 18.2069 | 17.93289 | 74.22715 | 1447.872 | 14.44444 |  |
| 79 GREENE CC 401 - MIDV | 891.0902 | 17.06897 | 60.52349 | 125.9612 | 1574.878 | 30 |  |
| 81 GREENSVIL 101 - PREC | 317 | 0 | 3 | 5 | 158.091 | 0 |  |
| 81 GREENSVIL 102 - PREC | 86 | 1 | 0 | 5 | 114.0657 | 0 |  |
| 81 GREENSVIL 103 - PREC | 305 | 3 | 0 | 2 | 44.02535 | 0 |  |
| 81 GREENSVIL 201 - PREC | 421 | 1 | 3 | 3 | 167.0962 | 0 |  |
| 81 GREENSVIL 202 - PREC | 284 | 1 | 0 | 5 | 400.2304 | 0 |  |
| 81 GREENSVIL 302 - PREC | 753 | 0 | 3 | 12 | 398.2293 | 0 |  |
| 81 GREENSVIL 401 - PREC | 110 | 0 | 2 | 7 | 204.1175 | 0 |  |
| 81 GREENSVIL 402 - PREC | 195 | 0 | 1 | 5 | 111.0639 | 0 |  |
| 81 GREENSVIL 403 - PREC | 87 | 0 | 0 | 6 | 140.0806 | 0 |  |
| 83 HALIFAX C( 101 - CHILC | 325.7722 | 0 | 4.219178 | 10.06132 | 471.3246 | 0 |  |
| 83 HALIFAX C( 102 - LIBER | 166.2331 | 1.073171 | 4.219178 | 3.353774 | 240.0672 | 0 |  |
| 83 HALIFAX C( 103 - REPU | 408.331 | 6.439024 | 3.164384 | 6.707547 | 434.9841 | 6.5625 |  |
| 83 HALIFAX C( 201 - CLAY! | 191.8932 | 0 | 2.109589 | 5.589623 | 401.9473 | 1.3125 |  |
| 83 HALIFAX C( 202 - CROS | 236.5196 | 0 | 2.109589 | 6.707547 | 323.7603 | 0 |  |
| 83 HALIFAX C( 203 - CLOV | 450.726 | 4.292683 | 1.054795 | 7.825472 | 458.1099 | 1.3125 |  |
| 83 HALIFAX C( 302 - MEAI | 253.2544 | 2.146341 | 7.383562 | 5.589623 | 122.236 | 1.3125 |  |
| 83 HALIFAX C( 304 - VERN | 223.1317 | 2.146341 | 3.164384 | 1.117925 | 404.1498 | 3.9375 |  |
| 83 HALIFAX C( $305-$ SINAI | 724.0623 | 3.219512 | 1.054795 | 12.29717 | 439.389 | 5.25 |  |
| 83 HALIFAX C( 401 - COUF | 504.2776 | 5.365854 | 6.328767 | 15.65094 | 488.9442 | 3.9375 |  |
| 83 HALIFAX C( 403 - CENT | 302.3434 | 3.219512 | 9.493151 | 24.59434 | 638.7108 | 2.625 |  |
| 83 HALIFAX C( 502 - DAN | 467.4609 | 4.292683 | 9.493151 | 41.36321 | 926.1307 | 5.25 |  |
| 83 HALIFAX C(503-SCOT | 143.9199 | 0 | 4.219178 | 12.29717 | 547.3091 | 1.3125 |  |
| 83 HALIFAX C(601-BLAC | 247.6762 | 1.073171 | 3.164384 | 7.825472 | 566.03 | 0 |  |
| 83 HALIFAX C(603-MT C. | 541.0943 | 2.146341 | 5.273973 | 16.76887 | 656.3305 | 0 |  |
| 83 HALIFAX C( 605 - UNIO | 119.3754 | 2.146341 | 2.109589 | 5.589623 | 225.7512 | 0 |  |
| 83 HALIFAX C(701-HYCC | 295.6495 | 0 | 2.109589 | 10.06132 | 836.9315 | 1.3125 |  |
| 83 HALIFAX C( 702 - MIDV | 116.0285 | 0 | 1.054795 | 14.53302 | 636.5084 | 3.9375 |  |
| 83 HALIFAX C( 703 - VIRGI | 109.3345 | 0 | 1.054795 | 8.943396 | 412.9596 | 0 |  |
| 83 HALIFAX C(801-SOUT | 666.048 | 4.292683 | 3.164384 | 13.41509 | 276.4076 | 1.3125 |  |
| 83 HALIFAX C(802-SOUT | 403.8683 | 2.146341 | 1.054795 | 6.707547 | 196.0182 | 2.625 |  |
| 85 HANOVER 1101 - ASHL | 809.171 | 12.03484 | 12.22039 | 57.18932 | 676.2021 | 11.46341 |  |
| 85 HANOVER 104 -SLIDII | 687.0109 | 7.658537 | 26.66267 | 68.40291 | 952.9782 | 18.34146 |  |


| 05 - BERK | 892.1055 | 13.12892 | 21.10795 | 54.9466 | 541.6129 | 6.878049 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85 HANOVER 106 -KERSI | 364.239 | 1.094077 | 16.66417 | 37.00485 | 655.5795 | 8.02439 |  |
| 85 HANOVER 107 -CHIC | 533.4701 | 5.470383 | 23.32984 | 81.85922 | 782.5709 | 11.46341 |  |
| 85 HANOVER 1201 - BEAV | 558.1263 | 7.658537 | 17.77511 | 78.49515 | 1625.924 | 14.90244 |  |
| 85 HANOVER 1202 - BLUN | 406.827 | 2.188153 | 4.443778 | 34.76214 | 700.0808 | 4.585366 |  |
| 85 HANOVER 1203 - WILN | 500.9688 | 8.752613 | 16.66417 | 52.70388 | 1101.678 | 5.731707 |  |
| 85 HANOVER 1206 -COUF | 534.5908 | 6.56446 | 21.10795 | 42.61165 | 697.91 | 6.878049 |  |
| 85 HANOVER $1208-$ OAK I | 458.3808 | 8.752613 | 19.997 | 63.91748 | 1024.614 | 8.02439 |  |
| 85 HANOVER 1209 - WEST | 162.5066 | 4.376307 | 4.443778 | 20.18447 | 302.8256 | 1.146341 |  |
| 85 HANOVER 1210-OAK I | 163.6274 | 2.188153 | 4.443778 | 24.6699 | 399.4259 | 3.439024 |  |
| 85 HANOVER 1301 - CLAY | 569.3336 | 8.752613 | 21.10795 | 61.67476 | 1386.051 | 11.46341 |  |
| 85 HANOVER $1303-$ SHAD | 539.0738 | 10.94077 | 26.66267 | 56.06796 | 1163.545 | 9.170732 |  |
| 85 HANOVER 1304 - ATLEI | 1368.418 | 24.06969 | 58.88006 | 195.1165 | 2320.578 | 22.92683 |  |
| 85 HANOVER1305-COOL | 692.6145 | 2.188153 | 33.32834 | 87.46602 | 1212.388 | 19.4878 |  |
| 85 HANOVER 1401 -BATT | 438.2076 | 5.470383 | 19.997 | 65.03883 | 1696.475 | 8.02439 |  |
| 85 HANOVER 1403 -COLD | 737.444 | 17.50523 | 24.44078 | 103.165 | 1831.064 | 17.19512 |  |
| 85 HANOVER 1404 - BLAC | 452.7771 | 7.658537 | 33.32834 | 43.73301 | 1838.662 | 13.7561 |  |
| 85 HANOVER 1405 - PEBB | 404.5855 | 1.094077 | 22.21889 | 34.76214 | 823.816 | 11.46341 |  |
| 85 HANOVER 1406 - BEAV | 147.9371 | 6.56446 | 7.776612 | 24.6699 | 346.2415 | 1.146341 |  |
| 85 HANOVER 1502 -RURA | 607.4386 | 13.12892 | 23.32984 | 50.46117 | 1379.539 | 19.4878 |  |
| 85 HANOVER 1503 -NEWI | 586.1447 | 5.470383 | 21.10795 | 88.58738 | 1085.397 | 12.60976 |  |
| 85 HANOVER 1504 -STUD | 264.4936 | 13.12892 | 22.21889 | 44.85437 | 1035.468 | 10.31707 |  |
| 85 HANOVER 1505 -TOTO | 236.4752 | 4.376307 | 5.554723 | 39.24757 | 803.1935 | 6.878049 |  |
| 85 HANOVER 1506 -GEOR | 413.5514 | 4.376307 | 19.997 | 70.64563 | 1001.821 | 10.31707 |  |
| 85 HANOVER 1507 -LAUR | 515.5383 | 4.376307 | 22.21889 | 86.34466 | 1286.195 | 13.7561 |  |
| 85 HANOVER 1601 -VILLA | 813.654 | 22.97561 | 24.44078 | 117.7427 | 2022.094 | 12.60976 |  |
| 85 HANOVER 1602 -LEE D | 624.2497 | 17.50523 | 15.55322 | 81.85922 | 1530.409 | 5.731707 |  |
| 85 HANOVER 1603 -MECF | 633.2156 | 14.223 | 26.66267 | 62.79612 | 909.5623 | 9.170732 |  |
| 85 HANOVER 1604 -HANC | 383.2915 | 1.094077 | 14.44228 | 56.06796 | 957.3198 | 8.02439 |  |
| 85 HANOVER 1701 -FARR | 535.7116 | 10.94077 | 22.21889 | 61.67476 | 1291.622 | 10.31707 |  |
| 85 HANOVER 1702 -MON | 652.2681 | 7.658537 | 13.33133 | 74.00971 | 1068.03 | 10.31707 |  |
| 85 HANOVER $1703-\mathrm{ROCK}$ | 582.7825 | 9.84669 | 16.66417 | 63.91748 | 1204.79 | 14.90244 |  |
| 85 HANOVER 1704 -ELMC | 766.5831 | 13.12892 | 36.66117 | 85.2233 | 1264.487 | 12.60976 |  |
| 85 HANOVER 1705 -SOUT | 345.1865 | 7.658537 | 19.997 | 38.12621 | 709.8494 | 3.439024 |  |
| 87 HENRICO C 101 - COAL | 1450.67 | 17.48431 | 53.54608 | 107.3692 | 1319.698 | 19.48363 |  |
| 87 HENRICO C 102 - DUM | 1675.342 | 22.94816 | 30.59776 | 76.37602 | 558.6315 | 18.33753 |  |
| 87 HENRICO C 103 -GLEN | 1411.894 | 10.92769 | 44.80386 | 117.3313 | 1536.513 | 24.06801 |  |
| 87 HENRICO C 104 -GLEN | 1260.213 | 17.48431 | 3.278331 | 34.31386 | 360.6215 | 10.31486 |  |
| 87 HENRICO C 105 -GREE | 757.2681 | 18.57708 | 19.66999 | 55.34494 | 513.2773 | 9.168766 |  |
| 87 HENRICO C 106 - HERN | 1346.888 | 19.66985 | 33.87609 | 111.7968 | 931.4213 | 25.21411 |  |
| 87 HENRICO C 107 - HILLI/ | 559.9678 | 8.742156 | 20.76276 | 48.70355 | 401.551 | 5.730479 |  |
| 87 HENRICO C 108 -HUN( | 1523.66 | 18.57708 | 45.89664 | 116.2244 | 1424.787 | 18.33753 |  |
| 87 HENRICO C 109 - HUN7 | 323.8918 | 8.742156 | 9.834994 | 34.31386 | 487.8347 | 4.584383 |  |
| 87 HENRICO C 110 - JOHN | 460.7475 | 14.206 | 9.834994 | 29.88627 | 342.9223 | 2.292191 |  |
| 87 HENRICO C 111 -LAKEs | 1013.873 | 28.41201 | 18.57721 | 100.7278 | 866.1554 | 25.21411 |  |
| 87 HENRICO C 112 -LONG | 1142.745 | 24.04093 | 32.78331 | 76.37602 | 1016.599 | 17.19144 |  |
| 87 HENRICO C 113 - MAU | 448.2024 | 5.463847 | 7.64944 | 44.27595 | 433.6308 | 6.876574 |  |


| ON | 439.0786 | 5.463847 | 27.31943 | 66.41393 | 365.0463 | 6.876574 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 115 - STAPI | 1379.961 | 16.39154 | 52.4533 | 117.3313 | 1496.69 | 25.21411 | 0 |
| 87 HENRICO C 116 - SUMI | 598.7436 | 16.39154 | 16.39166 | 68.62773 | 448.0114 | 11.46096 | 0 |
| 87 HENRICO C 117 - WEST | 871.3145 | 14.206 | 20.76276 | 70.84153 | 612.8354 | 9.168766 |  |
| 87 HENRICO C 201 - ADAn | 1431.784 | 11.71103 | 1.1 | 6.446701 | 76.82277 | 2.248705 |  |
| 87 HENRICO C 202 - AZALI | 2341.373 | 16.39154 | 16.39166 | 29.88627 | 138.2751 | 16.04534 |  |
| 87 HENRICO C 203 - BELM | 1229.42 | 16.39154 | 31.69054 | 69.73463 | 529.8703 | 9.168766 |  |
| 87 HENRICO C 204 - BROC | 268.009 | 3.278308 | 4.371108 | 16.60348 | 259.9572 | 2.292191 |  |
| 87 HENRICO C 205 -CANT | 295.3802 | 2.185539 | 3.278331 | 47.59665 | 316.3735 | 4.584383 |  |
| 87 HENRICO C 206 - CENT | 1939.038 | 9.581749 | 8.8 | 9.670051 | 37.87038 | 29.23316 |  |
| 87 HENRICO C 207 - CHAN | 1513.396 | 16.39154 | 25.13387 | 56.45184 | 476.7727 | 5.730479 |  |
| 87 HENRICO C 208 - FAIRF | 1763.58 | 8.51711 | 3.3 | 8.595601 | 64.92065 | 7.870466 |  |
| 87 HENRICO C 209 - GLEN | 1104.487 | 9.581749 | 4.4 | 16.11675 | 194.762 | 13.49223 |  |
| 87 HENRICO C 210 - GREE | 997.906 | 7.649386 | 10.92777 | 37.63456 | 223.4526 | 8.02267 |  |
| 87 HENRICO C 211 - HIGH | 774.9405 | 4.258555 | 1.1 | 8.595601 | 34.62435 | 7.870466 |  |
| 87 HENRICO C 212 - HOLL | 443.6405 | 6.556617 | 7.64944 | 19.92418 | 188.0542 | 3.438287 |  |
| 87 HENRICO C 213 -HUNC | 940.8828 | 8.742156 | 19.66999 | 36.52766 | 214.603 | 5.730479 |  |
| 87 HENRICO C 214 -LONG | 809.7294 | 13.11323 | 19.66999 | 60.87944 | 424.7812 | 5.730479 |  |
| 87 HENRICO C 215 - MAPI | 2016.645 | 18.09886 | 7.7 | 11.81895 | 85.47886 | 4.497409 |  |
| 87 HENRICO C 216 - MOO | 436.7977 | 8.742156 | 12.02055 | 33.20696 | 351.7719 | 1.146096 |  |
| 87 HENRICO C 217 - MOU | 334.156 | 1.092769 | 13.11333 | 27.67247 | 252.2138 | 2.292191 |  |
| 87 HENRICO C 218 - OAKV | 70.70877 | 3.278308 | 1.092777 | 4.427595 | 61.94726 | 2.292191 |  |
| 87 HENRICO C 219 - RANL | 230.3737 | 2.185539 | 1.092777 | 4.427595 | 50.88525 | 0 |  |
| 87 HENRICO C 220 - RATC | 2397.929 | 18.09886 | 18.7 | 31.15905 | 137.4154 | 14.61658 |  |
| 87 HENRICO C 221 - STRA | 177.9124 | 5.463847 | 9.834994 | 12.17589 | 111.7263 | 1.146096 |  |
| 87 HENRICO C 222 - WILD | 1198.628 | 9.834925 | 12.02055 | 33.20696 | 257.7448 | 8.02267 |  |
| 87 HENRICO C 223 - YELLC | 1509.974 | 14.206 | 27.31943 | 64.20013 | 961.2887 | 11.46096 |  |
| 87 HENRICO C 224 - ESSE> | 696.2093 | 1.064639 | 3.3 | 4.2978 | 9.738098 | 5.621762 |  |
| 87 HENRICO C 301 -CAUS | 701.3854 | 3.278308 | 28.4122 | 69.73463 | 690.2695 | 17.19144 |  |
| 87 HENRICO C 302 -CEDA | 877.0168 | 8.742156 | 41.52553 | 115.1175 | 1042.041 | 22.92191 |  |
| 87 HENRICO C 303 -INNSI | 1192.925 | 12.02046 | 40.43275 | 84.12431 | 953.5453 | 20.62972 |  |
| 87 HENRICO C 304 -JACKS | 554.2655 | 6.556617 | 24.0411 | 53.13114 | 691.3757 | 14.89924 |  |
| 87 HENRICO C 305 - NUCK | 1049.227 | 13.11323 | 49.17497 | 126.1865 | 1235.627 | 24.06801 |  |
| 87 HENRICO C 306 - POCA | 1068.615 | 9.834925 | 26.22665 | 75.26912 | 898.2352 | 8.02267 |  |
| 87 HENRICO C 307 -RIDGI | 575.9343 | 7.649386 | 24.0411 | 45.38285 | 603.9858 | 10.31486 |  |
| 87 HENRICO C 308 - RIVEF | 1037.822 | 4.371078 | 33.87609 | 107.3692 | 1130.537 | 25.21411 |  |
| 87 HENRICO C 309 - SADL | 1227.139 | 7.649386 | 30.59776 | 89.65881 | 1014.386 | 10.31486 |  |
| 87 HENRICO C $310-$ SHAD | 1078.879 | 7.649386 | 30.59776 | 88.55191 | 1370.583 | 24.06801 |  |
| 87 HENRICO C 311 -SHOR | 1531.643 | 16.39154 | 33.87609 | 94.0864 | 1392.707 | 36.67506 |  |
| 87 HENRICO C 312 -SPRIN | 889.5619 | 6.556617 | 34.96887 | 69.73463 | 621.685 | 11.46096 |  |
| 87 HENRICO C 313 - STON | 1457.513 | 17.48431 | 57.91719 | 141.6831 | 1472.354 | 27.5063 | 0 |
| 87 HENRICO C 314 - THRE | 1035.541 | 21.85539 | 43.71108 | 102.9416 | 1065.272 | 14.89924 |  |
| 87 HENRICO C 315 -TUCK | 1654.813 | 24.04093 | 60.10274 | 101.8347 | 672.5702 | 16.04534 |  |
| 87 HENRICO C 401 - QUIO | 1167.835 | 16.39154 | 44.80386 | 116.2244 | 987.8375 | 18.33753 |  |
| 87 HENRICO C 402 - CRES | 1034.401 | 16.39154 | 29.50498 | 91.8726 | 711.2873 | 17.19144 | 0 |
| 87 HENRICO C 403 - DERB | 645.5026 | 6.556617 | 15.29888 | 77.48292 | 869.474 | 21.77582 | 0 |
| 87 HENRICO C 404 - FREEI | 691.1212 | 10.92769 | 36.06164 | 80.80361 | 634.9594 | 18.33753 |  |


| 87 HENRICO C 405 - GAYT | 1090.284 | 15.29877 | 43.71108 | 133.9348 | 1329.654 | 27.5063 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 406 - GODI | 923.7758 | 9.834925 | 32.78331 | 109.583 | 866.1554 | 16.04534 | 0 |
| 87 HENRICO C 407 - LAKEI | 759.549 | 9.834925 | 15.29888 | 89.65881 | 888.2794 | 8.02267 |  |
| 87 HENRICO C 408 - LAUD | 1018.434 | 13.11323 | 30.59776 | 70.84153 | 873.8988 | 14.89924 |  |
| 87 HENRICO C 409 - MAYE | 986.5014 | 22.94816 | 22.94832 | 108.4761 | 1016.599 | 19.48363 | 0 |
| 87 HENRICO C 410 - MOO | 468.7307 | 5.463847 | 19.66999 | 67.52083 | 759.9601 | 13.75315 |  |
| 87 HENRICO C 411 - PEME | 1002.468 | 24.04093 | 25.13387 | 78.58982 | 689.1633 | 8.02267 | 0 |
| 87 HENRICO C 412 - PINC | 1249.949 | 20.76262 | 24.0411 | 110.6899 | 1009.962 | 19.48363 | 0 |
| 87 HENRICO C 413 - RIDGI | 1139.324 | 17.48431 | 61.19552 | 105.1554 | 1221.246 | 21.77582 | 0 |
| 87 HENRICO C 414 - ROLLI | 799.4653 | 1.092769 | 28.4122 | 114.0106 | 648.2338 | 8.02267 |  |
| 87 HENRICO C 415 - SKIPV | 664.8905 | 5.463847 | 13.11333 | 46.48975 | 498.8967 | 8.02267 |  |
| 87 HENRICO C 416 - SPOT | 439.0786 | 3.278308 | 10.92777 | 55.34494 | 400.4448 | 8.02267 |  |
| 87 HENRICO C 417 -TUCK | 1072.036 | 8.742156 | 36.06164 | 187.0659 | 1537.619 | 17.19144 |  |
| 87 HENRICO C 418 - WELE | 832.5387 | 15.29877 | 12.02055 | 83.01741 | 536.5075 | 14.89924 |  |
| 87 HENRICO C 419 - WEST | 1048.086 | 7.649386 | 30.59776 | 99.62089 | 1017.705 | 18.33753 |  |
| 87 HENRICO C501-ANTIC | 408.2778 | 2.129278 | 7.7 | 29.01015 | 1140.439 | 11.24352 | 0 |
| 87 HENRICO C502-CEDA | 787.3126 | 4.258555 | 4.4 | 20.41455 | 134.1693 | 6.746114 |  |
| 87 HENRICO C $503-\mathrm{CHICl}$ | 833.4266 | 14.90494 | 20.9 | 41.90355 | 971.6457 | 12.36788 |  |
| 87 HENRICO C504-DON/ | 824.4287 | 13.8403 | 16.5 | 22.56345 | 466.3467 | 7.870466 |  |
| 87 HENRICO C 505 - DORE | 990.8891 | 5.323194 | 16.5 | 51.5736 | 942.4315 | 5.621762 |  |
| 87 HENRICO C 506 - EANE | 1328.309 | 11.71103 | 5.5 | 34.3824 | 410.0821 | 12.36788 |  |
| 87 HENRICO C507-ELKO | 115.8474 | 3.193916 | 2.2 | 19.3401 | 486.9049 | 0 |  |
| 87 HENRICO C 508 -HIGH | 1385.67 | 15.96958 | 5.5 | 27.9357 | 276.9948 | 3.373057 |  |
| 87 HENRICO C509-LABU | 1229.332 | 10.64639 | 11 | 21.489 | 417.6562 | 5.621762 |  |
| 87 HENRICO C 510 - MEHI | 518.5016 | 14.90494 | 9.9 | 11.81895 | 436.0504 | 3.373057 |  |
| 87 HENRICO C511-MON | 2537.396 | 15.96958 | 11 | 39.75465 | 308.3731 | 15.74093 |  |
| 87 HENRICO C 512 - NINE | 565.7403 | 7.452471 | 9.9 | 33.30795 | 352.7355 | 3.373057 |  |
| 87 HENRICO C 513 - PLEA! | 2058.26 | 12.77567 | 6.6 | 17.1912 | 244.5345 | 8.994819 |  |
| 87 HENRICO C 514 - ROLF | 3314.586 | 22.35741 | 25.3 | 39.75465 | 331.0953 | 12.36788 |  |
| 87 HENRICO C 515 - SAND | 518.5016 | 8.51711 | 11 | 46.20135 | 1078.765 | 11.24352 |  |
| 87 HENRICO C516-SULLI | 1015.633 | 11.71103 | 6.6 | 29.01015 | 505.2991 | 1.124352 |  |
| 87 HENRICO C517-TOWI | 321.6734 | 8.51711 | 6.6 | 21.489 | 431.7223 | 5.621762 |  |
| 87 HENRICO C 518 - WHIT | 627.6006 | 14.90494 | 16.5 | 31.15905 | 991.1219 | 4.497409 |  |
| 89 HENRY COI 101 - BASSI | 273.103 | 2.259259 | 5.366972 | 6.927039 | 287.401 | 1.191489 |  |
| 89 HENRY COI 102 - GUN | 180.9585 | 3.388889 | 10.73394 | 11.54506 | 842.6074 | 0 |  |
| 89 HENRY COI 103 - SCOT | 410.7646 | 6.777778 | 11.80734 | 23.09013 | 1306.368 | 3.574468 |  |
| 89 HENRY COI 201 - FIELD | 242.0181 | 3.388889 | 4.293578 | 13.85408 | 438.7219 | 0 |  |
| 89 HENRY COI 202 - HORS | 386.3408 | 3.388889 | 10.73394 | 13.85408 | 732.6547 | 1.191489 | 0 |
| 89 HENRY COI 203 - HORS | 747.1476 | 9.037037 | 1.073394 | 9.236052 | 306.9965 | 3.574468 | 0 |
| 89 HENRY COI 204 - SPEN | 358.5864 | 2.259259 | 4.293578 | 16.16309 | 930.7872 | 4.765957 | 0 |
| 89 HENRY COI 302 - AXTO | 402.7066 | 0 | 5.555556 | 15.10891 | 364.7452 | 1.105263 | 0 |
| 89 HENRY COI 303 -IRISBI | 612.2895 | 7.194444 | 8.888889 | 26.9802 | 778.6327 | 1.105263 |  |
| 89 HENRY COI $304-\mathrm{MOU}$ | 783.5059 | 21.58333 | 5.555556 | 23.74257 | 679.256 | 6.631579 |  |
| 89 HENRY COI 305 - MOU | 323.7015 | 3.083333 | 4.444444 | 10.79208 | 375.6657 | 3.315789 | 0 |
| 89 HENRY COI 401 - COLLI | 198.7213 | 1.12963 | 7.513761 | 12.69957 | 573.7133 | 4.765957 | 0 |
| 89 HENRY COI 402 - DANI | 281.9844 | 3.388889 | 7.513761 | 20.78112 | 568.2701 | 2.382979 | 0 |
| 89 HENRY COI 404 - COLLI | 474.0446 | 3.388889 | 9.66055 | 34.63519 | 830.6323 | 7.148936 |  |


| 89 HENRY COI 405 - MOU | 344.55 | 2.055556 | 1.111111 | 15.10891 | 469.5821 | 4.421053 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 501 - BASSI | 291.976 | 3.388889 | 3.220183 | 11.54506 | 359.2512 | 4.765957 | 0 |
| 89 HENRY COI 502 - FIGSE | 239.7977 | 0 | 8.587156 | 15.00858 | 682.5773 | 1.191489 | 0 |
| 89 HENRY COI 503 - STAN | 245.3486 | 6.777778 | 10.73394 | 21.93562 | 1141.983 | 5.957447 |  |
| 89 HENRY COI 504-OAK I | 138.7718 | 1.12963 | 3.220183 | 16.16309 | 354.8966 | 1.191489 |  |
| 89 HENRY COI 505 - DYER | 176.4018 | 0 | 0 | 9.236052 | 340.9047 | 1.191489 |  |
| 89 HENRY COI 601 - FONT | 328.6117 | 4.518519 | 6.440367 | 15.00858 | 785.9981 | 9.531915 | 0 |
| 89 HENRY COI 602 - HILLC | 203.162 | 3.388889 | 6.440367 | 5.772532 | 283.0464 | 0 | 0 |
| 89 HENRY COI 603 -RIDGI | 323.7015 | 3.083333 | 4.444444 | 17.26733 | 1017.792 | 4.421053 | 0 |
| 89 HENRY COI 604 -RIDGI | 229.8062 | 3.388889 | 5.366972 | 11.54506 | 755.5162 | 3.574468 | 0 |
| 91 HIGHLAND 001 -MON | 145 | 3 | 9 | 16 | 300 | 0 |  |
| 91 HIGHLAND $003-$ WILSI | 26 | 1 | 1 | 4 | 74 | 0 |  |
| 91 HIGHLAND 005 -BLUE | 76 | 0 | 5 | 6 | 163 | 0 |  |
| 91 HIGHLAND 007 - MILL | 40 | 1 |  | 3 | 90 | 0 |  |
| 91 HIGHLAND 008 - MCD | 71 | 2 | 4 | 4 | 249 | 0 | 0 |
| 91 HIGHLAND 010 -HEAD | 13 | 1 | 1 | 0 | 82 | 0 | 0 |
| 93 ISLE OF WII 101 - SMITI | 828.8137 | 14.42466 | 34.14433 | 80.47059 | 1585.147 | 19.60204 |  |
| 93 ISLE OF WII 102 - CYPR | 722.5555 | 7.767123 | 22.40722 | 60.35294 | 1179.873 | 19.60204 |  |
| 93 ISLE OF WII 201 - BART | 765.0588 | 11.09589 | 21.34021 | 92.76471 | 1536.122 | 19.60204 |  |
| 93 ISLE OF WII 202 - CARR | 908.2276 | 12.20548 | 33.07732 | 115.1176 | 1431.535 | 9.22449 |  |
| 93 ISLE OF WII301-RUSH | 990.9972 | 7.767123 | 8.536082 | 36.88235 | 802.9234 | 10.37755 |  |
| 93 ISLE OF WII302-PONS | 1257.202 | 3.328767 | 12.80412 | 26.82353 | 675.458 | 2.306122 |  |
| 93 ISLE OF WII 401 - COUF | 216.9903 | 0 | 4.268041 | 13.41176 | 587.2126 | 3.459184 |  |
| 93 ISLE OF WII 402 - WINE | 510.0392 | 5.547945 | 21.34021 | 41.35294 | 1052.407 | 4.612245 |  |
| 93 ISLE OF WII403-LONG | 506.6837 | 5.547945 | 10.6701 | 41.35294 | 800.7445 | 8.071429 |  |
| 93 ISLE OF WII501-WALT | 205.8053 | 4.438356 | 6.402062 | 20.11765 | 668.9213 | 3.459184 |  |
| 93 ISLE OF WII502-CAMI | 266.2047 | 1.109589 | 4.268041 | 5.588235 | 202.6374 | 2.306122 |  |
| 93 ISLE OF WII503-CARR | 221.4644 | 3.328767 | 4.268041 | 19 | 364.9652 | 1.153061 |  |
| 93 ISLE OF WII 504-ZUNI | 325.4855 | 4.438356 | 13.87113 | 22.35294 | 826.8913 | 9.22449 |  |
| 93 ISLE OF WII 505 - RAYN | 155.4725 | 0 | 9.603093 | 13.41176 | 489.1623 | 0 | 0 |
| 95 JAMES CIT) 101 - BERK | 1153.385 | 21.19212 | 63.8 | 117.9754 | 1450.166 | 39.24468 | 1109.543 |
| 95 JAMES CIT) 102 - BERK | 890.1534 | 11.7734 | 55.68 | 114.4361 | 987.9857 | 26.58511 | 0 |
| 95 JAMES CIT) 103 - BERK | 1422.974 | 7.064039 | 59.16 | 76.68401 | 2056.403 | 43.04255 | 0 |
| 95 JAMES CIT) 104- BERKE | 330 | 10 | 14 | 24 | 304 | 3 | 405.747 |
| 95 JAMES CIT) 201 - JAME | 396 | 11 | 16 | 24 | 293 | 7 | 489.6515 |
| 95 JAMES CIT) 202 - JAME | 1579.387 | 25.90148 | 48.72 | 116.7956 | 1027.601 | 26.58511 |  |
| 95 JAMES CIT) 203 - JAME | 1004.602 | 16.48276 | 49.88 | 69.60549 | 1132.042 | 25.31915 |  |
| 95 JAMES CIT) 204 - JAME | 1210.609 | 20.01478 | 53.36 | 76.68401 | 1613.43 | 26.58511 |  |
| 95 JAMES CIT\301-POW | 1330.144 | 9.418719 | 35.96 | 88.48155 | 1633.838 | 40.51064 | 0 |
| 95 JAMES CIT) 302 - POW | 620.5641 | 8.241379 | 25.52 | 43.6509 | 398.5556 | 6.329787 |  |
| 95 JAMES CIT 303 - POW | 434.9035 | 2.35468 | 9.28 | 30.6736 | 812.7173 | 3.797872 | 0 |
| 95 JAMES CIT) 304 - POW | 1503.088 | 17.6601 | 22.04 | 93.20057 | 1190.865 | 13.92553 |  |
| 95 JAMES CIT 401 - STON | 1241.128 | 25.90148 | 51.04 | 128.5932 | 1797.102 | 17.7234 |  |
| 95 JAMES CIT) 402 - STON | 1696.378 | 29.4335 | 47.56 | 107.3576 | 2066.007 | 34.18085 | 0 |
| 95 JAMES CIT 403 - STON | 1082.172 | 20.01478 | 45.24 | 81.40303 | 1605.027 | 24.05319 | 0 |
| 95 JAMES CIT) 501 - ROBE | 807 | 9 | 14 | 33 | 335 | 3 | 860.3339 |
| 95 JAMES CIT\ 502 -ROBE | 796 | 10 | 24 | 50 | 1284 | 29 | 914.183 |


| 95 JAMES CIT\503-ROBE | 284 | 2 | 9 | 17 | 137 | 1 | 326.8517 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 JAMES CIT\504-ROBE | 1322.514 | 23.5468 | 41.76 | 101.4588 | 1181.261 | 29.11702 | 1189.69 |
| 97 KING \& QU 101-OWEI | 404.6919 | 3.375 | 2.6 | 6.716418 | 287.9063 | 2.181818 | 0 |
| 97 KING \& QU 201 - CLAR | 256.1915 | 5.625 | 3.9 | 22.38806 | 497.589 | 14.18182 | 0 |
| 97 KING \& QU 301 - SHAC | 307.2031 | 3.375 | 2.6 | 12.31343 | 406.3282 | 4.363636 | 0 |
| 97 KING \& QU 401 - COUF | 336.6764 | 4.5 | 0 | 20.14925 | 407.4146 | 2.181818 | 0 |
| 97 KING \& QU 501 - OLDN | 163.2371 | 1.125 | 3.9 | 13.43284 | 499.7619 | 1.090909 | 0 |
| 99 KING GEOR 101 - COUF | 676.174 | 17.94595 | 45.35625 | 89.97419 | 1359.486 | 10.5 | 0 |
| 99 KING GEOR 102 - PASS, | 387.5489 | 4.486486 | 12.16875 | 27.22903 | 743.5927 | 8.166667 | 0 |
| 99 KING GEOR 201 - MON | 901.9532 | 26.91892 | 54.20625 | 106.5484 | 2005.892 | 22.16667 | 0 |
| 99 KING GEOR 301 - DAHL | 1069.542 | 20.18919 | 35.4 | 79.31935 | 1501.876 | 23.33333 | 0 |
| 99 KING GEOR 401 - SHILC | 971.7819 | 13.45946 | 29.86875 | 63.92903 | 1730.153 | 19.83333 | 0 |
| 101 KING WILLI 101 - WEST | 514.5946 | 9.428571 | 19.96875 | 89.61373 | 1060.388 | 5 | 0 |
| 101 KING WILLI 201 - SWEE | 203.2432 | 3.142857 | 6.65625 | 23.52361 | 403.2014 | 3.75 | 0 |
| 101 KING WILLI 202 - COUF | 465.9459 | 5.238095 | 7.765625 | 19.04292 | 685.7598 | 3.75 | 0 |
| 101 KING WILLI 301 - AYLE ${ }^{-}$ | 400 | 8.380952 | 16.64063 | 44.80687 | 1306.965 | 12.5 | 0 |
| 101 KING WILLI 401 - MAN | 508.1081 | 9.428571 | 9.984375 | 52.64807 | 1255.11 | 8.75 | 0 |
| 101 KING WILLI 501 - MAN | 668.1081 | 8.380952 | 9.984375 | 31.36481 | 1263.576 | 16.25 | 0 |
| 103 LANCASTEF 101 - PREC | 487.6391 | 4.666667 | 12.52778 | 28.2 | 766.8108 | 7.714286 | 0 |
| 103 LANCASTEF 201 - PREC | 734.3003 | 0 | 6.833333 | 24.52174 | 455.7568 | 6.428571 | 0 |
| 103 LANCASTEF 301 - PREC | 296.6755 | 14 | 5.694444 | 31.87826 | 681.3564 | 10.28571 | 0 |
| 103 LANCASTEF 302 - PREC | 155.7262 | 7 | 3.416667 | 8.582609 | 313.3328 | 1.285714 | 0 |
| 103 LANCASTEF 401 - PREC | 709.2932 | 7 | 2.277778 | 15.93913 | 418.1569 | 2.571429 | 0 |
| 103 LANCASTEF 501 - PREC | 485.3657 | 2.333333 | 10.25 | 31.87826 | 887.5864 | 7.714286 | 0 |
| 105 LEE COUNT 101 - ELYD, | 100.2945 | 1.03125 | 3 | 2.382022 | 397.8535 | 0 | 0 |
| 105 LEE COUNT 102 - EWIN | 78.00685 | 2.0625 | 6 | 11.91011 | 391.3668 | 0 | 0 |
| 105 LEE COUNT 103 - ROSE | 162.7 | 2.0625 | 6 | 8.337079 | 743.8131 | 4.390244 | 0 |
| 105 LEE COUNT 201 - BLAC | 36.77466 | 1.03125 | 0 | 1.191011 | 140.5461 | 2.195122 | 0 |
| 105 LEE COUNT 202 - FLAT | 83.57877 | 1.03125 | 2 | 13.10112 | 640.0252 | 5.487805 | 0 |
| 105 LEE COUNT 203 - JONE | 203.9322 | 0 | 6 | 17.86517 | 863.8178 | 7.682927 | 0 |
| 105 LEE COUNT 301 - BEN + | 202.8178 | 5.15625 | 6 | 11.91011 | 934.0909 | 9.878049 | 0 |
| 105 LEE COUNT 302 - WOO | 99.18014 | 9.28125 | 4 | 0 | 623.8084 | 4.390244 | 0 |
| 105 LEE COUNT 401 - STICK | 86.92192 | 2.0625 | 2 | 4.764045 | 331.905 | 0 | 0 |
| 105 LEE COUNT 402 - JASPE | 60.17671 | 3.09375 | 1 | 4.764045 | 283.2544 | 1.097561 | 0 |
| 105 LEE COUNT 403 - SEMII | 59.06233 | 1.03125 | 1 | 3.573034 | 338.3917 | 3.292683 | 0 |
| 105 LEE COUNT 404 - DRYD | 137.0692 | 0 | 2 | 11.91011 | 622.7272 | 4.390244 | 0 |
| 105 LEE COUNT 501 - SAIN7 | 114.7815 | 0 | 0 | 0 | 257.3074 | 0 | 0 |
| 105 LEE COUNT 502 - PENN | 153.7849 | 3.09375 | 4 | 11.91011 | 712.4605 | 2.195122 | 0 |
| 105 LEE COUNT 503 - ROBE | 10.02945 | 2.0625 | 1 | 1.191011 | 108.1124 | 0 | 0 |
| 105 LEE COUNT 504 - KEOK | 37.88904 | 0 | 1 | 1.191011 | 153.5196 | 0 | 0 |
| 107 LOUDOUN 107-LITTL | 1147.426 | 18.7331 | 35.95154 | 80.13781 | 847.3374 | 32.83679 | 0 |
| 107 LOUDOUN 108 - MERC | 1204.059 | 9.366548 | 35.95154 | 52.211 | 834.3559 | 17.68135 | 0 |
| 107 LOUDOUN 112 - FREEI | 945.5187 | 3.512456 | 25.16608 | 25.4984 | 496.8371 | 11.36658 | 0 |
| 107 LOUDOUN 114 - DULL | 1149.889 | 25.75801 | 27.56285 | 31.56944 | 619.5712 | 16.41839 | 0 |
| 107 LOUDOUN 117 - CART | 787.9322 | 12.879 | 22.76931 | 30.35523 | 279.6921 | 11.36658 | 0 |
| 107 LOUDOUN 118-MOO | 1289.008 | 5.854093 | 43.14185 | 53.42521 | 630.1924 | 16.41839 | 0 |
| 107 LOUDOUN 119 - ARCC | 2208.673 | 25.75801 | 65.91117 | 126.2778 | 1292.249 | 26.52202 | 0 |

107 LOUDOUN 120 -LUNS 1284.083 107 LOUDOUN 121 -TOWI 783.0077 107 LOUDOUN 122 -HUTC 1410.891 107 LOUDOUN 123 -CARD 734.993 107 LOUDOUN 124 - LIBER 871.65 107 LOUDOUN 125 -ROCK 1370.263 107 LOUDOUN 207 -RIVEF 737.4553 107 LOUDOUN 208 - ALGO 842.1026 107 LOUDOUN 209-POTC 1261.923 107 LOUDOUN 210 -CASC 1515.538 107 LOUDOUN 213 - COUN 528.1608 107 LOUDOUN 214 - SUGA 1424.434 107 LOUDOUN 215 - SUGA 1489.684 107 LOUDOUN 216-LOWI 1046.472 107 LOUDOUN 217 - SOUT 1370.263 107 LOUDOUN 218 - UNIV 1026.774 107 LOUDOUN 219-GALIL 1078.482 107 LOUDOUN 301 -PURC 1147.426 107 LOUDOUN 302 -ROUN 885.1926 107 LOUDOUN 303 -HILLS 783.0077 107 LOUDOUN 305 - PHILC 424.7447 107 LOUDOUN 307 - MIDC 609.4163 107 LOUDOUN 308-ST LO 583.5623 107 LOUDOUN 309 - ALDIE 373.0367 107 LOUDOUN 310 - MOU 991.071 107 LOUDOUN 311 -ROUN 810.0928 107 LOUDOUN 312 - BRIAF 1371.495 107 LOUDOUN 313 - PINEE 2628.493 107 LOUDOUN 314 - LEGA 2480.755 107 LOUDOUN 315 - FIREF 280.7009 107 LOUDOUN 316 -CREIC 2046.162 107 LOUDOUN 318 - MADI 755.9225 107 LOUDOUN 401 -WEST 1047.704 107 LOUDOUN 402 - WATE 899.9663 107 LOUDOUN 403 - LUCK 1143.733 107 LOUDOUN 407 - HARP 763.3094 107 LOUDOUN 408 - EVER 1007.076 107 LOUDOUN 409 - CLAR 898.7352 107 LOUDOUN 411 -EAST 721.4505 107 LOUDOUN 413 -TUSC 46.78348 107 LOUDOUN 414 - RED F 784.2388 107 LOUDOUN 416 - HAMI 1184.361 107 LOUDOUN 420 - RIVEF 844.5649 107 LOUDOUN 421 - BETV 108.3407 107 LOUDOUN 422 - SYCO 867.9566 107 LOUDOUN 501 -WEST 1148.657 107 LOUDOUN 502 -EAST 1567.246
11.70819


### 11.70819

9.366548
10.53737

### 12.879

12.879
17.56228
18.7331

### 25.75801

8.19573

17.56228

### 15.22064

15.22064
22.24555
17.56228
11.70819
11.70819 11.70819
8.19573
8.19573

### 4.683274

8.19573
21.07473
16.39146
15.22064
35.12456

1.170819

10.53737
12879
16.39146
19.90391
3.512456
12.879
15.22064
3.512456
4.683274
17.56228
7.024911
4.6832747 .190309
10.53737
17.56228
22.24555
23.967758 .28205

| 38.34831 | 49.78258 |
| :--- | :--- |
| 51.53055 | 63.13888 |

$\begin{array}{ll}51.53055 & 63.13888 \\ 29.95962 & 47.35416\end{array}$ 23.967737 .64049
$\begin{array}{ll}29.95962 & 36.42628 \\ 29.95962 & 48.56837\end{array}$
$45.53862 \quad 52.211$ $41.94347 \quad 67.99572$
45.53862105 .6362
19.1741640 .06891
65.9111792 .27991
$41.94347 \quad 92.27991$
26.3644747 .35416
44.3402458 .28205
26.3644766 .78151
$43.14185 \quad 92.27991$
71.90309100 .7794
44.3402486 .20886
31.1580147 .35416
$13.18223 \quad 32.78365$
$10.78546 \quad 20.64156$
$11.98385 \quad 35.21207$
9.58707923 .06998
87.48209108 .0646
50.3321669 .20993
21.5709370 .42414
68.30794123 .8493
$41.94347 \quad 77.70939$
8.38869418 .21314
81.49017106 .8504 41.9434767 .99572 50.33216106 .8504 $26.36447 \quad 82.56623$ 33.5547876 .49519 $25.16608 \quad 38.8547$
$26.36447 \quad 58.28205$
35.9515457 .06784
32.3563964 .35309
$0 \quad 3.642628$
$19.17416 \quad 32.78365$ 50.3321677 .70939
33.99786
7.285256
52.211
52.7289364 .35309
47.9353987 .42307

| 778.8895 | 18.9443 | 0 |
| :---: | :---: | :---: |
| 536.9617 | 12.62953 | 0 |
| 836.7162 | 27.78497 | 0 |
| 512.1789 | 15.15544 | 0 |
| 515.7193 | 10.10363 | 0 |
| 519.2597 | 20.20725 | 0 |
| 551.1233 | 12.62953 | 0 |
| 594.7884 | 20.20725 | 0 |
| 722.243 | 26.52202 | 0 |
| 867.3997 | 27.78497 | 0 |
| 318.6366 | 8.840674 | 0 |
| 922.8661 | 32.83679 | 0 |
| 778.8895 | 23.99611 | 0 |
| 794.2313 | 39.15155 | 0 |
| 837.8963 | 25.25907 | 0 |
| 470.8741 | 5.051813 | 0 |
| 645.5342 | 20.20725 | 0 |
| 1224.981 | 40.41451 | 0 |
| 1178.956 | 22.73316 | 0 |
| 1104.607 | 31.57383 | 0 |
| 516.8994 | 16.41839 | 0 |
| 398.8858 | 8.840674 | 0 |
| 453.1721 | 13.89249 | 0 |
| 408.3269 | 8.840674 | 0 |
| 1289.888 | 27.78497 | 0 |
| 1163.614 | 41.67746 | 0 |
| 749.3861 | 18.9443 | 0 |
| 1599.084 | 30.31088 | 0 |
| 1142.371 | 29.04793 | 0 |
| 422.4886 | 8.840674 | 0 |
| 1129.39 | 22.73316 | 0 |
| 1004.295 | 22.73316 | 0 |
| 1450.387 | 18.9443 | 0 |
| 1115.228 | 26.52202 | 0 |
| 1292.249 | 15.15544 | 0 |
| 573.5459 | 15.15544 | 0 |
| 726.9636 | 22.73316 | 0 |
| 1232.062 | 22.73316 | 0 |
| 962.9907 | 20.20725 | 0 |
| 57.82665 | 0 | 0 |
| 477.9549 | 10.10363 | 0 |
| 1416.163 | 32.83679 | 0 |
| 946.4688 | 25.25907 | 0 |
| 180.5608 | 1.262953 | 0 |
| 1176.595 | 23.99611 | 0 |
| 823.7347 | 40.41451 | 0 |
| 659.6958 | 15.15544 | 0 |


| 107 LOUDOUN 503 - DRY | 581.1 | 11.70819 | 32.35639 | 59.49626 | 462.6132 | 11.36658 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 504 - SMAF | 1181.898 | 16.39146 | 53.92732 | 111.7073 | 781.2498 | 30.31088 | 0 |
| 107 LOUDOUN 505-COOL | 1218.833 | 15.22064 | 50.33216 | 98.35095 | 1010.196 | 31.57383 | 0 |
| 107 LOUDOUN 506 - BRAN | 879.0369 | 24.58719 | 38.34831 | 64.35309 | 461.433 | 15.15544 | 0 |
| 107 LOUDOUN 507-GREE | 645.1195 | 8.19573 | 33.55478 | 54.63942 | 487.396 | 15.15544 | 0 |
| 107 LOUDOUN 508-BALL؛ | 1270.541 | 21.07473 | 53.92732 | 89.85149 | 944.1085 | 34.09974 | 0 |
| 107 LOUDOUN 509-TOLB | 1655.889 | 21.07473 | 26.36447 | 66.78151 | 771.8087 | 16.41839 | 0 |
| 107 LOUDOUN 510 - HERIT | 711.6013 | 4.683274 | 26.36447 | 36.42628 | 637.2732 | 17.68135 | 0 |
| 107 LOUDOUN 615 - HILLS | 1213.908 | 19.90391 | 52.72893 | 72.85256 | 827.2751 | 23.99611 | 0 |
| 107 LOUDOUN 616 -EAGL | 1338.254 | 21.07473 | 39.5467 | 86.20886 | 822.5545 | 22.73316 | 0 |
| 107 LOUDOUN 617-OAK | 781.7765 | 9.366548 | 13.18223 | 19.42735 | 197.0827 | 5.051813 | 0 |
| 107 LOUDOUN 619 -RIDG\| | 770.6962 | 9.366548 | 15.579 | 38.8547 | 286.773 | 8.840674 |  |
| 107 LOUDOUN 620 -RUSS | 1468.755 | 17.56228 | 65.91117 | 81.35202 | 1001.935 | 29.04793 | 0 |
| 107 LOUDOUN 621 - DOM | 1632.497 | 9.366548 | 65.91117 | 87.42307 | 972.4318 | 34.09974 |  |
| 107 LOUDOUN 622 -FARN | 1558.628 | 12.879 | 39.5467 | 63.13888 | 738.7649 | 13.89249 |  |
| 107 LOUDOUN 623 - WELL | 989.8399 | 7.024911 | 22.76931 | 33.99786 | 716.3423 | 12.62953 | 0 |
| 107 LOUDOUN 625 - MILL | 494.9199 | 1.170819 | 17.97577 | 31.56944 | 408.3269 | 13.89249 | 0 |
| 107 LOUDOUN 626 - ASHB | 506.0002 | 2.341637 | 10.78546 | 8.499465 | 423.6687 | 12.62953 |  |
| 107 LOUDOUN 627 - ASHB | 1111.723 | 18.7331 | 19.17416 | 54.63942 | 505.0981 | 12.62953 | 0 |
| 107 LOUDOUN 628 - MOO | 1408.429 | 16.39146 | 40.74508 | 80.13781 | 703.3608 | 16.41839 | 0 |
| 107 LOUDOUN 629 - DISCC | 370.5744 | 4.683274 | 5.991924 | 9.713674 | 263.1702 | 6.314767 | 0 |
| 107 LOUDOUN 701-SULL) | 1337.023 | 17.56228 | 40.74508 | 64.35309 | 721.0629 | 21.47021 |  |
| 107 LOUDOUN 702 - PARK | 1122.803 | 19.90391 | 32.35639 | 50.99679 | 595.9685 | 15.15544 |  |
| 107 LOUDOUN 703 -ROLLI | 1551.242 | 36.29537 | 37.14993 | 69.20993 | 600.689 | 15.15544 |  |
| 107 LOUDOUN 705 -FORE | 1616.492 | 14.04982 | 47.93539 | 91.0657 | 914.6051 | 23.99611 |  |
| 107 LOUDOUN 707 - CLAU | 1144.964 | 10.53737 | 31.15801 | 47.35416 | 496.8371 | 12.62953 | 0 |
| 107 LOUDOUN 708 - SENE | 1089.563 | 21.07473 | 32.35639 | 46.13995 | 699.8204 | 27.78497 | 0 |
| 107 LOUDOUN 709 - MIRR | 1444.132 | 24.58719 | 50.33216 | 66.78151 | 557.024 | 25.25907 | 0 |
| 107 LOUDOUN 710 - STERI | 1156.044 | 19.90391 | 29.95962 | 60.71046 | 582.987 | 15.15544 | 0 |
| 107 LOUDOUN 808 -STON | 1499.534 | 18.7331 | 82.68855 | 125.0636 | 1043.24 | 35.36269 | 0 |
| 107 LOUDOUN 810 - CEDA | 1364.108 | 15.22064 | 58.72086 | 80.13781 | 813.1135 | 36.62565 | 0 |
| 107 LOUDOUN 813 - SELDI | 1084.638 | 7.024911 | 25.16608 | 58.28205 | 617.2109 | 15.15544 | 0 |
| 107 LOUDOUN 814 - NEW | 1221.295 | 5.854093 | 35.95154 | 44.92574 | 1059.762 | 39.15155 | 0 |
| 107 LOUDOUN 815 - BELM | 1098.181 | 1.170819 | 32.35639 | 40.06891 | 816.6539 | 36.62565 | 0 |
| 107 LOUDOUN 817 - SAND | 1538.93 | 33.95374 | 65.91117 | 91.0657 | 1147.092 | 54.30699 | 0 |
| 107 LOUDOUN 818 - BROA | 1068.633 | 11.70819 | 33.55478 | 58.28205 | 711.6218 | 23.99611 | 0 |
| 107 LOUDOUN 819 -HERIT | 965.217 | 18.7331 | 35.95154 | 50.99679 | 739.945 | 15.15544 | 0 |
| 107 LOUDOUN 820 - BELM | 1131.421 | 8.19573 | 47.93539 | 48.56837 | 744.6656 | 12.62953 | 0 |
| 107 LOUDOUN 822 - RIVEF | 856.8763 | 7.024911 | 19.17416 | 42.49733 | 580.6267 | 25.25907 | 0 |
| 109 LOUISA CO 101 - ZION | 801.6597 | 10.97345 | 11.16438 | 66.80493 | 1077.73 | 17.89157 | 0 |
| 109 LOUISA CO 102 - MECF | 401.4049 | 6.584071 | 17.86301 | 35.1009 | 582.4376 | 4.771084 | 0 |
| 109 LOUISA CO 201 - LOUIS | 424.4081 | 16.46018 | 15.63014 | 29.43946 | 688.3353 | 9.542169 | 0 |
| 109 LOUISA CO 202 -LOUIS | 384.1526 | 10.97345 | 13.39726 | 39.63004 | 677.3043 | 8.349398 | 0 |
| 109 LOUISA CO 301 - PATR | 1065.046 | 7.681416 | 13.39726 | 49.82063 | 891.306 | 10.73494 | 0 |
| 109 LOUISA CO 302 - PATR | 210.4788 | 6.584071 | 4.465753 | 13.58744 | 309.9715 | 3.578313 | 0 |
| 109 LOUISA CO 401 - MINE | 552.0755 | 6.584071 | 15.63014 | 41.89462 | 1218.927 | 4.771084 | 0 |
| 109 LOUISA CO 402 - YANC | 232.3318 | 15.36283 | 6.69863 | 12.45516 | 319.8994 | 3.578313 | 0 |


| 109 LOUISA CO 501 - FRED | 263.386 | 5.486726 | 2.232877 | 16.9843 | 314.3839 | 3.578313 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 109 LOUISA CO 502 - CUCK | 308.2422 | 5.486726 | 5.582192 | 32.83632 | 614.4275 | 7.156627 | 0 |
| 109 LOUISA CO 503 - ELK C | 175.9741 | 4.389381 | 8.931507 | 18.11659 | 480.9522 | 1.192771 | 0 |
| 109 LOUISA CO 601 - BUMI | 221.9804 | 6.584071 | 4.465753 | 23.77803 | 761.14 | 7.156627 | 0 |
| 109 LOUISA CO 602 - LOCU | 374.9513 | 8.778761 | 14.5137 | 54.34978 | 908.9556 | 4.771084 | 0 |
| 109 LOUISA CO 701 - SHEL- | 427.8585 | 6.584071 | 16.74658 | 46.42377 | 1004.925 | 3.578313 | 0 |
| 109 LOUISA CO 702 - SOUT | 368.0504 | 5.486726 | 12.28082 | 23.77803 | 677.3043 | 8.349398 | 0 |
| 111 LUNENBUR 101 - PLYM | 182.9955 | 2.083333 | 3.428571 | 15.59494 | 481.1468 | 1 | 0 |
| 111 LUNENBUR 201 -BROV | 212.9402 | 0 | 5.714286 | 15.59494 | 389.2915 | 3 | 0 |
| 111 LUNENBUR 301 -ROSE | 87.61604 | 3.125 | 2.285714 | 5.56962 | 334.6157 | 0 | 0 |
| 111 LUNENBUR 302 - FLAT | 188.5408 | 0 | 1.142857 | 7.797468 | 291.9686 | 3 | 0 |
| 111 LUNENBUR 401 - ARRC | 60.99851 | 5.208333 | 2.285714 | 4.455696 | 234.0123 | 0 | 0 |
| 111 LUNENBUR 402 - PLEA! | 156.378 | 5.208333 | 4.571429 | 7.797468 | 383.8239 | 0 | 0 |
| 111 LUNENBUR 501 -REED | 220.7037 | 0 | 1.142857 | 10.02532 | 177.1495 | 3 | 0 |
| 111 LUNENBUR 502 - PEOP | 308.3197 | 3.125 | 6.857143 | 4.455696 | 132.3154 | 0 | 0 |
| 111 LUNENBUR 601 - HOUP | 476.8974 | 2.083333 | 1.142857 | 6.683544 | 296.3427 | 0 | 0 |
| 111 LUNENBUR 701 - MEHI | 164.1414 | 4.166667 | 2.285714 | 3.341772 | 203.3939 | 0 | 0 |
| 111 LUNENBUR 702 - VICTC | 167.4686 | 0 | 1.142857 | 6.683544 | 279.9399 | 0 | 0 |
| 113 MADISON 1001 - OAK I | 320.3312 | 4.777778 | 8.7 | 22.03593 | 453.1201 | 3.685714 | 0 |
| 113 MADISON (002-RADI, | 401.2814 | 8.361111 | 13.05 | 30.8503 | 717.4402 | 9.828571 | 0 |
| 113 MADISON 1003-ROCF | 157.2745 | 3.583333 | 6.525 | 12.11976 | 387.3098 | 2.457143 | 0 |
| 113 MADISON 1004 - GRAV | 15.0336 | 1.194444 | 1.0875 | 4.407186 | 47.46973 | 0 | 0 |
| 113 MADISON 1005 - MADI | 451.0079 | 8.361111 | 14.1375 | 41.86826 | 801.5911 | 6.142857 | 0 |
| 113 MADISON (006-WOLI | 237.0682 | 3.583333 | 13.05 | 29.7485 | 453.1201 | 1.228571 | 0 |
| 113 MADISON 1007 - BRIGI | 329.5827 | 5.972222 | 21.75 | 23.13772 | 919.1865 | 7.371429 | 0 |
| 113 MADISON 1008 - CRIGI | 204.6882 | 2.388889 | 7.6125 | 9.916168 | 387.3098 | 8.6 | 0 |
| 113 MADISON 1009 - ETLAI | 86.73228 | 4.777778 | 1.0875 | 9.916168 | 252.4526 | 3.685714 | 0 |
| 115 MATHEWS 001 - CHES | 340.2449 | 6.413793 | 12.96 | 45.04839 | 835.4127 | 1.214286 | 0 |
| 115 MATHEWS 002 - WEST | 563.5306 | 10.68966 | 5.76 | 49.79032 | 1295.078 | 9.714286 | 0 |
| 115 MATHEWS 003 - PIANI | 659.2245 | 13.89655 | 17.28 | 52.16129 | 1386.51 | 6.071429 | 0 |
| 117 MECKLENB 101 - WRIG | 284.7152 | 0 | 0 | 8.365 | 249.0494 | 1.139535 | 0 |
| 117 MECKLENB 102 - PEAR | 59.06955 | 0 | 2.16 | 2.39 | 133.0538 | 0 | 0 |
| 117 MECKLENB 103 - SOUT | 536.3515 | 1.2 | 5.4 | 9.56 | 425.3172 | 1.139535 | 0 |
| 117 MECKLENB 201 - BOYD | 265.813 | 0 | 1.08 | 11.95 | 244.5005 | 1.139535 | 0 |
| 117 MECKLENB 202 - BLUE: | 132.3158 | 1.2 | 0 | 3.585 | 84.15368 | 0 | 0 |
| 117 MECKLENB 203 - CHAS | 373.3195 | 0 | 0 | 4.78 | 83.01647 | 4.55814 | 0 |
| 117 MECKLENB 301 - BRAC | 292.985 | 1.2 | 4.32 | 19.12 | 831.3019 | 2.27907 | 0 |
| 117 MECKLENB 302 - LACR | 339.0592 | 1.2 | 1.08 | 5.975 | 425.3172 | 2.27907 | 0 |
| 117 MECKLENB 401 - AMEF | 909.6711 | 3.6 | 1.08 | 10.755 | 456.022 | 3.418605 | 0 |
| 117 MECKLENB 402 - PARK | 147.6739 | 2.4 | 0 | 0 | 77.33041 | 2.27907 | 0 |
| 117 MECKLENB 501 - SOUT | 701.7462 | 3.6 | 8.64 | 31.07 | 896.1229 | 5.697674 | 0 |
| 117 MECKLENB 601 - BASK | 232.734 | 2.4 | 3.24 | 10.755 | 442.3754 | 3.418605 | 0 |
| 117 MECKLENB 602 - UNIO | 72.06485 | 1.2 | 3.24 | 8.365 | 297.9495 | 0 | 0 |
| 117 MECKLENB 603 - SMITI | 98.05545 | 0 | 0 | 8.365 | 186.5027 | 0 | 0 |
| 117 MECKLENB 604 - LAKE | 129.953 | 0 | 0 | 4.78 | 252.461 | 1.139535 | 0 |
| 117 MECKLENB 701 - CHAS | 302.4361 | 3.6 | 5.4 | 10.755 | 436.6894 | 6.837209 | 0 |
| 117 MECKLENB 702 - SUNS | 239.8224 | 1.2 | 2.16 | 8.365 | 366.1822 | 2.27907 | 0 |


| Cr | 102.781 | 0 | 1.08 | 1.195 | 125.0933 | 1.139535 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 MECKLENB 802 - BLUE: | 276.4455 | 0 | 1.08 | 7.17 | 567.4687 | 2.27907 | 0 |
| 117 MECKLENB 803 - CHAS | 271.7199 | 2.4 | 3.24 | 14.34 | 341.1636 | 0 | 0 |
| 117 MECKLENB 901 - AVER | 23.62782 | 0 | 0 | 0 | 191.0516 | 0 | 0 |
| 117 MECKLENB 902 - BUFF, | 88.60432 | 0 | 3.24 | 15.535 | 282.0285 | 2.27907 | 0 |
| 117 MECKLENB 903 - CLAR | 404.0357 | 4.8 | 7.56 | 41.825 | 893.8485 | 5.697674 | 0 |
| 119 MIDDLESE) 101 - SALU | 168.2712 | 2.129032 | 5.555556 | 16.47059 | 257.5246 | 0 | 0 |
| 119 MIDDLESE) 102 - URBA | 244.339 | 5.322581 | 3.333333 | 24.70588 | 458.0651 | 2.285714 | 0 |
| 119 MIDDLESE) 201 - NEW | 318.1017 | 5.322581 | 13.33333 | 25.88235 | 989.5521 | 5.714286 | 0 |
| 119 MIDDLESE) 302 - CHUF | 482.9153 | 2.129032 | 7.777778 | 20 | 590.6629 | 2.285714 | 0 |
| 119 MIDDLESE> 401- HARN | 467.9322 | 6.387097 | 5.555556 | 27.05882 | 562.1708 | 1.142857 | 0 |
| 119 MIDDLESE> 501 - WILTI | 426.4407 | 11.70968 | 14.44444 | 25.88235 | 812.0245 | 4.571429 | 0 |
| 121 MONTGON 101 - PREC | 1036.975 | 15.74607 | 35.20588 | 97.23945 | 812.8389 | 13.21622 | 0 |
| 121 MONTGON 102 - PREC | 1294.841 | 34.64136 | 48.00802 | 131.4335 | 431.5203 | 20.92568 | 0 |
| 121 MONTGON 103 - PREC | 1731.23 | 32.54188 | 60.81016 | 137.8449 | 782.9316 | 23.12838 | 0 |
| 121 MONTGON 201 - PREC | 113.5052 | 0 | 2.13369 | 5.342827 | 144.1961 | 4.405405 | 0 |
| 121 MONTGON 202 - PREC | 1013.833 | 28.34293 | 36.27273 | 126.0907 | 1227.269 | 18.72297 | 0 |
| 121 MONTGON 203 - PREC | 567.5261 | 3.149215 | 30.9385 | 66.25105 | 798.9533 | 7.709459 | 0 |
| 121 MONTGON 204 - PREC | 1181.336 | 24.14398 | 64.0107 | 102.5823 | 1354.375 | 26.43243 | 0 |
| 121 MONTGON 301 - PREC | 429.7771 | 10.49738 | 20.27005 | 27.7827 | 1336.217 | 8.810811 | 0 |
| 121 MONTGON 302 - PREC | 554.3022 | 11.54712 | 27.73797 | 58.7711 | 1184.544 | 6.608108 | 0 |
| 121 MONTGON 303 - PREC | 146.565 | 3.149215 | 8.534759 | 25.64557 | 459.2914 | 1.101351 | 0 |
| 121 MONTGON 304 - PREC | 623.7278 | 5.248691 | 32.00535 | 73.73101 | 1148.228 | 4.405405 | 0 |
| 121 MONTGON 401 - PREC | 407.7372 | 10.49738 | 26.67112 | 51.29114 | 650.4847 | 9.912162 | 0 |
| 121 MONTGON 402 - PREC | 396.7173 | 7.348168 | 19.20321 | 55.5654 | 1228.337 | 7.709459 | 0 |
| 121 MONTGON 403 - PREC | 353.7396 | 13.6466 | 20.27005 | 33.12553 | 1045.689 | 1.101351 | 0 |
| 121 MONTGON 404 - PREC | 192.8487 | 4.198953 | 13.86898 | 25.64557 | 581.057 | 4.405405 | 0 |
| 121 MONTGON 405 - PREC | 724.0091 | 15.74607 | 29.87166 | 66.25105 | 1202.702 | 13.21622 | 0 |
| 121 MONTGON 501 - PREC | 1055.709 | 17.84555 | 33.07219 | 79.07384 | 970.9206 | 16.52027 | 0 |
| 121 MONTGON 502 - PREC | 490.3867 | 17.84555 | 33.07219 | 42.74262 | 764.7735 | 12.11486 | 0 |
| 121 MONTGON 503 - PREC | 1191.254 | 14.69634 | 19.20321 | 137.8449 | 543.6728 | 16.52027 | 0 |
| 121 MONTGON 601 - PREC | 1583.563 | 41.98953 | 46.94118 | 166.6962 | 620.5774 | 25.33108 | 0 |
| 121 MONTGON 602 - PREC | 1465.65 | 18.89529 | 64.0107 | 135.7078 | 608.8281 | 17.62162 | 0 |
| 121 MONTGON 603 - PREC | 377.9834 | 8.397906 | 11.73529 | 69.45675 | 280.9154 | 8.810811 | 0 |
| 121 MONTGON 701 - PREC | 1798.452 | 30.44241 | 84.28075 | 152.8049 | 791.4765 | 34.14189 | 0 |
| 121 MONTGON 702 - PREC | 1289.331 | 30.44241 | 29.87166 | 157.0791 | 489.1987 | 23.12838 | 0 |
| 125 NELSON CC 101 - ROCK | 775.0093 | 29.45455 | 26.51163 | 61.28372 | 812.6934 | 2.55814 | 0 |
| 125 NELSON CC 201 - LOVII | 399.6141 | 8.415584 | 11.04651 | 29.50698 | 473.7202 | 14.06977 | 0 |
| 125 NELSON CC 202 - SCHU | 264.2077 | 4.207792 | 4.418605 | 12.48372 | 288.443 | 5.116279 | 0 |
| 125 NELSON CC 301 - SHIPN | 576.8535 | 7.363636 | 5.523256 | 36.31628 | 660.0502 | 5.116279 | 0 |
| 125 NELSON CC 302 - GLAD | 94.67443 | 1.051948 | 4.418605 | 7.944186 | 116.851 | 5.116279 | 0 |
| 125 NELSON CC 401 - ROSE | 524.0119 | 8.415584 | 15.46512 | 34.04651 | 825.3259 | 2.55814 | 0 |
| 125 NELSON CC 402 - MON | 39.63115 | 0 | 2.209302 | 3.404651 | 81.05879 | 1.27907 | 0 |
| 125 NELSON CC 501 - FABE | 295.0319 | 9.467532 | 6.627907 | 18.15814 | 310.5499 | 5.116279 | 0 |
| 125 NELSON CC 502 - NELL | 719.966 | 12.62338 | 18.77907 | 40.85581 | 585.3077 | 14.06977 | 0 |
| 127 NEW KENT 102 - TUNS | 149.4354 | 1.019608 | 4.533333 | 15.51592 | 494.2417 | 0 | 0 |
| 127 NEW KENT 103 - SOUT | 397.7452 | 6.117647 | 10.2 | 48.76433 | 1326.197 | 15.4375 | 0 |


| NEW KENT 201-QUIN | 566.2814 | 4.078431 | 23.8 | 58.73885 | 1038.872 | 20.1875 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 127 NEW KENT 202 - KENT | 214.6027 | 6.117647 | 9.066667 | 32.14013 | 736.538 | 7.125 | 0 |
| 127 NEW KENT 301 - WATr | 433.6996 | 3.058824 | 7.933333 | 22.16561 | 571.4334 | 10.6875 | 0 |
| 127 NEW KENT 302 - CUMI | 416.846 | 10.19608 | 14.73333 | 41.00637 | 835.1719 | 3.5625 | 0 |
| 127 NEW KENT 401 - PROV | 567.4049 | 6.117647 | 13.6 | 43.22293 | 1077.468 | 10.6875 | 0 |
| 127 NEW KENT 403 - MOU | 210.1084 | 3.058824 | 3.4 | 29.92357 | 486.7369 | 3.5625 | 0 |
| 127 NEW KENT 501 - ELTH, | 303.365 | 8.156863 | 5.666667 | 27.70701 | 608.9572 | 1.1875 | 0 |
| 127 NEW KENT $502-\mathrm{CHICl}$ | 286.5114 | 4.078431 | 9.066667 | 28.81529 | 942.3827 | 3.5625 | 0 |
| 131 NORTHAM 101 - PREC | 662.3415 | 12.94118 | 13.56667 | 32.34615 | 724.0926 | 8.580645 | 0 |
| 131 NORTHAM 201 - PREC | 808.6463 | 9.411765 | 6.166667 | 22.30769 | 367.2765 | 3.677419 | 0 |
| 131 NORTHAM 301 - PREC | 725.8537 | 2.352941 | 2.466667 | 14.5 | 333.5707 | 9.806452 | 0 |
| 131 NORTHAM 401 - PREC | 518.3049 | 8.235294 | 2.466667 | 18.96154 | 627.6244 | 6.129032 | 0 |
| 131 NORTHAM 501 - PREC | 539.8537 | 7.058824 | 12.33333 | 27.88462 | 633.4357 | 9.806452 | 0 |
| 133 NORTHUM 101-1A | 466.1163 | 8.842105 | 7.595745 | 21.93548 | 730.1044 | 2.482759 | 0 |
| 133 NORTHUM 201-2A | 467.245 | 4.421053 | 17.3617 | 21.93548 | 955.8752 | 8.689655 | 0 |
| 133 NORTHUM 301-3A | 558.6624 | 2.210526 | 4.340426 | 8.774194 | 258.3446 | 0 | 0 |
| 133 NORTHUM 302-3B | 322.7827 | 0 | 0 | 2.193548 | 88.73577 | 1.241379 | 0 |
| 133 NORTHUM 401-4A | 542.8619 | 1.105263 | 14.10638 | 53.74194 | 1146.826 | 12.41379 | 0 |
| 133 NORTHUM 501-5A | 494.3316 | 4.421053 | 7.595745 | 27.41935 | 1122.114 | 11.17241 | 0 |
| 135 NOTTOWA 101 - PREC | 289.8702 | 3.26087 | 7 | 13.78218 | 495.7653 | 0 | 0 |
| 135 NOTTOWA 102 - PREC | 199.1474 | 2.173913 | 2 | 5.742574 | 394.7971 | 2.571429 | 0 |
| 135 NOTTOWA 201 - PREC | 365.1036 | 8.695652 | 7 | 13.78218 | 636.4401 | 9 | 0 |
| 135 NOTTOWA 202 - PREC | 95.14822 | 0 | 3 | 11.48515 | 342.6112 | 5.142857 | 0 |
| 135 NOTTOWA 301 - PREC | 410.465 | 1.086957 | 2 | 8.039604 | 235.9707 | 0 | 0 |
| 135 NOTTOWA 302 - PREC | 174.8072 | 1.086957 | 3 | 5.742574 | 264.3325 | 0 | 0 |
| 135 NOTTOWA 401 - PREC | 533.2726 | 2.173913 | 0 | 9.188119 | 158.8264 | 1.285714 | 0 |
| 135 NOTTOWA 402 - PREC | 217.9558 | 4.347826 | 2 | 13.78218 | 454.9242 | 1.285714 | 0 |
| 135 NOTTOWA 501 - PREC | 543.23 | 2.173913 | 9 | 34.45545 | 728.3325 | 7.714286 | 0 |
| 137 ORANGE C101-ONE | 638.49 | 9.577982 | 17.56579 | 43.71067 | 1068.303 | 14.31325 | 0 |
| 137 ORANGE C102-ONE I | 676.5754 | 21.2844 | 22.25 | 51.55618 | 879.2704 | 9.542169 | 0 |
| 137 ORANGE Cl201-TWO | 513.0323 | 8.513761 | 14.05263 | 24.6573 | 1195.765 | 10.73494 | 0 |
| 137 ORANGE CI202-TWO | 388.6948 | 9.577982 | 5.855263 | 31.38202 | 1110.43 | 5.963855 | 0 |
| 137 ORANGE Cl301-THRE | 957.7351 | 14.89908 | 15.22368 | 56.03933 | 1082.345 | 16.6988 | 0 |
| 137 ORANGE CI302-THRE | 229.6324 | 5.321101 | 8.197368 | 12.32865 | 411.5504 | 1.192771 | 0 |
| 137 ORANGE C1401-FOUR | 394.2956 | 4.256881 | 18.73684 | 31.38202 | 1292.981 | 8.349398 | 0 |
| 137 ORANGE C1402-FOUR | 637.3699 | 18.09174 | 19.90789 | 67.24719 | 959.2041 | 9.542169 | 0 |
| 137 ORANGE CI501-FIVE ! | 741.5446 | 15.9633 | 25.76316 | 38.10674 | 1149.317 | 9.542169 | 0 |
| 137 ORANGE CI502-FIVE I | 779.6299 | 8.513761 | 30.44737 | 42.58989 | 1371.835 | 13.12048 | 0 |
| 139 PAGE COUI 101 - WEST | 620.6109 | 5.428571 | 27.87952 | 50.3027 | 1377.785 | 14.21875 | 0 |
| 139 PAGE COUI 201 - EAST | 635.8047 | 9.771429 | 22.51807 | 52.44324 | 1572.623 | 30.625 | 0 |
| 139 PAGE COUI 301 - MARI | 474.516 | 10.85714 | 15.01205 | 35.31892 | 1787.802 | 12.03125 | 0 |
| 139 PAGE COUI 401 - NEWI | 399.7155 | 2.171429 | 9.650602 | 32.10811 | 1387.42 | 4.375 | 0 |
| 139 PAGE COUI501-SHEN | 383.3529 | 9.771429 | 13.93976 | 27.82703 | 1705.37 | 8.75 | 0 |
| 141 PATRICK C( 101 - ARAR | 129.2264 | 2.227273 | 3.491803 | 11.05263 | 406.1504 | 1.090909 | 0 |
| 141 PATRICK C( 102 - CLAU | 82.33894 | 1.113636 | 2.327869 | 7.736842 | 412.6488 | 0 | 0 |
| 141 PATRICK C( 103 - WILLI | 102.9237 | 1.113636 | 3.491803 | 5.526316 | 416.981 | 0 | 0 |
| 141 PATRICK C( 201 - DRY F | 50.31824 | 1.113636 | 0 | 8.842105 | 264.2685 | 1.090909 | 0 |


| 2 - PATR | 187.5498 | 4.454545 | 8.147541 | 14.36842 | 693.1633 | 3.272727 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 141 PATRICK C( 203 - RUSS | 136.088 | 2.227273 | 12.80328 | 5.526316 | 543.6999 | 1.090909 | 0 |
| 141 PATRICK C( 301 - CRITZ | 269.8887 | 3.340909 | 13.96721 | 8.842105 | 770.0611 | 4.363636 | 0 |
| 141 PATRICK C( 302 - LIBER | 75.47736 | 6.681818 | 4.655738 | 15.47368 | 554.5306 | 1.090909 | 0 |
| 141 PATRICK C( 401 - MEAI | 189.837 | 3.340909 | 5.819672 | 18.78947 | 466.8021 | 2.181818 | 0 |
| 141 PATRICK C( 402 - STUA | 189.837 | 10.02273 | 5.819672 | 17.68421 | 637.9268 | 4.363636 | 0 |
| 141 PATRICK C( 501 - STUA | 77.76455 | 0 | 3.491803 | 11.05263 | 283.7637 | 0 | 0 |
| 141 PATRICK C( 502 - ELAN | 124.652 | 6.681818 | 4.655738 | 9.947368 | 460.3037 | 14.18182 | 0 |
| 141 PATRICK C(503-WOO | 152.0983 | 6.681818 | 2.327869 | 12.15789 | 543.6999 | 3.272727 | 0 |
| 143 PITTSYLVAI 103-TWIN | 404.7191 | 3.278351 | 18.76503 | 52.4596 | 1987.448 | 9.047619 | 0 |
| 143 PITTSYLVAI 105 - CHAT | 217.9257 | 8.742268 | 8.830601 | 23.43939 | 608.2697 | 5.654762 | 0 |
| 143 PITTSYLVAI 106 -TUNS | 208.7013 | 4.371134 | 7.726776 | 13.39394 | 829.4587 | 4.52381 | 0 |
| 143 PITTSYLVAI 108 - WEST | 174.1099 | 2.185567 | 4.415301 | 10.04545 | 434.7882 | 0 | 0 |
| 143 PITTSYLVAI 201 - CALL | 208.7013 | 0 | 6.622951 | 6.69697 | 693.9263 | 2.261905 | 0 |
| 143 PITTSYLVAI 202-BEARS | 88.78453 | 1.092784 | 2.20765 | 0 | 179.9871 | 0 | 0 |
| 143 PITTSYLVAI 204 - SAND | 141.8246 | 2.185567 | 6.622951 | 13.39394 | 452.1363 | 3.392857 | 0 |
| 143 PITTSYLVAI 206 -CLIM | 136.0594 | 4.371134 | 3.311475 | 6.69697 | 529.1188 | 2.261905 | 0 |
| 143 PITTSYLVAI 207 -GRET | 400.1069 | 4.371134 | 5.519126 | 21.20707 | 1265.331 | 3.392857 | 0 |
| 143 PITTSYLVAI 301 - CENT | 506.1871 | 0 | 5.519126 | 13.39394 | 317.6881 | 2.261905 | 0 |
| 143 PITTSYLVAI 305 -RICEV | 435.8513 | 2.185567 | 3.311475 | 6.69697 | 315.5196 | 2.261905 | 0 |
| 143 PITTSYLVAI 307 -EAST | 802.5199 | 6.556701 | 2.20765 | 7.813131 | 252.6325 | 0 | 0 |
| 143 PITTSYLVAI 308 - MT A | 262.8945 | 2.185567 | 8.830601 | 7.813131 | 196.251 | 0 | 0 |
| 143 PITTSYLVAI 309 -EAST | 281.3432 | 3.278351 | 2.20765 | 7.813131 | 272.1492 | 2.261905 | 0 |
| 143 PITTSYLVAI 402 - KEELI | 175.263 | 2.185567 | 5.519126 | 12.27778 | 781.7513 | 1.130952 | 0 |
| 143 PITTSYLVAI 404 - KENT | 426.627 | 8.742268 | 9.934426 | 31.25253 | 1372.673 | 3.392857 | 0 |
| 143 PITTSYLVAI 405 - RING | 561.5333 | 5.463918 | 7.726776 | 21.20707 | 1365.083 | 3.392857 | 0 |
| 143 PITTSYLVAI501-HURT | 449.6879 | 7.649485 | 14.34973 | 18.97475 | 1064.743 | 4.52381 | 0 |
| 143 PITTSYLVAI 502 - MOTI | 499.2689 | 6.556701 | 15.45355 | 25.67172 | 1125.462 | 10.17857 | 0 |
| 143 PITTSYLVAI503-RENA | 254.8231 | 3.278351 | 6.622951 | 15.62626 | 621.2808 | 5.654762 | 0 |
| 143 PITTSYLVAI 603 -STON | 303.2511 | 3.278351 | 3.311475 | 14.5101 | 935.7162 | 4.52381 | 0 |
| 143 PITTSYLVAI 604 -SWAr | 348.2199 | 3.278351 | 7.726776 | 11.16162 | 649.4716 | 2.261905 | 0 |
| 143 PITTSYLVAI 605 - WHIT | 265.2006 | 2.185567 | 2.20765 | 13.39394 | 684.1679 | 2.261905 | 0 |
| 143 PITTSYLVAI606-BROS | 490.0445 | 1.092784 | 5.519126 | 11.16162 | 496.591 | 4.52381 | 0 |
| 143 PITTSYLVAI 607 - DRY F | 94.54976 | 1.092784 | 1.103825 | 5.580808 | 352.3844 | 0 | 0 |
| 143 PITTSYLVAI 702 - BACH | 207.5483 | 5.463918 | 4.415301 | 22.32323 | 1165.579 | 3.392857 | 0 |
| 143 PITTSYLVAI 703 - FERR' | 106.0802 | 1.092784 | 3.311475 | 1.116162 | 207.0936 | 2.261905 | 0 |
| 143 PITTSYLVAI 704 - MT H | 569.6047 | 5.463918 | 24.28415 | 30.13636 | 1616.631 | 7.916667 | 0 |
| 143 PITTSYLVAI 705 - MT C | 177.5691 | 4.371134 | 4.415301 | 16.74242 | 780.667 | 2.261905 | 0 |
| 145 POWHATAI 101 - SUBL | 434.0236 | 10.26563 | 19.59542 | 78.90261 | 1376.98 | 16.38356 | 0 |
| 145 POWHATAI 102 - MAN, | 336.055 | 1.140625 | 6.916031 | 47.78609 | 880.0087 | 6.30137 | 0 |
| 145 POWHATAI 103 - FLAT | 225.5556 | 10.26563 | 16.1374 | 32.22783 | 810.5629 | 6.30137 | 0 |
| 145 POWHATAI 201 - POW | 256.3131 | 10.26563 | 11.52672 | 58.89913 | 1157.792 | 17.64384 | 0 |
| 145 POWHATAI 202 -GRAC | 430.6061 | 11.40625 | 16.1374 | 70.01217 | 1408.448 | 6.30137 | 0 |
| 145 POWHATAI301-BETH | 385.0393 | 4.5625 | 9.221374 | 62.23304 | 1137.175 | 6.30137 | 0 |
| 145 POWHATAI302-LEE'S | 295.0449 | 5.703125 | 4.610687 | 54.45391 | 862.6472 | 1.260274 | 0 |
| 145 POWHATAI401-POW | 500.0954 | 6.84375 | 23.05344 | 116.687 | 1817.527 | 8.821918 | 0 |
| 145 POWHATAI 402 - MT ZI | 218.7205 | 5.703125 | 13.83206 | 31.11652 | 665.1607 | 8.821918 | 0 |

145 POWHATAI501-SMITI 553.6364 145 POWHATAI502-PINE 290.4882 145 POWHATAI 503 - TOBA 134.422 147 PRINCE ED 101 - FARN 584.2894 147 PRINCE ED 201 - LOCK 623.242 147 PRINCE ED'301-LEIGF 427.3969 147 PRINCE ED 302 - MT P 256.4381 147 PRINCE ED 401 - HAMI 460.9394 147 PRINCE ED'501 - DARL 246.7 147 PRINCE ED 502 - BUFF، 166.6307 147 PRINCE ED 601 - PROS 754.1662 147 PRINCE ED 701 - WEST 544.2548 147 PRINCE ED 801 - CENT 526.9425 149 PRINCE GEI 101 - RICH/ 323.965 149 PRINCE GEI 102 - TEMF 683.4006 149 PRINCE GEI 103 - UNIO 734.2418 149 PRINCE GEI 104 - RIVES 686.9477 149 PRINCE GEI 105 - HARR 159.6178 149 PRINCE GEI 201 - BLAN 866.6655 149 PRINCE GEI 202 - BLAC 526.1475 149 PRINCE GEI 203 - BRAN 216.3708 149 PRINCE GEI 204 - COUF 1112.595 149 PRINCE GEI 205 - JEFFE 1109.048 153 PRINCE WI 101 - BREN 526.4811 153 PRINCE WI 102 - CEDA 1566.013 153 PRINCE WI 103-GLEN 1069.079 153 PRINCE WI 104 - NOKE 848.8165 153 PRINCE WI 105 - LIME! 1500.203 153 PRINCE WI 106 - WEST 1345.75 153 PRINCE WI 107 - MAR؛ 1741.954 153 PRINCE WI 108 - VICTC 1709.721 153 PRINCE WI 109 - PINE 1424.991 153 PRINCE WI 110 - BUCK 1088.367 153 PRINCE WI 111 - BRIST 1754.042 153 PRINCE WI 112 - BURK 1256.288 153 PRINCE WI 201 - SAUN 1294.901 153 PRINCE WI 202 - MAR〔 1048.933 153 PRINCE WI 203 - BENN 1243.677 153 PRINCE WI 204 - ELLIS 1187.269 153 PRINCE WI 205 - BUCK 1135.826 153 PRINCE WI 206 -COLE 735.9991 153 PRINCE WI 207 - SPRIG 1784.932 153 PRINCE WI 208 - HYLTI 656.7583 153 PRINCE WI 209 - INDEI 535.8826 153 PRINCE WI 210 - PENN 895.4274 153 PRINCE WI 211 - SIGN/ 922.5751 153 PRINCE WI 212 - YORK 2247.453
 13.83206

0
10.6
6.36
$4.24 \quad 3.311688 \quad 25.90189$
$\begin{array}{lll}1.06 & 4.415584 & 5.396226\end{array}$
$\begin{array}{lll}1.06 & 6.623377 & 23.7434\end{array}$
$\begin{array}{lll}2.12 & 2.207792 & 15.10943\end{array}$
$\begin{array}{lll}2.12 & 7.727273 & 12.95094\end{array}$
$\begin{array}{lll}9.54 & 6.623377 & 28.06038\end{array}$
$\begin{array}{llll}8.48 & 9.935065 & 63.67547\end{array}$
$7.42 \quad 5.519481 \quad 38.85283$
3.442623

3
6.885246
6.88524

4.59016
9.180328
1.14754
18.36066
12.62295
10.7966
29.99076
15.59519
15.59519
19.19409
26.39187
16.79482
13.19593
20.39372
8.027586
25.19224
14.4
17.99445
17.99445
23.99261
10.70345
21.59335
22.79298

### 11.9963

13.19593
9.597043
9.365517
22.7448352 .22368
40.00696 27.78261 18.89217 48.56604 23.7434
2.30769236 .11838
3.461538
9.230769
64.081
744.3408
389.162
188.55171 .285714
462.60956 .428571
400.12432 .571429
$235.6897 \quad 0 \quad 0$
$\begin{array}{lll}523.9984 & 2.571429 & 0\end{array}$
$481.2454 \quad 3.8571430$
$165.5309 \quad 2.571429 \quad 0$
$614.80474 .888889 \quad 0$
$1986.896 \quad 6.1111110$
$\begin{array}{lll}965.9614 & 6.111111 & 0\end{array}$
$471.2007 \quad 2.444444$
1511.2081 .222222
4.888889

0
0
0
0
0
0
0
0
0
0
0

0
0

## 0

0
0
0
0
0

0

## 0

0
0

0

0
0
0
0

153 PRINCE WI 213 - SARA 962.977 153 PRINCE WI 214 - LUCA 500.9629 153 PRINCE WI 215 -ROSA 1151.766 153 PRINCE WI 301 - DUM 1380.514 153 PRINCE WI 302 - POTC 2382.457 153 PRINCE WI 303-GRAF 995.2544 153 PRINCE WI 304 - QUAr 239.0654 153 PRINCE WI 305 - PATT 1185.926 153 PRINCE WI 306 - WASt 1255.765 153 PRINCE WI 307 - HENC 983.1229 153 PRINCE WI 308-MON 668.8459 153 PRINCE WI 309 - ASHL، 875.6778 153 PRINCE WI 310 - FORE 1300.086 153 PRINCE WI 311 - SWAr 2026.627 153 PRINCE WI 312 -TRIAN 1579.898 153 PRINCE WI 313 - CARD 953.5755 153 PRINCE WI 314 - CABII 958.9478 153 PRINCE WI 401 - EVERI 918.0378 153 PRINCE WI 402 - BATT 840.9045 153 PRINCE WI 403 - BULL 1022.395 153 PRINCE WI 404 - BEN L 1473.341 153 PRINCE WI 405 - UNIT 1743.297 153 PRINCE WI 406 - ALVE' 338.7817 153 PRINCE WI 407 - HERI7 1146.413 153 PRINCE WI 408 - SUDL 871.6486 153 PRINCE WI 409 - TYLEF 1541.154 153 PRINCE WI 410 - MOU 1150.95 153 PRINCE WI 411 - MULI 1647.94 153 PRINCE WI 412 - CATH 606.4797 153 PRINCE WI 413 - REAG 1105.578 153 PRINCE WI 501 - LAKE 1112.057 153 PRINCE WI 502-OCCC 893.5886 153 PRINCE WI 503 - OLD E 1252.094 153 PRINCE WI 504-ROCK 856.1328 153 PRINCE WI 505-MOH 1206.072 153 PRINCE WI 506 - BETH 1745.708 153 PRINCE WI 507-CHINI 1197.248 153 PRINCE WI 508 - SPRIN 1011.327 153 PRINCE WI 509 - MC C 934.7726 153 PRINCE WI 510 - YATE! 662.4392 153 PRINCE WI 511 - WEST 1214.13 153 PRINCE WI 512 - YORK 1676.148 153 PRINCE WI 513 - LYNN 1135.714 153 PRINCE WI 514 - ANTII 1427.334 153 PRINCE WI 601 - DALE 1454.088 153 PRINCE WI 602 - BEVIL 2054.719 153 PRINCE WI 603 - HAMI 1272.16

| 10.79667 | 13.01444 | 32.39542 | 412.6543 | 9.28385 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15.59519 | 16.91877 | 69.9741 | 899.4075 | 10.61011 | 0 |
| 10.8 | 26.96094 | 41.72574 | 574.5334 | 10.67213 | 0 |
| 22.8 | 17.97396 | 51.84107 | 415.0128 | 25.34631 | 0 |
| 15.6 | 32.09635 | 54.3699 | 512.2815 | 25.34631 | 0 |
| 13.2 | 21.82552 | 22.75949 | 320.338 | 14.67418 | 0 |
| 2.399261 | 5.205776 | 19.43725 | 249.1257 | 2.652529 | 0 |
| 20.39372 | 49.45487 | 64.79084 | 905.7954 | 26.52529 | 0 |
| 17.99445 | 29.93321 | 44.05777 | 937.7345 | 30.50408 | 0 |
| 17.99445 | 32.5361 | 69.9741 | 867.4683 | 27.85155 | 0 |
| 4.798521 | 49.45487 | 37.57869 | 603.0119 | 17.24144 | 0 |
| 9.597043 | 40.34477 | 53.12849 | 717.9929 | 25.19902 | 0 |
| 16.79482 | 29.93321 | 37.57869 | 548.0765 | 10.61011 | 0 |
| 18 | 37.23177 | 56.89873 | 640.6761 | 21.34426 | 0 |
| 14.39889 | 29.56383 | 54.74671 | 653.0267 | 14.64317 | 0 |
| 14.39556 | 26.02888 | 41.46614 | 461.2019 | 3.978793 | 0 |
| 11.9963 | 36.44043 | 44.05777 | 594.0689 | 10.61011 | 0 |
| 12.04138 | 40.28684 | 107.0966 | 1469.704 | 24.38389 | 0 |
| 13.37931 | 59.68421 | 52.10104 | 1357.332 | 39.01422 | 0 |
| 5.351724 | 28.35 | 59.3373 | 907.8452 | 21.1327 | 0 |
| 33.58965 | 31.23466 | 112.7361 | 684.7762 | 26.52529 | 0 |
| 25.19224 | 50.75632 | 97.18625 | 785.704 | 19.89396 | 0 |
| 4.013793 | 16.41316 | 7.236256 | 375.5581 | 4.876777 | 0 |
| 4.013793 | 25.36579 | 43.41753 | 1407.604 | 35.76303 | 0 |
| 14.39556 | 37.74188 | 60.90339 | 675.8332 | 11.93638 | 0 |
| 25.42069 | 41.77895 | 99.86033 | 1218.346 | 22.75829 | 0 |
| 18.73103 | 38.79474 | 65.1263 | 1330.718 | 26.00948 | 0 |
| 20.39372 | 29.93321 | 68.67829 | 534.0232 | 10.61011 | 0 |
| 8.027586 | 32.82632 | 40.52303 | 1015.781 | 6.50237 | 0 |
| 14.71724 | 61.17632 | 85.38782 | 1389.861 | 37.38863 | 0 |
| 14.39556 | 40.34477 | 55.72012 | 733.3237 | 15.91517 | 0 |
| 13.2 | 33.38021 | 51.84107 | 530.4383 | 17.34221 | 0 |
| 10.8 | 30.8125 | 56.89873 | 437.0604 | 17.34221 | 0 |
| 10.8 | 26.96094 | 45.51899 | 505.7969 | 17.34221 | 0 |
| 22.79298 | 42.94765 | 67.38247 | 729.491 | 18.5677 | 0 |
| 28.8 | 42.36719 | 59.42757 | 842.9948 | 26.68033 | 0 |
| 16.8 | 34.66406 | 48.04782 | 609.5501 | 32.01639 | 0 |
| 11.9963 | 40.34477 | 49.24104 | 407.544 | 18.5677 | 0 |
| 10.79667 | 40.34477 | 72.56574 | 1076.989 | 15.91517 | 0 |
| 10.70345 | 34.31842 | 52.10104 | 928.5453 | 30.88626 | 0 |
| 15.59519 | 42.94765 | 71.26992 | 793.3694 | 29.17781 | 0 |
| 20.4 | 33.38021 | 54.3699 | 421.4974 | 9.338115 | 0 |
| 27.6 | 60.34115 | 59.42757 | 874.1208 | 38.68648 | 0 |
| 24 | 47.5026 | 101.1533 | 741.8354 | 30.68238 | 0 |
| 18 | 24.39323 | 45.51899 | 383.8869 | 18.67623 | 0 |
| 14.4 | 20.54167 | 55.63432 | 682.1773 | 18.67623 | 0 |
| 10.8 | 15.40625 | 35.40366 | 290.509 | 12.00615 | 0 |

153 PRINCE WI 604-GIDEI 1361.786 153 PRINCE WI 605 - MINN 1313.629 153 PRINCE WI 606 - BEL A 1316.304 153 PRINCE WI 607 - KERR' 1641.367 153 PRINCE WI 608 - ENTE 1435.36 153 PRINCE WI 609 - KING 1617.288 153 PRINCE WI 610 - FITZG 1553.078 153 PRINCE WI 611 - NEAB 1163.806 153 PRINCE WI 701 - BELM 1357.773 153 PRINCE WI 702 -LIBRA 1538.364 153 PRINCE WI 703 -LYNN 1104.946 153 PRINCE WI 704 - PORT 1645.38 153 PRINCE WI 705 - POTC 898.9394 153 PRINCE WI 706 - RIPPC 1511.609 153 PRINCE WI 707 - KILBY 1308.278 153 PRINCE WI 708 - RIVEF 1686.849 153 PRINCE WI 709 - FREEI 1751.059 153 PRINCE WI 710 - POW 1488.868 153 PRINCE WI 711 - GRAY 1835.335 153 PRINCE WI 712 -LEESY 1178.52 155 PULASKI C( 101 - BELSF 172.4515 155 PULASKI C( 102 -NEW 713.0207 155 PULASKI C( 103 - WEST 261.9936 155 PULASKI CC 201 - DRAP 263.0991 155 PULASKI C( 202 -SOUT 76.27663 155 PULASKI C( 203 - NEWI 515.1436 155 PULASKI C( 301 - DUBL 414.5469 155 PULASKIC(302-HIWA 64.11659 155 PULASKI C( 304 - SNOV 222.1971 155 PULASKI C( 401 - MAS§ 594.7366 155 PULASKI C( 402 - WALk 134.8659 155 PULASKI C( 501 - ROBII 739.5517 157 RAPPAHAN 101 - WASt 433.1701 157 RAPPAHAN 201 -AMIS 281.6202 157 RAPPAHAN 301 -SPERI 405.724 157 RAPPAHAN 401 - SCRA 316.2261 157 RAPPAHAN 501 -CHES 91.88456 157 RAPPAHAN 502 - FLINT 218.375 159 RICHMONL 101 - PREC 499.1311 159 RICHMONC 201 - PREC 217.9612 159 RICHMON[ 301 - PREC 215.7816 159 RICHMONL 401 - PREC 215.7816 159 RICHMON[501-PREC 198.3447 161 ROANOKE I101-CATA 145.9008 161 ROANOKE 102 -MASC 132.4331 161 ROANOKE 103 -GLEN 441.0694 161 ROANOKE 104 - NORT 485.962

| 16.8 | 19.25781 | 35.40366 | 402.0437 | 8.004098 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 25.2 | 29.52865 | 58.16315 | 578.4241 | 12.00615 | 0 |
| 14.4 | 15.40625 | 53.10549 | 608.2532 | 13.34016 | 0 |
| 32.4 | 32.09635 | 53.10549 | 600.4717 | 12.00615 | 0 |
| 7.2 | 16.6901 | 44.25457 | 521.3599 | 14.67418 | 0 |
| 9.6 | 32.09635 | 69.5429 | 700.3341 | 22.65502 | 0 |
| 15.6 | 17.97396 | 41.72574 | 504.5 | 13.34016 | 0 |
| 13.2 | 10.27083 | 25.28833 | 370.9177 | 14.67418 | 0 |
| 18 | 23.10938 | 48.04782 | 778.149 | 12.00615 | 0 |
| 28.8 | 32.09635 | 54.3699 | 435.7635 | 18.67623 | 0 |
| 14.4 | 19.25781 | 32.87482 | 232.1478 | 12.00615 | 0 |
| 19.2 | 8.986979 | 51.84107 | 348.8702 | 21.34426 | 0 |
| 10.8 | 7.703125 | 21.49508 | 496.7185 | 10.67213 | 0 |
| 14.4 | 20.54167 | 53.10549 | 664.0205 | 10.67213 | 0 |
| 14.4 | 32.09635 | 20.23066 | 468.1863 | 17.34221 | 0 |
| 15.6 | 21.82552 | 40.46132 | 356.6516 | 13.34016 | 0 |
| 13.2 | 17.97396 | 39.19691 | 313.8534 | 5.336066 | 0 |
| 37.2 | 23.10938 | 29.08158 | 296.9936 | 14.67418 | 0 |
| 22.8 | 14.1224 | 45.51899 | 469.4833 | 30.68238 | 0 |
| 9.6 | 30.8125 | 40.46132 | 674.3958 | 20.01025 | 0 |
| 6.42 | 8.603774 | 4.346749 | 449.4789 | 2.444444 | 0 |
| 22.47 | 27.96226 | 53.24768 | 1072.984 | 4.888889 | 0 |
| 6.42 | 9.679245 | 20.64706 | 753.758 | 3.666667 | 0 |
| 6.42 | 12.90566 | 15.21362 | 805.005 | 4.888889 | 0 |
| 0 | 2.150943 | 4.346749 | 180.4321 | 0 | 0 |
| 13.91 | 21.50943 | 41.29412 | 1191.493 | 8.555556 | 0 |
| 3.21 | 20.43396 | 33.68731 | 1213.913 | 6.111111 | 0 |
| 4.28 | 3.226415 | 5.433437 | 298.9408 | 0 | 0 |
| 5.35 | 7.528302 | 22.82043 | 691.8345 | 2.444444 | 0 |
| 10.7 | 29.03774 | 55.42105 | 1504.313 | 7.333333 | 0 |
| 0 | 7.528302 | 14.12693 | 590.4082 | 0 | 0 |
| 27.82 | 20.43396 | 80.41486 | 1569.439 | 3.666667 | 0 |
| 363636 | 6.631579 | 11.89535 | 509.7194 | 9.904762 | 0 |
| 272727 | 5.526316 | 32.44186 | 606.7581 | 0 | 0 |
| 636364 | 7.736842 | 15.13953 | 423.3444 | 7.428571 | 0 |
| 727273 | 5.526316 | 14.05814 | 443.6052 | 1.238095 | 0 |
| 272727 | 6.631579 | 10.81395 | 298.5804 | 1.238095 | 0 |
| 727273 | 9.947368 | 8.651163 | 256.9924 | 6.190476 | 0 |
| 3.25 | 3.5 | 4.851064 | 288.3247 | 3.75 | 0 |
| 416667 | 3.5 | 16.97872 | 489.5066 | 0 | 0 |
| 166667 | 4.666667 | 14.55319 | 388.3777 | 3.75 | 0 |
| 083333 | 3.5 | 10.91489 | 534.6918 | 1.25 | 0 |
| 083333 | 5.833333 | 9.702128 | 512.0992 | 1.25 | 0 |
| 271186 | 5.416667 | 23.30056 | 454.7985 | 3.537313 | 0 |
| 135593 | 5.416667 | 26.62921 | 421.5467 | 7.074627 | 0 |
| 22034 | 15.16667 | 38.83427 | 1021.151 | 8.253731 | 0 |
| 949153 | 9.75 | 31.06742 | 661.8176 | 8.253731 | 0 |
|  |  |  |  |  | 0 |


| ROANOKE 105 - PETEI | 781.1306 | 11.35593 | 30.33333 | 78.77809 | 1470.587 | 23.58209 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 161 ROANOKE 106-GREE | 677.8777 | 9.084746 | 35.75 | 59.91573 | 1490.967 | 7.074627 | 0 |
| 161 ROANOKE (107-BENN | 173.9587 | 5.677966 | 6.5 | 25.51966 | 593.1688 | 1.179104 | 0 |
| 161 ROANOKE (108-WILD | 329.9603 | 6.813559 | 11.91667 | 42.16292 | 789.4615 | 5.895522 | 0 |
| 161 ROANOKE 201 - PLAN | 528.6021 | 8.504854 | 28.63291 | 55.78324 | 985.7701 | 5.828877 | 0 |
| 161 ROANOKE 202 - BURL | 440.692 | 13.82039 | 22.02532 | 33.46995 | 592.3412 | 6.994652 | 0 |
| 161 ROANOKE 203 - MOU | 740.9562 | 4.252427 | 36.34177 | 68.05556 | 1562.726 | 3.497326 | 0 |
| 161 ROANOKE 204 - BOTE | 739.605 | 7.949153 | 27.08333 | 53.25843 | 1041.531 | 9.432836 | 0 |
| 161 ROANOKE 205 - ORCF | 748.9481 | 8.504854 | 42.94937 | 60.2459 | 1735.263 | 4.663102 | 0 |
| 161 ROANOKE 206 - HOLL | 403.0163 | 6.378641 | 12.11392 | 22.3133 | 500.0283 | 4.663102 | 0 |
| 161 ROANOKE 301 - BENT | 166.1025 | 4.542373 | 8.666667 | 15.53371 | 353.9705 | 4.716418 | 0 |
| 161 ROANOKE 302 - POAE | 747.8064 | 13.82039 | 30.83544 | 87.02186 | 1616.575 | 13.9893 | 0 |
| 161 ROANOKE 303 - WINL | 563.9944 | 3.18932 | 26.43038 | 50.20492 | 795.6494 | 2.331551 | 0 |
| 161 ROANOKE 304 - OAK 1 | 936.1851 | 10.63107 | 30.83544 | 75.86521 | 1390.189 | 20.98396 | 0 |
| 161 ROANOKE 305 - CAST। | 1059.488 | 14.8835 | 38.5443 | 112.6821 | 1504.481 | 22.14973 | 0 |
| 161 ROANOKE 1306-GARS | 554.8609 | 10.63107 | 18.72152 | 51.32058 | 598.935 | 11.65775 | 0 |
| 161 ROANOKE (402-BONS | 151.8447 | 3.18932 | 7.708861 | 11.15665 | 360.46 | 3.497326 | 0 |
| 161 ROANOKE (403-NORT | 488.643 | 10.63107 | 19.82278 | 58.01457 | 1033.025 | 9.326203 | 0 |
| 161 ROANOKE (404-SOUT | 642.771 | 14.8835 | 7.708861 | 47.97359 | 1194.573 | 10.49198 | 0 |
| 161 ROANOKE (405-LINDE | 844.85 | 4.252427 | 22.02532 | 79.2122 | 1988.025 | 12.82353 | 0 |
| 161 ROANOKE (406-MOU | 535.4522 | 17.00971 | 27.53165 | 62.47723 | 1434.147 | 9.326203 | 0 |
| 161 ROANOKE 1501-COTT | 492.068 | 9.567961 | 25.32911 | 39.04827 | 790.1546 | 15.15508 | 0 |
| 161 ROANOKE 1502 - PENN | 442.9754 | 8.504854 | 18.72152 | 39.04827 | 703.3365 | 5.828877 |  |
| 161 ROANOKE 503 - CAVE | 553.7192 | 6.378641 | 29.73418 | 44.62659 | 913.2385 | 12.82353 | 0 |
| 161 ROANOKE 1504-OGDE | 647.3377 | 15.9466 | 24.22785 | 75.86521 | 674.7635 | 13.9893 | 0 |
| 161 ROANOKE 1505-CLEAI | 311.6811 | 5.315534 | 6.607595 | 29.00729 | 787.9567 | 3.497326 | 0 |
| 161 ROANOKE 1506-MOU | 473.801 | 10.63107 | 15.41772 | 52.43625 | 690.1489 | 6.994652 | 0 |
| 161 ROANOKE (507-HUN7 | 816.3077 | 18.07282 | 29.73418 | 69.17122 | 1257.214 | 17.48663 | 0 |
| 163 ROCKBRID( 101 - AIRPC | 388.3978 | 1.1 | 15.96 | 35.39592 | 492.5048 | 11 | 0 |
| 163 ROCKBRID ( 102 - BEN $\subseteq$ | 232.5871 | 5.5 | 17.1 | 12.16735 | 434.4366 | 8.555556 | 0 |
| 163 ROCKBRID (103-PLAN | 101.6157 | 2.2 | 4.56 | 12.16735 | 251.6291 | 0 | 0 |
| 163 ROCKBRID (104-EFFIN | 112.9063 | 7.7 | 6.84 | 8.84898 | 278.5126 | 4.888889 | 0 |
| 163 ROCKBRID 201 - COLLI | 252.9102 | 3.3 | 12.54 | 15.48571 | 382.8203 | 12.22222 | 0 |
| 163 ROCKBRID( 202 - HIGH | 456.1416 | 3.3 | 28.5 | 28.75918 | 706.4971 | 9.777778 | 0 |
| 163 ROCKBRID( 203 - VO-TI | 188.5536 | 1.1 | 5.7 | 14.37959 | 149.472 | 1.222222 | 0 |
| 163 ROCKBRID( 301 - MAU | 224.6836 | 2.2 | 7.98 | 8.84898 | 400.0258 | 2.444444 | 0 |
| 163 ROCKBRID 302 - NATL | 189.6827 | 4.4 | 5.7 | 27.65306 | 476.3748 | 4.888889 | 0 |
| 163 ROCKBRID( 303 - FALLI | 82.42163 | 0 | 5.7 | 9.955102 | 232.273 | 3.666667 | 0 |
| 163 ROCKBRID ( 401 - FAIRF | 204.3605 | 8.8 | 4.56 | 13.27347 | 477.4501 | 3.666667 | 0 |
| 163 ROCKBRID ( 402 - MOU | 246.1358 | 5.5 | 12.54 | 23.22857 | 722.6272 | 9.777778 | 0 |
| 163 ROCKBRID 403 - VESU | 85.80882 | 3.3 | 7.98 | 3.318367 | 262.3825 | 3.666667 | 0 |
| 163 ROCKBRID( 501 -GOSF | 67.7438 | 3.3 | 6.84 | 3.318367 | 292.492 | 2.444444 | 0 |
| 163 ROCKBRID( 502 - MEAL | 275.4915 | 4.4 | 13.68 | 23.22857 | 340.8822 | 11 | 0 |
| 163 ROCKBRID( 503 -ROCK | 158.0689 | 3.3 | 1.14 | 7.742857 | 279.5879 | 4.888889 | 0 |
| 163 ROCKBRID( 504 -ROCK | 240.4905 | 6.6 | 13.68 | 23.22857 | 500.0322 | 4.888889 | 0 |
| 165 ROCKINGH 101-BROA | 471.8612 | 9.699482 | 25.37262 | 72.83213 | 1288.778 | 10.82888 | 0 |
| 165 ROCKINGH 102-TIMB | 255.9625 | 9.699482 | 12.68631 | 39.2173 | 699.5919 | 3.609626 | 0 |

165 ROCKINGH 103 - FULK! 132.4327 165 ROCKINGH 104 - BERG 46.74097 165 ROCKINGH 105 - LACE' 124.6426 165 ROCKINGH 106 - TENT 149.126 165 ROCKINGH 107 - PLAIA 164.7063 165 ROCKINGH 108 - LITTL 114.6267 165 ROCKINGH 201 - SINGI 240.3821 165 ROCKINGH 202 -EDON 546.4242 165 ROCKINGH 203 - DAYT 258.1882 165 ROCKINGH 204 - MT C 288.236 165 ROCKINGH 205 - SILVE 534.1825 165 ROCKINGH 301 - KEEZI 221.4632 165 ROCKINGH 302 -PORT 317.1709 165 ROCKINGH 303 - MELR 149.126 165 ROCKINGH 304 - GROT 289.3489 165 ROCKINGH 305 -MAS§ 653.2607 165 ROCKINGH 306 - CROS 105.7236 165 ROCKINGH 307 - CROS 762.323 165 ROCKINGH 401 - BRID( 900.3201 165 ROCKINGH 402 - MON 300.4777 165 ROCKINGH 403 - MT C 62.32129 165 ROCKINGH 404 - NORT 357.2346 165 ROCKINGH 405 - OTTO 212.5601 165 ROCKINGH 501 - ELKT( 334.9769 165 ROCKINGH 502 - SWIF 280.4458 165 ROCKINGH 503 - MCG, 409.5399 165 ROCKINGH 504 - SOUT 149.126 165 ROCKINGH 505-STON 533.0696 167 RUSSELL C( 101 - MOCI 129.1213 167 RUSSELL C(102-COPP 123.305 167 RUSSELL C( 103 - SOUT 100.0399 167 RUSSELL C( 201 - NORT 307.0994 167 RUSSELL C( 202 - DANT 67.4688 167 RUSSELL C( 301 - COOk 59.32601 167 RUSSELL C( 302 -DAUC 69.79531 167 RUSSELL C(303 - NEW 164.019 167 RUSSELL C( 304 - CLEVI 131.4478 167 RUSSELL C( 401 - DRILL 29.08138 167 RUSSELL C(402-SWOI 155.8762 167 RUSSELL C(403-HON/ 130.2846 167 RUSSELL C(501-WEST 445.5267 167 RUSSELL C(601-EAST 195.4269 167 RUSSELL C(602 - ELK G 222.1817 169 SCOTT COL 101 - WEBE 129.5902 169 SCOTT COL 102 - YUM/ 158.8888 169 SCOTT COL 202 - WEBE 86.76907 169 SCOTT COL 203 -HILTC 131.8439

| 4.310881 | 11.62912 | 20.1689 | 866.2626 | 3.609626 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.07772 | 1.057192 | 8.963955 | 299.3701 | 3.609626 | 0 |
| 2.15544 | 14.80069 | 23.53038 | 675.1752 | 2.406417 | 0 |
| 3.233161 | 14.80069 | 23.53038 | 558.3996 | 4.812834 | 0 |
| 1.07772 | 14.80069 | 26.89186 | 655.0049 | 6.016043 | 0 |
| 0 | 19.02946 | 11.20494 | 454.3632 | 4.812834 | 0 |
| 6.466321 | 15.85789 | 35.85582 | 877.9401 | 9.625668 | 0 |
| 16.1658 | 25.37262 | 62.74768 | 1194.296 | 12.03209 | 0 |
| 6.466321 | 17.97227 | 34.73532 | 516.9974 | 2.406417 | 0 |
| 5.388601 | 20.08666 | 32.49434 | 955.4366 | 12.03209 | 0 |
| 10.7772 | 49.68804 | 51.54274 | 1023.379 | 7.219251 | 0 |
| 4.310881 | 10.57192 | 38.09681 | 622.0954 | 10.82888 | 0 |
| 3.233161 | 15.85789 | 34.73532 | 1049.919 | 7.219251 | 0 |
| 5.388601 | 13.7435 | 19.0484 | 559.4612 | 1.203209 | 0 |
| 3.233161 | 16.91508 | 30.25335 | 971.3606 | 4.812834 | 0 |
| 11.85492 | 32.77296 | 60.50669 | 900.2336 | 9.625668 | 0 |
| 5.388601 | 8.457539 | 11.20494 | 330.1564 | 10.82888 | 0 |
| 10.7772 | 35.94454 | 68.35015 | 1125.292 | 16.84492 | 0 |
| 23.70984 | 60.25997 | 72.83213 | 1494.728 | 16.84492 | 0 |
| 4.310881 | 26.42981 | 30.25335 | 949.0671 | 9.625668 | 0 |
| 3.233161 | 7.400347 | 8.963955 | 136.9459 | 0 | 0 |
| 8.621762 | 29.60139 | 33.61483 | 938.4511 | 4.812834 | 0 |
| 7.544041 | 12.68631 | 30.25335 | 1304.702 | 10.82888 | 0 |
| 4.310881 | 15.85789 | 39.2173 | 1010.64 | 9.625668 | 0 |
| 11.85492 | 14.80069 | 29.13285 | 1632.735 | 6.016043 | 0 |
| 7.544041 | 28.54419 | 69.47065 | 1232.513 | 7.219251 | 0 |
| 0 | 8.457539 | 21.28939 | 722.9471 | 7.219251 | 0 |
| 16.1658 | 28.54419 | 47.06076 | 943.7591 | 8.42246 | 0 |
| 2 | 8.489796 | 8.685714 | 713.012 | 6.615385 | 0 |
| 4 | 4.244898 | 10.85714 | 571.2818 | 1.102564 | 0 |
| 4 | 2.122449 | 11.94286 | 401.2055 | 0 | 0 |
| 4 | 11.67347 | 24.97143 | 1130.571 | 7.717949 | 0 |
| 1 | 5.306122 | 1.085714 | 236.5804 | 2.205128 | 0 |
| 3 | 0 | 1.085714 | 207.1442 | 0 | 0 |
| 3 | 5.306122 | 7.6 | 305.2651 | 0 | 0 |
| 8 | 5.306122 | 14.11429 | 675.9441 | 2.205128 | 0 |
| 5 | 9.55102 | 8.685714 | 367.4083 | 4.410256 | 0 |
| 1 | 0 | 5.428571 | 99.21115 | 1.102564 | 0 |
| 4 | 6.367347 | 14.11429 | 1157.827 | 2.205128 | 0 |
| 1 | 4.244898 | 8.685714 | 424.1004 | 3.307692 | 0 |
| 11 | 23.34694 | 35.82857 | 1396.588 | 9.923077 | 0 |
| 4 | 7.428571 | 22.8 | 800.2306 | 1.102564 | 0 |
| 3 | 10.61224 | 14.11429 | 1034.631 | 1.102564 | 0 |
| 4.588235 | 5.520833 | 15.77778 | 589.5437 | 5.757576 | 0 |
| 1.147059 | 8.833333 | 9.015873 | 746.0207 | 4.606061 | 0 |
| 3.441176 | 5.520833 | 6.761905 | 471.635 | 3.454545 | 0 |
| 1.147059 | 7.729167 | 14.65079 | 771.3656 | 5.757576 | 0 |


| COL 204 - CLAR | 25.91803 | 0 | 1.104167 | 1.126984 | 201.657 | 2.30303 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 169 SCOTT COL 301 - NICKi | 85.6422 | 1.147059 | 0 | 6.761905 | 549.8735 | 0 | 0 |
| 169 SCOTT COL 302 - SNOV | 70.99287 | 3.441176 | 0 | 2.253968 | 444.0862 | 1.151515 | 0 |
| 169 SCOTT COL 303 - TWIN | 91.27655 | 1.147059 | 2.208333 | 5.634921 | 387.8867 | 1.151515 | 0 |
| 169 SCOTT COL 304 - COPP | 32.67926 | 1.147059 | 0 | 2.253968 | 115.7048 | 0 | 0 |
| 169 SCOTT COL 401 - GATE | 291.8596 | 10.32353 | 5.520833 | 39.44444 | 1378.54 | 9.212121 | 0 |
| 169 SCOTT COL 501 - DUNC | 86.76907 | 0 | 3.3125 | 2.253968 | 277.6916 | 2.30303 | 0 |
| 169 SCOTT COL 502 - FORT | 67.61226 | 0 | 1.104167 | 1.126984 | 358.134 | 0 | 0 |
| 169 SCOTT COL 503 - MAN' | 30.42552 | 1.147059 | 2.208333 | 5.634921 | 219.2882 | 0 | 0 |
| 169 SCOTT COL 504 - RYE C | 64.23165 | 0 | 1.104167 | 2.253968 | 501.3876 | 1.151515 | 0 |
| 169 SCOTT COL 601 - CLINC | 41.69423 | 2.294118 | 4.416667 | 5.634921 | 357.0321 | 0 | 0 |
| 169 SCOTT COL 602 - DUFF | 138.6051 | 6.882353 | 3.3125 | 18.03175 | 720.6758 | 1.151515 | 0 |
| 169 SCOTT COL 603 - FAIR | 46.20171 | 1.147059 | 1.104167 | 3.380952 | 156.477 | 0 | 0 |
| 171 SHENANDC 101 - ORKN | 271.3457 | 5.321429 | 8.902724 | 18.46094 | 634.2138 | 10.18248 | 0 |
| 171 SHENANDC 103 - NEW | 566.6337 | 25.54286 | 35.61089 | 76.01563 | 1682.608 | 21.49635 | 0 |
| 171 SHENANDC 201 - CONI | 348.8731 | 8.514286 | 20.03113 | 33.66406 | 1297.55 | 11.31387 | 0 |
| 171 SHENANDC 202 - MT Jf | 380.7961 | 13.83571 | 10.01556 | 42.35156 | 1026.822 | 11.31387 | 0 |
| 171 SHENANDC 302 - EDINI | 352.2934 | 10.64286 | 27.82101 | 51.03906 | 1098.01 | 15.83942 | 0 |
| 171 SHENANDC 303 - ST LU | 300.9885 | 6.385714 | 10.01556 | 24.97656 | 1179.983 | 7.919708 | 0 |
| 171 SHENANDC 304 - FORT | 174.4365 | 8.514286 | 13.35409 | 30.40625 | 596.463 | 5.656934 | 0 |
| 171 SHENANDC 401 - WOO | 1006.715 | 23.41429 | 63.43191 | 105.3359 | 1879.991 | 28.28467 | 0 |
| 171 SHENANDC 501 - CEDA | 49.02465 | 0 | 0 | 2.171875 | 78.73743 | 0 | 0 |
| 171 SHENANDC 503 -TOM | 521.0294 | 8.514286 | 34.49805 | 54.29688 | 1518.662 | 19.23358 | 0 |
| 171 SHENANDC 504 -LEBAI | 328.3511 | 6.385714 | 16.69261 | 34.75 | 1076.438 | 7.919708 | 0 |
| 171 SHENANDC 601 - STRA: | 972.5122 | 31.92857 | 45.62646 | 82.53125 | 2024.523 | 15.83942 | 0 |
| 173 SMYTH COI 101 - SALT | 339.0811 | 3.3125 | 7.831683 | 19.84615 | 1291.594 | 6.12 | 0 |
| 173 SMYTH COI 201 - SEVEI | 213.8649 | 5.520833 | 5.594059 | 28.66667 | 992.8005 | 2.04 | 0 |
| 173 SMYTH COI 202 - RICH | 128.5405 | 2.208333 | 4.475248 | 6.615385 | 359.1882 | 1.02 | 0 |
| 173 SMYTH COI 301 - CHILL | 274.8108 | 4.416667 | 13.42574 | 29.76923 | 1231.2 | 7.14 | 0 |
| 173 SMYTH COI 302 - ST CL | 48.75676 | 4.416667 | 3.356436 | 3.307692 | 365.5455 | 2.04 | 0 |
| 173 SMYTH COI 401 - EAST | 290.3243 | 4.416667 | 12.30693 | 33.07692 | 803.1406 | 7.14 | 0 |
| 173 SMYTH COI 402 - WEST | 186.1622 | 1.104167 | 6.712871 | 23.15385 | 376.1411 | 2.04 | 0 |
| 173 SMYTH COI 501 - ATKIN | 192.8108 | 5.520833 | 17.90099 | 22.05128 | 922.87 | 2.04 | 0 |
| 173 SMYTH COI 502 - WAS | 283.6757 | 2.208333 | 13.42574 | 20.94872 | 493.7514 | 4.08 | 0 |
| 173 SMYTH COI 601 - ROYA | 250.4324 | 8.833333 | 12.30693 | 17.64103 | 835.9867 | 7.14 | 0 |
| 173 SMYTH COI 602 - ROYA | 124.1081 | 3.3125 | 4.475248 | 8.820513 | 449.2502 | 1.02 | 0 |
| 173 SMYTH COI 701 - ADW | 154.027 | 5.520833 | 5.594059 | 20.94872 | 1022.468 | 7.14 | 0 |
| 173 SMYTH COI 702 - SUGA | 160.6757 | 2.208333 | 5.594059 | 18.74359 | 521.2997 | 2.04 | 0 |
| 173 SMYTH COI 703 - KONN | 17.72973 | 0 | 0 | 4.410256 | 84.76418 | 0 | 0 |
| 175 SOUTHAMI 101 - BERLI | 102.838 | 0 | 8.346154 | 21.36986 | 535.9324 | 1 | 0 |
| 175 SOUTHAMI 102 -IVOR | 358.3092 | 3.6 | 8.346154 | 16.0274 | 522.1088 | 0 | 0 |
| 175 SOUTHAMI 201 - BOYK | 519.6025 | 2.4 | 2.384615 | 8.547945 | 358.3516 | 0 | 0 |
| 175 SOUTHAMI 202 - BRAN | 124.4881 | 0 | 3.576923 | 5.342466 | 163.7571 | 1 | 0 |
| 175 SOUTHAMI301-CAPR | 334.4941 | 1.2 | 4.769231 | 14.9589 | 350.9081 | 1 | 0 |
| 175 SOUTHAMI 302 -SEBRI | 267.3788 | 3.6 | 2.384615 | 11.75342 | 384.9356 | 1 | 0 |
| 175 SOUTHAMI401-DREV | 276.0388 | 0 | 4.769231 | 6.410959 | 242.4456 | 0 | 0 |
| 175 SOUTHAMI501-HUN7 | 326.9166 | 6 | 9.538462 | 24.57534 | 742.2239 | 0 | 0 |


| SOUTHAMI502-FORK | 218.6661 | 1.2 | 1.192308 | 6.410959 | 253.0792 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 175 SOUTHAMI601-COUF | 405.9395 | 2.4 | 9.538462 | 14.9589 | 546.566 | 0 | 0 |
| 175 SOUTHAMI602-SEDLI | 75.77537 | 1.2 | 1.192308 | 7.479452 | 309.4372 | 1 | 0 |
| 175 SOUTHAMI701-BLAC | 333.4116 | 0 | 2.384615 | 6.410959 | 174.3907 | 0 | 0 |
| 175 SOUTHAMI 702 - NEW: | 251.1412 | 2.4 | 3.576923 | 11.75342 | 450.8638 | 1 | 0 |
| 177 SPOTSYLVA 101 - PART | 431.2531 | 8.586667 | 11.28571 | 45.47064 | 1302.31 | 14.76596 | 0 |
| 177 SPOTSYLVf 102 - BLAYI | 553.4415 | 7.513333 | 15.8 | 37.51327 | 1346.902 | 12.30496 | 0 |
| 177 SPOTSYLVf 103 - TRAV | 876.8926 | 17.17333 | 28.22131 | 72.75302 | 1463.782 | 19.68794 | 0 |
| 177 SPOTSYLVf 104 - MASS | 867.8082 | 29.71429 | 39.74576 | 81.14286 | 1364.59 | 22.60638 | 0 |
| 177 SPOTSYLVf 201 - WILD | 870.8917 | 13.95333 | 29.34286 | 75.02655 | 1227.99 | 17.22695 | 0 |
| 177 SPOTSYLVf 202 - WILD | 664.8486 | 13.95333 | 31.6 | 90.94127 | 1318.317 | 14.76596 | 0 |
| 177 SPOTSYLVf 203 - NI RII | 540.2643 | 8.586667 | 18.05714 | 48.88093 | 1326.321 | 20.91844 | 0 |
| 177 SPOTSYLVA 204 - CHAN | 1254.228 | 23.61333 | 50.78571 | 103.4457 | 1433.799 | 28.30142 | 0 |
| 177 SPOTSYLVf 301 - PLAN | 1058.966 | 27.90667 | 31.6 | 94.35157 | 1408.644 | 17.22695 | 0 |
| 177 SPOTSYLVf 302 - HAZE | 1272.197 | 31.12667 | 38.37143 | 79.57361 | 1448.663 | 24.60993 | 0 |
| 177 SPOTSYLVf 303 - RIVEF | 1106.883 | 18.24667 | 55.3 | 63.65889 | 1812.258 | 22.14894 | 0 |
| 177 SPOTSYLVf 401 - SUMI | 1239.384 | 14.85714 | 37.47458 | 89.03175 | 1376.134 | 27.92553 |  |
| 177 SPOTSYLVf 402 - PARK | 1301.569 | 13.64476 | 59.00169 | 72.19546 | 1214.465 | 22.10993 |  |
| 177 SPOTSYLVf 403 -LEE H | 1533.048 | 24 | 60.18644 | 109.3175 | 1609.338 | 29.25532 |  |
| 177 SPOTSYLVA 501 - BELM | 421.6697 | 10.73333 | 20.31429 | 48.88093 | 1138.807 | 3.691489 | 0 |
| 177 SPOTSYLVA 502 - BROK | 370.1589 | 3.22 | 14.67143 | 34.10298 | 1053.053 | 6.152482 |  |
| 177 SPOTSYLVA 503 - POST | 392.9195 | 7.513333 | 16.92857 | 28.41915 | 1223.417 | 8.613475 |  |
| 177 SPOTSYLVA 504 - COUF | 816.9851 | 18.24667 | 28.21429 | 65.93242 | 1388.064 | 18.45745 |  |
| 177 SPOTSYLVA 505 - BROC | 674.432 | 15.02667 | 30.47143 | 67.06919 | 1543.563 | 24.60993 |  |
| 177 SPOTSYLVA 601 - SALEI | 1215.894 | 32.2 | 45.14286 | 117.0869 | 1386.92 | 27.07092 |  |
| 177 SPOTSYLVA 602 - SMITI | 1696.262 | 24.68667 | 48.52857 | 117.0869 | 1726.504 | 19.68794 |  |
| 177 SPOTSYLVf 603 - PIED | 752.2971 | 13.95333 | 24.82857 | 73.88978 | 985.5937 | 8.613475 | 0 |
| 177 SPOTSYLVA 701 - BATT | 1039.212 | 19.42857 | 32.9322 | 65.36508 | 1050.572 | 14.62766 | 0 |
| 177 SPOTSYLVA 702 - BREN | 1113.251 | 34.52476 | 56.61816 | 110.8846 | 1272.09 | 12.80142 | 0 |
| 177 SPOTSYLVf 703 - FAIR | 710.4684 | 10.9419 | 26.0063 | 56.68179 | 639.7813 | 11.27305 | 0 |
| 177 SPOTSYLVf 704 - GAYL | 1431.775 | 6.648571 | 48.5707 | 61.29732 | 1561.122 | 22.5461 |  |
| 179 STAFFORD 101 - HART | 1157.784 | 28.30626 | 73.69535 | 116.3676 | 2496.213 | 30.75395 |  |
| 179 STAFFORD 102 -ROCK | 826.646 | 9.058005 | 28.07442 | 50.03806 | 943.6904 | 2.365688 |  |
| 179 STAFFORD 103 - SIMP: | 887.8346 | 15.85151 | 26.90465 | 75.63893 | 1366.491 | 18.92551 | 0 |
| 179 STAFFORD 104 - COLLI | 1210.574 | 20.38051 | 54.97907 | 94.25775 | 1682.182 | 17.74266 | 0 |
| 179 STAFFORD 201 -ROCK | 899.8323 | 16.98376 | 30.41395 | 75.63893 | 1195.116 | 16.55982 | 0 |
| 179 STAFFORD 202 -ROSE | 1244.168 | 24.90951 | 46.7907 | 123.3496 | 1416.099 | 23.65688 | 0 |
| 179 STAFFORD 203 -RUBY | 543.4987 | 19.24826 | 19.88605 | 96.5851 | 1442.031 | 9.462754 | 0 |
| 179 STAFFORD 204 - STEF/ | 1073.8 | 11.32251 | 36.26279 | 65.16585 | 1605.514 | 21.2912 | 0 |
| 179 STAFFORD 301 - GRIFF | 1215.374 | 14.71926 | 16.37674 | 51.20174 | 634.7643 | 9.462754 | 0 |
| 179 STAFFORD 302 - WIDE | 1562.109 | 18.11601 | 32.75349 | 103.5672 | 1248.107 | 20.10835 | 0 |
| 179 STAFFORD 303 - HARB | 622.684 | 12.45476 | 25.73488 | 69.82055 | 897.4642 | 15.37698 | 0 |
| 179 STAFFORD 304 - BARR | 602.2878 | 9.058005 | 18.71628 | 36.07395 | 531.0373 | 4.731377 | 0 |
| 179 STAFFORD 401 - AQUI | 554.2967 | 5.661253 | 14.03721 | 24.43719 | 303.2888 | 5.914221 | 0 |
| 179 STAFFORD 402 - COUF | 1840.457 | 26.04176 | 42.11163 | 101.2398 | 1188.351 | 22.47404 | 0 |
| 179 STAFFORD 403 - BROC | 995.8145 | 21.51276 | 31.58372 | 94.25775 | 1699.094 | 20.10835 | 0 |
| 179 STAFFORD 404 - GOVE | 749.8603 | 20.38051 | 42.11163 | 74.47526 | 1104.918 | 34.30248 | 0 |

179 STAFFORD 501-GRAF 1172.182 179 STAFFORD 502 -FALM 920.2285 179 STAFFORD 503 - DREV 899.8323 179 STAFFORD 504 - GAYL 1125.39 179 STAFFORD 601 -FERR' 807.4496 179 STAFFORD 602 -CHAT 1118.192 179 STAFFORD 603 - WHIT 837.444 179 STAFFORD 604 -ENGL 881.8357 179 STAFFORD 701 -WOO 1277.762 179 STAFFORD 702 - WHIT 1403.738 179 STAFFORD 703 - HAMI 1476.925 181 SURRY COL 101 - SURR 359.0836 181 SURRY COL 201 - BACC 567.7255 181 SURRY COL 301 - DENC 251.4683 181 SURRY COL 302 - WALL 254.7627 181 SURRY COL 401 - CARS 501.8386 181 SURRY COL 501 - CLAR 284.4118 181 SURRY COL 502 - SPRIN 52.70952 183 SUSSEX CO 101 - WAVI 663.1344 183 SUSSEX CO 201 - STON 446.4238 183 SUSSEX CO 202 - LITTL 101.854 183 SUSSEX CO 301 - COUF 224.2954 183 SUSSEX CO 302 - WAKI 24.92172 183 SUSSEX CO 401 - MAR 455.0922 183 SUSSEX CO 402 - WEST 85.60068 183 SUSSEX CO 501 - HENR 370.5751 183 SUSSEX CO 502 - YALE 177.7027 183 SUSSEX CO 601 - BLAC 204.7915 183 SUSSEX CO 602 -NEW 124.6086 185 TAZEWELL 101 -ABBS 59.76181 185 TAZEWELL 102 - TIP T( 79.29933 185 TAZEWELL 103 -BOIS 55.16475 185 TAZEWELL 104 - FALLS 54.01548 185 TAZEWELL 106 -POCA 71.25447 185 TAZEWELL 107 -AMO 13.79119 185 TAZEWELL 109 - BISHC 24.13458 185 TAZEWELL 110 -ADRI، 51.71695 185 TAZEWELL 111 - GAP 60.91108 185 TAZEWELL 112 - BANL 25.28384 185 TAZEWELL 203-BURK 18.38825 185 TAZEWELL 204 - CLEAI 59.76181 185 TAZEWELL 207 - FREE 29.88091 185 TAZEWELL 209 - JEFFE 517.1695 185 TAZEWELL 214 -THON 75.85153 185 TAZEWELL 301 -CEDA 256.2862 185 TAZEWELL 302 -BAPT 63.20961 185 TAZEWELL 303 - WARI 125.2699

| 19.24826 | 43.2814 | 94.25775 | 1940.372 | 33.11964 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10.19026 | 52.63953 | 59.34747 | 1120.703 | 31.93679 | 0 |
| 28.30626 | 26.90465 | 90.76672 | 1214.283 | 17.74266 | 0 |
| 18.11601 | 35.09302 | 43.05601 | 819.669 | 10.6456 | 0 |
| 15.85151 | 29.24419 | 69.82055 | 1321.392 | 26.02257 | 0 |
| 27.17401 | 37.43256 | 114.0402 | 1323.647 | 30.75395 | 0 |
| 16.98376 | 29.24419 | 77.96629 | 1793.801 | 16.55982 | 0 |
| 26.04176 | 25.73488 | 48.87439 | 482.5561 | 5.914221 | 0 |
| 16.98376 | 57.3186 | 87.27569 | 1493.895 | 29.57111 | 0 |
| 22.64501 | 47.96047 | 91.9304 | 948.2003 | 16.55982 | 0 |
| 12.45476 | 80.71395 | 110.5492 | 1655.122 | 31.93679 | 0 |
| 3.1875 | 9.321429 | 27 | 521.7524 | 1 | 0 |
| 4.25 | 4.142857 | 8.307692 | 311.8286 | 4 | 0 |
| 1.0625 | 4.142857 | 9.346154 | 198.7143 | 2 | 0 |
| 2.125 | 4.142857 | 8.307692 | 164.0667 | 0 | 0 |
| 4.25 | 3.107143 | 14.53846 | 359.7238 | 3 | 0 |
| 2.125 | 3.107143 | 13.5 | 257.819 | 0 | 0 |
| 0 | 1.035714 | 0 | 5.095238 | 0 | 0 |
| 3.3 | 2.444444 | 3.315789 | 161.3651 | 1 | 0 |
| 2.2 | 2.444444 | 8.842105 | 179.532 | 0 | 0 |
| 0 | 0 | 1.105263 | 67.32449 | 0 | 0 |
| 2.2 | 7.333333 | 5.526316 | 403.947 | 1 | 0 |
| 1.1 | 0 | 6.631579 | 163.5023 | 0 | 0 |
| 3.3 | 4.888889 | 13.26316 | 265.0234 | 0 | 0 |
| 1.1 | 0 | 1.105263 | 16.02964 | 0 | 0 |
| 1.1 | 2.444444 | 8.842105 | 199.8362 | 0 | 0 |
| 1.1 | 0 | 3.315789 | 88.69735 | 0 | 0 |
| 5.5 | 1.222222 | 5.526316 | 337.6911 | 0 | 0 |
| 1.1 | 1.222222 | 5.526316 | 172.0515 | 1 | 0 |
| 0 | 3.201681 | 11.11111 | 305.5864 | 1.145455 | 0 |
| 0 | 1.067227 | 6.666667 | 390.7141 | 1.145455 | 0 |
| 0 | 3.201681 | 5.555556 | 223.7329 | 0 | 0 |
| 1.12766 | 2.134454 | 8.888889 | 442.0089 | 3.436364 | 0 |
| 0 | 4.268908 | 6.666667 | 165.8898 | 1.145455 | 0 |
| 0 | 1.067227 | 1.111111 | 85.12764 | 0 | 0 |
| 0 | 0 | 3.333333 | 163.707 | 0 | 0 |
| 1.12766 | 1.067227 | 6.666667 | 415.8158 | 0 | 0 |
| 1.12766 | 1.067227 | 8.888889 | 379.8003 | 0 | 0 |
| 0 | 0 | 4.444444 | 183.3518 | 0 | 0 |
| 0 | 0 | 0 | 110.2294 | 0 | 0 |
| 0 | 3.201681 | 10 | 445.2831 | 3.436364 | 0 |
| 0 | 2.134454 | 3.333333 | 140.788 | 1.145455 | 0 |
| 9.021277 | 20.27731 | 38.88889 | 1965.575 | 4.581818 | 0 |
| 1.12766 | 6.403361 | 7.777778 | 460.5624 | 1.145455 | 0 |
| 6.765957 | 7.470588 | 26.66667 | 1787.681 | 6.872727 | 0 |
| 0 | 2.134454 | 1.111111 | 341.602 | 0 | 0 |
| 4.510638 | 7.470588 | 8.888889 | 751.9609 | 1.145455 | 0 |


| EWELL 305 - POUN | 95.38904 | 1.12766 | 8.537815 | 2.222222 | 557.6952 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 185 TAZEWELL 401 - RICHI | 409.1385 | 7.893617 | 18.14286 | 40 | 1899.001 | 12.6 | 0 |
| 185 TAZEWELL 402 - JEWE | 32.17944 | 2.255319 | 2.134454 | 0 | 222.6415 | 0 | 0 |
| 185 TAZEWELL 404 - RAVE | 110.3295 | 3.382979 | 7.470588 | 4.444444 | 679.9298 | 3.436364 | 0 |
| 185 TAZEWELL 501 - SPRIN | 148.2553 | 3.382979 | 9.605042 | 16.66667 | 1157.954 | 9.163636 | 0 |
| 185 TAZEWELL 502 - GRAF | 458.557 | 10.14894 | 14.94118 | 36.66667 | 1891.362 | 12.6 | 0 |
| 187 WARREN C 101 -FORK | 414.1643 | 14.34815 | 13.94203 | 31.54945 | 692.6573 | 6.80597 | 0 |
| 187 WARREN C 102 - Otte | 551.0686 | 12.14074 | 28.95652 | 54.3956 | 1653.896 | 10.20896 | 0 |
| 187 WARREN C 201 - HAPP | 620.0959 | 9.933333 | 30.02899 | 54.3956 | 1268.966 | 21.55224 | 0 |
| 187 WARREN C 202 - LINDE | 536.1126 | 24.28148 | 22.52174 | 85.94505 | 1123.258 | 23.8209 | 0 |
| 187 WARREN C 301 - NORT | 556.8208 | 13.24444 | 16.08696 | 53.30769 | 965.5883 | 12.47761 | 0 |
| 187 WARREN C 302 - RIVEF | 436.0229 | 4.414815 | 11.7971 | 23.93407 | 1171.102 | 13.61194 | 0 |
| 187 WARREN C 401 - EAST | 586.7327 | 28.6963 | 43.97101 | 64.18681 | 1883.332 | 29.49254 | 0 |
| 187 WARREN C 402 - TOW | 368.146 | 15.45185 | 16.08696 | 27.1978 | 790.521 | 13.61194 | 0 |
| 187 WARREN C 501 - SOUT | 735.1416 | 16.55556 | 26.81159 | 65.27473 | 1268.966 | 13.61194 | 0 |
| 187 WARREN C 502 - BENT | 192.1262 | 7.725926 | 4.289855 | 25.02198 | 538.2502 | 3.402985 | 0 |
| 187 WARREN C 504 - BROV | 172.5684 | 2.207407 | 7.507246 | 9.791209 | 416.4643 | 3.402985 | 0 |
| 191 WASHINGT 101 -EAST | 685.2638 | 12.47561 | 18.80676 | 61.65971 | 1561.79 | 19.34579 | 0 |
| 191 WASHINGT 102 - WEST | 404.0694 | 4.536585 | 15.48792 | 24.66388 | 823.7891 | 2.149533 | 0 |
| 191 WASHINGT 201 - CLINC | 119.3304 | 2.268293 | 5.531401 | 14.57411 | 646.713 | 2.149533 | 0 |
| 191 WASHINGT 202 -GREE | 212.6681 | 4.536585 | 14.38164 | 13.45303 | 1034.961 | 2.149533 | 0 |
| 191 WASHINGT 203 - HAYT | 74.43383 | 1.134146 | 7.743961 | 4.484342 | 392.6472 | 1.074766 | 0 |
| 191 WASHINGT 204 WOOD | 285.9204 | 5.670732 | 12.16908 | 15.6952 | 853.4851 | 2.149533 | 0 |
| 191 WASHINGT 301 - WAT/ | 467.8698 | 2.268293 | 22.1256 | 51.56994 | 1496.899 | 8.598131 | 0 |
| 191 WASHINGT 302 -SOUT | 599.0151 | 15.87805 | 21.01932 | 45.96451 | 1218.636 | 15.04673 | 0 |
| 191 WASHINGT 401 - GLAD | 339.0874 | 2.268293 | 8.850242 | 32.51148 | 1157.044 | 4.299065 | 0 |
| 191 WASHINGT 402 - MEAL | 440.6955 | 5.670732 | 13.27536 | 40.35908 | 1339.62 | 12.8972 | 0 |
| WASHINGT 501 - RHEA | 381.6211 | 9.073171 | 12.16908 | 33.63257 | 1808.157 | 7.523364 | 0 |
| 191 WASHINGT 502 - DAM | 306.0057 | 5.670732 | 9.956522 | 30.26931 | 755.5983 | 2.149533 | 0 |
| 191 WASHINGT 504 -GREE | 35.44468 | 2.268293 | 0 | 4.484342 | 146.2803 | 1.074766 | 0 |
| 191 WASHINGT 601 - BURS | 232.7534 | 6.804878 | 14.38164 | 44.84342 | 1547.492 | 2.149533 | 0 |
| 191 WASHINGT 602 -MENI | 54.34851 | 2.268293 | 5.531401 | 10.08977 | 300.2596 | 11.82243 | 0 |
| 191 WASHINGT 603 -VALLI | 236.2979 | 2.268293 | 9.956522 | 22.42171 | 1105.351 | 7.523364 | 0 |
| 191 WASHINGT 701 - HIGH | 224.483 | 0 | 11.0628 | 26.90605 | 1212.037 | 4.299065 | 0 |
| 191 WASHINGT 702 - WALL | 129.9638 | 1.134146 | 8.850242 | 14.57411 | 598.3195 | 1.074766 | 0 |
| 191 WASHINGT 703 -JOHN | 323.7281 | 6.804878 | 17.70048 | 44.84342 | 1320.922 | 7.523364 | 0 |
| 193 WESTMOR 101 - PREC | 750.2661 | 2.352941 | 3.26087 | 19.34058 | 304.9992 | 1.433333 | 0 |
| 193 WESTMOR 102 - PREC | 375.133 | 1.176471 | 4.347826 | 7.963768 | 261.9138 | 0 | 0 |
| 193 WESTMOR 201 - PREC | 612.6781 | 4.705882 | 4.347826 | 19.34058 | 523.8277 | 7.166667 | 0 |
| 193 WESTMOR 202 - PREC | 234.0172 | 3.529412 | 4.347826 | 9.101449 | 395.7053 | 1.433333 | 0 |
| 193 WESTMOR 301 - PREC | 424.5236 | 1.176471 | 6.521739 | 15.92754 | 483.0099 | 0 | 0 |
| 193 WESTMOR 302 - PREC | 319.8627 | 2.352941 | 5.434783 | 7.963768 | 358.2891 | 5.733333 | 0 |
| 193 WESTMOR 401 - PREC | 483.3219 | 12.94118 | 10.86957 | 38.68116 | 1172.376 | 10.03333 | 0 |
| 193 WESTMOR 501 - PREC | 636.1974 | 11.76471 | 10.86957 | 38.68116 | 947.8787 | 17.2 | 0 |
| 195 WISE COU 101 - APPA | 213.3563 | 8.213333 | 5.603448 | 13.23636 | 740.0702 | 3.183673 | 0 |
| 195 WISE COUN 102 - DORC | 115.7571 | 1.026667 | 2.241379 | 5.515152 | 528.9326 | 4.244898 | 0 |
| 195 WISE COU 103 -GUES | 104.4084 | 1.026667 | 2.241379 | 2.206061 | 515.8725 | 1.061224 | 0 |

195 WISE COUß 104 - WEST 283.7185 195 WISE COUN 201 - NORT 135.05 195 WISE COUr 202 - WISE 483.4563 195 WISE COUN 203 - EAST 56.7437 195 WISE COUN 301 - BIG S 410.8244 195 WISE COUN 302 - EAST 297.337 195 WISE COUT 401 - CLINC 213.3563 195 WISE COUN 402 - SOUT 231.5143 195 WISE COUN 403 - ST PA 155.4777 197 WYTHE CO 101 - ROYA 61.23392 197 WYTHE CO 102 -RURA 311.7363 197 WYTHE CO 203 -WEST 649.0796 197 WYTHE CO 303 - EAST 685.8199 197 WYTHE CO 401 - FORT 200.4019 197 WYTHE CO 402 - MAX 188.1551 197 WYTHE CO 501 - JACK؛ 153.6415 197 WYTHE CO 502-SHEFI 165.8883 197 WYTHE CO 601 - HUD[ 73.48071 197 WYTHE CO 602 - ZION 164.7749 197 WYTHE CO 603 EVER( 115.7878 199 YORK COUI 101 - QUEE 825.916 199 YORK COUI 102 - WALL 971.5984 199 YORK COUI 103 - MAG 1739.012 199 YORK COUI 201 - COVE 1385.703 199 YORK COUI 202 - KILN 727.2649 199 YORK COUI 301 - SEAF 708.9112 199 YORK COUI 302 - YORK 799.5326 199 YORK COUI303-EDGE 1152.841 199 YORK COUI 401 - HARV 819.0334 199 YORK COUI 402 - DARE 880.9771 199 YORK COUI 403 -GRAF 534.5512 199 YORK COUI501-TABB 1095.486 199 YORK COUI 502 - BETH 1358.173 510 ALEXANDR 101 - LADR 1340.261 510 ALEXANDR 102 - CITY I 1213.275 510 ALEXANDR 103 - LYLES 2075.956 510 ALEXANDR 104 - DURA 1784.715 510 ALEXANDR 105 - LEE C 2340.972 510 ALEXANDR 106 -CORA 3176.047 510 ALEXANDR 107 - MT V 3290.611 510 ALEXANDR 108-GEOR 2988.328 510 ALEXANDR 109 - FIRE I 1396.853 510 ALEXANDR 110-CHAR 2053.871 510 ALEXANDR 201 - MAU 1786.095 510 ALEXANDR 202 -GEOR 1694.996 510 ALEXANDR 203 - CHAR 2045.59 510 ALEXANDR 204 - BLES§ 1637.024
10.26667
4.106667
14.37333
6.16 9.24 9.24
7.186667 3.08 3.08 1.065217
4.26087 8.521739 8.521739
2.130435 4.260875 .40404
2.1304358
5.326087
3.195652
2.130435
7.456522
17.15745
24.66383
21.44681
34.31489
9.6510642
23.59149
12.86809
19.30213

1
2
17.15745
22.51915
15.68212
9.147903
22.21634
11.76159
19.60265
24.83002
30.0574
32.67108
16.98896 30.05745
18.29581
9.147903
18.29581
18.29581
6.724138 4.482759
17.64848
6.618182
43.01818
3.309091
1393.073
$690.0067 \quad 2.122449$
0

| 1781.61 | 4.244898 | 0 |
| :--- | :--- | :--- |
|  | 0 |  |

$379.8302 \quad 5.3061220$
$\begin{array}{lll}1395.25 & 8.489796 & 0\end{array}$
$\begin{array}{lll}1554.148 & 9.55102 & 0\end{array}$
$1228.734 \quad 6.367347 \quad 0$
1454.021 .0612240
$424.452 \quad 2.122449 \quad 0$
$\begin{array}{llll}474.1882 & 2.324324 & 0\end{array}$
$1391.801 \quad 5.810811 \quad 0$
$1376.94919 .75676 \quad 0$
$1429.9915 .10811 \quad 0$
$\begin{array}{llll}970.6536 & 5.810811 & 0\end{array}$
$\begin{array}{lll}938.8289 & 6.972973 & 0\end{array}$
$663.01484 .648649 \quad 0$
$1024.75610 .45946 \quad 0$
$496.4655 \quad 0 \quad 0$
733.02914 .6486490
$\begin{array}{lll}546.3242 & 10.45946 & 0\end{array}$
$893.9071 \quad 13.82813 \quad 0$
$\begin{array}{llll}1240.681 & 13.82813 & 0\end{array}$
$\begin{array}{llll}1018.305 & 24.19922 & 0\end{array}$
$\begin{array}{rrr}1807.63 & 29.96094 & 0 \\ 899.4114 & 16.13281 & 675.3012\end{array}$
$\begin{array}{llll}2222.658 & 32.26563 & 0\end{array}$
$\begin{array}{lll}1311.137 & 19.58984 & 0\end{array}$
$\begin{array}{llll}1173.528 & 20.74219 & 447.5301\end{array}$
$\begin{array}{llll}1842.858 & 24.19922 & 492.1687\end{array}$
$\begin{array}{lll}1972.76 & 20.74219 & 0\end{array}$
$\begin{array}{lll}930.2358 & 14.98047 & 0\end{array}$
$\begin{array}{lll}1876.985 & 27.65625 & 0\end{array}$
$\begin{array}{lll}1646.903 & 36.875 & 0\end{array}$
$\begin{array}{llll}455.8963 & 31.19802 & 0\end{array}$
0
0
0
0
0

## 0

0
0
0
0
0
0
0

| 510 ALEXANDR 205 - DOU( | 2161.534 | 11.76159 | 66.22105 | 101.5274 | 653.1465 | 78.67327 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 510 ALEXANDR 206 - CHIN | 1710.179 | 16.98896 | 38.01579 | 58.01567 | 465.0403 | 35.26733 | 0 |
| 510 ALEXANDR 207 - TEMF | 2149.111 | 22.21634 | 56.41053 | 89.66057 | 677.9661 | 54.25743 | 0 |
| 510 ALEXANDR 208 - NOV/ | 2376.859 | 39.2053 | 45.37368 | 79.11227 | 508.148 | 31.19802 | 0 |
| 510 ALEXANDR 209 - JAME | 2532.832 | 22.21634 | 49.05263 | 64.60836 | 540.8053 | 31.19802 | 0 |
| 510 ALEXANDR 210 - The $\stackrel{ }{ }$ | 1111.133 | 10.45475 | 39.24211 | 38.2376 | 357.9243 | 18.9901 | 0 |
| 510 ALEXANDR 302 - PATR | 1942.068 | 28.75055 | 38.01579 | 63.28982 | 322.6544 | 25.77228 | 0 |
| 510 ALEXANDR 303 - CHAR | 2207.083 | 24.83002 | 20.84737 | 50.10444 | 389.2753 | 36.62376 | 0 |
| 510 ALEXANDR 304 - SAMI | 3100.131 | 40.51214 | 57.63684 | 93.61619 | 539.499 | 40.69307 | 0 |
| 510 ALEXANDR 305 - JOHN | 2543.874 | 26.13687 | 34.33684 | 50.10444 | 418.0138 | 32.55446 | 0 |
| 510 ALEXANDR 306 - WILLI | 2739.875 | 27.44371 | 24.52632 | 48.7859 | 372.2935 | 25.77228 | 0 |
| 510 ALEXANDR 307 - SOUT | 1899.279 | 23.52318 | 22.07368 | 34.28198 | 457.2026 | 18.9901 | 0 |
| 510 ALEXANDR 308 - CAMI | 1943.448 | 20.90949 | 51.50526 | 88.34204 | 711.9297 | 55.61386 | 0 |
| 520 BRISTOL Cl 001 - FIRST | 325.9617 | 8.888889 | 10.47273 | 17.64885 | 908.435 | 5.5 | 0 |
| 520 BRISTOL Cl 002 - SECO | 532.3259 | 17.77778 | 23.27273 | 43.60305 | 1076.129 | 27.5 | 0 |
| 520 BRISTOL Cl 003 - THIRL | 402.1757 | 7.777778 | 10.47273 | 28.03053 | 722.9721 | 6. 6 | 0 |
| 520 BRISTOL Cl 004 - FOUR | 574.5367 | 15.55556 | 19.78182 | 46.71756 | 2184.464 | 15.4 | 0 |
| 530 BUENA VIS 001 - FIRST | 365 | 8 | 58 | 33 | 825 | 4 | 0 |
| 530 BUENA VIS 002 - SECO | 328 | 5 | 116 | 50 | 605 | 0 | 0 |
| 540 CHARLOTTI 101 - Key R | 2309.654 | 36.94301 | 37.20571 | 87.59657 | 418.8037 | 28.32447 | 0 |
| 540 CHARLOTTI 102 - CLAR | 2327.402 | 40.51813 | 49.24286 | 86.47353 | 379.0798 | 21.5266 | 0 |
| 540 CHARLOTTI 201 - CARV | 2103.773 | 25.02591 | 29.54571 | 75.2432 | 195.2147 | 18.12766 | 0 |
| 540 CHARLOTTI 202 - WALk | 2339.234 | 42.90155 | 56.90286 | 96.58083 | 550.4601 | 27.19149 | 0 |
| 540 CHARLOTTI301-BENJ/ | 2013.848 | 21.45078 | 40.48857 | 68.50501 | 208.8344 | 13.59574 | 0 |
| 540 CHARLOTTI302-JOHN | 2219.729 | 19.06736 | 70.03429 | 107.8112 | 482.362 | 29.45745 | 0 |
| 540 CHARLOTTI 303 - BUFC | 1496.779 | 14.30052 | 28.45143 | 83.10443 | 175.9202 | 16.99468 | 0 |
| 540 CHARLOTTI 401 - VENA | 1552.39 | 9.533679 | 32.82857 | 101.073 | 248.5583 | 18.12766 | 0 |
| 540 CHARLOTTI402-ALUN | 1538.192 | 20.25907 | 38.3 | 78.6123 | 300.7669 | 39.65426 | 0 |
| 550 CHESAPEAIO01-GREA | 656.648 | 7.788079 | 15.95122 | 96.08633 | 1296.708 | 14.73779 | 0 |
| 550 CHESAPEAIOO2-BETH | 387.1283 | 7.788079 | 19.36934 | 69.77698 | 1487.501 | 7.935733 | 0 |
| 550 CHESAPEAI 003 - CAMI | 2102.25 | 19.80547 | 12.3 | 24.11505 | 151.7818 | 6.83004 | 517 |
| 550 CHESAPEAIO04-CHUR | 474.8145 | 8.802432 | 15.65455 | 66.86446 | 949.4674 | 7.968379 | 0 |
| 550 CHESAPEAI 005 - CRES | 1563.271 | 13.20365 | 13.41818 | 30.69188 | 202.7451 | 3.41502 | 1607.567 |
| 550 CHESAPEAI006-DEEP | 1666.122 | 11.12583 | 34.18118 | 133.8345 | 1623.456 | 21.53985 | 0 |
| 550 CHESAPEAIO07-GREE | 848.987 | 8.900662 | 38.73868 | 75.4964 | 1317.273 | 18.13882 | 0 |
| 550 CHESAPEAIO08-SOUT | 1046.458 | 13.20365 | 21.24545 | 44.94169 | 961.6542 | 13.66008 | 1620.252 |
| 550 CHESAPEAI009-BELLS | 1102.581 | 17.80132 | 31.90244 | 115.5324 | 2096.44 | 20.40617 | 0 |
| 550 CHESAPEAI010-OSCA | 454.9819 | 4.401216 | 11.18182 | 52.61466 | 469.7481 | 7.968379 | 746.1232 |
| 550 CHESAPEAIO11-GENE | 706.9719 | 8.802432 | 10.06364 | 61.38377 | 923.9857 | 7.968379 | 0 |
| 550 CHESAPEAI012-GEOR | 1364.946 | 11.00304 | 6.709091 | 18.63436 | 233.7662 | 6.83004 | 1403.45 |
| 550 CHESAPEAI013-GILM | 725.6378 | 15.40426 | 24.6 | 59.19149 | 905.1515 | 6.83004 | 0 |
| 550 CHESAPEAIO14-GRAS | 194.7892 | 2.225166 | 6.836237 | 9.151079 | 362.1643 | 5.66838 | 0 |
| 550 CHESAPEAI015-B M V | 1060.458 | 19.80547 | 20.12727 | 47.13396 | 671.3853 | 3.41502 | 0 |
| 550 CHESAPEAI016-HICKC | 546.3899 | 12.23841 | 19.36934 | 56.05036 | 1551.48 | 6.802057 | 0 |
| 550 CHESAPEAIO17-INDIA | 312.3978 | 10.01325 | 9.114983 | 46.89928 | 1101.345 | 7.935733 | 0 |
| 550 CHESAPEAI 018 - INDIA | 956.6287 | 14.30395 | 20.12727 | 69.05674 | 471.9639 | 4.55336 | 1216.631 |
| 550 CHESAPEAIO19-JOLLI | 433.6817 | 5.562914 | 19.36934 | 53.76259 | 903.697 | 7.935733 | 0 |


| 550 CHESAPEAI020-E W C | 895.365 | 10.01325 | 15.95122 | 61.72204 | 1186.719 | 11.33676 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAIO21-FELLC | 785.1355 | 5.50152 | 19.00909 | 59.19149 | 1094.602 | 3834 | 0 |
| 550 CHESAPEAIO22-NORF | 506.3132 | 8.802432 | 12.3 | 43.84555 | 765.5565 | 11.3834 | 699 |
| 550 CHESAPEAIO23-OAK | 1045.001 | 15.57616 | 28.48432 | 66.34532 | 856.8556 | 17.00514 | 0 |
| 550 CHESAPEAIO24-OAKL | 1034.792 | 24.20669 | 21.24545 | 53.7108 | 706.838 | 10.24506 | 1376.926 |
| 550 CHESAPEAIO25-ST JU | 501.6467 | 5.50152 | 7.827273 | 33.9803 | 461.9929 | 6.83004 | 728.8252 |
| 550 CHESAPEAIO26-JOHN | 592.6431 | 11.00304 | 8.945455 | 24.11505 | 275.8662 | 10.24506 | 748.4296 |
| CHESAPEAIO27-SILVE | 895.9644 | 20.90578 | 27.95455 | 73.44129 | 1278.513 | 22.7668 | 0 |
| 550 CHESAPEAIO28-SUNR | 66.15483 | 0 | 0 | 10.29496 | 207.9303 | 3.401028 | 151.0698 |
| 550 CHESAPEAIO29-TANG | 449.1488 | 12.10334 | 23.48182 | 56.99921 | 1051.394 | 6.83004 | 1005.594 |
| 550 CHESAPEAIO30-SOUT | 939.1294 | 8.802432 | 2.236364 | 10.96139 | 38.77638 | 1.13834 | 913.3379 |
| 550 CHESAPEAI031-CARV | 1699.766 | 12.10334 | 6.709091 | 29.59574 | 312.4268 | 4.55336 | 1766.709 |
| 550 CHESAPEAIO32-PROV | 2246.911 | 9.902736 | 6.709091 | 19.7305 | 114.1133 | 10.24506 | 2116.13 |
| 550 CHESAPEAIO33-WEST | 402.484 | 9.902736 | 12.3 | 31.78802 | 619.3142 | 11.3834 | 0 |
| 550 CHESAPEAIO34-HICKC | 656.648 | 15.57616 | 26.20557 | 116.6763 | 1921.641 | 29.47558 | 0 |
| 550 CHESAPEAI 035 -TAYL( | 845.7997 | 9.902736 | 16.77273 | 46.03783 | 371.1454 | 5.6917 | 0 |
| 550 CHESAPEAI 036 -GREA | 933.5182 | 16.68874 | 27.34495 | 86.93525 | 1801.682 | 15.87147 | 0 |
| 550 CHESAPEAIO37-BRID | 584.3677 | 5.562914 | 13.67247 | 72.06475 | 950.5384 | 6.802057 | 0 |
| 550 CHESAPEAI 038 - BAILE | 465.4815 | 7.702128 | 22.36364 | 67.9606 | 1162.183 | 15.93676 | 0 |
| 550 CHESAPEAI 039 -LAKE | 238.8925 | 5.562914 | 6.836237 | 30.88489 | 559.8123 | 6.802057 | 0 |
| 550 CHESAPEAIO40-RIVEF | 1199.286 | 8.802432 | 27.95455 | 81.11426 | 1001.538 | 14.79842 |  |
| 550 CHESAPEAIO41-JOHN | 1477.458 | 24.47682 | 41.01742 | 89.22302 | 1245.297 | 26.07455 | 0 |
| 550 CHESAPEAI 042 - PARK | 956.6287 | 11.00304 | 22.36364 | 48.2301 | 679.1406 | 10.24506 |  |
| 550 CHESAPEAI043-PLEA! | 409.1799 | 7.788079 | 19.36934 | 56.05036 | 1152.756 | 11.33676 |  |
| 550 CHESAPEAIO44-NANS | 715.1383 | 6.601824 | 10.06364 | 20.82664 | 571.6746 | 4.55336 | 0 |
| 550 CHESAPEAI045-SUNR | 436.1319 | 5.562914 | 5.696864 | 17.15827 | 239.9196 | 3.401028 | 520.0952 |
| 550 CHESAPEAIO46-BELLS | 703.2014 | 6.675497 | 22.78746 | 54.90647 | 973.3879 | 20.40617 | 0 |
| 550 CHESAPEAI047-GREE | 291.5713 | 4.450331 | 9.114983 | 60.6259 | 722.0436 | 6.802057 | 0 |
| 550 CHESAPEAI048-JOLLI | 1882.963 | 12.23841 | 9.114983 | 26.30935 | 206.7878 | 19.27249 | 795.539 |
| 550 CHESAPEAI049-WATE | 1452.956 | 30.03974 | 36.45993 | 99.51799 | 1673.725 | 24.94087 | 0 |
| 550 CHESAPEAI 050 - RIVEF | 1042.551 | 17.80132 | 30.76307 | 77.78417 | 786.0222 | 21.53985 |  |
| 550 CHESAPEAIO51-COOF | 559.8659 | 11.12583 | 21.64808 | 66.34532 | 1735.418 | 7.935733 | 0 |
| 550 CHESAPEAI 052 -SHIPY | 1097.68 | 11.12583 | 23.92683 | 70.92086 | 784.8797 | 12.47044 | 0 |
| 550 CHESAPEAIO53-FAIRV | 642.8078 | 20.90578 | 16.77273 | 40.55713 | 538.4377 | 9.106719 | 0 |
| 550 CHESAPEAI 054 - PUGF | 1262.283 | 11.00304 | 11.18182 | 48.2301 | 516.2798 | 13.66008 | 0 |
| 550 CHESAPEAI 055 -GEOR | 858.6326 | 9.902736 | 8.945455 | 14.2498 | 273.6505 | 2.27668 | 47.934 |
| 550 CHESAPEAI 056 -GREE | 908.7972 | 7.702128 | 20.12727 | 36.17258 | 612.6668 | 19.35178 | 0 |
| 550 CHESAPEAI 057 - CYPR | 996.2938 | 11.00304 | 31.30909 | 74.53743 | 711.2696 | 15.93676 | 0 |
| CHESAPEAI 058 - EXPR | 530.4638 | 5.562914 | 9.114983 | 26.30935 | 226.2099 | 4.534704 | 0 |
| 550 CHESAPEAI 059 - CLEAI | 592.9433 | 6.675497 | 23.92683 | 41.17986 | 702.6216 | 9.069409 | 0 |
| 550 CHESAPEAI 060 - PARK | 779.1569 | 12.23841 | 33.04181 | 85.79137 | 1697.716 | 27.20823 | 0 |
| 550 CHESAPEAI 061 - CENT | 464.3089 | 10.01325 | 22.78746 | 52.61871 | 1181.318 | 13.60411 | 0 |
| 550 CHESAPEAIO62-FENT | 668.8989 | 12.23841 | 25.0662 | 88.07914 | 1392.676 | 21.53985 | 0 |
| 550 CHESAPEAI 063 - POPL | 307.4975 | 5.562914 | 6.836237 | 53.76259 | 1001.95 | 9.069409 | 0 |
| 570 COLONIAL 001 - FIRST | 458.054 | 13.95122 | 15.05263 | 44.06573 | 780.8009 | 4.137931 | 0 |
| 570 COLONIAL 002 - SECO | 353.4224 | 8.585366 | 13.89474 | 45.22535 | 1018.436 | 3.103448 | 0 |
| 70 COLONIAL 003 - THIRI | 524.3207 | 10.73171 | 20.84211 | 40.58685 | 1127.303 | 10.34483 | 0 |


| IAL 004 - FOUR | 623.1395 | 6.439024 | 17.36842 | 53.34272 | 1291.19 | 8.275862 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 570 COLONIAL 005 - FIFTH | 408.0634 | 4.292683 | 20.84211 | 63.77934 | 1463.27 | 4.137931 | 0 |
| 580 COVINGTO 101 - PREC | 138.3528 | 1.333333 | 4.347826 | 9.80597 | 211.7554 | 0 | 0 |
| 580 COVINGTO 201 - PREC | 185.1967 | 1.333333 | 3.26087 | 13.07463 | 226.804 | 7.090909 | 0 |
| 580 COVINGTO 301 - PREC | 235.3087 | 4 | 1.086957 | 14.16418 | 160.1602 | 0 | 0 |
| 580 COVINGTO 401 - PREC | 193.9118 | 0 | 9.782609 | 16.34328 | 364.3912 | 4.727273 | 0 |
| 580 COVINGTO 501 - PREC | 161.23 | 1.333333 | 6.521739 | 19.61194 | 385.8892 | 1.181818 | 0 |
| 590 DANVILLE (001-WARI | 429.693 | 2.085714 | 2.363636 | 4.649446 | 55.3857 | 2.698413 | 0 |
| 590 DANVILLE (002-WARI | 360.3155 | 4.171429 | 14.18182 | 11.62362 | 210.2396 | 6.746032 | 0 |
| 590 DANVILLE (003-WARI | 814.6263 | 6.257143 | 11.81818 | 30.2214 | 319.8807 | 6.746032 | 0 |
| 590 DANVILLE (004-WARI | 1066.4 | 3.128571 | 18.90909 | 43.00738 | 968.6846 | 9.444444 | 0 |
| 590 DANVILLE (006-WARI | 523.6884 | 1.042857 | 0 | 4.649446 | 64.42826 | 2.698413 | 0 |
| 590 DANVILLE (007-WARI | 895.1938 | 5.214286 | 8.272727 | 8.136531 | 150.3326 | 2.698413 | 0 |
| 590 DANVILLE (008-WARI | 655.7294 | 2.085714 | 4.727273 | 13.94834 | 319.8807 | 2.698413 | 0 |
| 590 DANVILLE (009 - WARI | 481.1666 | 2.085714 | 4.727273 | 10.46125 | 392.2212 | 0 | 0 |
| 590 DANVILLE (010-WARI | 673.6333 | 6.257143 | 5.909091 | 23.24723 | 506.3835 | 1.349206 | 0 |
| 590 DANVILLE (011-WARI | 1092.136 | 9.385714 | 11.81818 | 27.89668 | 545.9447 | 9.444444 | 0 |
| 590 DANVILLE (012-WARI | 1086.541 | 8.342857 | 5.909091 | 30.2214 | 695.147 | 8.095238 | 0 |
| 590 DANVILLE (013-WARI | 1000.379 | 9.385714 | 10.63636 | 26.73432 | 497.341 | 12.14286 | 0 |
| 590 DANVILLE (014-WARI | 261.8442 | 2.085714 | 0 | 0 | 6.781922 | 0 | 0 |
| 590 DANVILLE (015-WARI | 696.0132 | 4.171429 | 1.181818 | 29.05904 | 681.5832 | 8.095238 | 0 |
| 590 DANVILLE (016-WARI | 646.7775 | 2.085714 | 13 | 31.38376 | 923.4718 | 6.746032 | 0 |
| 590 DANVILLE (017-WARI | 374.8624 | 5.214286 | 3.545455 | 19.76015 | 965.2936 | 5.396825 | 0 |
| 595 EMPORIA ( 101 - PREC | 292.191 | 1 | 0 | 1 | 91 | 1 | 0 |
| 595 EMPORIA ( 201 - PREC | 240.157 | 0 | 1 | 0 | 13 | 1 | 0 |
| 595 EMPORIA ( 301 - PREC | 156.102 | 2 | 5 | 8 | 179 | 1 | 0 |
| 595 EMPORIA ( 401 - PREC | 246.1609 | 3 | 1 | 1 | 212 | 0 | 0 |
| 595 EMPORIA ( 501 - PREC | 229.1498 | 2 | 0 | 2 | 6 | 0 | 0 |
| 595 EMPORIA ( 601 - DISTF | 153.1001 | 1 | 0 | 11 | 209 | 0 | 0 |
| 595 EMPORIA C 701 - DISTF | 213.1393 | 1 | 1 | 3 | 79 | 1 | 0 |
| 600 FAIRFAX Cl 001 - ONE | 1205.533 | 18.44828 | 46.54867 | 85.63788 | 585.7517 | 25.70149 | 0 |
| 600 FAIRFAX Cl 002 - TWO | 1045.495 | 8.609195 | 37.23894 | 65.41783 | 640.8957 | 26.92537 | 0 |
| 600 FAIRFAX Cl 003 - THRE | 1547.91 | 25.82759 | 50.03982 | 91.58496 | 796.5243 | 34.26866 | 0 |
| 600 FAIRFAX Cl 004 - FOUR | 1261.94 | 15.98851 | 52.36726 | 78.50139 | 600.4568 | 35.49254 | 0 |
| 600 FAIRFAX Cl 005 - FIVE | 1109.772 | 25.82759 | 40.73009 | 46.38719 | 531.8332 | 20.80597 | 0 |
| 600 FAIRFAX Cl 006 - SIX | 1196.35 | 12.29885 | 36.07522 | 59.47075 | 546.5382 | 20.80597 | 0 |
| 610 FALLS CHU 001 - FIRST | 2023.231 | 26.41509 | 88.45902 | 78.5241 | 469.1845 | 28.06579 | 0 |
| 610 FALLS CHU 002 - SECO | 1677.723 | 19.81132 | 63.54098 | 55.68072 | 353.4951 | 33.26316 | 0 |
| 610 FALLS CHU 003 - THIRI | 2118.045 | 23.77358 | 76 | 102.7952 | 501.3204 | 17.67105 | 0 |
| 620 FRANKLIN (101-PREC | 268.6498 | 2.461538 | 3.461538 | 24.33803 | 582.8585 | 5 | 0 |
| 620 FRANKLIN ( 201 - PREC | 313.2435 | 2.461538 | 6.923077 | 20.28169 | 413.4229 | 4 | 0 |
| 620 FRANKLIN (301-PREC | 572.1045 | 3.692308 | 0 | 4.056338 | 50.83068 | 3 | 0 |
| 620 FRANKLIN (401-PREC | 451.3752 | 0 | 0 | 6.084507 | 49.70111 | 0 | 0 |
| 620 FRANKLIN (501- PREC | 506.8454 | 1.230769 | 0 | 1.014085 | 10.16614 | 6 | 0 |
| 620 FRANKLIN (601-PREC | 406.7815 | 6.153846 | 4.615385 | 16.22535 | 314.0207 | 9 | 0 |
| 630 FREDERICK 101 - PREC | 1648.252 | 44.936 | 45.31579 | 92.24857 | 1174.005 | 20.75294 | 0 |
| 630 FREDERICK 201 - PREC | 1641.272 | 38.36 | 50.84211 | 110.0314 | 962.3178 | 32.28235 | 0 |


| CK 301 - PREC | 1426.081 | 27.4 | 51.94737 | 112.2543 | 986.3472 | 27.67059 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 630 FREDERICK 401 - PREC | 1230.664 | 19.728 | 18.78947 | 43.34571 | 323.824 | 10.37647 | 0 |
| 630 FREDERICK 402 - PREC | 760.7315 | 6.576 | 22.10526 | 31.12 | 297.5061 | 6.917647 | 0 |
| 640 GALAX CIT 001 - EAST | 319.3261 | 4 | 10.5 | 28.42105 | 667.073 | 8.727273 | 0 |
| 640 GALAX CIT 003 - SOUT | 151.079 | 1 | 7 | 11.84211 | 438.7158 | 2.181818 | 0 |
| 640 GALAX CIT 005 - WEST | 210.595 | 2 | 10.5 | 4.736842 | 497.2112 | 1.090909 | 0 |
| 50 HAMPTON 101 - ABER | 1415.28 | 24.69325 | 12.78689 | 36.36581 | 235.2352 | 12.27211 | 0 |
| 50 HAMPTON 102 - BASS | 1894.723 | 6.441718 | 22.37705 | 13.90457 | 127.419 | 16.73469 | 0 |
| 650 HAMPTON 103 - CITY I | 1025.732 | 10.7362 | 3.196721 | 38.50497 | 199.2965 | 8.92517 | 0 |
| 650 HAMPTON 104 - COOF | 2411.047 | 25.76687 | 27.70492 | 64.17495 | 380.079 | 35.70068 | 0 |
| 650 HAMPTON 105 -EAST | 2089.497 | 19.32515 | 9.590164 | 27.80915 | 266.8177 | 7.809524 | 0 |
| 650 HAMPTON 106 - ARM | 1335.757 | 24.69325 | 26.63934 | 85.5666 | 692.6369 | 22.31293 | 0 |
| 650 HAMPTON 107-LINDS | 1484.43 | 9.662577 | 11.72131 | 20.32207 | 300.5783 | 5.578231 | 0 |
| 650 HAMPTON 108 -THON | 2133.292 | 17.17791 | 21.31148 | 32.08748 | 291.8659 | 6.693878 | 0 |
| 650 HAMPTON 109 - PHEN | 2121.767 | 8.588957 | 13.85246 | 26.73956 | 140.4877 | 11.15646 | 0 |
| 650 HAMPTON 110 - PHOE | 345.413 | 2.137931 | 3.425532 | 20.66916 | 217.3964 | 1.10084 | 0 |
| 650 HAMPTON 111 - HAM | 462.1557 | 12.88344 | 5.327869 | 42.7833 | 322.3593 | 3.346939 | 0 |
| 650 HAMPTON 112 - SMIT | 1885.503 | 24.69325 | 20.2459 | 64.17495 | 664.3215 | 27.89116 | 0 |
| 650 HAMPTON 115 - WYTt | 645.4045 | 4.294479 | 11.72131 | 47.06163 | 549.9711 | 8.92517 | 0 |
| 650 HAMPTON 116 - JONE | 753.7403 | 8.588957 | 11.72131 | 25.66998 | 258.1053 | 8.92517 | 0 |
| 50 HAMPTON 117 - KECO | 1247.014 | 11.80982 | 18.11475 | 41.71372 | 413.8396 | 15.61905 | 0 |
| 650 HAMPTON 118 -MALL | 2111.395 | 12.88344 | 12.78689 | 21.39165 | 262.4615 | 20.08163 | 0 |
| 650 HAMPTON 201 - BOOk | 1060.338 | 10.68966 | 21.69504 | 114.2243 | 1157.636 | 17.61345 | 0 |
| 650 HAMPTON 202 - BRYA | 1152.142 | 28.86207 | 19.41135 | 91.37944 | 998.9367 | 14.31092 | 0 |
| 650 HAMPTON 203 - BURB | 969.6811 | 14.96552 | 14.84397 | 51.12897 | 635.8846 | 22.01681 | 0 |
| 650 HAMPTON 204 - FORR | 1236.641 | 15.03067 | 15.98361 | 45.99205 | 589.177 | 6.693878 | 0 |
| 650 HAMPTON 205 - ASBU | 1126.896 | 29.93103 | 37.68085 | 110.9607 | 1927.22 | 15.41176 | 0 |
| 650 HAMPTON 208 -KRAF | 1848.623 | 34.35583 | 26.63934 | 118.7237 | 1280.725 | 24.54422 | 0 |
| 650 HAMPTON 209 - LANG | 1078.698 | 17.10345 | 15.98582 | 62.00748 | 896.7604 | 22.01681 | 0 |
| 650 HAMPTON 210 - MACl | 2296.949 | 20.39877 | 43.68852 | 86.63618 | 738.3771 | 15.61905 | 0 |
| 650 HAMPTON 212 - BETH | 2163.258 | 24.69325 | 29.83607 | 84.49702 | 805.8983 | 16.73469 | 0 |
| 650 HAMPTON 213 -PHILL | 1367.881 | 20.31034 | 47.95745 | 130.5421 | 1501.122 | 37.42857 | 0 |
| 650 HAMPTON 214 - TUCK | 1585.851 | 21.47239 | 21.31148 | 66.31412 | 913.7144 | 21.19728 | 0 |
| 650 HAMPTON 215 - TYLEF | 565.7823 | 2.147239 | 3.196721 | 11.78368 | 105.6132 | 4.447779 | 0 |
| 650 HAMPTON 216 - SAND | 985.3944 | 8.588957 | 15.98361 | 39.57455 | 478.0937 | 20.08163 | 0 |
| 650 HAMPTON 217 - SYMS | 511.7136 | 1.07362 | 4.262295 | 35.29622 | 549.9711 | 7.809524 | 0 |
| 660 HARRISONI 101 - NORT | 1552.397 | 27.06122 | 43.37884 | 124.8617 | 823.7746 | 16.1194 | 0 |
| 660 HARRISONI 102 - EAST | 751.265 | 18.73469 | 22.21843 | 52.29249 | 287.7194 | 12.89552 | 0 |
| 660 HARRISONI 103 - SOUT | 1411.468 | 33.30612 | 35.9727 | 120.5929 | 921.1398 | 30.08955 | 0 |
| 660 HARRISONI 104 - EAST | 1362.684 | 33.30612 | 26.45051 | 123.7945 | 962.7114 | 16.1194 | 0 |
| 660 HARRISONI 105 - Soutr | 1338.834 | 23.93878 | 31.74061 | 122.7273 | 805.1768 | 13.97015 | 0 |
| 660 HARRISONI 201 - NORT | 1169.718 | 30.18367 | 48.66894 | 81.10672 | 876.2862 | 24.71642 | 0 |
| 660 HARRISONI 202 - SOUT | 1372.441 | 53.08163 | 50.78498 | 94.98024 | 906.9179 | 17.19403 | 0 |
| 660 HARRISONI 203 - WES | 1253.192 | 35.38776 | 50.78498 | 89.64427 | 678.2739 | 12.89552 | 0 |
| 670 HOPEWELL 101 - WARI | 496.746 | 8.285714 | 7.9625 | 34.78974 | 530.9243 | 2.30303 | 0 |
| 670 HOPEWELL 201 - WARI | 872.3078 | 5.178571 | 3.4125 | 8.697436 | 148.7029 | 3.454545 | 0 |
| 670 HOPEWELL 301 - WARI | 421.4153 | 7.25 | 19.3375 | 42.4 | 1002.367 | 13.81818 | 0 |


| 670 HOPEWELL 401 - WARI | 890.8676 | 7.25 | 23.8875 | 34.78974 | 837.142 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 670 HOPEWELL 501 - WARI | 471.6358 | 10.35714 | 18.2 | 42.4 | 796.3864 | 11.51515 | 0 |
| 670 HOPEWELL 601 - WARI | 925.8036 | 7.25 | 4.55 | 23.91795 | 167.4284 | 3.454545 | 0 |
| 670 HOPEWELL 701 - WARI | 645.2239 | 12.42857 | 13.65 | 25.00513 | 402.0485 | 3.454545 | 0 |
| 678 LEXINGTON 001 -LEXIN | 1514 | 20 | 56 | 92 | 766 | 17 | 0 |
| 680 LYNCHBUR 101 - FIRST | 1311.002 | 15.40741 | 100.8617 | 116.1485 | 1545.021 | 28.75085 | 0 |
| 680 LYNCHBUR 102 - FIRST | 1040.704 | 20.91005 | 77.50426 | 123.5398 | 1471.651 | 23.42662 | 0 |
| 680 LYNCHBUR 103 - FIRST | 819.6499 | 4.402116 | 38.22128 | 72.85681 | 993.1517 | 12.77816 | 0 |
| 680 LYNCHBUR 104 - FIRST | 550.4458 | 12.10582 | 14.86383 | 52.79479 | 371.1027 | 8.518771 | 0 |
| 680 LYNCHBUR 105 - FIRST | 659.8784 | 6.603175 | 31.85106 | 71.80092 | 474.2459 | 10.64846 | 0 |
| 680 LYNCHBUR 201 - SECO | 1975.258 | 20.91005 | 48.8383 | 72.85681 | 519.9691 | 31.94539 | 0 |
| 680 LYNCHBUR 202 - SECO | 1596.621 | 14.30688 | 27.60426 | 58.07427 | 360.4694 | 14.90785 | 0 |
| 680 LYNCHBUR 203 - SECO | 616.1053 | 1.100529 | 7.431915 | 8.447167 | 149.9297 | 3.194539 | 0 |
| 680 LYNCHBUR 204 - SECO | 380.8253 | 4.402116 | 6.370213 | 17.95023 | 298.7962 | 5.324232 | 0 |
| 80 LYNCHBUR 301 - THIRI | 569.0493 | 12.10582 | 39.28298 | 60.18606 | 487.0059 | 8.518771 | 0 |
| 680 LYNCHBUR 302 - THIRI | 153.2056 | 4.402116 | 165.6255 | 144.6577 | 2912.465 | 30.88055 | 0 |
| 680 LYNCHBUR 303 - THIRI | 488.0692 | 11.00529 | 43.52979 | 66.52144 | 767.7254 | 13.843 | 0 |
| 680 LYNCHBUR 304 - THIRI | 436.6359 | 11.00529 | 41.40638 | 54.90658 | 734.7621 | 14.90785 | 0 |
| 680 LYNCHBUR 305 - THIRI | 733.1982 | 7.703704 | 85.99787 | 82.35988 | 1777.89 | 21.29693 | 0 |
| 680 LYNCHBUR 401 - FOUR | 937.8371 | 13.20635 | 98.7383 | 107.7014 | 1972.48 | 25.55631 | 0 |
| 680 LYNCHBUR 402 - FOUR | 472.7487 | 5.502646 | 21.23404 | 40.12404 | 645.4423 | 9.583618 | 0 |
| 680 LYNCHBUR 403 - FOUR | 985.9874 | 23.11111 | 97.6766 | 141.49 | 1330.228 | 22.36177 | 0 |
| 680 LYNCHBUR 404 - FOUR | 1064.779 | 19.80952 | 50.9617 | 86.58346 | 1169.665 | 25.55631 | 0 |
| 683 MANASSAS 001 - DEAN | 1853.234 | 25.872 | 64.48544 | 107.9115 | 1588.285 | 33.80488 | 0 |
| 683 MANASSAS 002 - WEET | 1432.271 | 28.224 | 44.18447 | 101.9165 | 1005.259 | 40.06504 | 0 |
| 683 MANASSAS 003 - METZ | 1586.707 | 25.872 | 46.57282 | 79.13514 | 1148.868 | 35.05691 | 0 |
| 683 MANASSAS 004 - HAYD | 1681.362 | 35.28 | 40.60194 | 97.12039 | 1232.332 | 15.02439 | 0 |
| 683 MANASSAS 005 - BALD | 1869.425 | 31.752 | 50.15534 | 101.9165 | 978.2559 | 30.04878 | 0 |
| 685 MANASSAS 001 - PREC | 1136.541 | 19.85294 | 25.59184 | 46.656 | 553.4505 | 8.68 | 0 |
| 685 MANASSAS 002 - PREC | 1013.167 | 7.941176 | 15.12245 | 62.208 | 618.1738 | 7.44 | 0 |
| 685 MANASSAS 003 - PREC | 1054.292 | 17.20588 | 16.28571 | 53.136 | 561.3758 | 14.88 | 0 |
| 690 MARTINSV 001 - PREC | 586.2572 | 2.230769 | 3.122449 | 2.150943 | 24.43307 | 1.24 | 0 |
| 90 MARTINSV 002 - PREC | 709.9122 | 14.5 | 16.65306 | 29.03774 | 464.2284 | 6.2 | 0 |
| MARTINSV 003 - PREC | 537.6784 | 0 | 6.244898 | 9.679245 | 245.4413 | 4.96 | 0 |
| 690 MARTINSV 004 - PREC | 807.0697 | 3.346154 | 6.244898 | 15.0566 | 398.7034 | 4.96 | 0 |
| 690 MARTINSV 005 - PREC | 557.5516 | 6.692308 | 15.61224 | 58.07547 | 1013.973 | 13.64 | 0 |
| 690 MARTINSV 006 - PREC | 334.5309 | 2.230769 | 3.122449 | 0 | 2.221189 | 0 | 0 |
| 700 NEWPORT 101 - DENB | 2007.166 | 28.04015 | 25.86111 | 56.52887 | 578.2797 | 25.57529 | 0 |
| 700 NEWPORT 102 -EPES | 2130.499 | 26.96168 | 20.47338 | 63.99494 | 488.8995 | 10.00772 | 0 |
| 700 NEWPORT 103 -JENKI | 1566.222 | 22.64781 | 29.09375 | 106.6582 | 860.42 | 25.57529 | 0 |
| 700 NEWPORT 104 - MCIN | 1379.585 | 12.94161 | 28.0162 | 61.86178 | 401.6729 | 8.895753 | 1301.812 |
| 700 NEWPORT 105 - OYST | 355.8108 | 8.627737 | 10.77546 | 34.13064 | 237.9885 | 4.447876 | 0 |
| 700 NEWPORT 106 -RESEI | 2049.732 | 29.11861 | 37.71412 | 73.59418 | 908.8792 | 26.68726 | 770.7521 |
| 700 NEWPORT 107 -RICHI | 1651.355 | 21.56934 | 40.94676 | 91.72609 | 996.1057 | 22.23938 | 1538.206 |
| 700 NEWPORT 108 -LEE H | 1418.877 | 16.17701 | 20.47338 | 61.86178 | 502.8988 | 7.783784 | 505.7717 |
| 700 NEWPORT 109 - WINL | 820.766 | 17.25547 | 12.93056 | 41.59671 | 516.8981 | 11.11969 | 790.5432 |
| 700 NEWPORT 110-GREE | 1763.774 | 28.04015 | 15.08565 | 84.26001 | 569.6648 | 13.34363 | 1652.554 |


| AN | 363.4509 | 4.313869 | 6.465278 | 17.06532 | 149.6851 | 4.447876 | 352.9407 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 700 NEWPORT 202 - BOUL | 822.9489 | 19.41241 | 33.40394 | 89.59292 | 911.0329 | 28.9112 | 0 |
| 700 NEWPORT 203 - CHAR | 1259.527 | 17.25547 | 44.1794 | 118.3906 | 1541.002 | 22.23938 | 0 |
| 700 NEWPORT 204 - WELL | 1099.084 | 20.49088 | 36.63657 | 109.858 | 751.656 | 16.67954 | 0 |
| 700 NEWPORT 205 - DEEP | 839.3206 | 20.49088 | 37.71412 | 99.19216 | 1318.09 | 25.57529 | 0 |
| 700 NEWPORT 208 - HIDEI | 493.3328 | 3.235401 | 12.93056 | 51.19595 | 739.8104 | 12.23166 | 0 |
| 00 NEWPORT 209 - HILTC | 807.6687 | 15.09854 | 34.48148 | 91.72609 | 850.7281 | 14.4556 | 0 |
| T 210 - NELSI | 1410.146 | 18.33394 | 45.25694 | 114.1243 | 1477.467 | 24.46332 | 0 |
| 700 NEWPORT 211 - PALN | 1238.789 | 23.72628 | 35.55903 | 99.19216 | 761.3478 | 11.11969 | 85.76129 |
| 700 NEWPORT 212 - RIVEF | 459.498 | 8.627737 | 29.09375 | 60.7952 | 634.277 | 15.56757 | 0 |
| 700 NEWPORT 213 - SANF | 315.4274 | 5.392336 | 26.93866 | 30.93089 | 508.2831 | 3.335907 | 0 |
| 700 NEWPORT 215 - WAR' | 579.5568 | 12.94161 | 24.78356 | 37.33038 | 431.8253 | 6.671815 | 0 |
| 700 NEWPORT 216 - YATE! | 585.0141 | 5.392336 | 17.24074 | 56.52887 | 665.5063 | 5.559846 | 0 |
| 00 NEWPORT 217 - RIVEF | 783.6569 | 5.392336 | 21.55093 | 69.32786 | 1001.49 | 22.23938 | 0 |
| 700 NEWPORT 218 - KILN | 1722.299 | 12.94161 | 53.87731 | 114.1243 | 1266.4 | 24.46332 | 1642.659 |
| 700 NEWPORT 219 - DEER | 1752.859 | 22.64781 | 32.32639 | 138.6557 | 707.5043 | 26.68726 | 0 |
| 700 NEWPORT 302 - BRIAF | 1240.972 | 9.706204 | 16.16319 | 26.66456 | 300.447 | 7.783784 | 0 |
| 700 NEWPORT 303 - CARV | 774.9254 | 7.54927 | 11.85301 | 24.53139 | 264.9103 | 4.447876 | 0 |
| 700 NEWPORT 304 -CHES | 710.5301 | 4.313869 | 2.155093 | 7.466077 | 13.99932 | 7.783784 | 0 |
| 700 NEWPORT 305 - DOW | 419.1146 | 5.392336 | 6.465278 | 12.79899 | 91.53404 | 3.335907 | 0 |
| 700 NEWPORT 306 - DUNE | 311.0616 | 3.235401 | 2.155093 | 6.399494 | 5.384355 | 1.111969 | 0 |
| 700 NEWPORT 307 - HUN7 | 646.1349 | 0 | 2.155093 | 0 | 12.92245 | 6.671815 | 0 |
| 700 NEWPORT 308 - JEFFE | 623.2146 | 5.392336 | 3.232639 | 5.332912 | 11.84558 | 4.447876 | 0 |
| 700 NEWPORT 309 - MAG | 713.8045 | 7.54927 | 5.387731 | 6.399494 | 10.76871 | 4.447876 | 0 |
| 700 NEWPORT 310 - MAR | 968.111 | 5.392336 | 7.542824 | 6.399494 | 21.53742 | 7.783784 | 0 |
| 700 NEWPORT 311 - NEWI | 1377.403 | 8.627737 | 16.16319 | 34.13064 | 478.1307 | 7.783784 | 0 |
| 700 NEWPORT 312 - NEW: | 260.8552 | 1.078467 | 0 | 0 | 3.230613 | 0 | 0 |
| 700 NEWPORT 313 - REED | 1386.134 | 4.313869 | 3.232639 | 7.466077 | 31.22926 | 6.671815 | 0 |
| 700 NEWPORT 314 - RIVEF | 600.2943 | 7.54927 | 7.542824 | 45.86304 | 390.9042 | 7.783784 | 0 |
| 700 NEWPORT 315 -SEDG | 688.7013 | 7.54927 | 17.24074 | 71.46102 | 693.5049 | 8.895753 | 0 |
| 700 NEWPORT 316 -SOUT | 1154.748 | 25.88321 | 22.62847 | 66.12811 | 595.5097 | 30.02317 | 0 |
| 700 NEWPORT 317 -WASt | 409.2916 | 2.156934 | 0 | 1.066582 | 8.614968 | 2.223938 | 0 |
| 700 NEWPORT 318 - WILSI | 767.2852 | 5.392336 | 5.387731 | 14.93215 | 68.91975 | 3.335907 | 0 |
| 700 NEWPORT 319 - SAUN | 1351.208 | 26.96168 | 33.40394 | 75.72735 | 1046.719 | 16.67954 | 0 |
| 700 NEWPORT 320 - WATF | 1537.845 | 25.88321 | 34.48148 | 143.9886 | 1640.075 | 24.46332 | 0 |
| 710 NORFOLK ( 101 - GRAN | 1462.738 | 24.41614 | 26.12587 | 99.67882 | 672.2966 | 15.69427 | 0 |
| 710 NORFOLK ( 102 - OCEA | 582.2117 | 10.45775 | 8.678967 | 69.60452 | 472.3867 | 7.273743 | 0 |
| 710 NORFOLK ( 103 - NORT | 720.419 | 12.5493 | 26.0369 | 71.77966 | 709.6344 | 6.234637 | 0 |
| 710 NORFOLK ( 104 - TITUS | 772.467 | 14.76722 | 13.0444 | 20.74965 | 132.612 | 7.601395 | 0 |
| 710 NORFOLK ( 106 - SECO | 1304.807 | 19.86972 | 18.4428 | 85.91808 | 691.7091 | 21.82123 | 0 |
| 710 NORFOLK ( 201 - LARC | 2200.268 | 37.15499 | 46.80886 | 151.1613 | 954.2311 | 21.29936 | 0 |
| 710 NORFOLK ( 203 - GHEN | 633.3441 | 3.184713 | 21.77156 | 46.00561 | 247.147 | 12.33121 | 0 |
| 710 NORFOLK ( 207 - LAME | 1925.235 | 35.03185 | 9.797203 | 79.96213 | 231.631 | 13.45223 | 0 |
| 710 NORFOLK ( 208 - LARC | 385.7044 | 2.123142 | 15.24009 | 35.05189 | 290.37 | 5.605096 | 0 |
| 710 NORFOLK ( 210 - MAU | 1211.901 | 18.04671 | 31.56876 | 74.48527 | 415.6059 | 16.81529 | 0 |
| 710 NORFOLK ( 211 - CHRY | 1485.838 | 33.97028 | 25.0373 | 113.9187 | 657.2114 | 22.42038 | 0 |
| 10 NORFOLK ( 212 - PARK | 1189.986 | 11.67728 | 10.88578 | 17.52595 | 44.33129 | 5.605096 | 0 |


| 710 NORFOLK ( 213 - TAYL( | 36 | 44.58599 | 34.8345 | 120.4909 | 467.6951 | 28.02548 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 710 NORFOLK ( 214 - STUA | 1470.498 | 24.41614 | 18.50583 | 86.53436 | 424.4721 | 6.726115 | 0 |
| 710 NORFOLK ( 215 - SUBU | 882.5677 | 14.64085 | 30.37638 | 45.67797 | 588.3745 | 14.54749 | 0 |
| 710 NORFOLK ( 217 - WESL | 938.0683 | 19.86972 | 7.594096 | 52.20339 | 447.0802 | 8.312849 | 0 |
| 710 NORFOLK ( 218 - WILL | 1339.008 | 15.92357 | 32.65734 | 124.8724 | 1026.269 | 24.66242 | 0 |
| 710 NORFOLK ( 301 - BALLI | 1385.029 | 22.29299 | 4.354312 | 28.47966 | 219.4399 | 7.847134 | 0 |
| 710 NORFOLK ( 302 -TAN^ | 834.9623 | 10.61571 | 10.88578 | 31.76578 | 175.1086 | 4.484076 | 0 |
| 710 NORFOLK (303-BROA | 1970.16 | 11.67728 | 2.177156 | 19.71669 | 69.82179 | 6.726115 | 0 |
| 710 NORFOLK ( 304 - COLE | 787.845 | 6.369427 | 4.354312 | 9.858345 | 169.5672 | 10.08917 | 0 |
| 710 NORFOLK ( 305 -LAFA) | 1070.549 | 14.862 | 8.708625 | 28.47966 | 224.9813 | 6.726115 | 0 |
| 710 NORFOLK ( 306 - LINDE | 986.1759 | 9.55414 | 8.708625 | 14.23983 | 90.87915 | 5.605096 | 0 |
| 710 NORFOLK (309-NOR\} | 2167.395 | 28.66242 | 21.77156 | 71.19916 | 531.9755 | 20.17834 | 0 |
| 710 NORFOLK ( 310 - ROSE | 2206.843 | 12.73885 | 9.797203 | 31.76578 | 108.6117 | 7.847134 | 0 |
| 710 NORFOLK ( 311 -SHER' | 1813.468 | 26.53928 | 20.68298 | 97.48808 | 871.1099 | 20.17834 | 0 |
| 710 NORFOLK (313-UNIO | 843.7283 | 6.369427 | 5.44289 | 4.381487 | 14.40767 | 1.121019 | 0 |
| 710 NORFOLK ( 402 - BERK | 1337.912 | 10.61571 | 3.265734 | 9.858345 | 14.40767 | 0 | 0 |
| 710 NORFOLK ( 403 - BRAN | 919.3351 | 3.184713 | 6.531469 | 4.381487 | 13.29939 | 1.121019 | 0 |
| 710 NORFOLK ( 404 - CAM | 1322.571 | 6.369427 | 5.44289 | 9.858345 | 55.41412 | 3.363057 | 0 |
| 710 NORFOLK ( 405 - CHES | 1492.413 | 14.862 | 1.088578 | 7.667602 | 46.54786 | 8.968153 | 0 |
| 710 NORFOLK ( 406 - BARR | 699.7423 | 16.73239 | 4.339483 | 41.32768 | 459.7335 | 5.195531 | 0 |
| 710 NORFOLK ( 408 -EASTI | 1013.57 | 11.67728 | 11.97436 | 52.57784 | 694.893 | 10.08917 | 0 |
| 710 NORFOLK ( 409 - FAIRL | 777.9832 | 11.67728 | 16.32867 | 58.0547 | 523.1092 | 5.605096 | 0 |
| 710 NORFOLK ( 411 -RUFF | 545.684 | 0 | 0 | 4.381487 | 17.73252 | 4.484076 | 0 |
| 710 NORFOLK ( 412 - INGLI | 1294.082 | 6.369427 | 6.531469 | 30.67041 | 167.3506 | 8.968153 | 0 |
| 710 NORFOLK ( 413 - POPL | 1745.531 | 5.307856 | 14.15152 | 29.57504 | 341.351 | 11.21019 | 0 |
| 710 NORFOLK ( 414 - YOUN | 1664.446 | 11.67728 | 8.708625 | 13.14446 | 28.81534 | 5.605096 | 0 |
| 710 NORFOLK ( 415 - LAKE | 989.4632 | 9.55414 | 15.24009 | 42.7195 | 498.727 | 24.66242 | 0 |
| 710 NORFOLK ( 501 - BAYV | 1016.422 | 17.77817 | 14.10332 | 117.4576 | 873.0718 | 12.46927 | 0 |
| 710 NORFOLK ( $503-$ EAST | 1131.776 | 24.05282 | 21.69742 | 78.30508 | 854.092 | 20.78212 | 0 |
| 710 NORFOLK ( 504 -LARR' | 933.7153 | 20.91549 | 16.27306 | 53.29096 | 591.5378 | 6.234637 | 0 |
| 710 NORFOLK ( 505 - LITTL | 585.4765 | 7.320423 | 5.424354 | 55.4661 | 610.5176 | 5.195531 | 0 |
| 710 NORFOLK (506-OCEA | 1373.367 | 27.19014 | 24.95203 | 85.91808 | 682.2191 | 13.50838 | 0 |
| 710 NORFOLK ( 507 - PRETI | 987.0394 | 32.41901 | 26.0369 | 83.74294 | 709.6344 | 12.46927 | 0 |
| 710 NORFOLK ( 509 - TARR | 765.0371 | 13.59507 | 21.69742 | 78.30508 | 1030.183 | 15.58659 | 0 |
| 710 NORFOLK (510-THIRL | 859.7145 | 17.77817 | 24.95203 | 115.2825 | 1052.326 | 15.58659 | 0 |
| 710 NORFOLK ( 511 - CROS | 926.0976 | 26.14437 | 27.12177 | 83.74294 | 830.8944 | 8.312849 | 0 |
| 710 NORFOLK ( 512 - AZALI | 558.2703 | 9.411972 | 10.84871 | 28.27684 | 507.183 | 9.351955 | 0 |
| 720 NORTON C 001 - EAST | 383 | 6 | 22 | 24 | 1021 | 4 | 0 |
| 730 PETERSBUF 101 - FIRST | 1458.479 | 5.491803 | 8.436364 | 8.041322 | 151.1458 | 4.545455 | 0 |
| 730 PETERSBUF 201 - SECO | 2078.031 | 13.18033 | 15.81818 | 27.57025 | 211.6042 | 6.818182 | 0 |
| 730 PETERSBUF 301 -THIRI | 1946.647 | 15.37705 | 11.6 | 45.95041 | 483.6667 | 12.5 | 0 |
| 730 PETERSBUF 401 - FOUR | 1505.488 | 9.885246 | 4.218182 | 25.27273 | 264.8075 | 4.545455 | 0 |
| 730 PETERSBUF 501 - FIFTH | 1640.487 | 10.98361 | 5.272727 | 16.08264 | 119.7075 | 11.36364 | 0 |
| 730 PETERSBUF601-SIXTH | 1568.166 | 5.491803 | 5.272727 | 3.446281 | 43.53 | 2.272727 | 0 |
| 730 PETERSBUF 701 -SEVEI | 1823.701 | 6.590164 | 7.381818 | 12.63636 | 176.5383 | 7.954545 | 0 |
| 735 POQUOSOIOO1-CENT | 504.7019 | 10.18421 | 28.5 | 96.45211 | 1603.638 | 21.75 | 0 |
| 735 POQUOSOIOO2-EASTI | 536.8409 | 14.71053 | 26.125 | 105.8621 | 1825.371 | 12.08333 | 0 |


| ST | 559.4572 | 18.10526 | 21.375 | 104.6858 | 1662.991 | 24.16667 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 740 PORTSMOL 001 - EMA | 906.9586 | 16.94426 | 9.517572 | 71.85127 | 414.5782 | 6.826531 | 0 |
| 740 PORTSMOL 005 - HAMI | 976.8982 | 2.118033 | 3.172524 | 5.362035 | 16.11055 | 0 | 0 |
| 740 PORTSMOL 007-PARK | 707.2923 | 4.236066 | 11.63259 | 33.24462 | 205.141 | 7.964286 | 0 |
| 740 PORTSMOL 009 - THIRL | 1164.156 | 12.7082 | 6.345048 | 27.88258 | 202.9929 | 4.55102 | 0 |
| 740 PORTSMOL 010 - PORT | 474.9124 | 4.236066 | 8.460064 | 46.1135 | 284.6197 | 1.137755 | 0 |
| 740 PORTSMOL 011 - JOSEF | 1082.936 | 5.295082 | 4.230032 | 6.434442 | 20.4067 | 6.826531 | 0 |
| 740 PORTSMOL013-ST. M | 859.5802 | 4.236066 | 1.057508 | 3.217221 | 15.03651 | 5.688776 | 0 |
| 0 PORTSMOI014-BRIG | 1140.467 | 7.413115 | 7.402556 | 10.72407 | 32.2211 | 5.688776 | 0 |
| 740 PORTSMOI 016 - CRAD | 918.2392 | 16.94426 | 10.57508 | 37.53425 | 345.8398 | 11.37755 | 0 |
| 740 PORTSMOL 017 - VICTC | 1017.508 | 19.0623 | 6.345048 | 33.24462 | 459.6877 | 7.964286 | 0 |
| 740 PORTSMOI 019 - VICTC | 406.1009 | 8.472131 | 8.460064 | 19.30333 | 373.7648 | 3.413265 | 0 |
| 740 PORTSMOL 020 - NOBL | 744.5182 | 11.64918 | 6.345048 | 30.0274 | 269.5832 | 4.55102 | 0 |
| 740 PORTSMOL 021 -JOHN | 822.3542 | 7.413115 | 1.057508 | 2.144814 | 20.4067 | 2.27551 | 0 |
| 740 PORTSMOL 022 -ST. M | 706.1643 | 11.64918 | 16.92013 | 40.75147 | 534.8703 | 6.826531 | 0 |
| 740 PORTSMOL023-WEST | 463.6318 | 14.82623 | 14.80511 | 58.98239 | 742.1594 | 6.826531 | 0 |
| 740 PORTSMOL 024 -THE S | 680.2189 | 7.413115 | 8.460064 | 35.38943 | 341.5437 | 1.137755 | 0 |
| 740 PORTSMOL 025 -JOHN | 705.0362 | 9.531148 | 15.86262 | 50.40313 | 554.203 | 6.826531 | 0 |
| 740 PORTSMOI 026 - WILLI | 1314.188 | 6.354098 | 6.345048 | 9.651663 | 30.07303 | 1.137755 | 0 |
| 740 PORTSMOI 027 - CAVA | 1302.907 | 7.413115 | 5.28754 | 15.0137 | 34.36918 | 3.413265 | 0 |
| 740 PORTSMOI 028 - LAKE | 1637.94 | 10.59016 | 10.57508 | 7.506849 | 42.96147 | 9.102041 | 0 |
| 740 PORTSMOL 029 - WOO | 278.6303 | 10.59016 | 6.345048 | 39.67906 | 627.2375 | 3.413265 | 0 |
| 740 PORTSMOL 030 - THE F | 344.0577 | 10.59016 | 13.7476 | 37.53425 | 811.9718 | 6.826531 | 0 |
| 740 PORTSMOL031-WEST | 1196.869 | 13.76721 | 17.97764 | 43.96869 | 712.0864 | 10.2398 | 0 |
| 740 PORTSMOL 032 - HODC | 400.4606 | 3.177049 | 6.345048 | 26.81018 | 630.4596 | 12.51531 | 0 |
| 740 PORTSMOL 033- PINEC | 241.4044 | 5.295082 | 6.345048 | 45.0411 | 673.4211 | 4.55102 | 0 |
| 740 PORTSMOI 034-CHUR | 526.8031 | 12.7082 | 9.517572 | 66.48924 | 714.2344 | 7.964286 | 0 |
| 740 PORTSMOI 035 - CHUR | 639.6089 | 8.472131 | 22.20767 | 65.41683 | 879.6361 | 12.51531 | 0 |
| 740 PORTSMOI 036 -SCOT | 1470.988 | 25.41639 | 29.61022 | 85.79256 | 1264.141 | 21.61735 | 0 |
| 740 PORTSMOL037-CHUR | 1468.731 | 15.88525 | 22.20767 | 61.1272 | 663.7547 | 10.2398 | 0 |
| 740 PORTSMOI 038 -GROI | 2172.64 | 15.88525 | 17.97764 | 35.38943 | 254.5467 | 18.20408 | 0 |
| 740 PORTSMOI 039 - CHUR | 1724.801 | 12.7082 | 15.86262 | 43.96869 | 622.9413 | 11.37755 | 0 |
| 750 RADFORD (001-EAST | 1476.838 | 28.47273 | 30.71845 | 163.7018 | 934.0442 | 18.08511 | 0 |
| 750 RADFORD (002-CENT | 773.1618 | 15.81818 | 32.91262 | 59.14386 | 725.639 | 22.34043 | 0 |
| 750 RADFORD (003-WEST | 675 | 13.70909 | 49.36893 | 78.15439 | 978.3168 | 9.574468 | 0 |
| 760 RICHMONL 101 - ONE I | 1361.195 | 11.46507 | 28.49577 | 143.9495 | 725.3484 | 31.19021 | 0 |
| 760 RICHMONE 102 - ONE I | 540.1566 | 6.253676 | 20.05258 | 74.12326 | 419.712 | 4.302098 | 0 |
| 760 RICHMONL 104 - ONE I | 810.2349 | 5.211397 | 29.55117 | 122.4645 | 640.3298 | 18.28392 | 0 |
| 760 RICHMONL 105 - ONE I | 896.66 | 8.338235 | 33.77277 | 106.3508 | 484.2831 | 18.28392 | 0 |
| 760 RICHMONL 106 - ONE I | 613.6179 | 5.211397 | 34.82817 | 117.0933 | 835.1192 | 25.81259 | 0 |
| 760 RICHMONL 111 - ONE | 817.7971 | 7.295956 | 22.16338 | 71.97475 | 478.9021 | 8.604196 | 0 |
| 760 RICHMONE 112 - ONE I | 755.1389 | 4.169118 | 16.88638 | 63.38075 | 347.6076 | 7.528671 | 0 |
| 760 RICHMONL 113 - ONE I | 1356.873 | 29.18382 | 26.38498 | 97.75676 | 281.9604 | 15.05734 | 0 |
| 760 RICHMONL 114 - ONE I | 1563.213 | 32.31066 | 23.21878 | 152.5435 | 387.4264 | 31.19021 | 0 |
| 760 RICHMONL 203 -TWO | 1669.084 | 19.80331 | 35.88357 | 105.2765 | 428.3215 | 12.90629 | 0 |
| 760 RICHMONL 204 -TWO | 1426.013 | 34.39522 | 33.77277 | 114.9448 | 364.8266 | 17.20839 | 0 |
| 760 RICHMONL 206 -TWO | 2493.363 | 51.07169 | 11.60939 | 100.9795 | 246.4463 | 17.20839 | 0 |


| o | 1480.029 | 23.97243 | 21.10798 | 113.8705 | 389.5788 | 22.58601 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMONL 208 -TWO | 1594.542 | 19.80331 | 35.88357 | 112.7963 | 356.2171 | 17.20839 | 0 |
| 760 RICHMONL 213 -TWO | 2356.163 | 68.79044 | 17.94178 | 92.38551 | 196.9418 | 22.58601 | 0 |
| 760 RICHMONL 301 -THRE | 930.1497 | 8.338235 | 3.166197 | 11.81675 | 26.90461 | 4.302098 | 0 |
| 760 RICHMONL 302 -THRE | 932.3103 | 9.380515 | 14.77559 | 27.9305 | 99.00898 | 3.226573 | 0 |
| 760 RICHMONL 303 -THRE | 823.1987 | 9.380515 | 7.387793 | 19.3365 | 40.89501 | 2.151049 | 0 |
| 760 RICHMONL 304 -THRE | 1200.228 | 16.67647 | 3.166197 | 13.96525 | 32.28554 | 11.83077 | 0 |
| 760 RICHMONL 305 -THRE | 1162.417 | 17.71875 | 25.32958 | 40.8215 | 88.24713 | 13.98182 | 0 |
| 760 RICHMONL 306 -THRE | 1041.422 | 17.71875 | 9.498592 | 30.079 | 57.03778 | 4.302098 | 0 |
| 760 RICHMONL 307 -THRE | 1031.699 | 10.42279 | 16.88638 | 52.63825 | 209.856 | 11.83077 | 0 |
| 760 RICHMONL 308 -THRE | 1085.715 | 9.380515 | 17.94178 | 60.158 | 247.5224 | 12.90629 | 0 |
| 760 RICHMONL 309 -THRE | 679.517 | 6.253676 | 12.66479 | 38.673 | 342.2267 | 4.302098 | 0 |
| 760 RICHMONL 310 -THRE | 656.8304 | 3.126838 | 0 | 3.22275 | 4.304738 | 4.302098 | 0 |
| 760 RICHMONL 402 -FOUR | 1663.682 | 23.97243 | 32.71737 | 143.9495 | 533.7875 | 22.58601 | 0 |
| 760 RICHMONL 404 - FOUR | 1504.876 | 31.26838 | 24.27418 | 73.04901 | 410.0263 | 13.98182 | 0 |
| 760 RICHMONL 409 -FOUR | 1558.892 | 18.76103 | 28.49577 | 113.8705 | 1028.832 | 24.73706 | 0 |
| 760 RICHMON[ 410 -FOUR | 1127.847 | 16.67647 | 23.21878 | 47.267 | 441.2357 | 10.75524 | 0 |
| 760 RICHMON[ 412 -FOUR | 1099.759 | 12.50735 | 21.10798 | 48.34125 | 329.3125 | 10.75524 | 0 |
| 760 RICHMON[ 413 -FOUR | 976.6032 | 16.67647 | 20.05258 | 67.67775 | 461.6832 | 8.604196 | 0 |
| 760 RICHMON[ 414 -FOUR | 972.2819 | 14.59191 | 29.55117 | 78.42026 | 601.5872 | 10.75524 | 0 |
| 760 RICHMONL501-FIVE I | 1650.719 | 30.2261 | 13.72019 | 84.86576 | 231.3797 | 11.83077 | 0 |
| 760 RICHMONL503-FIVE I | 1677.726 | 10.42279 | 15.83099 | 70.9005 | 150.6658 | 6.453147 | 0 |
| 760 RICHMONL 504 - FIVE I | 2086.085 | 45.86029 | 31.66197 | 121.3903 | 280.8842 | 30.11469 | 0 |
| 760 RICHMONL 505 - FIVE I | 969.041 | 34.39522 | 9.498592 | 59.08375 | 148.5135 | 9.67972 | 0 |
| 760 RICHMONL508-FIVE I | 770.2633 | 16.67647 | 16.88638 | 49.4155 | 142.0564 | 15.05734 | 0 |
| 760 RICHMON[509-FIVE I | 1329.866 | 11.46507 | 11.60939 | 30.079 | 78.56147 | 6.453147 | 0 |
| 760 RICHMON[510-FIVE I | 1381.721 | 19.80331 | 20.05258 | 51.564 | 106.5423 | 18.28392 | 0 |
| 760 RICHMONL602-SIX H | 1047.904 | 5.211397 | 5.276995 | 2.1485 | 13.9904 | 23.66154 | 0 |
| 760 RICHMONL603-SIX H | 1168.899 | 20.84559 | 9.498592 | 10.7425 | 32.28554 | 4.302098 | 0 |
| 760 RICHMONL 604 -SIX H | 902.0615 | 10.42279 | 3.166197 | 10.7425 | 34.43791 | 3.226573 | 0 |
| 760 RICHMONL606-SIX H | 1383.881 | 9.380515 | 9.498592 | 12.891 | 50.58067 | 7.528671 | 0 |
| 760 RICHMON[607-SIX H | 1449.78 | 31.26838 | 18.99718 | 60.158 | 259.3605 | 12.90629 | 0 |
| 760 RICHMONL609-SIX H | 1601.024 | 33.35294 | 10.55399 | 71.97475 | 193.7132 | 9.67972 | 0 |
| 760 RICHMONL610-SIX H | 1060.868 | 5.211397 | 8.443192 | 2.1485 | 23.67606 | 3.226573 | 0 |
| 760 RICHMONL 701 -SEVEI | 1233.718 | 7.295956 | 3.166197 | 6.4455 | 17.21895 | 2.151049 | 0 |
| 760 RICHMONL 702 -SEVEI | 1073.831 | 15.63419 | 20.05258 | 23.6335 | 37.66646 | 7.528671 | 0 |
| 760 RICHMONL 703 -SEVEI | 1093.277 | 10.42279 | 28.49577 | 34.376 | 38.74264 | 10.75524 | 0 |
| 760 RICHMONL 705 -SEVEI | 957.1575 | 21.88787 | 18.99718 | 45.1185 | 94.70424 | 16.13287 | 0 |
| 760 RICHMONL 706 -SEVEI | 1759.83 | 25.01471 | 11.60939 | 32.2275 | 103.3137 | 15.05734 | 0 |
| 760 RICHMON[ 707 -SEVEI | 2022.346 | 33.35294 | 30.60657 | 93.45976 | 263.6652 | 19.35944 | 0 |
| 760 RICHMONL 708 - SEVEI | 1678.807 | 32.31066 | 32.71737 | 131.0585 | 357.2933 | 19.35944 | 0 |
| 760 RICHMONL 802 - EIGH ${ }^{-1}$ | 1079.233 | 9.380515 | 6.332394 | 12.891 | 20.44751 | 6.453147 | 0 |
| 760 RICHMONL 806 - EIGH ${ }^{-1}$ | 1402.247 | 13.54963 | 5.276995 | 4.297 | 138.8278 | 7.528671 | 0 |
| 760 RICHMONL810-EIGH | 1020.896 | 10.42279 | 6.332394 | 8.594001 | 122.685 | 7.528671 | 0 |
| 760 RICHMON[811-EIGH | 1332.026 | 12.50735 | 12.66479 | 8.594001 | 101.1613 | 8.604196 | 0 |
| 760 RICHMON[812-EIGH ${ }^{-}$ | 1639.915 | 12.50735 | 9.498592 | 18.26225 | 250.751 | 9.67972 | 0 |
| 760 RICHMONL814-EIGH | 975.5228 | 9.380515 | 8.443192 | 5.37125 | 52.73304 | 2.151049 | 0 |


| NE | 570.4054 | 5.211397 | 6.332394 | 7.519751 | 41.9712 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMON[ 903 - NINE | 1424.933 | 8.338235 | 8.443192 | 11.81675 | 170.0372 | 4.302098 | 0 |
| 760 RICHMON[ 908 - NINE | 1349.311 | 9.380515 | 12.66479 | 29.00475 | 126.9898 | 4.302098 | 0 |
| 760 RICHMON[ 909 - NINE | 1491.913 | 18.76103 | 16.88638 | 21.485 | 148.5135 | 8.604196 | 0 |
| 760 RICHMON[ 910 - NINE | 1231.557 | 14.59191 | 6.332394 | 16.11375 | 140.9802 | 4.302098 | 0 |
| 760 RICHMON[ 911 - NINE | 1260.726 | 9.380515 | 12.66479 | 7.519751 | 68.87581 | 7.528671 | 0 |
| 770 ROANOKE 001 -Peters | 1403.806 | 22.59424 | 9.991935 | 19.60927 | 335.7611 | 11.56682 | 0 |
| 770 ROANOKE 1002 - Granı | 1193.235 | 21.51832 | 17.76344 | 43.57616 | 597.2779 | 17.35023 | 0 |
| 770 ROANOKE 1003 -Prestc | 806.6133 | 12.91099 | 17.76344 | 68.63245 | 1111.447 | 9.253456 | 0 |
| 770 ROANOKE 1004 - Willia | 876.8036 | 21.51832 | 14.4328 | 63.18543 | 806.713 | 10.41014 | 0 |
| 770 ROANOKE 1005 - East ( | 663.9313 | 10.75916 | 7.771505 | 70.81126 | 1125.852 | 11.56682 | 0 |
| 770 ROANOKE 1006 - Hollir | 965.4045 | 16.13874 | 23.31452 | 81.7053 | 916.4171 | 12.7235 | 0 |
| 770 ROANOKE 1007 - Soutr | 617.9049 | 23.67016 | 18.87366 | 67.54305 | 780.1181 | 23.13364 | 0 |
| 770 ROANOKE 1008 - Linco | 1302.548 | 11.83508 | 4.44086 | 21.78808 | 93.08227 | 5.78341 | 0 |
| 770 ROANOKE 1009-Highli | 1189.783 | 31.20157 | 17.76344 | 94.77815 | 415.5459 | 17.35023 | 0 |
| 770 ROANOKE 010 - Old S | 1169.071 | 48.41623 | 26.64516 | 106.7616 | 626.0891 | 19.66359 | 0 |
| 770 ROANOKE 1011 -RALEI | 1288.74 | 21.51832 | 33.30645 | 81.7053 | 810.0374 | 16.19355 | 0 |
| 770 ROANOKE 1012 -SOUT | 792.8053 | 10.75916 | 44.4086 | 57.73841 | 890.9303 | 11.56682 | 0 |
| 770 ROANOKE 1013 -GARL | 634.0141 | 19.36649 | 17.76344 | 87.15232 | 1171.285 | 3.470046 | 0 |
| 770 ROANOKE 1014 - Crysti | 1091.977 | 20.44241 | 36.6371 | 78.43709 | 946.3364 | 12.7235 | 0 |
| 770 ROANOKE 1015 - Granı | 1010.28 | 29.04974 | 32.19624 | 78.43709 | 866.5516 | 19.66359 | 0 |
| 770 ROANOKE 016 - Deye | 869.8996 | 8.60733 | 15.54301 | 47.93377 | 1052.716 | 12.7235 | 0 |
| 770 ROANOKE 017 -LEE-H | 1055.156 | 25.82199 | 22.2043 | 99.13576 | 769.0369 | 11.56682 | 0 |
| 770 ROANOKE 1018 - OLD 1 | 1380.793 | 23.67016 | 17.76344 | 52.29139 | 519.7094 | 15.03687 | 0 |
| 770 ROANOKE 1018 -Sumn | 1012.582 | 11.83508 | 24.42473 | 55.5596 | 704.7658 | 4.626728 | 0 |
| 770 ROANOKE 1019-Fores | 953.8979 | 7.531414 | 7.771505 | 15.25166 | 97.51476 | 2.313364 | 0 |
| 770 ROANOKE 020 -EURE | 2006.753 | 11.83508 | 2.22043 | 23.96689 | 151.8128 | 2.313364 | 0 |
| 775 SALEM CIT' 001 - NORT | 689.1925 | 15.33333 | 20.84722 | 69.09677 | 789.7207 | 10.82474 | 0 |
| 775 SALEM CIT' 002 - CONE | 297.3439 | 5.897436 | 6.583333 | 31.80645 | 469.6235 | 8.659794 | 0 |
| 775 SALEM CIT' 003 - BEVE | 213.2117 | 4.717949 | 18.65278 | 21.93548 | 550.4785 | 8.659794 | 0 |
| 775 SALEM CIT' 004 - WEST | 353.8162 | 8.25641 | 17.55556 | 53.74194 | 755.385 | 14.07216 | 0 |
| 775 SALEM CIT' 005 - NORT | 651.1602 | 11.79487 | 12.06944 | 64.70968 | 900.481 | 11.90722 | 0 |
| 775 SALEM CIT'006-SOUT | 321.5464 | 5.897436 | 9.875 | 27.41935 | 501.744 | 3.247423 | 0 |
| 775 SALEM CIT'007-SOUT | 382.6286 | 12.97436 | 13.16667 | 51.54839 | 767.5687 | 17.31959 | 0 |
| 775 SALEM CIT' 008 - EAST | 183.2468 | 8.25641 | 9.875 | 17.54839 | 324.5276 | 2.164948 | 0 |
| 775 SALEM CIT' 009 - SOUT | 478.2858 | 10.61538 | 18.65278 | 54.83871 | 1089.881 | 10.82474 | 0 |
| 775 SALEM CIT' 010 - HIDD | 631.5677 | 8.25641 | 30.72222 | 49.35484 | 1076.59 | 17.31959 | 0 |
| 790 STAUNTON 101 - WARI | 1000.732 | 16.35 | 37.34899 | 77.95349 | 1079.122 | 10.85106 | 0 |
| 790 STAUNTON 201 - WARI | 1094.334 | 43.6 | 23.47651 | 89.86305 | 1407.934 | 15.19149 | 0 |
| 790 STAUNTON 301 - WARI | 974.1536 | 19.62 | 28.81208 | 101.7726 | 1098.983 | 21.70213 | 0 |
| 790 STAUNTON 401 - WARI | 895.5742 | 10.9 | 37.34899 | 70.37468 | 844.0982 | 28.21277 | 0 |
| 790 STAUNTON 501 - WARI | 1368.206 | 18.53 | 32.01342 | 79.03618 | 702.8635 | 26.04255 | 0 |
| 800 SUFFOLK C 101 - BELLE | 902.6663 | 12.11392 | 15.22807 | 49.52624 | 384.0287 | 7.209677 | 0 |
| 800 SUFFOLK C 102 - DRIVI | 1041.357 | 15.41772 | 53.29825 | 93.54956 | 1936.889 | 20.42742 | 0 |
| 800 SUFFOLK C 104 - BENN | 960.2582 | 24.22785 | 34.80702 | 72.63848 | 938.8609 | 16.82258 | 0 |
| 800 SUFFOLK C 201 - EBEN | 470.1387 | 7.708861 | 22.84211 | 37.41983 | 1023.704 | 4.806452 | 0 |
| 800 SUFFOLK C 202 - CHUC | 595.9008 | 8.810127 | 10.87719 | 44.02332 | 916.5337 | 7.209677 | 0 |


| G: | 1326.966 | 12.11392 | 17.40351 | 60.53207 | 775.872 | 8.41129 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 800 SUFFOLK C 204 - HILLP | 1049.585 | 6.607595 | 22.84211 | 44.02332 | 627.3958 | 4.806452 | 0 |
| 800 SUFFOLK C 301 - WHIT | 401.3205 | 1.065217 | 5.25 | 5.444444 | 189.8942 | 0 | 384.9131 |
| 800 SUFFOLK C 302 - JOHN | 1788.265 | 7.564667 | 5.325439 | 25.24325 | 245.0494 | 5.691795 | 1488.41 |
| 800 SUFFOLK C 304 - NANS | 1192.977 | 18.72152 | 32.63158 | 56.12974 | 692.1448 | 6.008065 | 0 |
| 800 SUFFOLK C 305 - SHOL | 526.5553 | 5.506329 | 7.614035 | 22.01166 | 330.4433 | 1.201613 | 0 |
| 800 SUFFOLK C 401 - AIRPC | 425.4239 | 3.195652 | 9.45 | 28.31111 | 667.9038 | 3.130435 | 0 |
| 800 SUFFOLK C 402 - WHA | 319.3692 | 3.195652 | 8.4 | 49 | 897.0865 | 7.304348 | 0 |
| 800 SUFFOLK C 403 - SOUT | 870.1304 | 2.130435 | 4.2 | 2.177778 | 46.92788 | 2.086957 | 681.6417 |
| 800 SUFFOLK C 404 - BOOk | 1482.621 | 5.434232 | 9.45 | 8.711111 | 74.38665 | 3.446704 | 1387.117 |
| SUFFOLK C 405 - PITTA | 238.623 | 2.130435 | 3.15 | 9.8 | 272.8365 | 4.173913 | 0 |
| 800 SUFFOLK C 501 - KILBY | 882.182 | 7.456522 | 17.85 | 60.97778 | 1434.029 | 9.391304 | 0 |
| 800 SUFFOLK C 502 - HOLL | 754.4344 | 8.521739 | 14.7 | 56.62222 | 1285.606 | 4.173913 | 0 |
| 800 SUFFOLK C 504 - LAKE | 632.8216 | 7.49257 | 23.17544 | 53.55436 | 1440.971 | 11.95266 | 0 |
| 800 SUFFOLK C 601 - LAKE | 1177.448 | 6.391304 | 24.15 | 63.15556 | 688.6394 | 4.173913 | 48 |
| 800 SUFFOLK C 602 - OLDE | 362.2453 | 4.405063 | 5.438596 | 14.30758 | 192.0144 | 2.403226 | 462.3724 |
| 800 SUFFOLK C 603 - ELEPF | 269.9573 | 2.130435 | 5.25 | 17.42222 | 300.1202 | 2.086957 | 0 |
| 800 SUFFOLK C 604 - WILR | 573.5692 | 7.708861 | 16.31579 | 55.02915 | 664.2357 | 10.81452 | 0 |
| 800 SUFFOLK C 605 - HOLL | 850.951 | 2.202532 | 2.175439 | 9.905248 | 26.7927 | 6.008065 | 59.101 |
| 800 SUFFOLK C 702 - HARB | 1066.039 | 7.708861 | 27.19298 | 62.73324 | 990.2136 | 16.82258 | 0 |
| 800 SUFFOLK C 704 - BURB | 1369.279 | 11.01266 | 22.84211 | 67.13557 | 660.8866 | 8.41129 | 0 |
| 800 SUFFOLK C 706 - HUN7 | 1748.916 | 22.02532 | 14.14035 | 28.61516 | 302.5343 | 18.02419 | 0 |
| 810 VIRGINIA B 001 - NORT | 940.7613 | 9.989137 | 18.17776 | 80.40952 | 1625.12 | 19.7962 | 0 |
| 810 VIRGINIA B 002 - SOUT | 1019.059 | 29.96741 | 29.53885 | 130.2408 | 1156.964 | 30.27654 | 0 |
| 810 VIRGINIA B 003 - OCEA | 666.7186 | 12.20895 | 14.76943 | 74.74688 | 971.3358 | 15.13827 | 0 |
| 810 VIRGINIA B 004 - LINKł | 820.9417 | 14.42875 | 17.04165 | 80.40952 | 1170.973 | 15.13827 | 0 |
| 810 VIRGINIA B 005 - SEAT, | 1230.226 | 34.40703 | 26.13052 | 101.9276 | 916.4647 | 29.11206 | 0 |
| 810 VIRGINIA B 006 - ALAN | 841.1094 | 12.20895 | 30.67496 | 86.07216 | 1333.252 | 20.96068 | 0 |
| 810 VIRGINIA B 007 - KING! | 517.2408 | 6.659425 | 20.44997 | 80.40952 | 901.2876 | 12.80931 | 0 |
| 810 VIRGINIA B 008 - LONL | 1060.581 | 34.40703 | 28.40274 | 127.9757 | 1257.366 | 24.45413 | 0 |
| 810 VIRGINIA B 009 - TRAN | 737.8985 | 9.989137 | 27.26663 | 78.14446 | 1274.878 | 11.64482 | 0 |
| 810 VIRGINIA B 010 - GREA | 690.4452 | 9.989137 | 15.90554 | 84.93964 | 1532.889 | 17.46723 | 0 |
| 810 VIRGINIA B 011 - CAPE | 1053.463 | 13.31885 | 19.31386 | 90.60228 | 1273.711 | 24.45413 | 0 |
| 810 VIRGINIA B 012 - PLAZ | 1137.692 | 34.40703 | 32.94718 | 113.2528 | 1008.695 | 22.12516 | 0 |
| 810 VIRGINIA B 013 - MT TI | 1134.133 | 23.30799 | 24.99441 | 141.5661 | 1361.271 | 16.30275 | 0 |
| 810 VIRGINIA B 014 - MALI | 972.7922 | 17.75847 | 24.99441 | 106.4577 | 1263.204 | 22.12516 | 0 |
| 810 VIRGINIA B 015 - OLD [ | 711.7992 | 15.53866 | 18.17776 | 107.5902 | 834.7417 | 9.315858 | 0 |
| 810 VIRGINIA B 016 - ARAG | 1270.562 | 28.85751 | 20.44997 | 149.4938 | 1405.635 | 18.63172 | 0 |
| 810 VIRGINIA B 017 - OCEA | 698.7496 | 16.64856 | 26.13052 | 88.33722 | 912.9623 | 10.48034 | 0 |
| 810 VIRGINIA B 018 -THOR | 1029.736 | 17.75847 | 28.40274 | 90.60228 | 1293.558 | 47.74377 | 0 |
| 810 VIRGINIA B 019 - LAKE | 461.4831 | 8.879233 | 7.952768 | 52.09631 | 763.526 | 9.315858 | 0 |
| 810 VIRGINIA B 020 - BAYS | 787.7245 | 15.53866 | 20.44997 | 52.09631 | 1028.542 | 4.657929 | 0 |
| 810 VIRGINIA B 021 - DAVI! | 1560.027 | 22.19808 | 14.76943 | 56.62642 | 470.4908 | 23.28965 | 0 |
| 810 VIRGINIA B 022 - POIN | 721.2899 | 21.08818 | 27.26663 | 60.02401 | 1027.374 | 16.30275 | 0 |
| 810 VIRGINIA B 023 - ARRC | 842.2957 | 35.51693 | 27.26663 | 89.46975 | 1257.366 | 16.30275 | 0 |
| 810 VIRGINIA B 024 - LARK: | 743.8302 | 13.31885 | 17.04165 | 72.48182 | 760.0236 | 6.986894 | 0 |
| 810 VIRGINIA B 025 - AVAL | 1385.636 | 31.07732 | 36.35551 | 124.5781 | 1499.033 | 31.44102 | 0 |

| 026 - FAIRF | 823.3144 | 16.64856 | 31.81107 | 86.07216 | 1006.36 | 22.12516 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 027 - EDWI | 850.6 | 8.879233 | 27.26663 | 91.73481 | 1230.514 | 23.28965 | 0 |
| 810 VIRGINIA B 028 -THAL | 644.1783 | 15.53866 | 26.13052 | 77.01194 | 917.6322 | 22.12516 | 0 |
| 810 VIRGINIA B 029 - HOLL | 1231.413 | 34.40703 | 36.35551 | 99.66251 | 791.5453 | 16.30275 | 0 |
| 810 VIRGINIA B 030 - RED $\backslash$ | 651.2963 | 16.64856 | 12.49721 | 77.01194 | 1140.619 | 18.63172 | 0 |
| 810 VIRGINIA B 031 - SIGM | 977.5376 | 8.879233 | 40.89995 | 107.5902 | 2106.118 | 23.28965 | 0 |
| 810 VIRGINIA B 032 - CREEI | 225.4031 | 7.769329 | 9.088878 | 36.24091 | 916.4647 | 9.315858 | 0 |
| 810 VIRGINIA B 033 - CAPP | 255.0614 | 3.329712 | 6.816658 | 26.04815 | 976.0057 | 2.328965 | 0 |
| 810 VIRGINIA B 034 - BLAC | 173.2045 | 1.109904 | 3.408329 | 24.91563 | 587.2379 | 1.164482 | 0 |
| 810 VIRGINIA B $035-$ COUF | 653.6689 | 13.31885 | 20.44997 | 65.68665 | 1340.257 | 18.63172 | 0 |
| 810 VIRGINIA B 036 - WIN[ | 1455.629 | 14.42875 | 27.26663 | 120.048 | 1037.882 | 19.7962 | 0 |
| 810 VIRGINIA B 037 - CHES, | 780.6065 | 17.75847 | 21.58608 | 107.5902 | 845.249 | 9.315858 | 0 |
| 810 VIRGINIA B 038 - WITC | 969.2332 | 12.20895 | 28.40274 | 81.54205 | 1615.78 | 22.12516 | 0 |
| 810 VIRGINIA B 039 - PEME | 1261.071 | 21.08818 | 27.26663 | 126.8432 | 1297.06 | 20.96068 | 0 |
| 810 VIRGINIA B 040 - BON | 829.2461 | 16.64856 | 27.26663 | 72.48182 | 832.4068 | 24.45413 | 0 |
| 810 VIRGINIA B 041 - COLLI | 1896.945 | 23.30799 | 17.04165 | 80.40952 | 635.1042 | 17.46723 | 0 |
| 810 VIRGINIA B 042 - BRAN | 1123.456 | 21.08818 | 30.67496 | 84.93964 | 1050.724 | 18.63172 | 0 |
| 810 VIRGINIA B 043 - BELL | 1110.407 | 23.30799 | 40.89995 | 98.52998 | 710.9898 | 15.13827 | 0 |
| 810 VIRGINIA B 044 - CENT | 1043.972 | 31.07732 | 30.67496 | 113.2528 | 1350.764 | 29.11206 | 0 |
| 810 VIRGINIA B 045 - TIMB | 1406.99 | 11.09904 | 23.8583 | 86.07216 | 626.9319 | 13.97379 | 0 |
| 810 VIRGINIA B 046 - GREE | 1233.785 | 13.31885 | 19.31386 | 48.69872 | 650.2813 | 10.48034 | 0 |
| 810 VIRGINIA B 047 - KING! | 937.2023 | 26.6377 | 40.89995 | 96.26492 | 1613.445 | 32.6055 | 0 |
| 810 VIRGINIA B 048 - WOLI | 996.5189 | 11.09904 | 23.8583 | 99.66251 | 1382.286 | 24.45413 | 0 |
| 810 VIRGINIA B 049 - LYNN | 705.8675 | 11.09904 | 22.72219 | 72.48182 | 1258.534 | 20.96068 | 0 |
| 810 VIRGINIA B $050-$ OCEA | 944.3203 | 16.64856 | 20.44997 | 77.01194 | 479.8306 | 22.12516 | 0 |
| 810 VIRGINIA B 051 - STRA | 791.2834 | 25.5278 | 18.17776 | 81.54205 | 1072.906 | 34.93447 | 0 |
| 810 VIRGINIA B 052 - HOM | 1187.518 | 23.30799 | 24.99441 | 112.1203 | 1327.414 | 18.63172 | 0 |
| 810 VIRGINIA B $053-$ SHAN | 797.2151 | 13.31885 | 20.44997 | 55.49389 | 969.0009 | 6.986894 | 0 |
| 810 VIRGINIA B 054 - CROn | 798.4014 | 12.20895 | 15.90554 | 84.93964 | 753.0188 | 15.13827 | 0 |
| 810 VIRGINIA B $055-\mathrm{MAG}$ | 1358.35 | 32.18722 | 22.72219 | 115.5179 | 753.0188 | 29.11206 | 0 |
| 810 VIRGINIA B 056 - EDINI | 423.5205 | 14.42875 | 6.816658 | 56.62642 | 686.4729 | 6.986894 | 0 |
| 810 VIRGINIA B 057 - SHER | 577.7437 | 17.75847 | 14.76943 | 55.49389 | 820.7321 | 9.315858 | 0 |
| 810 VIRGINIA B 058 - GLEN | 1087.866 | 17.75847 | 21.58608 | 87.20469 | 1026.207 | 13.97379 | 0 |
| 810 VIRGINIA B 059 - SHEL` | 759.2525 | 11.09904 | 21.58608 | 55.49389 | 741.344 | 23.28965 | 0 |
| 810 VIRGINIA B 060 - FOXF | 805.5194 | 14.42875 | 20.44997 | 90.60228 | 1590.095 | 23.28965 | 0 |
| 810 VIRGINIA B 061 - BAKE | 1806.784 | 23.30799 | 21.58608 | 48.69872 | 259.1785 | 17.46723 | 0 |
| 810 VIRGINIA B 062 - LAND | 1034.482 | 19.97827 | 31.81107 | 80.40952 | 1244.524 | 18.63172 | 0 |
| 810 VIRGINIA B 063 - CULV | 1038.041 | 24.41789 | 30.67496 | 126.8432 | 1485.023 | 16.30275 | 0 |
| 810 VIRGINIA B 064 - ROSE | 1458.002 | 15.53866 | 30.67496 | 106.4577 | 1379.951 | 10.48034 | 0 |
| 810 VIRGINIA B 065 - COLO | 943.1339 | 16.64856 | 42.03606 | 89.46975 | 985.3455 | 19.7962 | 0 |
| 810 VIRGINIA B 066 - HUN7 | 686.8862 | 22.19808 | 18.17776 | 90.60228 | 1208.332 | 25.61861 | 0 |
| 810 VIRGINIA B 067 - EASTI | 543.3401 | 13.31885 | 7.952768 | 73.61435 | 468.1558 | 15.13827 | 0 |
| 810 VIRGINIA B 068 - MAN | 832.8051 | 13.31885 | 18.17776 | 91.73481 | 1090.418 | 16.30275 | 0 |
| 810 VIRGINIA B 069 - SHELI | 1193.45 | 11.09904 | 18.17776 | 55.49389 | 477.4956 | 16.30275 | 0 |
| 810 VIRGINIA B 070 - CORP | 1079.562 | 27.7476 | 20.44997 | 141.5661 | 1249.194 | 27.94758 | 0 |
| 810 VIRGINIA B 071 - ROUN | 586.048 | 1.109904 | 11.3611 | 48.69872 | 486.8354 | 4.657929 | 0 |
| 810 VIRGINIA B 072 - RUDE | 765.1841 | 24.41789 | 20.44997 | 89.46975 | 1297.06 | 15.13827 | 0 |

| 810 VIRGINIA B 073 - DAHL | 7 | 21.08818 | 19.31386 | 83.80711 | 615.2572 | 25.61861 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 074 - BUCK | 1149.556 | 18.86837 | 17.04165 | 62.28907 | 656.1187 | 11.64482 | 0 |
| VIRGINIA B 075 - COLO | 870.7677 | 12.20895 | 23.8583 | 103.0601 | 1397.463 | 15.13827 | 0 |
| 810 VIRGINIA B 076 - VILLA | 1173.282 | 17.75847 | 17.04165 | 108.7227 | 603.5825 | 11.64482 | 0 |
| 810 VIRGINIA B 077 - BROC | 945.5066 | 27.7476 | 28.40274 | 101.9276 | 960.8286 | 27.94758 | 0 |
| 810 VIRGINIA B 078 - INDIA | 908.7303 | 16.64856 | 26.13052 | 79.27699 | 811.3923 | 4.657929 | 0 |
| 810 VIRGINIA B 079 - PLEA! | 1157.86 | 23.30799 | 22.72219 | 83.80711 | 583.7355 | 13.97379 | 0 |
| 810 VIRGINIA B 080 - CHIM | 1070.071 | 35.51693 | 29.53885 | 72.48182 | 600.0801 | 17.46723 | 0 |
| GINIA B 081 - ROCK | 1290.729 | 16.64856 | 24.99441 | 93.99986 | 918.7996 | 11.64482 | 0 |
| 810 VIRGINIA B 082 - SHELI | 675.0229 | 16.64856 | 22.72219 | 70.21676 | 960.8286 | 26.78309 | 0 |
| 810 VIRGINIA B 083 - STRA' | 792.4698 | 19.97827 | 42.03606 | 125.7107 | 1398.63 | 20.96068 | 0 |
| 810 VIRGINIA B 084 - TALLI | 1163.792 | 23.30799 | 38.62773 | 92.86733 | 861.5936 | 22.12516 | 0 |
| 810 VIRGINIA B 085 - UPTC | 978.7239 | 24.41789 | 30.67496 | 110.9878 | 1609.942 | 24.45413 | 0 |
| 810 VIRGINIA B 086 - HAYG | 975.1649 | 7.769329 | 21.58608 | 54.36137 | 1149.959 | 31.44102 | 0 |
| 810 VIRGINIA B 087 - HILLC | 818.5691 | 13.31885 | 20.44997 | 67.95171 | 1039.049 | 26.78309 | 0 |
| 810 VIRGINIA B 088 - NORT | 724.8489 | 15.53866 | 21.58608 | 61.15654 | 998.1877 | 10.48034 | 0 |
| 810 VIRGINIA B 089 - LAKE | 863.6497 | 9.989137 | 30.67496 | 87.20469 | 1050.724 | 15.13827 | 0 |
| 810 VIRGINIA B 090 - LAKE | 523.1724 | 9.989137 | 14.76943 | 65.68665 | 849.9188 | 13.97379 | 0 |
| 810 VIRGINIA B 091 - LEXIN | 1163.792 | 22.19808 | 24.99441 | 75.87941 | 762.3585 | 12.80931 | 0 |
| 810 VIRGINIA B 092 - LITTL | 600.284 | 16.64856 | 21.58608 | 61.15654 | 935.1442 | 16.30275 | 0 |
| 810 VIRGINIA B 093 - NEW | 1678.66 | 13.31885 | 20.44997 | 48.69872 | 289.5328 | 17.46723 | 0 |
| 810 VIRGINIA B 094 - PINEI | 466.2285 | 15.53866 | 14.76943 | 50.96378 | 646.7789 | 9.315858 | 0 |
| 810 VIRGINIA B 095 - DAM | 545.7127 | 7.769329 | 6.816658 | 57.75895 | 767.0284 | 11.64482 | 0 |
| 810 VIRGINIA B 096 - HILLT | 807.8921 | 23.30799 | 12.49721 | 72.48182 | 619.9271 | 23.28965 | 0 |
| 810 VIRGINIA B 097 - INDIA | 1150.742 | 13.31885 | 18.17776 | 88.33722 | 661.956 | 25.61861 | 0 |
| 810 VIRGINIA B 098 - INDEI | 654.8553 | 12.20895 | 14.76943 | 57.75895 | 402.7775 | 8.151376 | 0 |
| 820 WAYNESBC 001 - WARI | 695.5337 | 16.21918 | 13.27465 | 47.69032 | 755.1046 | 14.18182 | 0 |
| 820 WAYNESBC 002 - WARI | 1063.048 | 23.31507 | 35.73944 | 112.7226 | 1319.548 | 26.18182 | 0 |
| 820 WAYNESBC 003 - WARI | 811.8216 | 20.27397 | 36.76056 | 70.45161 | 1036.249 | 13.09091 | 0 |
| 820 WAYNESBC 004 - WARI | 1193.597 | 14.19178 | 59.22535 | 105.1355 | 1690.098 | 30.54545 | 0 |
| 830 WILLIAMSE 001 - STRYY | 2479.748 | 44.8 | 47.25275 | 112.2 | 1056.769 | 38.85714 | 2361.453 |
| 830 WILLIAMSE 002 - MAT( | 2726.252 | 39.2 | 52.74725 | 118.8 | 868.2314 | 41.14286 | 2503.547 |
| 840 WINCHEST 101 - MERF | 1038.829 | 11.96703 | 16.41026 | 81.79272 | 985.6518 | 22.33766 | 0 |
| 840 WINCHEST 102 - OLD 1 | 744.3395 | 22.84615 | 25.16239 | 69.46779 | 792.7584 | 15.63636 | 0 |
| 840 WINCHEST 201 - VIRGI | 1142.016 | 30.46154 | 26.25641 | 78.43137 | 710.2491 | 8.935065 | 0 |
| 840 WINCHEST 301 - WAR | 971.5833 | 19.58242 | 16.41026 | 96.35854 | 861.8878 | 16.75325 | 0 |
| 840 WINCHEST 401 - FRED | 439.4154 | 6.527473 | 12.03419 | 29.13165 | 479.446 | 7.818182 | 0 |
| 840 WINCHEST 402 -ROLLI | 827.8168 | 7.615385 | 31.7265 | 44.81793 | 960.007 | 14.51948 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 453.211 | 0 | 1318.333 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 143.8403 | 0 | 642.9577 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 297.9548 | 0 | 798.5642 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 723.7676 | 0 | 669.9727 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 124.4332 | 0 | 395.5 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 198.6365 | 0 | 580.2828 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 37.67245 | 0 | 168.5738 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 376.7245 | 0 | 306.8907 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 358.4591 | 0 | 177.2186 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 450.9278 | 0 | 769.388 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 15.98225 | 0 | 252.8607 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 724.9092 | 0 | 1238.369 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 194.0702 | 0 | 446.2883 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 412.1138 | 0 | 495.9959 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 119.8669 | 0 | 416.0314 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1027.43 | 0 | 814.7732 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1322.451 | 0 | 866.7585 | 5.431034 |
| 0 | 0 | 0 | 0 | 0 | 0 | 612.2459 | 0 | 261.5793 | 2.172414 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1276.97 | 0 | 520.9418 | 2.172414 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1482.218 | 0 | 806.9056 | 7.603448 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1231.489 | 0 | 1156.047 | 8.689655 |
| 0 | 0 | 0 | 0 | 0 | 0 | 980.7597 | 0 | 690.525 | 6.517241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1909.041 | 0 | 780.3043 | 8.689655 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1470.556 | 0 | 553.085 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 464.1407 | 0 | 400.1277 | 3.258621 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1814.58 | 0 | 1151.614 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1216.329 | 0 | 891.143 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 426.8229 | 0 | 345.8167 | 3.258621 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1081.051 | 0 | 708.2592 | 3.258621 |
| 0 | 0 | 0 | 0 | 0 | 0 | 674.0536 | 0 | 458.8722 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 295.0442 | 0 | 250.4954 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 524.7822 | 0 | 679.4411 | 1.086207 |
| 0 | 0 | 0 | 0 | 0 | 0 | 485.132 | 0 | 630.6721 | 1.086207 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2479.304 | 0 | 1170.457 | 11.94828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1000.585 | 0 | 1273.536 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 580.759 | 0 | 472.1728 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 576.0943 | 0 | 653.9482 | 2.172414 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1041.401 | 0 | 897.7933 | 7.603448 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1779.595 | 0 | 1122.796 | 9.775862 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1231.489 | 0 | 1194.841 | 8.689655 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1736.446 | 0 | 1373.291 | 2.172414 |
| 0 | 0 | 0 | 0 | 0 | 0 | 535.2779 | 0 | 534.2425 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1155.687 | 0 | 1343.365 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1941.694 | 0 | 1594.969 | 4.344828 |
| 0 | 0 | 0 | 0 | 0 | 0 | 149.5551 | 15.90909 | 551.9508 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 47.28579 | 4.242424 | 215.1855 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 113.266 | 7.424242 | 315.2468 | 1.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.4587 | 10.60606 | 403.4728 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 78.07654 | 7.424242 | 351.8283 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 181.4455 | 13.78788 | 498.1544 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 167.1498 | 10.60606 | 351.8283 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 155.0534 | 22.27273 | 492.7748 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 96.77093 | 11.66667 | 185.0595 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 180.3458 | 26.51515 | 613.2787 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 373.8877 | 44.54545 | 599.2916 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 316.7048 | 35 | 409.9284 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 377.435 | 0 | 847.5893 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 441.8751 | 0 | 960.9755 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 346.3656 | 0 | 1008.126 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 333.7077 | 0 | 953.117 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 508.6166 | 0 | 1036.192 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 546.7058 | 0 | 504.6993 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 419.7721 | 0 | 929.9353 | 2.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 116.9127 | 0 | 563.7598 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 700.3624 | 0 | 1351.95 | 3.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 195.9679 | 0 | 642.1493 | 1.1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 229.3715 | 0 | 656.1091 | 1.1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.1546 | 0 | 1664.434 | 5.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 106.8916 | 0 | 369.3969 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 691.4548 | 0 | 1747.119 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 184.8333 | 0 | 445.6387 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 800.5733 | 0 | 1640.81 | 8.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 102.5406 | 0 | 474.243 | 1.214286 |
| 0 | 0 | 0 | 0 | 0 | 0 | 280.6373 | 0 | 739.1355 | 2.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 138.1599 | 0 | 221.0998 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 198.6049 | 0 | 1020.05 | 3.642857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 164.0649 | 0 | 598.1443 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 208.3192 | 0 | 695.3428 | 3.642857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 359.4316 | 0 | 1015.777 | 2.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 281.7167 | 0 | 750.8848 | 3.642857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 129.5249 | 0 | 287.3229 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1787.18 | 133.4913 | 339.5351 | 7.39645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1739.827 | 82.76458 | 544.0278 | 5.91716 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1023.428 | 42.7172 | 491.2969 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1594.715 | 82.76458 | 698.3619 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1486.262 | 113.4676 | 465.5746 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1319.764 | 66.74563 | 544.0278 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1632.902 | 46.72194 | 618.6226 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2043.801 | 118.8072 | 780.6734 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1962.843 | 153.515 | 596.7586 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2097.263 | 124.1469 | 814.1125 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1108.968 | 57.40124 | 443.7106 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1698.585 | 82.76458 | 643.0588 | 1.47929 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1295.324 | 60.07107 | 349.824 | 4.43787 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1289.214 | 73.4202 | 549.1722 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1845.225 | 90.77406 | 702.2202 | 10.35503 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1672.617 | 61.40598 | 672.6395 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1742.882 | 78.75985 | 663.6367 | 5.91716 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2216.409 | 137.496 | 944.0104 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1959.788 | 92.10897 | 690.6452 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1261.719 | 41.38229 | 646.9172 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2375.269 | 132.1564 | 962.016 | 10.35503 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1831.478 | 118.8072 | 583.8974 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1738.3 | 81.42967 | 564.6056 | 7.39645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2046.856 | 101.4534 | 711.2231 | 7.39645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1391.556 | 73.4202 | 469.4329 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2474.557 | 160.1895 | 652.0616 | 11.83432 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1606.935 | 102.7883 | 608.3336 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2277.509 | 186.8878 | 519.5915 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1664.98 | 45.38703 | 519.5915 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1903.27 | 132.1564 | 412.8438 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1677.2 | 72.08528 | 590.328 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 730.1471 | 41.38229 | 362.6852 | 5.91716 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1451.129 | 56.06633 | 671.3534 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1426.689 | 54.73142 | 589.0419 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1266.301 | 26.69825 | 817.9708 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1669.562 | 69.41546 | 779.3873 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1423.634 | 60.07107 | 627.6254 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1687.892 | 120.1421 | 339.5351 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 960.8002 | 61.40598 | 374.2602 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1955.206 | 105.4581 | 852.696 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1558.054 | 80.09476 | 594.1864 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1559.582 | 97.44862 | 472.0052 | 5.91716 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1584.022 | 117.4723 | 340.8212 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1374.754 | 58.73616 | 434.7078 | 2.95858 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1631.375 | 112.1327 | 488.7247 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2037.691 | 98.78354 | 861.6988 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1495.427 | 85.43441 | 378.1186 | 7.39645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1182.288 | 62.74089 | 643.0588 | 4.43787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1096.748 | 64.07581 | 407.6993 | 7.39645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1475.569 | 86.76932 | 581.3252 | 8.87574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 545.3191 | 10.6793 | 172.3398 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1454.184 | 90.77406 | 481.008 | 1.47929 |
| 0 | 0 | 0 | 0 | 0 | 0 | 299.2138 | 0 | 666.1632 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 338.8156 | 0 | 891.7818 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 489.5226 | 0 | 1440.324 | 4.780488 |
| 0 | 0 | 0 | 0 | 0 | 0 | 410.3189 | 0 | 1683.051 | 2.390244 |
| 0 | 0 | 0 | 0 | 0 | 0 | 265.1122 | 0 | 930.276 | 4.780488 |
| 0 | 0 | 0 | 0 | 0 | 0 | 482.9223 | 0 | 1451.017 | 2.390244 |
| 0 | 0 | 0 | 0 | 0 | 0 | 732.6338 | 0 | 1991.005 | 4.780488 |


| 0 | 0 | 0 | 0 | 0 | 0 | 168.3078 | 0 | 570.997 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.3083 | 0 | 820.1399 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 200.2092 | 0 | 677.9253 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 249.7115 | 0 | 798.7542 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 220.0102 | 0 | 775.23 | 2.390244 |
| 0 | 0 | 0 | 0 | 0 | 0 | 143.0066 | 0 | 568.8584 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 61.60284 | 0 | 268.39 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 408.1188 | 0 | 940.9689 | 2.390244 |
| 0 | 0 | 0 | 0 | 0 | 0 | 321.2148 | 0 | 1312.01 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 207.9096 | 0 | 636.2233 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 196.9091 | 0 | 681.1331 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 387.2179 | 0 | 1476.68 | 3.585366 |
| 0 | 0 | 0 | 0 | 0 | 0 | 258.5119 | 0 | 973.0473 | 2.390244 |
| 0 | 0 | 0 | 0 | 0 | 0 | 603.9279 | 0 | 2071.201 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 429.0198 | 0 | 1394.345 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 288.2133 | 0 | 1113.123 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 704.0325 | 0 | 1746.139 | 1.195122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 618.2285 | 0 | 1315.218 | 7.170732 |
| 0 | 0 | 0 | 0 | 0 | 0 | 105.0853 | 0 | 286.7384 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 10.28009 | 0 | 71.68461 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 114.2232 | 0 | 235.6903 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 54.82713 | 0 | 298.6859 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 15.99125 | 0 | 94.49335 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 122.2188 | 0 | 364.9398 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 99.37418 | 0 | 362.7676 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.5927 | 0 | 1479.77 | 3.576923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 182.5951 | 0 | 611.1623 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.8981 | 0 | 1034.108 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 269.9232 | 0 | 932.4282 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 187.1317 | 0 | 518.1359 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 200.7412 | 0 | 707.4339 | 4.769231 |
| 0 | 0 | 0 | 0 | 0 | 0 | 494.4812 | 0 | 1422.44 | 3.576923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 147.4371 | 0 | 457.5605 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 336.837 | 0 | 1025.455 | 2.384615 |
| 0 | 0 | 0 | 0 | 0 | 0 | 430.2129 | 0 | 2382.726 | 6.580645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 297.1424 | 0 | 974.6146 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.7293 | 0 | 637.1232 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.0693 | 0 | 684.0414 | 1.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 144.0347 | 0 | 552.7504 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 402.7525 | 0 | 1558.396 | 3.290323 |
| 0 | 0 | 0 | 0 | 0 | 0 | 254.0087 | 0 | 1014.643 | 1.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 493.1429 | 0 | 1970.561 | 2.193548 |
| 0 | 0 | 0 | 0 | 0 | 0 | 298.6318 | 0 | 1435.508 | 1.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 108.6974 | 0 | 382.8022 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 135.0136 | 0 | 526.353 | 1.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 202.5204 | 0 | 739.5043 | 4.387097 |
| 0 | 0 | 0 | 0 | 0 | 0 | 441.6547 | 0 | 1400.708 | 3.290323 |


| 0 | 0 | 0 | 0 | 0 | 0 | 489.7104 | 0 | 2131.512 | 6.580645 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 258.5854 | 0 | 997.2432 | 3.290323 |
| 0 | 0 | 0 | 0 | 0 | 0 | 291.4717 | 0 | 1093.602 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 80.52332 | 0 | 277.9977 | 2.384615 |
| 0 | 0 | 0 | 0 | 0 | 0 | 576.1387 | 0 | 1338.067 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 291.4717 | 0 | 1524.12 | 2.384615 |
| 0 | 0 | 0 | 0 | 0 | 0 | 246.1065 | 0 | 732.3131 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 176.9245 | 0 | 593.8551 | 1.192308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 691.8201 | 0 | 1285.063 | 3.576923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 65.77681 | 8.615385 | 301.5599 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 61.39168 | 6.461538 | 316.531 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 26.31072 | 5.384615 | 86.61828 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.6871 | 21.53846 | 542.1663 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 59.19912 | 6.461538 | 319.7391 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 36.17724 | 7.538462 | 146.5025 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 130.4573 | 28 | 614.8829 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.7298 | 0 | 1407.236 | 2.171429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 375.0756 | 0 | 1588.604 | 4.342857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 413.7197 | 0 | 1506.661 | 4.342857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.261 | 0 | 1511.031 | 1.085714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 351.2071 | 0 | 1306.72 | 6.514286 |
| 0 | 0 | 0 | 0 | 0 | 0 | 318.2459 | 0 | 1194.184 | 1.085714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 200.0403 | 0 | 823.8015 | 3.257143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 510.3301 | 0 | 1667.269 | 5.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 238.6844 | 0 | 895.9114 | 2.171429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 571.7061 | 0 | 1812.582 | 7.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 197.5272 | 0 | 189.6676 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 241.9154 | 0 | 378.1994 | 1.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 233.0377 | 0 | 483.8227 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.9577 | 0 | 110.1662 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.8434 | 0 | 232.8255 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 349.5566 | 0 | 219.1967 | 1.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 72.13073 | 0 | 89.72299 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 331.8013 | 0 | 364.5706 | 1.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 169.7846 | 0 | 168.0886 | 1.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 177.5526 | 0 | 156.7313 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 678.0288 | 0 | 442.9363 | 2.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 267.4385 | 0 | 122.6593 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 803.4253 | 0 | 321.4127 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 86.8415 | 8.7343 | 330.5442 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 172.5403 | 13.10145 | 748.4229 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 44.5634 | 1.091787 | 67.43544 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 147.402 | 10.91787 | 416.7731 | 1.666667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 158.8285 | 19.65217 | 479.7866 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 203.3919 | 16.37681 | 519.5846 | 1.666667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 178.2536 | 20.74396 | 453.2546 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 206.8199 | 26.2029 | 678.7764 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 12.56916 | 1.091787 | 65.22444 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 222.817 | 12.00966 | 346.0212 | 1.666667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 81.12824 | 6.550725 | 87.33443 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 141.6888 | 13.10145 | 406.8237 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 117.6931 | 12.00966 | 265.3198 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 156.5432 | 4.36715 | 391.3467 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 115.4078 | 29.47826 | 221.0998 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 203.3919 | 10.91787 | 525.112 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 129.1196 | 19.65217 | 410.1401 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 422.8256 | 0 | 545.3568 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 78.94186 | 0 | 180.3542 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 277.9186 | 0 | 339.2377 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 249.8023 | 0 | 451.9591 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.1163 | 0 | 404.7235 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 364.4302 | 0 | 733.2258 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 151.3953 | 0 | 343.5318 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 322.2558 | 0 | 328.5023 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 501.7674 | 0 | 407.9441 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 299.5465 | 0 | 411.1647 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 471.9655 | 0 | 1717.766 | 5.363636 |
| 0 | 0 | 0 | 0 | 0 | 0 | 456.4549 | 0 | 1852.786 | 3.218182 |
| 0 | 0 | 0 | 0 | 0 | 0 | 450.9154 | 0 | 1351.28 | 9.654545 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.1023 | 0 | 1859.216 | 6.436364 |
| 0 | 0 | 0 | 0 | 0 | 0 | 197.2062 | 0 | 611.8803 | 2.145455 |
| 0 | 0 | 0 | 0 | 0 | 0 | 190.5588 | 0 | 585.0905 | 1.072727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 699.085 | 0 | 1263.41 | 3.218182 |
| 0 | 0 | 0 | 0 | 0 | 0 | 245.9538 | 0 | 1099.456 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 490.7998 | 0 | 1902.08 | 7.509091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 456.4549 | 0 | 1980.306 | 3.218182 |
| 0 | 0 | 0 | 0 | 0 | 0 | 394.4124 | 0 | 1014.8 | 2.145455 |
| 0 | 0 | 0 | 0 | 0 | 0 | 402.1677 | 0 | 1146.606 | 6.436364 |
| 0 | 0 | 0 | 0 | 0 | 0 | 520.7131 | 0 | 1554.883 | 1.072727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.9307 | 0 | 747.9728 | 6.436364 |
| 0 | 0 | 0 | 0 | 0 | 0 | 484.1524 | 0 | 1131.604 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 186.1272 | 0 | 506.8641 | 1.072727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 410.4521 | 36.41905 | 813.153 | 3.405405 |
| 0 | 0 | 0 | 0 | 0 | 0 | 338.7333 | 29.59048 | 611.7904 | 4.540541 |
| 0 | 0 | 0 | 0 | 0 | 0 | 496.5146 | 28.45238 | 584.2818 | 2.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 497.618 | 54.62857 | 825.2568 | 5.675676 |
| 0 | 0 | 0 | 0 | 0 | 0 | 205.226 | 23.9 | 425.8325 | 2.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 646.5724 | 50.07619 | 857.1667 | 2.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1050.404 | 72.8381 | 700.9181 | 4.540541 |
| 0 | 0 | 0 | 0 | 0 | 0 | 364.1107 | 20.48571 | 246.4767 | 2.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 703.9474 | 39.83333 | 519.3616 | 2.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 417.0723 | 26.17619 | 561.1746 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 531.8223 | 58.04286 | 700.9181 | 7.945946 |
| 0 | 0 | 0 | 0 | 0 | 0 | 336.5266 | 37.55714 | 544.6695 | 4.540541 |


| 0 | 0 | 0 | 0 | 0 | 0 | 110.935 | 31.99531 | 407.9562 | 1.066667 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 124.2472 | 27.58216 | 637.0225 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 83.20122 | 16.5493 | 346.8719 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 126.4659 | 31.99531 | 474.4945 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 352.7732 | 37.51174 | 1075.521 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 114.263 | 28.68545 | 393.7759 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 168.6211 | 34.20188 | 586.8461 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 401.5846 | 61.78404 | 1267.5 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.5593 | 22.06573 | 478.8577 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 42.15528 | 18.75587 | 268.3348 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 270.6813 | 38.61502 | 958.8062 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 129.7939 | 24.2723 | 513.763 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 139.778 | 19.85915 | 439.5892 | 2.133333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 41.04593 | 6.619718 | 169.0728 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 77.65447 | 7.723005 | 331.6008 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 194.1362 | 29.78873 | 834.4559 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 100.9508 | 12.13615 | 462.4958 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 113.1537 | 19.85915 | 517.0354 | 2.133333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 778.0216 | 0 | 615.5673 | 3.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 931.2134 | 0 | 361.702 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 805.765 | 0 | 507.7307 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 331.6303 | 0 | 580.8929 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 326.0846 | 0 | 544.7201 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 228.4811 | 0 | 459.6076 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 275.0646 | 0 | 584.0846 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 256.2094 | 0 | 515.9946 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 252.882 | 0 | 443.649 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 321.6481 | 0 | 417.0513 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 717.9397 | 0 | 777.6452 | 10.19277 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1080.917 | 0 | 1349.045 | 10.19277 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1137.024 | 0 | 1918.191 | 6.795181 |
| 0 | 0 | 0 | 0 | 0 | 0 | 929.772 | 0 | 1781.822 | 1.13253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1076.023 | 0 | 764.1895 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1769.086 | 0 | 1702.93 | 6.795181 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1137.024 | 0 | 1202.532 | 3.39759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1112.978 | 0 | 2020.75 | 3.39759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1565.269 | 0 | 2010.607 | 4.53012 |
| 0 | 0 | 0 | 0 | 0 | 0 | 695.0389 | 0 | 929.7932 | 3.39759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1565.269 | 0 | 2007.226 | 5.662651 |
| 0 | 0 | 0 | 0 | 0 | 0 | 993.8942 | 0 | 1065.036 | 1.13253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 763.7413 | 0 | 1088.703 | 3.39759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1540.365 | 0 | 933.4029 | 8.108597 |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.6263 | 0 | 474.4763 | 2.26506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 785.8093 | 0 | 779.4733 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1708.912 | 0 | 876.6345 | 11.58371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1193.225 | 0 | 274.0165 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 596.0542 | 0 | 222.7067 | 5.791855 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1561.573 | 0 | 672.4868 | 6.950226 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1345.421 | 0 | 1575.577 | 6.795181 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1827.23 | 0 | 1231.437 | 8.108597 |
| 0 | 0 | 0 | 0 | 0 | 0 | 928.627 | 0 | 2250.663 | 2.26506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 592.7056 | 0 | 749.9974 | 1.158371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2657.687 | 0 | 788.2069 | 10.42534 |
| 0 | 0 | 0 | 0 | 0 | 0 | 291.3299 | 0 | 66.59366 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 617.2621 | 0 | 324.2347 | 1.158371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2661.072 | 0 | 588.3055 | 16.98795 |
| 0 | 0 | 0 | 0 | 0 | 0 | 382.8588 | 0 | 691.0457 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1450.765 | 0 | 1544.02 | 1.13253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 803.8177 | 0 | 2277.712 | 3.39759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 226.7178 | 0 | 815.9639 | 1.13253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 699.8614 | 0 | 2335.145 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1275.824 | 0 | 1961.784 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 481.0849 | 0 | 447.5967 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1161.971 | 0 | 2801.3 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 974.4482 | 0 | 1637.549 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1241.221 | 0 | 2092.788 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 740.0448 | 0 | 1920.299 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 978.913 | 0 | 1591.698 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1052.583 | 0 | 1975.976 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 333.7457 | 0 | 528.3825 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 628.4242 | 0 | 927.9444 | 1.158371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1818.3 | 0 | 2220.516 | 10.42534 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1121.787 | 0 | 1560.038 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1146.344 | 0 | 1122.267 | 9.266968 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1072.674 | 0 | 1322.048 | 1.158371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 769.0662 | 0 | 1335.148 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 562.568 | 0 | 878.8179 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1817.184 | 0 | 1322.048 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 656.3293 | 0 | 655.0196 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 678.6535 | 0 | 775.1065 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1032.491 | 0 | 1413.751 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1059.28 | 0 | 1080.782 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1539.249 | 0 | 2102.613 | 8.108597 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1076.023 | 0 | 1538.204 | 8.108597 |
| 0 | 0 | 0 | 0 | 0 | 0 | 571.4977 | 0 | 693.2291 | 3.475113 |
| 0 | 0 | 0 | 0 | 0 | 0 | 478.8525 | 0 | 719.4298 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 842.7358 | 0 | 876.6345 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 621.7269 | 0 | 727.0717 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 875.1058 | 0 | 1507.637 | 10.42534 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1247.919 | 0 | 2305.669 | 8.108597 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1172.017 | 0 | 1389.733 | 5.791855 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1204.387 | 0 | 1257.638 | 1.158371 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1017.98 | 0 | 2217.241 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1101.696 | 0 | 1326.415 | 6.950226 |


| 0 | 0 | 0 | 0 | 0 | 0 | 886.2678 | 0 | 774.0148 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 923.1027 | 0 | 1709.601 | 6.950226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 575.9625 | 0 | 1128.817 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 839.3872 | 0 | 375.5446 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1055.931 | 0 | 1872.264 | 5.791855 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1495.717 | 0 | 449.7801 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 954.3564 | 0 | 350.4355 | 4.633484 |
| 0 | 0 | 0 | 0 | 0 | 0 | 246.6816 | 0 | 589.5176 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 831.5737 | 0 | 1870.081 | 2.316742 |
| 0 | 0 | 0 | 0 | 0 | 0 | 479.9388 | 0 | 1187.032 | 5.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 659.6203 | 0 | 785.7501 | 12.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 420.833 | 0 | 716.2544 | 5.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 171.4067 | 0 | 342.9951 | 4.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 567.4153 | 0 | 974.0611 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 426.7436 | 0 | 708.4081 | 2.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 169.0425 | 0 | 273.4993 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 81 | 20 | 415 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 84 | 25 | 488 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 90 | 9 | 230 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 72 | 8 | 180 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 38 | 9 | 181 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 12 | 4 | 32 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 52 | 5 | 184 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 75 | 21 | 446 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1219.63 | 0 | 1559.493 | 17.21739 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1272.504 | 0 | 1172.385 | 12.91304 |
| 0 | 0 | 0 | 0 | 0 | 0 | 378.3437 | 0 | 1060.676 | 6.456522 |
| 0 | 0 | 0 | 0 | 0 | 0 | 330.1695 | 0 | 779.7463 | 10.76087 |
| 0 | 0 | 0 | 0 | 0 | 0 | 242.046 | 0 | 320.7467 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 415.9431 | 0 | 1018.647 | 8.608696 |
| 0 | 0 | 0 | 0 | 0 | 0 | 649.7643 | 0 | 1487.601 | 6.456522 |
| 0 | 0 | 0 | 0 | 0 | 0 | 563.9907 | 0 | 1358.196 | 6.456522 |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.5172 | 0 | 1322.804 | 6.456522 |
| 0 | 0 | 0 | 0 | 0 | 0 | 105.7483 | 0 | 205.7203 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 699.1134 | 0 | 1284.093 | 6.456522 |
| 0 | 0 | 0 | 0 | 0 | 0 | 294.9201 | 0 | 377.1539 | 2.152174 |
| 0 | 0 | 0 | 0 | 0 | 0 | 504.0667 | 0 | 1307.319 | 12.91304 |
| 0 | 0 | 0 | 0 | 0 | 0 | 300.795 | 0 | 681.3103 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 110.4482 | 0 | 387.1081 | 2.152174 |
| 0 | 0 | 0 | 0 | 0 | 0 | 379.577 | 0 | 655.2444 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 311.4478 | 0 | 689.6743 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.6602 | 0 | 424.9943 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 295.2265 | 0 | 591.7643 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 373.0885 | 0 | 486.3226 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 424.8332 | 25.49533 | 867.086 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 119.5569 | 8.11215 | 298.4864 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 48.75135 | 3.476636 | 131.6518 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 207.7736 | 15.06542 | 387.0109 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 29.01866 | 6.953271 | 165.6997 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 73.12703 | 5.794393 | 306.4309 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 146.2541 | 13.90654 | 523.2024 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 488.6743 | 16.2243 | 641.235 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.7176 | 4.635514 | 194.0729 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 269.2932 | 24.33645 | 657.124 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 134.9449 | 0 | 395.9673 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 241.0555 | 0 | 638.1931 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 257.2027 | 0 | 1024.206 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 402.528 | 0 | 351.7251 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 678.1848 | 0 | 1163.569 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 212.2211 | 0 | 381.5886 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 377.1538 | 0 | 609.4357 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 674.7247 | 0 | 588.4206 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 516.7122 | 0 | 817.3738 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 349.4728 | 0 | 457.9063 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 306.7979 | 0 | 249.9682 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 201.8407 | 0 | 75.21166 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1302.161 | 0 | 682.4352 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 451.7546 | 28.66667 | 708.2686 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 674.8014 | 39.41667 | 533.4716 | 7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 383.8216 | 41.80556 | 1017.001 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 450.6224 | 19.11111 | 834.2587 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1190.594 | 0 | 0 | 348.7686 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2452.442 | 0 | 0 | 561.9734 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2140.219 | 0 | 0 | 168.8385 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1308.487 | 0 | 0 | 236.6204 |
| 0 | 0 | 0 | 0 | 0 | 0 | 759.1818 | 0 | 0 | 186.0921 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2247.748 | 0 | 0 | 320.4234 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2197.222 | 0 | 0 | 394.3673 |
| 0 | 0 | 0 | 0 | 0 | 0 | 992.3776 | 0 | 0 | 274.8247 |
| 0 | 0 | 0 | 0 | 0 | 0 | 991.0821 | 0 | 0 | 255.1064 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1294.237 | 0 | 0 | 264.9655 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1421.199 | 0 | 0 | 338.9094 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2234.793 | 0 | 0 | 316.7262 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2198.518 | 0 | 0 | 501.5859 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1527.432 | 0 | 0 | 574.2974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1105.089 | 0 | 0 | 189.7893 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2237.384 | 0 | 0 | 574.2974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1599.982 | 0 | 0 | 292.0783 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1325.329 | 0 | 0 | 314.2614 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2442.078 | 0 | 0 | 455.9872 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1277.395 | 0 | 0 | 241.55 |
| 0 | 0 | 0 | 0 | 0 | 0 | 997.5597 | 0 | 0 | 150.3525 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1326.625 | 0 | 0 | 294.5431 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1669.941 | 0 | 0 | 232.9232 |


| 0 | 0 | 0 | 0 | 0 | 0 | 2054.714 | 0 | 0 | 173.7681 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 418.4569 | 0 | 0 | 66.54948 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2627.339 | 0 | 0 | 122.0074 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1887.59 | 0 | 0 | 389.4377 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1474.316 | 0 | 0 | 361.0926 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2018.439 | 0 | 0 | 289.6135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 502.6665 | 0 | 0 | 57.9227 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1799.494 | 0 | 0 | 363.5574 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1833.178 | 0 | 0 | 156.5145 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2049.532 | 0 | 0 | 353.6982 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1615.529 | 0 | 0 | 235.388 |
| 0 | 0 | 0 | 0 | 0 | 0 | 915.9412 | 0 | 0 | 125.7046 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1241.12 | 0 | 0 | 146.6553 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1745.082 | 0 | 0 | 272.3599 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2286.614 | 0 | 0 | 210.74 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1471.724 | 0 | 0 | 175.0005 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1321.443 | 0 | 0 | 94.89463 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2215.36 | 0 | 0 | 194.7189 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2591.064 | 0 | 0 | 311.7967 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2291.796 | 0 | 0 | 173.7681 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1796.903 | 0 | 0 | 289.6135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 936.6697 | 0 | 0 | 149.1201 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2074.884 | 0 | 1805.048 | 24.01911 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1645.326 | 0 | 0 | 385.7405 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1496.34 | 0 | 0 | 167.6061 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1672.532 | 0 | 0 | 241.55 |
| 0 | 0 | 0 | 0 | 0 | 0 | 729.3846 | 0 | 0 | 203.3456 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2290.501 | 0 | 0 | 158.9793 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1496.34 | 0 | 0 | 268.6627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 922.0152 | 0 | 1103.861 | 10.67516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1102.501 | 0 | 1158.483 | 6.671975 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1082.508 | 21.35402 | 784.176 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 589.0264 | 0 | 561.4575 | 1.334395 |
| 0 | 0 | 0 | 0 | 0 | 0 | 675.7714 | 0 | 843.4566 | 2.66879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 993.7138 | 24.91302 | 584.1185 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 682.767 | 0 | 959.0508 | 2.66879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1146.492 | 46.26704 | 660.6837 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1197.64 | 0 | 1360.455 | 12.00955 |
| 0 | 0 | 0 | 0 | 0 | 0 | 891.8614 | 41.5217 | 532.2517 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 679.9687 | 0 | 796.4567 | 1.334395 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1120.376 | 65.24839 | 673.0329 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 870.248 | 0 | 818.0513 | 6.671975 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1625.721 | 149.4781 | 833.5729 | 11.1974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.2356 | 15.42235 | 306.2609 |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 1066.839 | 67.62106 | 585.3534 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 637.2304 | 20.16768 | 423.5785 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2330.662 | 0 | 0 | 236.6204 |


| 0 | 0 | 0 | 0 | 0 | 0 | 2488.717 | 0 | 0 | 215.6696 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1874.811 | 0 | 1581.481 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 951.3966 | 0 | 1539.562 | 10.67516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 927.6117 | 0 | 867.5916 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2184.267 | 0 | 0 | 149.1201 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1348.649 | 0 | 0 | 80.10586 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1617.374 | 0 | 1417.617 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1126.286 | 0 | 1378.239 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1217.228 | 0 | 1520.508 | 12.00955 |
| 0 | 0 | 0 | 0 | 0 | 0 | 738.7315 | 0 | 845.9971 | 4.003185 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1992.528 | 0 | 0 | 122.0074 |
| 0 | 0 | 0 | 0 | 0 | 0 | 688.1566 | 24.91302 | 475.4453 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1598.299 | 110.3291 | 932.3667 | 9.953247 |
| 0 | 0 | 0 | 0 | 0 | 0 | 600.668 | 47.45338 | 296.3815 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 741.6944 | 51.01238 | 272.9179 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1821.591 | 97.27942 | 759.4775 | 11.1974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1183.055 | 90.16141 | 329.7244 | 9.953247 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1036.805 | 51.01238 | 843.4523 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1395.9 | 97.27942 | 428.5182 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2050.106 | 164.9005 | 748.3632 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2063.164 | 194.5588 | 1227.513 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1185.666 | 92.53408 | 560.655 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1450.744 | 115.0744 | 221.0512 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1292.742 | 125.7514 | 708.8457 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1858.153 | 144.7328 | 794.0554 | 18.66234 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1151.716 | 105.5838 | 416.169 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1787.64 | 112.7018 | 691.5568 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2039.66 | 125.7514 | 920.0175 | 13.68571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1785.029 | 110.3291 | 831.103 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1886.881 | 107.9564 | 815.0491 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1327.999 | 81.85707 | 759.4775 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1365.867 | 90.16141 | 668.0932 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1154.319 | 0 | 0 | 226.7612 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1402.429 | 64.06206 | 643.3948 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1641.391 | 125.7514 | 342.0736 | 1.244156 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1983.51 | 156.5961 | 339.6038 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1782.417 | 124.5651 | 592.7629 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 737.1578 | 0 | 0 | 103.5214 |
| 0 | 0 | 0 | 0 | 0 | 0 | 887.4395 | 0 | 0 | 105.9862 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1526.137 | 0 | 0 | 117.0778 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1513.422 | 142.3601 | 517.4327 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 344.7312 | 40.33537 | 101.2637 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1707.986 | 66.43473 | 647.0996 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1511.886 | 0 | 0 | 207.0428 |
| 0 | 0 | 0 | 0 | 0 | 0 | 660.7348 | 30.84469 | 128.432 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1113.847 | 96.09308 | 510.0231 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1333.103 | 0 | 0 | 186.0921 |


| 0 | 0 | 0 | 0 | 0 | 0 | 763.0684 | 0 | 0 | 115.8454 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1300.134 | 22.54035 | 230.9306 | 102.289 |
| 0 | 0 | 0 | 0 | 0 | 0 | 699.9088 | 39.14903 | 151.8955 | 1.244156 |
| 0 | 0 | 0 | 0 | 0 | 0 | 954.5398 | 106.7701 | 347.0133 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1637.473 | 109.1428 | 547.0708 | 11.1974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1001.549 | 75.9254 | 311.2005 | 1.244156 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1533.91 | 0 | 0 | 173.7681 |
| 0 | 0 | 0 | 0 | 0 | 0 | 996.2642 | 0 | 0 | 97.35943 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1394.594 | 73.55273 | 327.2545 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1075.979 | 79.4844 | 608.8169 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 755.2952 | 0 | 0 | 197.1837 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1271.849 | 86.60241 | 608.8169 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1691.011 | 131.6831 | 842.2174 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1907.774 | 109.1428 | 627.3408 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1089.037 | 79.4844 | 495.204 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 673.6767 | 0 | 0 | 124.4722 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1050.677 | 0 | 0 | 83.80305 |
| 0 | 0 | 0 | 0 | 0 | 0 | 995.0196 | 67.62106 | 660.6837 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1133.434 | 64.06206 | 608.8169 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1876.435 | 144.7328 | 573.0042 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1036.805 | 32.03103 | 813.8141 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1193.501 | 34.4037 | 826.1634 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2029.213 | 147.1055 | 723.6648 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1069.45 | 40.33537 | 393.9404 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 951.9282 | 54.57138 | 722.4298 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1064.227 | 42.70804 | 409.9944 | 1.244156 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1197.419 | 46.26704 | 937.3064 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 613.726 | 24.91302 | 484.0897 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1341.057 | 58.13038 | 1491.787 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 889.2498 | 53.38505 | 745.8934 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1260.097 | 123.3788 | 787.8808 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1006.772 | 67.62106 | 923.7223 | 6.220779 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1226.146 | 97.27942 | 363.0673 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2754.301 | 0 | 0 | 398.0645 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1083.814 | 58.13038 | 640.9249 | 9.953247 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1198.724 | 112.7018 | 479.15 | 3.732468 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1860.765 | 169.6458 | 612.5217 | 7.464935 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1544.761 | 124.5651 | 703.906 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 992.408 | 67.62106 | 501.3787 | 2.488312 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1738.02 | 135.2421 | 1029.926 | 11.1974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2099.726 | 187.4408 | 732.3092 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2214.064 | 0 | 0 | 203.3456 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1471.724 | 0 | 0 | 308.0995 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2392.848 | 0 | 0 | 402.9941 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1098.178 | 59.31672 | 419.8738 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1159.501 | 0 | 0 | 204.578 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2009.626 | 155.4098 | 780.4712 | 7.464935 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1246.302 | 0 | 0 | 204.578 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 2501.913 | 262.1799 | 980.5287 | 17.41818 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1755.446 | 0 | 0 | 197.1837 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1235.287 | 113.8881 | 549.5406 | 4.976623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1132.295 | 0 | 0 | 232.9232 |
| 0 | 0 | 0 | 0 | 0 | 0 | 822.654 | 36.77637 | 374.1816 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1684.482 | 125.7514 | 624.8709 | 8.709091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1808.563 | 0 | 0 | 236.6204 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1116.749 | 0 | 0 | 118.3102 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1276.099 | 0 | 0 | 237.8528 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1629.779 | 0 | 0 | 268.6627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 3255.672 | 0 | 0 | 335.2122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1754.995 | 126.9378 | 815.0491 | 11.1974 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1175.048 | 0 | 0 | 362.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1725.649 | 0 | 0 | 315.4938 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1944.594 | 0 | 0 | 269.8951 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1378.446 | 0 | 0 | 115.8454 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1679.01 | 0 | 0 | 343.839 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2136.332 | 0 | 0 | 241.55 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1143.955 | 0 | 0 | 119.5426 |
| 0 | 0 | 0 | 0 | 0 | 0 | 641.2884 | 0 | 0 | 54.2255 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2487.422 | 0 | 0 | 428.8744 |
| 0 | 0 | 0 | 0 | 0 | 0 | 728.089 | 0 | 0 | 62.85229 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1285.784 | 0 | 2172.155 | 9.340764 |
| 0 | 0 | 0 | 0 | 0 | 0 | 733.135 | 0 | 834.5647 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 591.8246 | 0 | 741.8353 | 2.66879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1668.645 | 0 | 0 | 304.4023 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1076.587 | 0 | 0 | 303.1699 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1149.137 | 0 | 0 | 124.4722 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1501.522 | 0 | 0 | 229.226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 930.4099 | 0 | 1374.428 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1988.642 | 0 | 0 | 635.9173 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1470.429 | 0 | 0 | 359.8602 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1370.673 | 0 | 0 | 252.6416 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1720.467 | 0 | 0 | 248.9444 |
| 0 | 0 | 0 | 0 | 0 | 0 | 871.6472 | 0 | 904.4293 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1301.175 | 0 | 1540.833 | 17.34713 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1561.116 | 0 | 0 | 444.8956 |
| 0 | 0 | 0 | 0 | 0 | 0 | 517.6717 | 0 | 814.2405 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1124.522 | 0 | 0 | 380.8109 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1724.353 | 0 | 0 | 214.4372 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1640.144 | 0 | 0 | 108.451 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1347.345 | 0 | 1816.48 | 18.68153 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1861.68 | 0 | 0 | 241.55 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1084.312 | 0 | 905.6996 | 4.003185 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1831.882 | 0 | 0 | 152.8173 |
| 0 | 0 | 0 | 0 | 0 | 0 | 765.3146 | 0 | 712.6192 | 8.006369 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1045.137 | 0 | 1312.185 | 9.340764 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1302.01 | 0 | 0 | 255.1064 |
| 0 | 0 | 0 | 0 | 0 | 0 | 975.1815 | 0 | 1558.616 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1791.721 | 0 | 0 | 160.2117 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2149.037 | 0 | 1180.077 | 14.67834 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1662.146 | 0 | 1455.725 | 17.34713 |
| 0 | 0 | 0 | 0 | 0 | 0 | 647.7891 | 0 | 691.0247 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.1063 | 0 | 382.35 | 2.66879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1015.756 | 0 | 979.375 | 4.003185 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1042.339 | 0 | 880.2943 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2054.714 | 0 | 0 | 332.7474 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1476.064 | 0 | 1272.806 | 6.671975 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1706.917 | 0 | 1764.399 | 18.68153 |
| 0 | 0 | 0 | 0 | 0 | 0 | 915.0196 | 0 | 971.7534 | 6.671975 |
| 0 | 0 | 0 | 0 | 0 | 0 | 857.656 | 0 | 1365.536 | 9.340764 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1653.751 | 0 | 1832.994 | 10.67516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 930.4099 | 0 | 688.4841 | 4.003185 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2518.514 | 0 | 0 | 241.55 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2269.772 | 0 | 0 | 248.9444 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1338.951 | 0 | 1092.429 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1345.946 | 0 | 1365.536 | 12.00955 |
| 0 | 0 | 0 | 0 | 0 | 0 | 677.1705 | 0 | 1061.942 | 13.34395 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1137.477 | 0 | 0 | 83.80305 |
| 0 | 0 | 0 | 0 | 0 | 0 | 926.2126 | 0 | 702.4571 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2513.332 | 0 | 0 | 226.7612 |
| 0 | 0 | 0 | 0 | 0 | 0 | 936.0063 | 0 | 743.1056 | 5.33758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1210.232 | 0 | 1148.32 | 8.006369 |
| 0 | 0 | 0 | 0 | 0 | 0 | 267.2305 | 0 | 318.8367 | 1.334395 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1004.563 | 0 | 858.6998 | 10.67516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1105.299 | 0 | 782.4838 | 12.00955 |
| 0 | 0 | 0 | 0 | 0 | 0 | 947.1992 | 0 | 483.9713 | 9.340764 |
| 0 | 0 | 0 | 0 | 0 | 0 | 419.7524 | 0 | 0 | 45.59872 |
| 0 | 0 | 0 | 0 | 0 | 0 | 245.9243 | 0 | 744.34 | 3.575342 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.9246 | 56.12227 | 1655.655 | 3.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 386.7935 | 0 | 660.118 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 244.7564 | 34.11354 | 709.8741 | 2.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 266.219 | 0 | 762.5501 | 2.383562 |
| 0 | 0 | 0 | 0 | 0 | 0 | 439.3211 | 0 | 817.1806 | 2.383562 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1050.55 | 0 | 1427.221 | 7.150685 |
| 0 | 0 | 0 | 0 | 0 | 0 | 717.4781 | 0 | 1336.17 | 3.575342 |
| 0 | 0 | 0 | 0 | 0 | 0 | 987.2786 | 0 | 1274.711 | 10.72603 |
| 0 | 0 | 0 | 0 | 0 | 0 | 347.109 | 53.9214 | 1165.529 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 732.9976 | 0 | 1489.818 | 3.575342 |
| 0 | 0 | 0 | 0 | 0 | 0 | 862.21 | 107.8428 | 1575.942 | 3.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 815.3703 | 0 | 1372.59 | 17.87671 |
| 0 | 0 | 0 | 0 | 0 | 0 | 808.2075 | 0 | 1098.3 | 5.958904 |
| 0 | 0 | 0 | 0 | 0 | 0 | 743.7419 | 0 | 1522.824 | 8.342466 |


| 0 | 0 | 0 | 0 | 0 | 0 | 353.3669 | 0 | 729.5442 | 7.150685 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 815.3703 | 0 | 1007.249 | 3.575342 |
| 0 | 0 | 0 | 0 | 0 | 0 | 621.9736 | 0 | 1397.629 | 2.383562 |
| 0 | 0 | 0 | 0 | 0 | 0 | 558.7018 | 0 | 1166.588 | 1.191781 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1020.705 | 0 | 2094.168 | 7.150685 |
| 0 | 0 | 0 | 0 | 0 | 0 | 458.4683 | 50.287 | 1124.301 | 2.533333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 571.2661 | 68.24664 | 1078.251 | 5.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 528.8153 | 65.85202 | 889.5567 | 2.533333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 397.8244 | 43.10314 | 1054.664 | 5.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 322.6259 | 39.51121 | 1169.228 | 3.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1428.032 | 0 | 1715.654 | 13.26316 |
| 0 | 0 | 0 | 0 | 0 | 0 | 856.0934 | 0 | 1213.842 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1039.888 | 0 | 1198.019 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 922.5979 | 0 | 1905.529 | 3.315789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1343.39 | 0 | 1726.956 | 4.421053 |
| 0 | 0 | 0 | 0 | 0 | 0 | 494.793 | 0 | 1383.915 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 707.4868 | 0 | 2253.836 | 3.315789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 373.8933 | 0 | 1168.855 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 323.5185 | 0 | 847.3391 | 3.315789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 77.24144 | 0 | 203.2323 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 276.502 | 0 | 718.3027 | 3.315789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 175.7523 | 0 | 607.5464 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.6913 | 0 | 508.6185 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 550.765 | 0 | 792.4986 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 247.3965 | 0 | 298.9343 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 242.9187 | 0 | 1047.346 | 8.842105 |
| 0 | 0 | 0 | 0 | 0 | 0 | 240.6798 | 0 | 522.5975 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 169.0356 | 0 | 562.3837 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 233.9632 | 0 | 666.6881 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 285.4575 | 0 | 950.5682 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.1106 | 0 | 478.51 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 246.277 | 0 | 768.8419 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 402.9988 | 0 | 1163.478 | 3.315789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 358.2212 | 0 | 1103.261 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.8882 | 0 | 875.297 | 1.105263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 594.4232 | 0 | 919.3844 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 488.0763 | 0 | 637.6549 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 420.9099 | 0 | 569.9108 | 2.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 351.2883 | 0 | 1248.898 | 1.19697 |
| 0 | 0 | 0 | 0 | 0 | 0 | 431.3286 | 0 | 1480.497 | 8.378788 |
| 0 | 0 | 0 | 0 | 0 | 0 | 590.2977 | 0 | 1444.783 | 5.984848 |
| 0 | 0 | 0 | 0 | 0 | 0 | 355.735 | 0 | 916.6524 | 3.590909 |
| 0 | 0 | 0 | 0 | 0 | 0 | 216.776 | 0 | 916.6524 | 5.984848 |
| 0 | 0 | 0 | 0 | 0 | 0 | 437.9987 | 0 | 1261.885 | 5.984848 |
| 0 | 0 | 0 | 0 | 0 | 0 | 633.6529 | 0 | 1651.49 | 5.984848 |
| 0 | 0 | 0 | 0 | 0 | 0 | 452.4504 | 0 | 1318.161 | 8.378788 |
| 0 | 0 | 0 | 0 | 0 | 0 | 260.1312 | 0 | 905.8301 | 4.787879 |


| 0 | 0 | 0 | 0 | 0 | 0 | 872.6623 | 0 | 1523.786 | 13.16667 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 667.003 | 0 | 1864.69 | 3.590909 |
| 0 | 0 | 0 | 0 | 0 | 0 | 611.4195 | 0 | 1372.273 | 3.590909 |
| 0 | 0 | 0 | 0 | 0 | 0 | 332.3899 | 0 | 719.6858 | 4.787879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 579.181 | 0 | 1279.201 | 15.56061 |
| 0 | 0 | 0 | 0 | 0 | 0 | 601.4144 | 0 | 1244.569 | 5.984848 |
| 0 | 0 | 0 | 0 | 0 | 0 | 650.328 | 0 | 1433.96 | 7.181818 |
| 0 | 0 | 0 | 0 | 0 | 0 | 808.1854 | 0 | 1650.407 | 9.575758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 680.3431 | 0 | 1515.128 | 10.77273 |
| 0 | 0 | 0 | 0 | 0 | 0 | 468.0138 | 0 | 965.353 | 4.787879 |
| 0 | 0 | 0 | 0 | 0 | 0 | 720.3633 | 0 | 1199.116 | 11.9697 |
| 0 | 0 | 0 | 0 | 0 | 0 | 956.0377 | 0 | 1986.982 | 16.75758 |
| 0 | 0 | 0 | 0 | 0 | 0 | 20.10732 | 1.109756 | 99.87463 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 96.06829 | 15.53659 | 385.3858 | 1.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 349.6439 | 42.17073 | 1239.748 | 2.4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 409.9659 | 37.73171 | 1571.94 | 3.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 75.96098 | 9.987805 | 265.9705 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 29.0439 | 4.439024 | 174.7806 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 207.7756 | 16.64634 | 438.5799 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 360.8146 | 32.18293 | 1165.928 | 3.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 282.6195 | 22.19512 | 580.7927 | 1.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 361.0134 | 47.35878 | 1072.803 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 298.4228 | 36.59542 | 922.7829 | 2.064516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 201.1839 | 32.29008 | 697.2138 | 1.032258 |
| 0 | 0 | 0 | 0 | 0 | 0 | 447.0754 | 44.12977 | 1044.741 | 8.258065 |
| 0 | 0 | 0 | 0 | 0 | 0 | 596.8457 | 71.03817 | 1557.399 | 2.064516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 420.2509 | 38.74809 | 1276.786 | 3.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 495.136 | 64.58015 | 1590.856 | 2.064516 |
| 0 | 0 | 0 | 0 | 0 | 0 | 570.0211 | 63.50382 | 1372.842 | 3.096774 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.8407 | 60.27481 | 1191.523 | 1.032258 |
| 0 | 0 | 0 | 0 | 0 | 0 | 488.4299 | 60.27481 | 1861.755 | 5.16129 |
| 0 | 0 | 0 | 0 | 0 | 0 | 415.7801 | 45.20611 | 1229.298 | 4.129032 |
| 0 | 0 | 0 | 0 | 0 | 0 | 379.5632 | 0 | 606.1783 | 3.461538 |
| 0 | 0 | 0 | 0 | 0 | 0 | 533.9037 | 0 | 1032.502 | 1.153846 |
| 0 | 0 | 0 | 0 | 0 | 0 | 222.9362 | 0 | 244.2477 | 3.461538 |
| 0 | 0 | 0 | 0 | 0 | 0 | 825.4357 | 0 | 1176.83 | 3.461538 |
| 0 | 0 | 0 | 0 | 0 | 0 | 418.4342 | 0 | 849.3158 | 3.461538 |
| 0 | 0 | 0 | 0 | 0 | 0 | 168.0596 | 0 | 391.9065 | 1.153846 |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.3108 | 0 | 810.4582 | 4.615385 |
| 0 | 0 | 0 | 0 | 0 | 0 | 525.9009 | 0 | 1466.596 | 2.307692 |
| 0 | 0 | 0 | 0 | 0 | 0 | 549.9094 | 0 | 1487.69 | 4.615385 |
| 0 | 0 | 0 | 0 | 0 | 0 | 331.5462 | 0 | 899.2755 | 2.307692 |
| 0 | 0 | 0 | 0 | 0 | 0 | 89.66521 | 11.9697 | 200.6726 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 49.31587 | 3.590909 | 118.1739 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 77.33624 | 8.378788 | 221.8547 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 57.16157 | 7.181818 | 131.552 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 40.34934 | 9.575758 | 166.1123 | 1 |


| 0 | 0 | 0 | 0 | 0 | 0 | 44.83261 | 8.378788 | 178.3756 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 17.93304 | 1.19697 | 123.7481 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 54.91994 | 3.590909 | 147.1599 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 106.4774 | 20.34848 | 366.7849 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 302.6201 | 43.09091 | 948.7354 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 147.9476 | 25.13636 | 628.7741 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.3304 | 35.90909 | 748.0628 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 126.6521 | 20.34848 | 285.401 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 153.5517 | 21.54545 | 693.4353 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 91.90684 | 16.75758 | 312.1574 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 259.2484 | 0 | 715.4 | 3.4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 423.4781 | 0 | 914.1223 | 2.266667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 770.7066 | 0 | 1548.929 | 2.266667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 644.0151 | 0 | 1506.977 | 2.266667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 925.5518 | 0 | 1725.571 | 6.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 308 | 0 | 152.0904 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 88 | 0 | 104.0619 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 285 | 0 | 57.03391 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 404 | 0 | 161.0958 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 275 | 0 | 374.2225 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 709 | 0 | 390.232 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 109 | 0 | 200.119 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 184 | 0 | 113.0672 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 130.0773 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 305.8539 | 0 | 477.9015 | 2.416667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 163.4928 | 0 | 240.5987 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 358.1271 | 0 | 462.5207 | 4.833333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 182.4001 | 0 | 410.8854 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 211.3172 | 0 | 335.0804 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 414.8491 | 0 | 463.6194 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 246.9075 | 0 | 135.1308 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 205.7563 | 0 | 404.2937 | 3.625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 685.1127 | 0 | 465.8166 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 491.5906 | 0 | 511.9588 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 279.1612 | 0 | 677.8511 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 448.215 | 0 | 972.2823 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 133.4635 | 0 | 554.8052 | 2.416667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 235.7855 | 0 | 562.4955 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 507.1614 | 0 | 676.7524 | 6.041667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 112.3318 | 0 | 227.4152 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 289.1709 | 0 | 837.1516 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 111.2196 | 0 | 647.0896 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 102.322 | 0 | 408.6882 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 622.8297 | 0 | 303.2203 | 1.208333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 385.932 | 0 | 205.4427 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 747.0816 | 66.08132 | 677.9913 | 3.46988 |
| 0 | 0 | 0 | 0 | 0 | 0 | 637.4798 | 57.27048 | 1011.001 | 2.313253 |


| 0 | 0 | 0 | 0 | 0 | 0 | 834.3157 | 57.27048 | 565.8997 | 4.626506 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 335.5157 | 28.63524 | 688.874 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 471.9587 | 50.66235 | 885.8506 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 530.1148 | 55.06777 | 1642.197 | 6.939759 |
| 0 | 0 | 0 | 0 | 0 | 0 | 359.0018 | 31.9393 | 704.1098 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 447.3543 | 39.64879 | 1137.241 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 469.722 | 29.73659 | 769.4059 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 432.8152 | 38.54744 | 1065.415 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 153.2188 | 17.62169 | 293.8325 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 143.1534 | 14.31762 | 427.6895 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 485.3794 | 57.27048 | 1443.044 | 10.40964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 466.3668 | 59.47319 | 1217.773 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1186.607 | 107.9328 | 2598.785 | 8.096386 |
| 0 | 0 | 0 | 0 | 0 | 0 | 617.3489 | 51.7637 | 1339.659 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 380.2511 | 48.45963 | 1711.846 | 3.46988 |
| 0 | 0 | 0 | 0 | 0 | 0 | 657.6108 | 90.31114 | 1863.116 | 5.783133 |
| 0 | 0 | 0 | 0 | 0 | 0 | 432.8152 | 40.75015 | 1854.41 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 361.2386 | 35.24337 | 879.321 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 152.1004 | 26.43253 | 330.8336 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 523.4045 | 60.57454 | 1449.574 | 3.46988 |
| 0 | 0 | 0 | 0 | 0 | 0 | 569.2583 | 58.37183 | 1138.329 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 231.5058 | 51.7637 | 1070.856 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 224.7955 | 27.53388 | 807.4953 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 372.4224 | 50.66235 | 1052.356 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 484.261 | 51.7637 | 1337.482 | 4.626506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 713.53 | 114.541 | 2082.946 | 4.626506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 532.3516 | 85.90572 | 1582.342 | 4.626506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 620.704 | 58.37183 | 909.7925 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 332.1605 | 34.14202 | 1009.913 | 1.156627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 477.5507 | 55.06777 | 1350.541 | 4.626506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 570.3767 | 47.35828 | 1133.976 | 4.626506 |
| 0 | 0 | 0 | 0 | 0 | 0 | 503.2735 | 53.96641 | 1252.597 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 693.3991 | 81.50029 | 1337.482 | 2.313253 |
| 0 | 0 | 0 | 0 | 0 | 0 | 307.5561 | 33.04066 | 740.0226 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1253.351 | 0 | 1544.923 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1526.46 | 0 | 662.2683 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1187.624 | 0 | 1767.525 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1113.964 | 0 | 367.6807 | 6.762215 |
| 0 | 0 | 0 | 0 | 0 | 0 | 685.6036 | 0 | 557.0584 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1282.815 | 0 | 976.7903 | 10.14332 |
| 0 | 0 | 0 | 0 | 0 | 0 | 533.7509 | 0 | 431.9141 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1308.88 | 0 | 1625.769 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 293.5064 | 0 | 523.8343 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 455.5581 | 0 | 355.4985 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 990.4423 | 0 | 895.9448 | 13.52443 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1067.502 | 0 | 1082 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 421.5612 | 0 | 472.8905 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 363.7666 | 0 | 502.7923 | 2.254072 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1211.422 | 0 | 1661.208 | 9.016287 |
| 0 | 0 | 0 | 0 | 0 | 0 | 562.0817 | 0 | 485.0727 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 787.5943 | 0 | 702.1372 | 3.381107 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1376.596 | 0 | 79.94214 | 5.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2146.336 | 0 | 202.6674 | 13.52443 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1118.497 | 0 | 594.7125 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 250.4436 | 0 | 256.9335 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 222.1129 | 0 | 382.0778 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1861.265 | 0 | 74.54065 | 6.36 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1384.806 | 0 | 530.4791 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1664.929 | 0 | 106.9496 | 1.06 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1062.458 | 0 | 192.2933 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 895.251 | 0 | 272.4381 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 735.9794 | 0 | 59.41646 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 411.3622 | 0 | 192.7001 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 860.1209 | 0 | 276.868 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 747.9312 | 0 | 475.1055 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1974.579 | 0 | 108.0299 | 5.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 412.4954 | 0 | 352.1761 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 283.3073 | 0 | 283.5128 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 60.06115 | 0 | 63.1259 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 199.4483 | 0 | 58.69602 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2286.473 | 0 | 199.8554 | 6.36 |
| 0 | 0 | 0 | 0 | 0 | 0 | 164.3182 | 0 | 134.0041 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1072.035 | 0 | 302.3399 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1351.942 | 0 | 1003.37 | 10.14332 |
| 0 | 0 | 0 | 0 | 0 | 0 | 602.4709 | 0 | 56.17556 | 2.12 |
| 0 | 0 | 0 | 0 | 0 | 0 | 593.8121 | 0 | 812.8844 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 754.7306 | 0 | 1206.037 | 3.381107 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1041.438 | 0 | 1115.224 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 516.7525 | 0 | 725.3942 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 847.6554 | 0 | 1554.891 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 907.7166 | 0 | 1048.776 | 6.762215 |
| 0 | 0 | 0 | 0 | 0 | 0 | 526.9516 | 0 | 666.6981 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 827.2573 | 0 | 1378.803 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 943.9799 | 0 | 1286.882 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 828.3905 | 0 | 1615.802 | 16.90554 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1242.019 | 0 | 1694.432 | 11.27036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 826.1241 | 0 | 719.8568 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1229.554 | 0 | 1788.567 | 3.381107 |
| 0 | 0 | 0 | 0 | 0 | 0 | 992.7087 | 0 | 1157.308 | 3.381107 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1528.726 | 0 | 817.3143 | 10.14332 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1050.503 | 0 | 1155.093 | 10.14332 |
| 0 | 0 | 0 | 0 | 0 | 0 | 981.3765 | 0 | 805.1321 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 528.0848 | 0 | 1022.197 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 613.077 | 0 | 767.4781 | 7.889251 |


| 0 | 0 | 0 | 0 | 0 | 0 | 932.6476 | 0 | 1534.956 | 12.39739 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 837.4564 | 0 | 1006.692 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 634.6083 | 0 | 1001.155 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 924.715 | 0 | 940.2437 | 10.14332 |
| 0 | 0 | 0 | 0 | 0 | 0 | 891.8514 | 0 | 1147.341 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 334.3026 | 0 | 926.9541 | 7.889251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 909.983 | 0 | 776.3379 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1101.499 | 0 | 1145.126 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1007.441 | 0 | 1421.994 | 3.381107 |
| 0 | 0 | 0 | 0 | 0 | 0 | 683.3372 | 0 | 809.562 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 616.4767 | 0 | 543.7687 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 367.1662 | 0 | 489.5026 | 1.127036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 832.9234 | 0 | 1872.735 | 4.508143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 734.3325 | 0 | 675.5579 | 2.254072 |
| 0 | 0 | 0 | 0 | 0 | 0 | 902.0504 | 0 | 1213.789 | 5.635179 |
| 0 | 0 | 0 | 0 | 0 | 0 | 374.7212 | 0 | 1101.905 | 4.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 755.052 | 0 | 151.2419 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 802.1726 | 0 | 933.3786 | 4.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 799.9288 | 0 | 468.8499 | 2.12 |
| 0 | 0 | 0 | 0 | 0 | 0 | 943.5345 | 0 | 909.612 | 4.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1221.771 | 0 | 472.0908 | 7.42 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.0454 | 0 | 446.1636 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1299.183 | 0 | 303.5641 | 4.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1118.554 | 0 | 442.9227 | 6.36 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1014.215 | 0 | 432.1197 | 1.06 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2400.908 | 0 | 352.1776 | 10.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 554.2284 | 0 | 339.214 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1979.066 | 0 | 284.1187 | 1.06 |
| 0 | 0 | 0 | 0 | 0 | 0 | 3148.107 | 0 | 405.1122 | 6.36 |
| 0 | 0 | 0 | 0 | 0 | 0 | 484.6693 | 0 | 1046.81 | 5.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 962.6072 | 0 | 500.1786 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 305.1622 | 0 | 419.1561 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 610.3244 | 0 | 944.1815 | 3.18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 257.9086 | 15.91716 | 271.6739 | 2.060606 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.746 | 31.83432 | 776.8346 | 7.212121 |
| 0 | 0 | 0 | 0 | 0 | 0 | 397.3784 | 47.75148 | 1241.626 | 7.212121 |
| 0 | 0 | 0 | 0 | 0 | 0 | 199.2427 | 25.46746 | 430.9686 | 13.39394 |
| 0 | 0 | 0 | 0 | 0 | 0 | 355.3161 | 29.71203 | 709.1888 | 5.151515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 670.7837 | 31.83432 | 307.6789 | 4.121212 |
| 0 | 0 | 0 | 0 | 0 | 0 | 299.9709 | 33.95661 | 913.217 | 4.121212 |
| 0 | 0 | 0 | 0 | 0 | 0 | 385.6015 | 0 | 380.3842 | 1.0625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 576.7544 | 0 | 803.2755 | 3.1875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 737.172 | 0 | 716.0814 | 3.1875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 303.208 | 0 | 380.3842 | 3.1875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 177.1046 | 29.71203 | 550.9852 | 10.30303 |
| 0 | 0 | 0 | 0 | 0 | 0 | 235.7705 | 33.95661 | 566.26 | 8.242424 |
| 0 | 0 | 0 | 0 | 0 | 0 | 400.6991 | 48.81262 | 843.3892 | 7.212121 |


| 0 | 0 | 0 | 0 | 0 | 00 | 318.5881 | 0 | 476.2977 | 4.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 245.7326 | 22.28402 | 367.6871 | 3.090909 |
| 0 | 0 | 0 | 0 | 0 | 0 | 199.2427 | 29.71203 | 676.4571 | 10.30303 |
| 0 | 0 | 0 | 0 | 0 | 0 | 224.7015 | 55.17949 | 1096.515 | 9.272727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.6525 | 9.550296 | 357.8676 | 1.030303 |
| 0 | 0 | 0 | 0 | 0 | 0 | 133.8688 | 16.9783 | 350.1758 |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 303.2916 | 37.14004 | 765.924 | 5.151515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 194.8151 | 11.67258 | 274.9471 | 2.060606 |
| 0 | 0 | 0 | 0 | 0 | 0 | 303.208 | 0 | 1021.261 | 2.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 199.2427 | 26.5286 | 741.9206 | 2.060606 |
| 0 | 0 | 0 | 0 | 0 | 0 | 126 | 0 | 338 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 82 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 63 | 0 | 189 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 96 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 265 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 83 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 895.223 | 0 | 1599.302 | 5.657895 |
| 0 | 0 | 0 | 0 | 0 | 00 | 752.3445 | 0 | 1223.253 | 3.394737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 805.924 | 0 | 1587.277 | 5.657895 |
| 0 | 0 | 0 | 0 | 0 | 0 | 908.6179 | 0 | 1498.731 | 6.789474 |
| 0 | 0 | 0 | 0 | 0 | 0 | 997.9169 | 0 | 802.3839 | 3.394737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1185.445 | 0 | 637.3158 | 3.394737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 226.5963 | 0 | 555.3283 | 2.263158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 598.3037 | 0 | 996.9674 | 1.131579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 522.3995 | 0 | 803.477 | 4.526316 |
| 0 | 0 | 0 | 0 | 0 | 0 | 248.9211 | 0 | 640.5953 | 1.131579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 280.1758 | 0 | 189.1177 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 261.1997 | 0 | 330.1361 | 2.263158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 369.4748 | 0 | 798.0112 | 2.263158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 196.4579 | 0 | 447.1049 | 1.131579 |
| 1680.65 | 13.28571 | 0 | 0 | 0 | 0 | 904.3878 | 75.02428 | 1716.308 | 5.368421 |
| 0 | 0 | 0 | 0 | 0 | 0 | 689.5198 | 87.91908 | 1187.946 | 4.026316 |
| 0 | 0 | 0 | 0 | 0 | 0 | 950.5176 | 70.33526 | 2440.92 | 8.052632 |
| 414.3902 | 1.47619 | 0 | 0 | 0 | 0 | 376.431 | 0 | 455.8445 | 0 |
| 409.5294 | 2.952381 | 489.8866 | 18.79297 | 318.3652 | 20 | 471.1704 | 0 | 441.0203 | 1.2 |
| 0 | 0 | 1424.195 | 78.48828 | 994.609 | 3.375 | 1249.443 | 103.1584 | 1258.781 | 8.052632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 732.0078 | 76.19653 | 1362.131 |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 838.8348 | 42.20116 | 1969.458 | 2.684211 |
| 0 | 0 | 0 | 0 | 0 | 0 | 976.0104 | 73.85202 | 1911.396 | 5.368421 |
| 0 | 0 | 561.4942 | 34.26953 | 394.0052 | 2 | 524.4235 | 43.37341 | 462.1724 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 324.1229 | 46.89017 | 837.252 | 2.684211 |
| 0 | 0 | 1368.5 | 85.12109 | 1078.152 | 2.25 | 1234.58 | 98.46936 | 1321.488 | 2.684211 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1040.349 | 110.1919 | 1905.59 | 2.684211 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1340.193 | 111.3642 | 2271.38 | 8.052632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 838.8348 | 73.85202 | 1765.08 | 1.342105 |
| 607.6103 | 2.952381 | 926.3517 | 40.90234 | 362.3944 | 4.125 | 961.2886 | 0 | 505.2585 | 1.2 |
| 1726.829 | 5.904762 | 0 | 0 | 0 | 0 | 737.7038 | 0 | 1954.325 | 3.6 |


| 194.4353 | 2.952381 | 312.5727 | 25.42578 | 135.4746 | 2.25 | 344.8512 | 0 | 197.6561 | 1.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1465.556 | 1.47619 | 0 | 0 | 0 | 0 | 1088.329 | 1.172254 | 1583.992 | 4.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 364.0347 | 16.90244 | 305.0455 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 227.3817 | 16.90244 | 542.303 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 224.0214 | 28.97561 | 451.5547 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 305.7891 | 21.73171 | 416.5674 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.7731 | 14.4878 | 521.5293 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 572.6157 | 61.43077 | 1543.54 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.3611 | 36.85846 | 792.2595 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 760.4152 | 97.17231 | 2201.48 | 10.17391 |
| 0 | 0 | 0 | 0 | 0 | 0 | 925.1719 | 87.12 | 1669.892 | 9.043478 |
| 0 | 0 | 0 | 0 | 0 | 0 | 798.436 | 80.41846 | 1899.829 | 5.652174 |
| 0 | 0 | 0 | 0 | 0 | 0 | 409.3761 | 64.15584 | 1123.364 | 3.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.142 | 25.66234 | 389.7167 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 385.6754 | 25.66234 | 692.1199 | 3.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 365.2066 | 42.77056 | 1263.917 | 2.133333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 461.0868 | 43.83983 | 1213.872 | 6.4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 578.5131 | 44.90909 | 1249.01 | 1.066667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 396.611 | 32.18898 | 840.78 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 634.5776 | 13.79528 | 541.4806 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 231.1675 | 17.24409 | 764.2416 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 123.516 | 12.64567 | 350.7058 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 624.379 | 37.93701 | 456.9456 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 363.7489 | 32.18898 | 1017.846 | 1.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.8626 | 12.07843 | 351.9345 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 100.1744 | 14.27451 | 350.8483 | 2.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 167.6832 | 16.47059 | 704.9553 | 1.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 64.24227 | 1.098039 | 106.4493 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 105.6187 | 6.588235 | 612.6268 | 1.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 233.0143 | 19.76471 | 814.6632 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 230.8366 | 19.76471 | 889.6123 | 1.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.1954 | 15.37255 | 574.6091 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 112.1518 | 9.882353 | 300.8823 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 82.75276 | 9.882353 | 233.5368 | 2.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 77.3085 | 3.294118 | 324.7791 | 1.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 166.5944 | 9.882353 | 569.178 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.8626 | 12.07843 | 232.4506 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 192.7268 | 12.07843 | 661.5065 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 14.15508 | 2.196078 | 98.84581 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 46.82064 | 3.294118 | 140.1221 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 926.447 | 0 | 1182.346 | 10.17163 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1055.291 | 0 | 1054.011 | 12.71454 |
| 0 | 0 | 0 | 0 | 0 | 0 | 784.1054 | 0 | 678.5119 | 6.357268 |
| 0 | 0 | 0 | 0 | 0 | 0 | 963.2594 | 0 | 849.6253 | 7.628722 |
| 0 | 0 | 0 | 0 | 0 | 0 | 714.1618 | 0 | 407.5825 | 8.900175 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1106.828 | 0 | 893.5919 | 6.357268 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1997.69 | 0 | 1665.978 | 10.17163 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1061.426 |  | 0 | 1061.14 |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- | ---: | :--- |


| 0 | 0 | 0 | 0 | 0 | 0 | 546.0515 |  | 0 | 589.3904 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 0 | 0 | 0 | 0 | 0 | 1094.557 |  | 0 | 1032.621 |
| 7.628722 |  |  |  |  |  |  |  |  |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 1094.557 |  | 0 | 1279.785 |


| 0 | 0 | 0 | 0 | 0 | 0 | 277.3213 | 0 | 318.5354 | 1.051282 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.6771 | 0 | 630.4347 | 1.051282 |
| 0 | 0 | 0 | 0 | 0 | 0 | 163.1973 | 0 | 513.196 | 1.051282 |
| 0 | 0 | 0 | 0 | 0 | 0 | 216.8356 | 0 | 785.2783 | 4.205128 |
| 0 | 0 | 0 | 0 | 0 | 0 | 374.3267 | 0 | 973.3027 | 4.205128 |
| 0 | 0 | 0 | 0 | 0 | 0 | 413.1288 | 0 | 1054.043 | 3.153846 |
| 0 | 0 | 0 | 0 | 0 | 0 | 338.9482 | 0 | 726.6589 | 1.051282 |
| 0 | 0 | 0 | 0 | 0 | 0 | 168.0833 | 0 | 468.2583 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 193.8561 | 0 | 400.742 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 86.28278 | 0 | 316.8911 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 161.36 | 0 | 286.3999 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 67.23333 | 0 | 227.5953 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 145.6722 | 0 | 376.7846 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 197.2178 | 0 | 165.5239 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 296.9472 | 0 | 149.1893 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 417.9672 | 0 | 313.6242 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 144.5517 | 0 | 190.5703 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 137.8283 | 0 | 274.4212 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 327.5447 | 0 | 473.7249 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 412.8909 | 0 | 742.4208 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 151.0858 | 0 | 411.1371 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 16.14657 | 0 | 52.8759 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 441.724 | 0 | 861.1218 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 243.3519 | 0 | 482.3577 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 326.3914 | 0 | 956.0826 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 200.6788 | 0 | 416.5326 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 99.18607 | 0 | 255.7467 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 297.3553 | 22.55172 | 898.4585 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 485.7657 | 42.5977 | 1366.011 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 540.879 | 43.85057 | 1483.531 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 242.6316 | 0 | 269.2589 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 57.71335 | 0 | 134.0614 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 502.9306 | 0 | 449.9009 | 2.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 244.9873 | 0 | 259.0338 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 123.6715 | 0 | 82.93627 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 332.1462 | 0 | 107.9308 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 262.6546 | 0 | 848.6766 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 289.7446 | 0 | 421.498 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 817.4094 | 0 | 497.6176 | 2.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 133.094 | 0 | 85.2085 | 2.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 636.0246 | 0 | 963.4241 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 216.7195 | 0 | 461.262 | 2.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 71.84723 | 0 | 298.7978 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 89.51458 | 0 | 194.2754 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 110.7154 | 0 | 256.7616 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 279.1441 | 0 | 464.6703 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 233.209 | 0 | 368.1007 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 96.58152 | 0 | 122.7002 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 240.276 | 0 | 588.5067 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 254.4099 | 0 | 366.9646 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 29.44559 | 0 | 180.642 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 77.73634 | 0 | 298.7978 | 1.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.393 | 0 | 942.974 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 126.3329 | 18.13333 | 289.1627 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 163.0843 | 13.6 | 529.9483 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 266.4475 | 28.33333 | 1029.111 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 396.2258 | 30.6 | 640.9956 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 389.3349 | 34 | 609.1107 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 321.5746 | 45.33333 | 902.6713 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 996.0494 | 62.4583 | 924.6905 | 1.060241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1231.06 | 87.22625 | 584.353 | 8.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1651.663 | 91.53372 | 987.8349 | 5.301205 |
| 0 | 0 | 0 | 0 | 0 | 0 | 109.818 | 6.461204 | 144.4829 | 2.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1010.326 | 82.91878 | 1316.4 | 1.060241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 542.501 | 41.99782 | 870.1081 | 3.180723 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1112.456 | 75.38071 | 1521.886 | 3.180723 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.1485 | 50.61276 | 1369.912 | 2.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 557.8755 | 52.7665 | 1207.235 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 153.7452 | 17.22988 | 464.4857 | 2.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 583.1337 | 60.30457 | 1216.867 | 5.301205 |
| 0 | 0 | 0 | 0 | 0 | 0 | 387.6576 | 34.45975 | 725.6252 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 373.3812 | 32.30602 | 1283.222 | 1.060241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 361.3013 | 35.53662 | 1054.19 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 186.6906 | 18.30674 | 613.2496 | 1.060241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 702.8353 | 48.45903 | 1260.747 | 1.060241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1033.388 | 52.7665 | 1045.628 | 2.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 505.1629 | 52.7665 | 790.9101 | 2.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1007.031 | 116.3017 | 689.2369 | 11.66265 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1484.74 | 96.91806 | 847.633 | 4.240964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1358.449 | 101.2255 | 783.4184 | 8.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 339.3377 | 44.15156 | 339.2672 | 7.421687 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1667.037 | 132.4547 | 1037.066 | 6.361446 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1199.213 | 90.45685 | 663.5511 | 8.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 809.6294 | 0 | 862.8473 | 2.26087 |
| 0 | 0 | 0 | 0 | 0 | 0 | 416.8824 | 0 | 500.9396 | 5.652174 |
| 0 | 0 | 0 | 0 | 0 | 0 | 262.1971 | 0 | 303.5355 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 588.0235 | 0 | 672.8723 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 96.54118 | 0 | 127.3575 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 515.6176 | 0 | 864.9699 | 10.17391 |
| 0 | 0 | 0 | 0 | 0 | 0 | 36.20294 | 0 | 85.96634 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 307.1765 | 0 | 321.5778 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 697.7294 | 0 | 673.9336 | 4.521739 |
| 0 | 0 | 0 | 0 | 0 | 0 | 141.0839 | 13.71429 | 480.8237 | 3.321429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 356.0688 | 63.2967 | 1327.117 | 3.321429 |


| 0 | 0 | 0 | 0 | 0 | 0 | 490.4344 | 56.96703 | 1100.72 | 3.321429 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 204.9075 | 25.31868 | 735.2506 | 3.321429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 371.7448 | 32.7033 | 596.1783 | 3.321429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 370.6251 | 47.47253 | 843.0586 | 1.107143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 482.5964 | 43.25275 | 1139.531 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 193.7104 | 35.86813 | 472.1991 | 7.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 254.1749 | 32.7033 | 615.5837 | 4.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 258.6538 | 32.7033 | 932.5392 | 1.107143 |
| 0 | 0 | 0 | 0 | 0 | 0 | 568.7148 | 0 | 854.8722 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 719.1563 | 0 | 462.5284 | 3.333333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 594.9281 | 0 | 449.8722 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 410.2952 | 0 | 743.267 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 447.9056 | 0 | 729.4602 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 362.004 | 22.10909 | 827.9346 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 349.5601 | 30.25455 | 1057.605 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 471.7365 | 16.29091 | 312.5761 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 272.6343 | 11.63636 | 115.3955 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 426.486 | 29.09091 | 1281.674 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 375.5792 | 18.61818 | 1217.814 | 4.571429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 272.1998 | 0 | 517.6196 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.6298 | 0 | 391.3432 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 371.382 | 0 | 638.2079 | 1.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 94.77403 | 0 | 348.1134 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 372.484 | 0 | 242.3142 | 1.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 152.0793 | 0 | 278.7183 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 493.7066 | 0 | 175.1943 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 198.3642 | 0 | 468.7017 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 479.3803 | 0 | 791.7874 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 587.0209 | 0 | 1145.231 | 3.391304 |
| 0 | 0 | 0 | 0 | 0 | 0 | 647.2854 | 0 | 949.1222 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 512.2483 | 0 | 1198.321 | 4.521739 |
| 0 | 0 | 0 | 0 | 0 | 0 | 392.8353 | 0 | 1104.059 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 888.3434 | 0 | 1191.82 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.2019 | 0 | 423.6379 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 406.2274 | 0 | 1306.668 | 1.130435 |
| 0 | 0 | 0 | 0 | 0 | 0 | 642.8213 | 0 | 1037.967 | 7.913043 |
| 0 | 0 | 0 | 0 | 0 | 0 | 736.5661 | 0 | 1201.571 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 735.4501 | 0 | 1448.603 | 5.652174 |
| 0 | 0 | 0 | 0 | 0 | 0 | 590.541 | 0 | 1441.581 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 612.4129 | 0 | 1649.666 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 470.8212 | 0 | 1794.467 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.694 | 0 | 1386.878 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 430.5309 | 0 | 1675.408 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 125.2714 | 21.06335 | 400.0439 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 84.64286 | 13.30317 | 401.131 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 89.15714 | 18.84615 | 406.5663 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 54.17143 | 11.08597 | 248.9403 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 187.3429 | 14.41176 | 687.0319 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 126.4 | 14.41176 | 539.1896 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 283.2714 | 23.28054 | 734.8632 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 80.12857 | 18.84615 | 545.712 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 176.0571 | 34.36652 | 465.2684 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 182.8286 | 22.17195 | 642.4618 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 69.97143 | 11.08597 | 289.1622 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.8857 | 23.28054 | 451.1364 | 20 |
| 0 | 0 | 0 | 0 | 0 | 0 | 156.8714 | 18.84615 | 530.493 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 376.4332 | 0 | 1989.444 | 9.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 210.6645 | 0 | 597.808 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 191.0945 | 0 | 805.7412 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 164.6176 | 0 | 425.6133 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 184.1875 | 0 | 677.9489 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 78.27969 | 0 | 177.6096 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 126.6289 | 0 | 460.2688 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 135.8383 | 0 | 518.75 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 385.6426 | 0 | 1215.11 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 470.8293 | 0 | 330.3106 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 405.2125 | 0 | 310.8168 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 759.7735 | 0 | 254.5016 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 246.3508 | 0 | 201.4353 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 261.316 | 0 | 282.6592 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 171.5246 | 0 | 760.2558 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 438.5965 | 0 | 1330.989 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 526.0856 | 0 | 1336.404 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.2012 | 0 | 1073.239 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 466.2247 | 0 | 1142.55 | 3.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.3274 | 0 | 617.3017 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 292.3977 | 0 | 918.3717 | 3.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 332.6887 | 0 | 632.4635 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 255.5602 | 0 | 663.8701 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 477.7364 | 0 | 505.7542 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 86.3379 | 0 | 348.7213 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 204.9086 | 0 | 1121.973 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 99.00079 | 0 | 204.6842 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 547.9579 | 0 | 1614.731 | 4.571429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.5828 | 0 | 752.6749 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 390.0043 | 0 | 1503.584 | 6.439024 |
| 0 | 0 | 0 | 0 | 0 | 0 | 321.047 | 0 | 928.2996 | 1.073171 |
| 0 | 0 | 0 | 0 | 0 | 0 | 228.3503 | 0 | 845.4935 | 2.146341 |
| 0 | 0 | 0 | 0 | 0 | 0 | 269.0464 | 0 | 1210.494 | 4.292683 |
| 0 | 0 | 0 | 0 | 0 | 0 | 405.8305 | 0 | 1474.166 | 3.219512 |
| 0 | 0 | 0 | 0 | 0 | 0 | 396.787 | 0 | 1159.285 | 4.292683 |
| 0 | 0 | 0 | 0 | 0 | 0 | 288.264 | 0 | 916.3145 | 2.146341 |
| 0 | 0 | 0 | 0 | 0 | 0 | 510.9621 | 0 | 1900.181 | 1.073171 |
| 0 | 0 | 0 | 0 | 0 | 0 | 222.6981 | 0 | 694.0456 | 1.073171 |


| 0 | 0 | 0 | 0 | 0 | 0 | 522.2666 | 0 | 849.8518 | 1.073171 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 274.6987 | 0 | 475.0453 | 16.09756 |
| 0 | 0 | 0 | 0 | 0 | 0 | 139.045 | 0 | 538.2394 | 1.073171 |
| 0 | 0 | 0 | 0 | 0 | 0 | 551.5315 | 0 | 587.7193 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 593.6249 | 0 | 821.2719 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 433.8858 | 0 | 404.6053 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 233.1327 | 0 | 211.6228 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 436.0445 | 0 | 506.5789 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 238.5293 | 0 | 423.2456 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 154.3425 | 0 | 264.2544 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 713.4292 | 0 | 583.3333 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 516.9933 | 0 | 591.0088 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 496.4863 | 0 | 231.3596 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 333.5628 | 0 | 623.4799 | 1.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 663.602 | 0 | 1988.879 | 4.96 |
| 0 | 0 | 0 | 0 | 0 | 0 | 762.2614 | 0 | 912.873 | 3.72 |
| 0 | 0 | 0 | 0 | 0 | 0 | 660.0784 | 0 | 515.0972 | 3.72 |
| 0 | 0 | 0 | 0 | 0 | 0 | 158.5598 | 0 | 462.5819 | 2.48 |
| 0 | 0 | 0 | 0 | 0 | 0 | 824.5108 | 0 | 1546.409 | 2.48 |
| 0 | 0 | 0 | 0 | 0 | 0 | 543.8013 | 0 | 1137.46 | 3.72 |
| 0 | 0 | 0 | 0 | 0 | 0 | 203.1914 | 0 | 453.6431 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1086.428 | 0 | 988.8526 | 2.48 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1023.004 | 0 | 587.7248 | 6.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 453.4695 | 63.22921 | 1519.752 | 7.078947 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1375.166 | 150.4855 | 1752.472 | 9.910526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 909.6223 | 78.40422 | 1263.889 | 8.494737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 744.6023 | 84.72714 | 1483.751 | 2.831579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1329.551 | 111.2834 | 1551.896 | 8.494737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1194.047 | 130.2522 | 497.5838 | 11.32632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1557.628 | 97.37298 | 1647.041 | 14.15789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1467.739 | 150.4855 | 1499.18 | 14.15789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1271.861 | 106.2251 | 1109.599 | 9.910526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 994.8785 | 11.38126 | 984.8519 | 2.96681 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1588.485 | 126.4584 | 1869.475 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1164.977 | 3.793752 | 1374.138 | 15.5102 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1456.34 | 0 | 0 | 109.679 |
| 0 | 0 | 0 | 0 | 0 | 0 | 886.8147 | 103.6959 | 1528.752 | 11.32632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1100.133 | 98.63756 | 1380.892 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1027.685 | 115.0772 | 924.4516 | 14.15789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1073.254 | 0 | 1373.118 | 6.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 661.4215 | 69.55213 | 1095.456 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1597.876 | 122.6647 | 1270.317 | 2.831579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 532.6255 | 63.22921 | 1116.028 | 4.247368 |
| 0 | 0 | 0 | 0 | 0 | 0 | 456.1528 | 60.70004 | 1184.172 | 1.415789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 838.1156 | 60.70004 | 1167.458 | 23.31265 |
| 0 | 0 | 0 | 0 | 0 | 0 | 888.1065 | 0 | 1116.03 | 6.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2041.14 | 0 | 1466.739 | 23.26531 |


| 0 | 0 | 0 | 0 | 0 | 0 | 865.3487 | 48.0542 | 473.1547 | 1.415789 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 464.2025 | 65.75837 | 941.1663 | 4.247368 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1401.51 | 0 | 0 | 117.2431 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1420.233 | 0 | 0 | 80.6834 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2318.911 | 0 | 0 | 223.14 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1024.386 | 0 | 0 | 71.85865 |
| 0 | 0 | 0 | 0 | 0 | 0 | 193.1941 | 36.67294 | 270.0067 | 2.831579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1037.077 | 67.02296 | 1074.884 | 2.831579 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1100.133 | 74.61046 | 1080.027 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 868.0319 | 82.19797 | 995.1677 | 7.078947 |
| 0 | 0 | 0 | 0 | 0 | 0 | 587.6321 | 63.22921 | 702.0175 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 739.2358 | 53.11253 | 885.8792 | 7.078947 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1179.289 | 58.17087 | 659.5879 | 5.663158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2120.988 | 0 | 0 | 147.4993 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1645.867 | 26.55627 | 145.2893 | 162.1424 |
| 0 | 0 | 0 | 0 | 0 | 0 | 830.4664 | 70.81671 | 556.7282 | 1.415789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 834.4913 | 55.6417 | 703.3033 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 871.5486 | 0 | 1656.955 | 20.16327 |
| 0 | 0 | 0 | 0 | 0 | 0 | 779.7274 | 0 | 1542.528 | 13.95918 |
| 0 | 0 | 0 | 0 | 0 | 0 | 948.3172 | 0 | 1069.962 | 7.755102 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1313.452 | 139.1043 | 765.0191 | 9.910526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1521.404 | 153.0147 | 889.7365 | 8.494737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 289.0109 | 0 | 441.3592 | 6.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1022.075 | 0 | 1588.596 | 9.306122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 800.9506 | 74.61046 | 723.8752 | 15.57368 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1467.634 | 0 | 1398.381 | 10.85714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1065.728 | 0 | 1533.612 | 4.653061 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1487.863 | 106.2251 | 599.1578 | 14.15789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 546.4113 | 0 | 1141.293 | 10.85714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1016.054 | 0 | 1619.803 | 7.755102 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1012.928 | 61.96462 | 857.5928 | 1.415789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1036.422 | 0 | 0 | 142.4566 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1353.367 | 0 | 0 | 182.7983 |
| 0 | 0 | 0 | 0 | 0 | 0 | 990.9533 | 0 | 0 | 181.5376 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1066.593 | 91.05006 | 865.3073 | 7.078947 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1905.679 | 0 | 0 | 260.9604 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1335.982 | 0 | 0 | 196.6658 |
| 0 | 0 | 0 | 0 | 0 | 0 | 892.1812 | 59.43545 | 551.5852 | 1.415789 |
| 0 | 0 | 0 | 0 | 0 | 0 | 822.4166 | 87.2563 | 1198.316 | 7.078947 |
| 0 | 0 | 0 | 0 | 0 | 0 | 647.2641 | 0 | 1058.073 | 7.755102 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1051.835 | 77.13963 | 965.5955 | 8.494737 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1779.971 | 0 | 0 | 107.1576 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1394.824 | 0 | 0 | 308.8661 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1590.072 | 0 | 0 | 359.2933 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1527.218 | 0 | 0 | 85.72611 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2125 | 0 | 0 | 211.7939 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1289.175 | 0 | 0 | 68.07662 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1434.943 | 0 | 0 | 81.94408 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1441.63 | 0 | 0 | 142.4566 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1525.881 | 0 | 0 | 113.461 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1757.237 | 0 | 0 | 117.2431 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1602.108 | 0 | 0 | 118.5037 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1787.995 | 0 | 0 | 165.1488 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1646.24 | 0 | 0 | 492.9251 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1202.25 | 0 | 0 | 64.29458 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1521.869 | 0 | 0 | 263.4817 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1691.708 | 0 | 0 | 112.2004 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1108.637 | 0 | 0 | 64.29458 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1650.251 | 0 | 0 | 71.85865 |
| 0 | 0 | 0 | 0 | 0 | 0 | 961.5323 | 0 | 0 | 100.8542 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1656.938 | 0 | 0 | 160.1061 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1386.8 | 0 | 0 | 94.55086 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1722.467 | 0 | 0 | 103.3756 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1734.503 | 0 | 0 | 92.0295 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1479.075 | 0 | 0 | 75.64069 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1826.778 | 0 | 0 | 98.33289 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1369.415 | 0 | 0 | 165.1488 |
| 0 | 0 | 0 | 0 | 0 | 0 | 181.3581 | 13.97688 | 422.0809 | 2.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 681.9932 | 56.98266 | 1102.338 | 2.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 262.8063 | 26.87861 | 740.2485 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 248.6886 | 30.10405 | 803.4535 | 1.055556 |
| 0 | 0 | 0 | 0 | 0 | 0 | 74.93237 | 5.375723 | 176.7598 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 524.5266 | 53.75723 | 1152.688 | 4.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 423.5308 | 26.87861 | 1188.04 | 1.055556 |
| 0 | 0 | 0 | 0 | 0 | 0 | 66.24456 | 6.450867 | 297.8134 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 207.4215 | 22.57803 | 704.8966 | 1.055556 |
| 0 | 0 | 0 | 0 | 0 | 0 | 576.6535 | 59.13295 | 1492.281 | 2.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 139.005 | 4.300578 | 590.2705 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 755.8396 | 65.58382 | 1550.13 | 5.277778 |
| 0 | 0 | 0 | 0 | 0 | 0 | 428.6653 | 0 | 529.166 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 293.6713 | 0 | 628.585 | 10.28571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 413.2713 | 0 | 430.8159 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.0119 | 0 | 448.9893 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 94.73267 | 0 | 296.1191 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 235.6475 | 0 | 268.3246 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 351.7425 | 29.90769 | 393.7022 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 138.0672 | 8.861538 | 577.645 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 129.301 | 9.969231 | 475.4545 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 140.2587 | 11.07692 | 590.5533 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.6306 | 12.18462 | 577.645 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 123.7295 | 21.12159 | 485.8227 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 113.6974 | 22.23325 | 441.657 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 348.895 | 56.69479 | 1104.142 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 422.4639 | 42.24318 | 706.6512 | 2.285714 |


| 0 | 0 | 0 | 0 | 0 | 0 | 683.2991 | 76.70471 | 1592.12 | 3.428571 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 558.4549 | 61.14144 | 1614.741 | 2.285714 |
| 0 | 0 | 0 | 0 | 0 | 0 | 152.7112 | 34.46154 | 604.316 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 282.0141 | 41.13151 | 853.152 | 1.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 481.7358 | 0 | 1068.256 | 5.60241 |
| 0 | 0 | 0 | 0 | 0 | 0 | 396.1939 | 0 | 678.5919 | 3.361446 |
| 0 | 0 | 0 | 0 | 0 | 0 | 641.564 | 0 | 1706.996 | 4.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 630.9091 | 72.25806 | 1117.069 | 3.428571 |
| 0 | 0 | 0 | 0 | 0 | 0 | 667.4517 | 0 | 1888.545 | 4.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 355.6741 | 0 | 544.6447 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 153.8259 | 20.00993 | 367.3293 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 632.5596 | 0 | 1840.943 | 3.361446 |
| 0 | 0 | 0 | 0 | 0 | 0 | 496.3679 | 0 | 905.5272 | 7.843373 |
| 0 | 0 | 0 | 0 | 0 | 0 | 807.02 | 0 | 1610.687 | 20.16867 |
| 0 | 0 | 0 | 0 | 0 | 0 | 900.4407 | 0 | 1806.626 | 3.361446 |
| 0 | 0 | 0 | 0 | 0 | 0 | 477.2336 | 0 | 733.942 | 1.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 119.3084 | 0 | 411.8046 | 1.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 433.3371 | 0 | 1145.747 | 4.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 549.2688 | 0 | 1316.225 | 4.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 761.9979 | 0 | 2128.764 | 1.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 491.8657 | 0 | 1549.802 | 4.481928 |
| 0 | 0 | 0 | 0 | 0 | 0 | 399.5706 | 0 | 933.2023 | 2.240964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 400.6961 | 0 | 794.8271 | 2.240964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 471.6058 | 0 | 1054.972 | 2.240964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 596.542 | 0 | 813.6461 | 6.722892 |
| 0 | 0 | 0 | 0 | 0 | 0 | 299.3965 | 0 | 819.1811 | 1.120482 |
| 0 | 0 | 0 | 0 | 0 | 0 | 449.0948 | 0 | 764.938 | 2.240964 |
| 0 | 0 | 0 | 0 | 0 | 0 | 664.075 | 0 | 1491.131 | 6.722892 |
| 0 | 0 | 0 | 0 | 0 | 0 | 355.9163 | 0 | 561.987 | 5.555556 |
| 0 | 0 | 0 | 0 | 0 | 0 | 201.9462 | 0 | 486.0428 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 274.4683 | 0 | 92.21795 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 120.4983 | 0 | 296.1824 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 219.7978 | 0 | 433.9668 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 389.388 | 0 | 806.0934 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 159.5487 | 0 | 192.0303 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 191.9047 | 0 | 420.9478 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 178.516 | 0 | 505.5713 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 81.44792 | 0 | 244.1063 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 168.4745 | 0 | 522.93 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 207.5248 | 0 | 771.376 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 69.17495 | 0 | 286.4181 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 54.67052 | 0 | 317.8807 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 234.3022 | 0 | 414.4383 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 147.2757 | 0 | 298.3522 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.145 | 0 | 542.4585 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 514.3224 | 0 | 1319.103 | 5.730337 |
| 0 | 0 | 0 | 0 | 0 | 0 | 277.5359 | 0 | 721.9343 | 3.438202 |


| 0 | 0 | 0 | 0 | 0 | 0 | 159.6932 | 0 | 862.6955 | 3.438202 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 56.16797 | 0 | 304.9826 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 144.2746 | 0 | 679.2794 | 2.292135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 166.3012 | 0 | 565.1776 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 181.7199 | 0 | 662.2175 | 9.168539 |
| 0 | 0 | 0 | 0 | 0 | 0 | 131.0586 | 0 | 464.9385 | 2.292135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 262.1172 | 0 | 911.7487 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 599.125 | 0 | 1223.13 | 4.58427 |
| 0 | 0 | 0 | 0 | 0 | 0 | 263.2185 | 0 | 560.9121 | 3.438202 |
| 0 | 0 | 0 | 0 | 0 | 0 | 323.7918 | 0 | 976.7974 | 5.730337 |
| 0 | 0 | 0 | 0 | 0 | 0 | 546.261 | 0 | 1107.961 | 9.168539 |
| 0 | 0 | 0 | 0 | 0 | 0 | 227.9759 | 0 | 661.1511 | 3.438202 |
| 0 | 0 | 0 | 0 | 0 | 0 | 353.5278 | 0 | 1059.974 | 5.730337 |
| 0 | 0 | 0 | 0 | 0 | 0 | 186.1252 | 0 | 549.182 | 4.58427 |
| 0 | 0 | 0 | 0 | 0 | 0 | 313.8798 | 0 | 981.0629 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 636.5703 | 0 | 1002.39 | 4.58427 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.1466 | 0 | 339.1065 | 3.438202 |
| 0 | 0 | 0 | 0 | 0 | 0 | 725.7783 | 0 | 1258.32 | 6.876404 |
| 0 | 0 | 0 | 0 | 0 | 0 | 909.7008 | 0 | 1618.754 | 8.022472 |
| 0 | 0 | 0 | 0 | 0 | 0 | 294.0558 | 0 | 1003.457 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 63.8773 | 0 | 152.4913 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 392.0745 | 0 | 960.8018 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 255.5092 | 0 | 1304.174 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 364.5411 | 0 | 1019.452 | 2.292135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 322.6905 | 0 | 1619.82 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 442.7358 | 0 | 1291.377 | 2.292135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.9226 | 0 | 709.1379 | 2.292135 |
| 0 | 0 | 0 | 0 | 0 | 0 | 579.301 | 0 | 955.47 | 1.146067 |
| 0 | 0 | 0 | 0 | 0 | 0 | 173.4672 | 20.53462 | 660.8239 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 165.5308 | 16.21154 | 522.9699 | 3.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 136.0527 | 9.726923 | 362.1402 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 359.406 | 38.90769 | 1031.717 | 1.571429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 91.8356 | 6.484615 | 203.4987 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 69.16014 | 5.403846 | 184.8994 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 91.8356 | 6.484615 | 286.6488 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 208.6142 | 24.85769 | 614.8726 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 151.9256 | 16.21154 | 338.0705 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 47.61846 | 2.161538 | 82.05595 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 244.8949 | 22.69615 | 1040.469 | 3.142857 |
| 0 | 0 | 0 | 0 | 0 | 0 | 142.8554 | 17.29231 | 388.3981 | 1.571429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 546.4785 | 43.23077 | 1284.449 | 1.571429 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.3532 | 19.45385 | 775.7022 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 270.9717 | 31.34231 | 945.2845 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 172.7877 | 14.25503 | 546.322 | 2.153846 |
| 0 | 0 | 0 | 0 | 0 | 0 | 190.3966 | 8.315436 | 723.2684 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 103.4525 | 8.315436 | 456.7429 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 158.4804 | 11.87919 | 750.9162 | 4.307692 |


| 0 | 0 | 0 | 0 | 0 | 0 | 39.62011 | 8.315436 | 184.6878 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 128.7654 | 4.751678 | 500.9795 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 94.64804 | 7.127517 | 404.7649 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 127.6648 | 7.127517 | 346.1514 | 1.076923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 40.72067 | 3.563758 | 103.956 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.6872 | 45.14094 | 1287.285 | 1.076923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 163.9832 | 5.939597 | 201.2765 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 117.7598 | 4.751678 | 300.8089 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 46.22346 | 7.127517 | 202.3824 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 94.64804 | 13.06711 | 455.6369 | 1.076923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 72.63687 | 3.563758 | 320.7153 | 1.076923 |
| 0 | 0 | 0 | 0 | 0 | 0 | 195.8994 | 17.81879 | 655.8075 | 3.230769 |
| 0 | 0 | 0 | 0 | 0 | 0 | 50.6257 | 5.939597 | 149.2985 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 252.7032 | 0 | 665.3386 | 3.413793 |
| 0 | 0 | 0 | 0 | 0 | 0 | 588.1298 | 0 | 1735.29 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 356.9574 | 0 | 1333.923 | 3.413793 |
| 0 | 0 | 0 | 0 | 0 | 0 | 372.8222 | 0 | 1072.115 | 45.51724 |
| 0 | 0 | 0 | 0 | 0 | 0 | 330.8938 | 0 | 1181.382 | 2.275862 |
| 0 | 0 | 0 | 0 | 0 | 0 | 267.4348 | 0 | 1212.755 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 181.3117 | 0 | 629.6375 | 2.275862 |
| 0 | 0 | 0 | 0 | 0 | 0 | 917.8905 | 0 | 2092.3 | 7.965517 |
| 0 | 0 | 0 | 0 | 0 | 0 | 38.52874 | 0 | 89.79366 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 495.2076 | 0 | 1594.649 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 303.6971 | 0 | 1117.552 | 1.137931 |
| 0 | 0 | 0 | 0 | 0 | 0 | 922.4233 | 0 | 2118.265 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 495.3931 | 44.76761 | 1095.711 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 240.0918 | 35.58451 | 929.9193 | 1.272727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 172.7358 | 9.183099 | 317.7667 | 1.272727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 302.016 | 43.61972 | 1183.92 | 1.272727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 68.44247 | 9.183099 | 337.9592 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 283.5474 | 28.69718 | 802.3875 | 3.818182 |
| 0 | 0 | 0 | 0 | 0 | 0 | 192.2907 | 21.80986 | 376.2188 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 227.0552 | 24.10563 | 874.6555 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 248.7829 | 19.51408 | 527.1314 | 3.818182 |
| 0 | 0 | 0 | 0 | 0 | 0 | 277.029 | 34.43662 | 813.0151 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 123.8483 | 5.739437 | 447.424 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 183.5996 | 30.99296 | 969.2416 | 2.545455 |
| 0 | 0 | 0 | 0 | 0 | 0 | 164.0446 | 16.07042 | 517.5665 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 14.12305 | 2.295775 | 86.08395 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 99.44437 | 0 | 501.312 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 350.2171 | 0 | 471.4466 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 464.7943 | 0 | 343.452 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 117.82 | 0 | 133.3276 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 286.443 | 0 | 328.5193 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 237.8018 | 0 | 340.2522 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 256.1773 | 0 | 216.5241 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 285.3621 | 0 | 687.9707 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 188.0796 | 0 | 248.5227 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 355.6217 | 0 | 540.7769 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 67.01686 | 0 | 291.1876 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 268.0674 | 0 | 166.3929 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 229.1544 | 0 | 421.3154 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 436.3149 | 0 | 1331.521 | 6.018519 |
| 0 | 0 | 0 | 0 | 0 | 0 | 548.3739 | 0 | 1357.831 | 6.018519 |
| 0 | 0 | 0 | 0 | 0 | 0 | 889.3419 | 1.174603 | 1537.704 | 10.83333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 802.182 | 86.92063 | 1468.105 | 5.961538 |
| 0 | 0 | 0 | 0 | 0 | 0 | 855.9401 | 0 | 1341.816 | 1.203704 |
| 0 | 0 | 0 | 0 | 0 | 0 | 685.4674 | 0 | 1399.012 | 4.814815 |
| 0 | 0 | 0 | 0 | 0 | 0 | 522.1473 | 0 | 1408.164 | 6.018519 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1250.531 | 0 | 1567.168 | 12.03704 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1032.373 | 0 | 1531.707 | 7.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1227.881 | 0 | 1543.146 | 10.83333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1059.792 | 0 | 1930.934 | 7.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1120.906 | 81.04762 | 1529.372 | 4.769231 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1192.223 | 57.55556 | 1378.606 | 5.98433 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1381.138 | 109.2381 | 1809.121 | 7.153846 |
| 0 | 0 | 0 | 0 | 0 | 0 | 439.8912 | 0 | 1155.358 | 2.407407 |
| 0 | 0 | 0 | 0 | 0 | 0 | 343.3297 | 0 | 1092.442 | 3.611111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.3987 | 0 | 1245.727 | 3.611111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 785.6052 | 0 | 1480.231 | 3.611111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 625.8615 | 0 | 1684.992 | 1.203704 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1208.807 | 0 | 1514.548 | 15.64815 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1643.93 | 0 | 1894.329 | 8.425926 |
| 0 | 0 | 0 | 0 | 0 | 0 | 755.8023 | 0 | 1042.11 | 2.407407 |
| 0 | 0 | 0 | 0 | 0 | 0 | 954.9785 | 74 | 1152.52 | 2.384615 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1064.172 | 65.77778 | 1403.196 | 5.995726 |
| 0 | 0 | 0 | 0 | 0 | 0 | 696.4181 | 19.96825 | 691.7019 | 7.188034 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1320.196 | 22.31746 | 1698.636 | 8.41453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1013.343 | 134.1783 | 2689.634 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 730.1327 | 48.58178 | 1045.717 | 1.15625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 809.0014 | 65.93242 | 1471.708 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1122.086 | 99.47698 | 1809.329 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 797.0516 | 77.49951 | 1316.493 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1114.916 | 108.7307 | 1587.27 | 6.9375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 503.0865 | 84.43976 | 1504.564 | 4.625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 886.6751 | 62.46229 | 1803.664 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1110.136 | 84.43976 | 691.1024 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1432.781 | 126.0813 | 1364.077 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 544.9108 | 61.30558 | 1009.463 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 553.2757 | 61.30558 | 557.4137 | 3.46875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 512.6464 | 45.11166 | 329.6898 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1736.306 | 135.335 | 1285.904 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 917.7445 | 109.8874 | 1794.6 | 4.625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 683.5285 | 91.38002 | 1222.458 | 4.625 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1036.048 | 113.3575 | 2106.163 | 3.46875 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 836.4859 | 54.36533 | 1273.441 | 4.625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 850.8257 | 101.7904 | 1290.435 | 3.46875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1026.488 | 67.08913 | 879.1728 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 726.5478 | 67.08913 | 1460.379 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 996.6132 | 104.1038 | 1519.292 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 751.6423 | 78.65622 | 1885.237 | 3.46875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 822.1462 | 68.24584 | 544.9512 | 1.15625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1160.325 | 84.43976 | 1659.779 | 5.78125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1236.804 | 115.6709 | 1105.764 | 6.9375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1320.453 | 111.0441 | 1894.3 | 2.3125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 357.5484 | 0 | 523.1599 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 552.7742 | 0 | 314.3055 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 227.0323 | 0 | 223.1876 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 239.0968 | 0 | 177.1168 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 501.2258 | 0 | 346.0432 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 280.7742 | 0 | 260.0443 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 51.54839 | 0 | 6.142778 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 575.2677 | 0 | 187.4799 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 412.7627 | 0 | 176.7668 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 86.66933 | 0 | 67.49276 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 227.507 | 0 | 378.1737 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 30.33426 | 0 | 159.6257 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.0969 | 0 | 251.7587 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 84.50259 | 0 | 13.92708 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 346.6773 | 0 | 197.1217 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 170.0886 | 0 | 87.84772 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 209.0897 | 0 | 313.8949 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 130.004 | 0 | 163.911 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 65.84806 | 10.72052 | 293.7741 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 101.5623 | 6.432314 | 355.1597 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 82.58909 | 8.576419 | 188.5416 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 74.77661 | 12.86463 | 407.776 | 1.08 |
| 0 | 0 | 0 | 0 | 0 | 0 | 74.77661 | 5.360262 | 152.3679 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 22.32137 | 3.216157 | 75.63586 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 39.06241 | 8.576419 | 138.1177 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 101.5623 | 8.576419 | 361.7367 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 90.40157 | 12.86463 | 345.2942 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 40.17847 | 3.216157 | 160.0411 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 25.66958 | 1.072052 | 101.944 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 91.51764 | 11.79258 | 415.4492 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 44.64275 | 4.28821 | 122.7713 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 683.0341 | 115.7817 | 1706.74 | 3.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 121.6515 | 11.79258 | 413.2568 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 335.9367 | 35.37773 | 1668.374 | 12.96 |
| 0 | 0 | 0 | 0 | 0 | 0 | 88.16943 | 6.432314 | 309.1205 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 145.0889 | 18.22489 | 724.5697 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 120.5354 | 13.93668 | 525.0664 | 1.08 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 481.0256 | 60.03493 | 1780.183 | 4.32 |
| 0 | 0 | 0 | 0 | 0 | 0 | 56.91951 | 5.360262 | 195.1186 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 158.4818 | 19.29694 | 621.5295 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 188.6156 | 34.30568 | 1095.076 | 1.08 |
| 0 | 0 | 0 | 0 | 0 | 0 | 467.6328 | 72.89956 | 1816.357 | 3.24 |
| 0 | 0 | 0 | 0 | 0 | 0 | 378.9182 | 0 | 728.7033 | 5.849057 |
| 0 | 0 | 0 | 0 | 0 | 0 | 543.9126 | 0 | 1673.077 | 8.188679 |
| 0 | 0 | 0 | 0 | 0 | 0 | 570.0841 | 0 | 1332.144 | 12.86792 |
| 0 | 0 | 0 | 0 | 0 | 0 | 567.8083 | 0 | 1204.702 | 5.849057 |
| 0 | 0 | 0 | 0 | 0 | 0 | 549.602 | 0 | 987.943 | 3.509434 |
| 0 | 0 | 0 | 0 | 0 | 0 | 421.0202 | 0 | 1185.096 | 2.339623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 612.1861 | 0 | 1933.406 | 9.358491 |
| 0 | 0 | 0 | 0 | 0 | 0 | 357.2982 | 0 | 832.1813 | 2.339623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 723.6996 | 0 | 1327.787 | 5.849057 |
| 0 | 0 | 0 | 0 | 0 | 0 | 185.4765 | 0 | 553.3352 | 3.509434 |
| 0 | 0 | 0 | 0 | 0 | 0 | 164.9944 | 0 | 422.6261 | 2.339623 |
| 0 | 0 | 0 | 0 | 0 | 0 | 693.9579 | 71.1123 | 1543.733 | 3.441176 |
| 0 | 0 | 0 | 0 | 0 | 0 | 424.4709 | 25.64706 | 788.4064 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 138.7916 | 24.48128 | 552.4358 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 272.9568 | 24.48128 | 961.5251 | 3.441176 |
| 0 | 0 | 0 | 0 | 0 | 0 | 86.74474 | 15.15508 | 366.0852 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 292.6189 | 16.32086 | 833.6158 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 464.9518 | 59.45455 | 1487.497 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 592.1774 | 33.80749 | 1250.424 | 6.882353 |
| 0 | 0 | 0 | 0 | 0 | 0 | 371.2675 | 44.29947 | 1099.358 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 458.0122 | 61.7861 | 1281.298 | 3.441176 |
| 0 | 0 | 0 | 0 | 0 | 0 | 442.9765 | 59.45455 | 1710.236 | 3.441176 |
| 0 | 0 | 0 | 0 | 0 | 0 | 315.7509 | 45.46524 | 712.3225 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 33.5413 | 3.497326 | 149.9626 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 385.1467 | 37.30481 | 1402.592 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 68.2392 | 10.49198 | 295.5146 | 1.147059 |
| 0 | 0 | 0 | 0 | 0 | 0 | 256.7644 | 32.64171 | 1056.354 | 1.147059 |
| 0 | 0 | 0 | 0 | 0 | 0 | 226.6929 | 27.97861 | 1198.598 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 152.6707 | 24.48128 | 560.1545 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 371.2675 | 36.13904 | 1276.888 | 2.294118 |
| 0 | 0 | 0 | 0 | 0 | 0 | 505.0937 | 21.47826 | 478.8052 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 271.254 | 13.56522 | 346.2482 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.1262 | 14.69565 | 673.0698 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 160.1802 | 20.34783 | 451.3796 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 288.792 | 18.08696 | 597.6495 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 247.87 | 14.69565 | 425.0967 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 367.1283 | 50.86957 | 1259.292 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 487.5557 | 54.26087 | 1036.459 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 361.7144 | 19.93548 | 571.0497 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 140.9133 | 16.6129 | 485.8835 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 110.9553 | 4.430108 | 492.4348 | 0 |


| 0 | 0 | 0 | 0 | 0 | 0 | 321.7705 | 39.87097 | 1315.707 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.7476 | 16.6129 | 625.6433 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 605.8161 | 36.54839 | 1635.626 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 69.90186 | 11.07527 | 345.0319 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 479.327 | 55.37634 | 1263.297 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 367.2621 | 35.44086 | 1436.905 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 271.8406 | 35.44086 | 1132.272 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 326.2087 | 23.25806 | 1314.615 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 167.5425 | 14.39785 | 398.5337 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 58.16826 | 10.99206 | 463.6054 | 1.052632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 314.9866 | 47.26587 | 1305.751 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 645.3384 | 48.36508 | 1358.917 | 4.210526 |
| 0 | 0 | 0 | 0 | 0 | 0 | 612.413 | 47.26587 | 1440.792 | 3.157895 |
| 0 | 0 | 0 | 0 | 0 | 0 | 226.088 | 23.08333 | 920.8309 | 1.052632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 256.8184 | 21.98413 | 823.0059 | 3.157895 |
| 0 | 0 | 0 | 0 | 0 | 0 | 172.3098 | 15.38889 | 615.6595 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 198.6501 | 14.28968 | 938.9073 | 5.263158 |
| 0 | 0 | 0 | 0 | 0 | 0 | 91.09369 | 5.496032 | 449.7823 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 170.1147 | 25.28175 | 683.7116 | 1.052632 |
| 0 | 0 | 0 | 0 | 0 | 0 | 124.0191 | 17.5873 | 538.0375 | 1.052632 |
| 0 | 0 | 847.2645 | 47.71233 | 876.8749 | 3.333333 | 738.854 | 0 | 1058.444 | 1.19403 |
| 0 | 0 | 0 | 0 | 0 | 0 | 820.5653 | 0 | 1475.641 | 7.164179 |
| 0 | 0 | 1477.735 | 114.2877 | 924.1251 | 6.666667 | 1555.967 | 0 | 1290.22 | 13.13433 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1123.242 | 0 | 2188.628 | 13.13433 |
| 1011.069 | 3.5 | 0 | 0 | 0 | 0 | 606.5048 | 0 | 1078.31 | 5.970149 |
| 0 | 0 | 0 | 0 | 0 | 0 | 554.716 | 0 | 2499.87 | 3.58209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 642.1815 | 0 | 1556.21 | 4.776119 |
| 768.2356 | 5.833333 | 0 | 0 | 0 | 0 | 980.5353 | 0 | 1403.9 | 5.970149 |
| 1368.696 | 4.666667 | 0 | 0 | 0 | 0 | 653.6902 | 0 | 2144.48 | 4.776119 |
| 0 | 0 | 0 | 0 | 0 | 0 | 664.0479 | 0 | 2308.931 | 10.74627 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.7978 | 0 | 1049.614 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | ) 879.2593 | 0 | 2237.19 | 3.58209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1118.639 | 0 | 2049.562 | 5.970149 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1250.609 | 39.76676 | 564.3896 | 5.204301 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1155.153 | 38.48397 | 693.4302 | 10.4086 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1922.95 | 62.85714 | 870.6981 | 10.4086 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1628.282 | 74.40233 | 568.2999 | 13.01075 |
| 0 | 0 | 0 | 0 | 0 | 0 | ) 2144.296 | 107.7551 | 864.1809 | 6.505376 |
| 0 | 0 | 0 | 0 | 0 | 0 | O 2852.606 | 153.9359 | 783.3676 | 13.01075 |
| 0 | 0 | 0 | 0 | 0 | 0 | 3085.02 | 133.4111 | 920.2288 | 5.204301 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2776.518 | 118.0175 | 844.6293 | 18.21505 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1282.428 | 71.83673 | 656.9339 | 1.301075 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1839.945 | 89.79592 | 566.9965 | 11.70968 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1715.437 | 48.74636 | 556.569 | 7.806452 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1577.095 | 34.63557 | 779.4573 | 5.204301 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1911.882 | 82.09913 | 564.3896 | 13.01075 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1554.961 | 52.59475 | 686.913 | 5.204301 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1993.504 | 67.98834 | 933.2632 | 9.107527 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1597.847 | 85.94752 | 589.155 | 5.204301 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2000.421 | 110.3207 | 830.2914 | 6.505376 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2131.846 | 161.6327 | 685.6096 | 14.31183 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2378.094 | 103.9067 | 636.0788 | 9.107527 |
| 0 | 0 | 0 | 0 | 0 | 0 | 987.7597 | 61.57434 | 454.9006 | 3.903226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1740.339 | 97.49271 | 457.5075 | 10.4086 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2017.022 | 126.9971 | 428.8318 | 5.204301 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2826.321 | 183.4402 | 664.7545 | 20.8172 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2318.607 | 130.8455 | 512.252 | 14.31183 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2441.731 | 166.7638 | 439.2594 | 10.4086 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1756.94 | 100.0583 | 474.4523 | 2.602151 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1769.39 | 134.6939 | 894.16 | 3.903226 |
| 0 | 0 | 0 | 0 | 0 | 0 | 391.263 | 43.72105 | 813.3465 | 2.266667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 523.2139 | 48.20526 | 1099.297 | 7.933333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 415.3584 | 54.93158 | 679.8286 | 1.133333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 655.1647 | 66.14211 | 2069.527 | 5.666667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 322 | 0 | 951 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 298 | 0 | 768 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2280.32 | 0 | 573.86 | 10.84091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2305.158 | 0 | 516.474 | 6.022727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2053.234 | 0 | 342.0656 | 7.227273 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2320.533 | 0 | 742.6423 | 10.84091 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1981.087 | 0 | 339.8151 | 6.022727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2176.239 | 0 | 711.1363 | 3.613636 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1433.479 | 0 | 333.0638 | 3.613636 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1379.073 | 0 | 499.5958 | 3.613636 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1474.875 | 0 | 506.3471 | 1.204545 |
| 0 | 0 | 0 | 0 | 0 | 0 | 601.9359 | 0 | 1406.363 | 9.339901 |
| 0 | 0 | 0 | 0 | 0 | 0 | 352.0525 | 0 | 1542.536 | 8.172414 |
| 0 | 29.69626 | 2177.222 | 0 | 0 | 26.74505 | 2106.843 | 0 | 158.0406 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 490.3155 | 0 | 1000.187 | 1.144068 |
| 0 | 38.49515 | 1651.726 | 0 | 0 | 36.77444 | 1550.142 | 0 | 216.6151 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1573.158 | 0 | 1755.379 | 12.84236 |
| 0 | 0 | 0 | 0 | 0 | 0 | 770.5764 | 0 | 1413.229 | 3.502463 |
| 0 | 84.68932 | 1645.938 | 0 | 0 | 78.00639 | 1120.388 | 0 | 890.7741 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 993.3788 | 0 | 2229.125 | 16.34483 |
| 0 | 51.69348 | 768.5676 | 0 | 0 | 52.37572 | 498.468 | 0 | 469.701 | 3.432203 |
| 0 | 0 | 1200.308 | 0 | 0 | 92.49329 | 743.0434 | 0 | 897.4052 | 4.576271 |
| 0 | 39.59501 | 1459.584 | 0 | 0 | 36.77444 | 1339.342 | 0 | 234.2979 | 5.720339 |
| 0 | 0 | 1199.151 | 0 | 0 | 111.4377 | 789.6292 | 0 | 905.1415 | 5.720339 |
| 0 | 0 | 0 | 0 | 0 | 0 | 172.3334 | 0 | 378.7682 | 2.334975 |
| 0 | 0 | 1392.45 | 0 | 0 | 86.92141 | 1098.26 | 0 | 663.1073 | 4.576271 |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.9168 | 0 | 1638.659 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 284.3501 | 0 | 1130.583 | 5.837438 |
| 0 | 51.69348 | 1237.348 | 0 | 0 | 60.17636 | 1012.076 | 0 | 484.0683 | 6.864407 |
| 0 | 0 | 0 | 0 | 0 | 0 | 392.6739 | 0 | 972.6676 | 9.339901 |


| 0 | 0 | 0 | 0 | 0 | 0 | 797.591 | 0 | 1298.445 | 12.81894 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 766.3363 | 0 | 1137.229 | 3.432203 |
| 0 | 73.69071 | 936.4024 | 0 | 0 | 76.89201 | 592.8042 | 0 | 700.6834 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 950.2955 | 0 | 992.121 | 7.004926 |
| 0 | 70.39112 | 1432.962 | 0 | 0 | 65.74824 | 1074.967 | 0 | 680.7902 | 5.720339 |
| 0 | 52.79334 | 753.5204 | 0 | 0 | 53.4901 | 535.7366 | 0 | 444.2819 | 4.576271 |
| 0 | 29.69626 | 756.9928 | 0 | 0 | 33.43131 | 584.6517 | 0 | 282.9258 | 2.288136 |
| 0 | 0 | 0 | 0 | 0 | 0 | 902.5998 | 0 | 1326.215 | 10.29661 |
| 0 | 24.19695 | 0 | 0 | 0 | 0 | 59.08573 | 0 | 211.6982 | 3.502463 |
| 0 | 101.1872 | 1012.796 | 0 | 0 | 114.7808 | 538.0659 | 0 | 1007.923 | 6.864407 |
| 0 | 4.399445 | 944.5048 | 0 | 0 | 6.686262 | 914.2462 | 0 | 41.9968 | 3.432203 |
| 0 | 30.79612 | 1834.608 | 0 | 0 | 37.88882 | 1660.784 | 0 | 296.1879 | 6.864407 |
| 0 | 19.7975 | 2205.002 | 0 | 0 | 17.83003 | 2116.16 | 0 | 162.4613 | 9.152542 |
| 0 | 0 | 731.5282 | 0 | 0 | 75.77764 | 436.7418 | 0 | 623.3209 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 566.2382 | 0 | 2119.271 | 10.50739 |
| 0 | 0 | 0 | 0 | 0 | 0 | 858.3433 | 0 | 390.1281 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 353.2834 | 0 | 709.4752 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 508.3835 | 0 | 1056.203 | 7.004926 |
| 0 | 0 | 0 | 0 | 0 | 0 | 496.1387 | 0 | 1185.857 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 232.6501 | 0 | 583.6006 | 3.502463 |
| 0 | 0 | 1657.513 | 0 | 0 | 112.5521 | 1227.536 | 0 | 1044.394 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1366.357 | 0 | 1378.899 | 16.34483 |
| 0 | 0 | 1243.135 | 0 | 0 | 79.12077 | 963.1613 | 0 | 703.9989 | 4.576271 |
| 0 | 0 | 0 | 0 | 0 | 0 | 386.5191 | 0 | 1214.118 | 3.502463 |
| 0 | 0 | 0 | 0 | 0 | 0 | 690.6344 | 0 | 595.6914 | 5.720339 |
| 0 | 28.59639 | 534.7564 | 0 | 0 | 33.43131 | 412.3691 | 0 | 262.0481 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 643.7882 | 0 | 1067.646 | 7.004926 |
| 0 | 0 | 0 | 0 | 0 | 0 | 242.4977 | 0 | 820.4737 | 2.334975 |
| 0 | 27.49653 | 1871.647 | 0 | 0 | 28.9738 | 1670.403 | 0 | 343.2944 | 12.84236 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1326.967 | 0 | 1881.254 | 15.17734 |
| 0 | 0 | 1348.466 | 0 | 0 | 113.6665 | 987.224 | 0 | 936.0495 | 7.004926 |
| 0 | 0 | 0 | 0 | 0 | 0 | 497.3049 | 0 | 1812.595 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1010.612 | 0 | 900.5758 | 7.004926 |
| 0 | 0 | 909.7803 | 0 | 0 | 53.4901 | 669.6708 | 0 | 557.0101 | 3.432203 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1242.676 | 0 | 562.536 | 3.432203 |
| 0 | 34.0957 | 988.4891 | 0 | 0 | 36.77444 | 872.319 | 0 | 257.5067 | 2.288136 |
| 0 | 0 | 1195.678 | 0 | 0 | 93.60767 | 927.0573 | 0 | 645.4244 | 5.720339 |
| 0 | 0 | 1360.041 | 0 | 0 | 95.83642 | 1037.699 | 0 | 737.1543 | 3.432203 |
| 0 | 0 | 623.8825 | 0 | 0 | 32.31693 | 493.612 | 0 | 274.6356 | 4.669951 |
| 0 | 0 | 0 | 0 | 0 | 0 | 547.7739 | 0 | 764.4023 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 679.4859 | 0 | 1864.089 | 3.502463 |
| 0 | 0 | 0 | 0 | 0 | 0 | 413.6001 | 0 | 1285.066 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 611.7835 | 0 | 1499.052 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 276.9643 | 0 | 1051.625 | 5.837438 |
| 0 | 0 | 0 | 0 | 0 | 0 | 472.3311 | 0 | 767.1542 | 1.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 354.2483 | 0 | 1003.112 | 3.75 |
| 0 | 0 | 0 | 0 | 0 | 0 | 515.5892 | 0 | 1130.971 | 1.25 |


| 0 | 0 | 0 | 0 | 0 | 0 | 577.5534 | 0 | 1299.513 | 1.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.278 | 0 | 1505.25 | 2.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 124.7078 | 14.98611 | 213.1703 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 177.8442 | 17.29167 | 227.096 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 210.3766 | 14.98611 | 179.9628 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 173.5065 | 24.20833 | 363.1393 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 148.5649 | 11.52778 | 400.6316 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 407.5909 | 0 | 75.57509 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 358.5909 | 0 | 233.4932 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 789.5682 | 0 | 383.5154 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1039.023 | 0 | 1028.724 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 497.7955 | 0 | 87.98294 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 874.2045 | 0 | 190.6297 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 637 | 0 | 344.0358 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 457.7045 | 0 | 417.3549 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 648.1364 | 0 | 547.0734 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1064.636 | 0 | 602.3447 | 2.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1067.977 | 0 | 733.1911 | 3.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 945.4773 | 0 | 563.9932 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 248.3409 | 0 | 14.66382 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 664.8409 | 0 | 739.959 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 623.6364 | 0 | 979.0922 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 357.4773 | 0 | 990.372 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 270 | 0 | 84 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 221 | 0 | 24 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 146 | 0 | 176 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 214 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 203 | 0 | 22 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 146 | 0 | 209 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 195 | 0 | 94 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1332.135 | 0 | 0 | 226.9094 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1216.805 | 0 | 0 | 193.2932 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1723.483 | 0 | 0 | 303.7464 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1448.762 | 0 | 0 | 189.6914 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1260.864 | 0 | 0 | 163.2787 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1326.952 | 0 | 0 | 168.081 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1955.132 | 138.459 | 588.6106 | 2.4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1583.641 | 84.68852 | 483.1295 | 4.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2075.226 | 104.8525 | 617.2598 | 4.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 286.4902 | 0 | 523.5826 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 316.8755 | 0 | 395.7701 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 550.1913 | 0 | 56.05809 | 1.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.8427 | 0 | 51.57344 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 488.3355 | 0 | 21.30207 | 1.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 398.2647 | 0 | 302.7137 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1434.656 | 111.2192 | 1289.944 | 6.947368 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1454.23 | 105.3033 | 1153.98 | 8.105263 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1268.853 | 98.2042 | 1137.985 | 5.789474 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1111.11 | 37.86186 | 397.6091 | 1.157895 |
| 0 | 0 | 0 | 0 | 0 | 0 | 655.1518 | 41.41141 | 340.4814 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 311.2201 | 37.26027 | 666.0777 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 179.1195 | 18.63014 | 392.6114 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 221.6604 | 24.10959 | 474.3109 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1404.033 | 0 | 212.39 | 5.339806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1849.102 | 0 | 110.0071 | 5.339806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1009.435 | 0 | 192.7848 | 2.135922 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2341.202 | 0 | 398.6398 | 6.407767 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1815.837 | 0 | 318.0405 | 4.271845 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1394.856 | 0 | 687.2724 | 4.271845 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1482.035 | 0 | 266.849 | 2.135922 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2071.637 | 0 | 263.5815 | 5.339806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2064.754 | 0 | 130.7016 | 6.407767 |
| 0 | 0 | 0 | 0 | 0 | 0 | 269.6368 | 0 | 256.451 | 3.5625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.4226 | 0 | 318.0405 | 4.271845 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1967.252 | 0 | 587.0678 | 9.61165 |
| 0 | 0 | 0 | 0 | 0 | 0 | 672.1922 | 0 | 508.6469 | 5.339806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 768.5474 | 0 | 202.5874 | 1.067961 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1220.499 | 0 | 382.3021 | 6.407767 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2133.579 | 0 | 212.39 | 2.135922 |
| 0 | 0 | 0 | 0 | 0 | 0 | 883.1747 | 0 | 1325.906 | 5.9375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 981.4322 | 0 | 1121.837 | 3.5625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 828.3333 | 0 | 750.8012 | 3.5625 |
| 0 | 0 | 233.2223 | 11.88 | 143.3427 | 0 | 1244.588 | 0 | 566.3734 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 918.5931 | 0 | 2099.624 | 4.75 |
| 0 | 0 | 1786.55 | 157.68 | 1173.89 | 25.65 | 1936.281 | 0 | 1183.938 | 6.407767 |
| 0 | 0 | 0 | 0 | 0 | 0 | 932.3034 | 0 | 965.7835 | 10.6875 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2288.436 | 0 | 702.5209 | 5.339806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2181.757 | 0 | 752.6232 | 11.74757 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1128.818 | 0 | 1741.684 | 5.9375 |
| 0 | 0 | 1504.228 | 100.44 | 843.7673 | 31.35 | 1625.42 | 0 | 863.7195 | 4.271845 |
| 0 | 0 | 0 | 0 | 0 | 0 | 531.0141 | 0 | 96.958 | 1.067961 |
| 0 | 0 | 0 | 0 | 0 | 0 | 994.5232 | 0 | 449.8312 | 10.67961 |
| 0 | 0 | 0 | 0 | 0 | 0 | 548.3069 | 0 | 508.6469 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1550.824 | 0 | 955.3802 | 3.15 |
| 0 | 0 | 0 | 0 | 0 | 0 | 744.6117 | 0 | 377.5558 | 3.15 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1356.296 | 0 | 1110.78 | 7.35 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1251.466 | 0 | 1178.631 | 6.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1161.767 | 0 | 1010.098 | 13.65 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1220.126 | 0 | 951.0028 | 5.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1384.394 | 0 | 1061.534 | 3.15 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1265.516 | 0 | 812.0185 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 518.316 | 0 | 534.4325 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 862.4081 | 0 | 165.707 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 443.1819 | 0 | 1041.43 | 2.222222 |


| 0 | 0 | 0 | 0 | 0 | 0 | 858.0525 | 0 | 897.671 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 473.6711 | 0 | 838.4116 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 912.4975 | 0 | 190.9471 | 2.222222 |
| 0 | 0 | 0 | 0 | 0 | 0 | 659.8729 | 0 | 421.4006 | 1.111111 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1389 | 0 | 1019 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1178.761 | 0 | 1830.991 | 9.648649 |
| 0 | 0 | 0 | 0 | 0 | 0 | 894.1576 | 0 | 1816.052 | 11.79279 |
| 0 | 0 | 0 | 0 | 0 | 0 | 694.6078 | 0 | 1217.459 | 3.216216 |
| 0 | 0 | 0 | 0 | 0 | 0 | 505.9623 | 0 | 470.5518 | 4.288288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 624.8199 | 0 | 606.0622 | 4.288288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1775.23 | 0 | 731.9694 | 8.576577 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1425.2 | 0 | 520.7013 | 9.648649 |
| 0 | 0 | 0 | 0 | 0 | 0 | 546.3085 | 0 | 183.5259 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 332.583 | 0 | 338.2424 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 522.3189 | 0 | 602.8611 | 6.432432 |
| 0 | 0 | 0 | 0 | 0 | 0 | 185.3741 | 0 | 3032.445 | 13.93694 |
| 0 | 0 | 0 | 0 | 0 | 0 | 436.1744 | 0 | 901.6242 | 3.216216 |
| 0 | 0 | 0 | 0 | 0 | 0 | 393.6474 | 0 | 848.2736 | 7.504505 |
| 0 | 0 | 0 | 0 | 0 | 0 | 640.086 | 0 | 1982.506 | 7.504505 |
| 0 | 0 | 0 | 0 | 0 | 0 | 817.8271 | 0 | 2246.058 | 13.93694 |
| 0 | 0 | 0 | 0 | 0 | 0 | 420.9083 | 0 | 734.1035 | 2.144144 |
| 0 | 0 | 0 | 0 | 0 | 0 | 896.3385 | 0 | 1597.315 | 5.36036 |
| 0 | 0 | 0 | 0 | 0 | 0 | 912.695 | 0 | 1421.258 | 7.504505 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1752.364 | 0 | 1808.079 | 15.23077 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1379.072 | 0 | 1174.699 | 6.346154 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1508.05 | 0 | 1277.807 | 8.884615 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1612.224 | 0 | 1355.138 | 13.96154 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1793.29 | 0 | 1102.277 | 21.57692 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1089.463 | 0 | 654.2416 | 10.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 970.7719 | 0 | 707.8895 | 4.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 985.7646 | 0 | 673.8689 | 6.3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 485.4121 | 37.03346 | 41.06946 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 624.8858 | 62.0855 | 500.6035 | 1.083333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 457.9567 | 52.28253 | 240.8669 | 2.166667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 705.0557 | 67.5316 | 406.2547 | 5.416667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 463.4478 | 53.37175 | 1091.116 | 3.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 282.2419 | 20.69517 | 21.08973 | 0 |
| 0 | 0 | 1835.699 | 136.5663 | 562.1734 | 13.08475 | 1952.932 | 0 | 594.8515 | 7.621302 |
| 0 | 0 | 1988.311 | 119.4955 | 503.0538 | 15.26554 | 2080.368 | 0 | 488.3591 | 5.443787 |
| 0 | 0 | 1508.674 | 106.6924 | 851.3219 | 9.813559 | 1592.407 | 0 | 882.0583 | 7.621302 |
| 525.8232 | 6.5625 | 1345.162 | 80.01931 | 397.7135 | 4.361582 | 1398.53 | 0 | 384.0181 | 6.532544 |
| 0 | 0 | 342.286 | 32.00772 | 237.5532 | 6.542373 | 350.7217 | 0 | 261.3905 | 1.088757 |
| 433.5359 | 2.1875 | 1995.941 | 118.4286 | 892.1681 | 9.813559 | 2053.138 | 0 | 882.0583 | 11.97633 |
| 1231.929 | 6.5625 | 1687.448 | 100.2909 | 953.4375 | 6.542373 | 1674.097 | 0 | 1000.383 | 7.621302 |
| 283.3007 | 3.28125 | 1385.495 | 60.81467 | 506.2786 | 5.451977 | 1421.403 | 0 | 475.4509 | 4.35503 |
| 590.2097 | 2.1875 | 824.1025 | 55.48005 | 496.6044 | 0 | 823.4336 | 0 | 503.4187 | 4.35503 |
| 714.6903 | 4.375 | 1700.529 | 97.09009 | 568.6228 | 2.180791 | 1714.397 | 0 | 598.0786 | 2.177515 |


| 171.6974 | 2.1875 | 345.5562 | 30.9408 | 146.1866 | 2.180791 | 364.8813 | 0 | 144.1412 | 2.177515 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 830.643 | 87.48777 | 879.2693 | 8.723164 | 888.7855 | 0 | 920.7828 | 4.35503 |
| 0 | 0 | 1322.27 | 140.834 | 1421.02 | 8.723164 | 1340.803 | 0 | 1511.332 | 5.443787 |
| 0 | 0 | 997.4257 | 128.0309 | 756.7306 | 8.723164 | 1049.987 | 0 | 832.577 | 7.621302 |
| 0 | 0 | 866.6158 | 83.22008 | 1293.106 | 7.632768 | 872.4475 | 0 | 1339.223 | 2.177515 |
| 0 | 0 | 511.2488 | 48.01158 | 708.36 | 6.542373 | 491.2282 | 0 | 777.7173 | 1.088757 |
| 0 | 0 | 840.4538 | 112.027 | 809.4007 | 4.361582 | 876.8043 | 0 | 876.6799 | 3.266272 |
| 0 | 0 | 1381.135 | 116.2947 | 1459.716 | 6.542373 | 1449.722 | 0 | 1507.029 | 7.621302 |
| 65.45962 | 1.09375 | 1103.164 | 101.3578 | 721.2588 | 5.451977 | 1243.864 | 0 | 800.3066 | 6.532544 |
| 0 | 0 | 473.0959 | 32.00772 | 664.2891 | 3.271186 | 436.7683 | 0 | 723.9332 | 3.266272 |
| 0 | 0 | 310.6736 | 43.74389 | 492.3048 | 0 | 322.4026 | 0 | 523.8566 | 3.266272 |
| 0 | 0 | 583.1943 | 53.3462 | 408.4625 | 5.451977 | 595.7912 | 0 | 445.3319 | 4.35503 |
| 0 | 0 | 595.1852 | 37.34234 | 647.0906 | 5.451977 | 569.6505 | 0 | 698.1169 | 3.266272 |
| 0 | 0 | 803.391 | 54.41313 | 986.7595 | 5.451977 | 848.4851 | 0 | 979.9453 | 3.266272 |
| 1458.355 | 6.5625 | 1679.817 | 104.5586 | 1256.56 | 6.542373 | 1641.421 | 0 | 1333.844 | 6.532544 |
| 0 | 0 | 1118.425 | 77.88546 | 544.975 | 7.632768 | 1771.036 | 0 | 750.8253 | 8.710059 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1267.826 | 0 | 262.4661 | 3.266272 |
| 0 | 0 | 716.1844 | 45.87773 | 267.6504 | 3.271186 | 797.2928 | 0 | 253.8607 | 2.177515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 697.0866 | 0 | 18.28657 | 1.088757 |
| 0 | 0 | 289.962 | 21.33848 | 72.01839 | 3.271186 | 418.252 | 0 | 88.20583 | 0 |
| 0 | 0 | 10.90083 | 1.066924 | 1.074901 | 0 | 290.8158 | 0 | 17.21089 | 1.088757 |
| 0 | 0 | 0 | 0 | 0 | 0 | 623.0212 | 0 | 17.21089 | 1.088757 |
| 0 | 0 | 0 | 0 | 0 | 0 | 605.594 | 0 | 12.90817 | 2.177515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 694.9082 | 0 | 21.51362 | 2.177515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 929.0858 | 0 | 27.9677 | 2.177515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1402.887 | 0 | 424.8939 | 2.177515 |
| 0 | 0 | 0 | 0 | 0 | 0 | 245.0695 | 0 | 10.75681 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1321.197 | 0 | 31.19475 | 1.088757 |
| 0 | 0 | 593.005 | 43.74389 | 365.4665 | 5.451977 | 628.4672 | 0 | 379.7153 | 3.266272 |
| 0 | 0 | 688.9323 | 86.42085 | 644.9408 | 2.180791 | 743.9221 | 0 | 662.6194 | 1.088757 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1218.812 | 0 | 563.6568 | 9.798817 |
| 0 | 0 | 0 | 0 | 0 | 0 | 394.2896 | 0 | 9.681128 | 1.088757 |
| 0 | 0 | 0 | 0 | 0 | 0 | 746.1005 | 0 | 75.29766 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1391.995 | 0 | 972.4155 | 8.710059 |
| 0 | 0 | 1344.072 | 130.1647 | 1283.432 | 13.08475 | 1585.872 | 0 | 1626.429 | 9.798817 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1501.688 | 0 | 711.7802 | 5.436508 |
| 0 | 0 | 0 | 0 | 0 | 0 | 512.7553 | 0 | 585.8849 | 4.477612 |
| 0 | 0 | 0 | 0 | 0 | 0 | 604.8995 | 0 | 885.7388 | 3.358209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 779.9338 | 0 | 148.0229 | 4.381308 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1039.603 | 0 | 987.8168 | 6.716418 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2143.611 | 0 | 1132.26 | 14.13492 |
| 0 | 0 | 198.3712 | 0 | 0 | 5.617048 | 624.2143 | 0 | 308.2994 | 1.087302 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1891.293 | 0 | 313.7852 | 10.87302 |
| 0 | 0 | 0 | 0 | 0 | 0 | 376.2838 | 0 | 331.3396 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1201.256 | 0 | 502.4951 | 5.436508 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1444.798 | 0 | 776.7828 | 8.698413 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1188.092 | 0 | 68.02336 | 6.52381 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1522.688 | 0 | 607.8216 | 3.261905 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 1617.322 | 0 | 0 | 94.36641 | 1493.068 | 0 | 480.5521 | 6.52381 |
| 0 | 0 | 0 | 0 | 0 | 0 | 705.7161 | 0 | 769.8378 | 1.119403 |
| 0 | 0 | 0 | 0 | 0 | 0 | 784.8517 | 0 | 610.341 | 4.477612 |
| 0 | 0 | 1508.922 | 0 | 0 | 130.3155 | 1422.858 | 0 | 1042.293 | 4.349206 |
| 0 | 0 | 1467.73 | 0 | 0 | 30.33206 | 1437.119 | 0 | 186.5157 | 3.261905 |
| 0 | 0 | 937.6562 | 0 | 0 | 19.09796 | 864.4655 | 0 | 172.2527 | 3.261905 |
| 0 | 0 | 1919.756 | 0 | 0 | 19.09796 | 1976.861 | 0 | 72.41196 | 3.261905 |
| 0 | 0 | 829.2567 | 0 | 0 | 21.34478 | 820.584 | 0 | 137.1439 | 1.087302 |
| 0 | 0 | 1147.951 | 0 | 0 | 28.08524 | 1103.62 | 0 | 215.0416 | 2.174603 |
| 0 | 0 | 982.1001 | 0 | 0 | 20.22137 | 973.0722 | 0 | 100.9379 | 6.52381 |
| 0 | 0 | 2369.614 | 0 | 0 | 64.03435 | 2217.113 | 0 | 505.7866 | 5.436508 |
| 0 | 0 | 2151.731 | 0 | 0 | 20.22137 | 2208.336 | 0 | 117.3951 | 3.261905 |
| 0 | 0 | 2255.795 | 0 | 0 | 123.5751 | 1943.95 | 0 | 795.4344 | 6.52381 |
| 0 | 0 | 812.9967 | 0 | 0 | 5.617048 | 830.4574 | 0 | 25.23447 | 2.174603 |
| 0 | 0 | 1275.863 | 0 | 0 | 5.617048 | 1308.766 | 0 | 37.30313 | 1.087302 |
| 0 | 0 | 892.1284 | 0 | 0 | 3.370229 | 882.0181 | 0 | 39.49743 | 0 |
| 0 | 0 | 1246.595 | 0 | 0 | 10.11069 | 1295.601 | 0 | 51.56609 | 4.349206 |
| 0 | 0 | 1457.974 | 0 | 0 | 12.35751 | 1489.777 | 0 | 48.27464 | 1.087302 |
| 0 | 0 | 0 | 0 | 0 | 0 | 599.4792 | 0 | 576.3151 | 3.358209 |
| 0 | 0 | 1280.199 | 0 | 0 | 70.77481 | 1075.097 | 0 | 624.2789 | 4.349206 |
| 0 | 0 | 1031.964 | 0 | 0 | 53.92366 | 844.7188 | 0 | 467.3863 | 3.261905 |
| 0 | 0 | 523.5699 | 0 | 0 | 1.12341 | 533.1602 | 0 | 26.33162 | 2.174603 |
| 0 | 0 | 1338.735 | 0 | 0 | 31.45547 | 1314.251 | 0 | 164.5726 | 4.349206 |
| 0 | 0 | 1833.037 | 0 | 0 | 47.18321 | 1761.842 | 0 | 299.5222 | 5.436508 |
| 0 | 0 | 1610.818 | 0 | 0 | 6.740458 | 1648.847 | 0 | 48.27464 | 3.261905 |
| 0 | 0 | 1224.915 | 0 | 0 | 58.4173 | 1054.253 | 0 | 454.2205 | 1.087302 |
| 0 | 0 | 0 | 0 | 0 | 0 | 885.6682 | 0 | 1078.198 | 8.955224 |
| 0 | 0 | 0 | 0 | 0 | 0 | 973.4762 | 0 | 1082.452 | 10.07463 |
| 0 | 0 | 0 | 0 | 0 | 0 | 802.1964 | 0 | 756.0148 | 3.358209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 496.4946 | 0 | 723.0521 | 2.238806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1188.118 | 0 | 918.7015 | 3.358209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 858.567 | 0 | 898.4986 | 10.07463 |
| 0 | 0 | 0 | 0 | 0 | 0 | 566.9578 | 0 | 1298.304 | 3.358209 |
| 0 | 0 | 0 | 0 | 0 | 0 | 682.951 | 0 | 1310 | 2.238806 |
| 0 | 0 | 0 | 0 | 0 | 0 | 791.3559 | 0 | 1029.286 | 5.597015 |
| 0 | 0 | 0 | 0 | 0 | 0 | 454.2166 | 0 | 616.7209 | 1.119403 |
| 0 | 0 | 0 | 0 | 0 | 0 | 398 | 30 | 988 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1359.683 | 0 | 204.4286 | 3.081081 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1970.153 | 0 | 286.9173 | 3.081081 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1942.405 | 0 | 504.4962 | 4.108108 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1400.703 | 0 | 308.4361 | 18.48649 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1584.085 | 0 | 153.0226 | 2.054054 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1486.362 | 0 | 96.83459 | 1.027027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1756.609 | 0 | 194.8647 | 6.162162 |
| 0 | 0 | 0 | 0 | 0 | 0 | 376.3944 | 0 | 1800.827 | 6.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 447.8004 | 0 | 1991.688 | 9.9 |


| 0 | 0 | 0 | 0 | 0 | 0 | 424.8052 | 0 | 1907.485 | 5.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 925.8027 | 0 | 450.0946 | 4.164384 |
| 0 | 0 | 0 | 0 | 0 | 0 | 922.4239 | 0 | 39.65119 | 1.041096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 711.8094 | 0 | 227.1906 | 1.041096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1142.049 | 0 | 228.2622 | 1.041096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 510.2051 | 0 | 280.7733 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1018.158 | 0 | 56.79765 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 805.2907 | 0 | 45.00946 | 1.041096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1110.513 | 0 | 57.8693 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 946.0757 | 0 | 355.789 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1056.451 | 0 | 428.6615 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 452.7648 | 0 | 327.926 | 1.041096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 788.3965 | 0 | 249.6953 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 795.1541 | 0 | 28.93465 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 772.6285 | 0 | 491.8891 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 566.5192 | 0 | 694.4316 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 685.9049 | 0 | 359.004 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 754.608 | 0 | 536.8985 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1301.98 | 0 | 35.36457 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1281.707 | 0 | 57.8693 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1650.001 | 0 | 51.43938 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 333.3791 | 0 | 590.4812 | 4.164384 |
| 0 | 0 | 0 | 0 | 0 | 0 | 467.4065 | 0 | 705.1482 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1273.823 | 0 | 666.5686 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 469.659 | 0 | 588.3379 | 2.082192 |
| 0 | 0 | 0 | 0 | 0 | 0 | 328.8739 | 0 | 636.5623 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 600.3076 | 0 | 699.7899 | 5.205479 |
| 0 | 0 | 0 | 0 | 0 | 0 | 711.8094 | 0 | 872.3261 | 5.205479 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1561.025 | 0 | 1228.115 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1513.721 | 0 | 675.1419 | 3.123288 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2147.817 | 0 | 277.5583 | 10.41096 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1745.735 | 0 | 634.419 | 4.164384 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1317.755 | 123.3394 | 1130.511 | 7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 689.6249 | 47.0362 | 860.8778 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 633.6204 | 60.62443 | 1092.611 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1107.255 | 0 | 1022.728 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 437.7268 | 0 | 583.803 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 618.8551 | 0 | 907.8995 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 775.1861 | 0 | 688.9734 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 481.9307 | 0 | 1104.289 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 691.0908 | 0 | 647.1198 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 642.5743 | 0 | 490.4374 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1257.117 | 0 | 456.0961 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1424.229 | 0 | 622.437 | 12.65 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1524.497 | 0 | 612.7785 | 11.59583 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1300.243 | 0 | 600.9737 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2321.246 | 0 | 433.5596 | 8.433333 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1345.525 | 0 | 576.2908 | 11.59583 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1458.73 | 0 | 566.6323 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 2225.291 | 0 | 378.828 | 10.54167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 875.4536 | 0 | 77.26804 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 885.1569 | 0 | 150.2434 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 773.0298 | 0 | 95.51188 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1137.443 | 0 | 78.34121 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1108.333 | 0 | 187.8043 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 958.4708 | 0 | 133.0727 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 947.6893 | 0 | 316.5843 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1014.534 | 0 | 346.633 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 602.683 | 0 | 372.389 | 4.216667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 581.1201 | 0 | 47.21936 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1522.34 | 0 | 752.2902 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1451.183 | 0 | 570.925 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1405.901 | 0 | 1164.386 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1057.66 | 0 | 506.5349 | 4.216667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1017.769 | 0 | 388.4865 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 902.4072 | 0 | 541.9495 | 11.59583 |
| 0 | 0 | 0 | 0 | 0 | 0 | 884.0788 | 0 | 723.3147 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1556.841 | 0 | 348.7794 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1624.764 | 0 | 211.4139 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1999.959 | 0 | 483.9984 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 914.2668 | 0 | 238.2431 | 7.379167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 763.3265 | 0 | 203.9018 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1245.257 | 0 | 148.0971 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1312.102 | 0 | 203.9018 | 7.379167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1006.987 | 0 | 54.73153 | 3.1625 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1088.926 | 0 | 93.36555 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 840.953 | 0 | 77.26804 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1322.884 | 0 | 92.29238 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1329.353 | 0 | 402.4377 | 8.433333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1533.122 | 0 | 292.9747 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 974.6429 | 0 | 61.17053 | 4.216667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1133.13 | 0 | 82.63388 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1039.332 | 0 | 92.29238 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1031.785 | 0 | 128.7801 | 5.270833 |
| 0 | 0 | 0 | 0 | 0 | 0 | 897.0165 | 0 | 181.3653 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1706.703 | 0 | 186.7311 | 4.216667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1904.004 | 0 | 441.0717 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1546.06 | 0 | 576.2908 | 8.433333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1022.081 | 0 | 45.07302 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1345.525 | 0 | 150.2434 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 984.3462 | 0 | 139.5117 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1270.055 | 0 | 159.9019 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1605.358 | 0 | 255.4138 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 930.439 | 0 | 74.04854 | 2.108333 |


| 0 | 0 | 0 | 0 | 0 | 0 | 522.9002 | 0 | 75.12171 | 1.054167 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1374.635 | 0 | 213.5603 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1284.07 | 0 | 180.2921 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1430.698 | 0 | 207.1213 | 6.325 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1162.24 | 0 | 173.8531 | 1.054167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1179.49 | 0 | 107.3167 | 2.108333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1222.22 | 0 | 496.2563 | 8.239583 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1063.297 | 0 | 737.1357 | 8.239583 |
| 0 | 0 | 0 | 0 | 0 | 0 | 705.435 | 0 | 1242.313 | 4.708333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 774.0348 | 0 | 935.6382 | 11.77083 |
| 0 | 0 | 0 | 0 | 0 | 0 | 563.662 | 0 | 1280.23 | 4.708333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 848.3513 | 0 | 1066.115 | 11.77083 |
| 0 | 0 | 0 | 0 | 0 | 0 | 570.522 | 0 | 886.5702 | 9.416667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1058.724 | 0 | 260.9527 | 2.354167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1079.304 | 0 | 604.429 | 9.416667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1136.471 | 0 | 820.7744 | 3.53125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1162.767 | 0 | 1027.083 | 2.354167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 619.6852 | 0 | 1157.56 | 5.885417 |
| 0 | 0 | 0 | 0 | 0 | 0 | 605.9652 | 0 | 1252.35 | 5.885417 |
| 0 | 0 | 0 | 0 | 0 | 0 | 968.401 | 0 | 1164.251 | 3.53125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 964.971 | 0 | 1019.277 | 8.239583 |
| 0 | 0 | 0 | 0 | 0 | 0 | 745.4516 | 0 | 1227.816 | 2.354167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 969.5444 | 0 | 979.1303 | 1.177083 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1209.644 | 0 | 704.7954 | 3.53125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 882.6512 | 0 | 864.2665 | 2.354167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 772.8915 | 0 | 207.424 | 2.354167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1739.006 | 0 | 325.6333 | 1.177083 |
| 0 | 0 | 0 | 0 | 0 | 0 | 541.7143 | 63.51392 | 959.1376 | 8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 248 | 36.29367 | 511.7621 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 171.4286 | 20.41519 | 616.1127 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 289.1429 | 32.89114 | 857.0072 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 568 | 43.09873 | 1016.863 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 254.8571 | 30.62278 | 568.3778 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 320 | 60.11139 | 850.3465 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 152 | 27.22025 | 344.135 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 358.8571 | 38.56203 | 1247.767 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 520 | 95.27089 | 1184.491 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 979.0768 | 0 | 1186.938 | 3.5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1044.425 | 0 | 1551.301 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1046.718 | 0 | 1174.793 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1019.203 | 0 | 843.5543 | 5.833333 |
| 0 | 0 | 0 | 0 | 0 | 0 | 865.5773 | 0 | 1287.414 | 4.666667 |
| 0 | 0 | 0 | 0 | 0 | 0 | 951.2162 | 0 | 378.7984 | 2.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1206.907 | 0 | 1909.59 | 11.02041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1003.996 | 0 | 983.7617 | 3.306122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 485.5777 | 0 | 1053.951 | 1.102041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 633.3622 | 0 | 905.7738 | 2.204082 |


| 0 | 0 | 0 | 0 | 0 | 0 | 1335.925 | 0 | 816.6448 | 6.612245 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 1076.716 | 0 | 630.5879 | 2.204082 |
| 0 | 12.8 | 0 | 0 | 0 | 0 | 372.97 | 0 | 210.6115 | 1.125 |
| 0 | 16.29091 | 0 | 0 | 0 | 0 | 1681.812 | 0 | 312.651 | 2.227041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1222.155 | 0 | 705.2335 | 4.408163 |
| 0 | 0 | 0 | 0 | 0 | 0 | 536.0121 | 0 | 335.348 | 2.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 399.5245 | 0 | 682.2936 | 1.125 |
| 0 | 0 | 0 | 0 | 0 | 0 | 313.8259 | 0 | 931.2978 | 3.375 |
| 0 | 0 | 0 | 0 | 0 | 0 | 742.319 | 0 | 97.62722 | 0 |
| 0 | 12.8 | 0 | 0 | 0 | 0 | 1323.475 | 0 | 193.3011 | 1.102041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 223.2992 | 0 | 274.2338 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 834.0528 | 0 | 1499.51 | 2.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 718.1786 | 0 | 1363.49 | 2.25 |
| 0 | 0 | 0 | 0 | 0 | 0 | 604.7126 | 0 | 1484.941 | 4.477041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1030.797 | 0 | 827.089 | 3.375 |
| 0 | 17.45455 | 0 | 0 | 0 | 0 | 377.9446 | 0 | 182.7145 | 1.102041 |
| 0 | 0 | 0 | 0 | 0 | 0 | 249.8537 | 0 | 311.5295 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 626.3249 | 0 | 669.5819 | 2.204082 |
| 0 | 4.654545 | 0 | 0 | 0 | 0 | 812.8149 | 0 | 53.47742 | 2.204082 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1055.604 | 0 | 1070.663 | 2.204082 |
| 0 | 0 | 1191 | 79 | 652 | 4 | 1403.953 | 0 | 697.4347 | 3.306122 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1727.671 | 0 | 320.8645 | 4.408163 |
| 0 | 0 | 0 | 0 | 0 | 0 | 642.6937 | 0 | 1921.021 | 17.60434 |
| 0 | 0 | 0 | 0 | 0 | 0 | 841.0853 | 0 | 1414.085 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 529.8362 | 0 | 1131.036 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 590.4229 | 0 | 1437.286 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1040.665 | 0 | 1121.756 | 11.31707 |
| 0 | 0 | 0 | 0 | 0 | 0 | 538.1521 | 0 | 1680.894 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 356.3921 | 0 | 1105.515 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 870.7847 | 0 | 1521.968 | 7.544715 |
| 0 | 0 | 0 | 0 | 0 | 0 | 488.2572 | 0 | 1577.65 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 405.099 | 0 | 1845.619 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 736.5437 | 0 | 1610.131 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 994.3339 | 0 | 1198.318 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 850.5891 | 0 | 1689.014 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 723.4759 | 0 | 1533.569 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 586.859 | 0 | 989.5115 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 974.1384 | 0 | 1711.054 | 10.05962 |
| 0 | 0 | 0 | 0 | 0 | 0 | 498.9489 | 0 | 1178.598 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 754.3633 | 0 | 1617.091 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 354.0161 | 0 | 878.148 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 618.9343 | 0 | 1179.758 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1382.801 | 0 | 640.3404 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 584.483 | 0 | 1183.238 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 690.2127 | 0 | 1470.927 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 580.9191 | 0 | 940.79 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1114.319 | 0 | 1789.937 | 5.02981 |


| 0 | 0 | 0 | 0 | 0 | 0 | 584.483 | 0 | 1292.281 | 5.02981 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 616.5583 | 0 | 1506.888 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 508.4527 | 0 | 1107.835 | 10.05962 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1082.244 | 0 | 990.6715 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 451.43 | 0 | 1351.443 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 693.7766 | 0 | 2385.036 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 177.0081 | 0 | 969.7909 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 166.3163 | 0 | 1021.993 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 131.8651 | 0 | 589.2988 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 439.5502 | 0 | 1568.37 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1189.162 | 0 | 1309.682 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 601.1147 | 0 | 1075.354 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 686.6488 | 0 | 1916.381 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 999.0858 | 0 | 1582.29 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 674.769 | 0 | 1032.433 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1654.847 | 0 | 820.1461 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 864.8448 | 0 | 1312.002 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 945.627 | 0 | 939.6299 | 11.31707 |
| 0 | 0 | 0 | 0 | 0 | 0 | 873.1606 | 0 | 1591.571 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1240.244 | 0 | 809.7058 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1007.402 | 0 | 837.5467 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 604.6786 | 0 | 2024.264 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 735.3557 | 0 | 1699.454 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 472.8135 | 0 | 1502.248 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 817.3259 | 0 | 624.0999 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 629.626 | 0 | 1256.32 | 7.544715 |
| 0 | 0 | 0 | 0 | 0 | 0 | 940.8751 | 0 | 1607.811 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 563.0995 | 0 | 1195.998 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 647.4456 | 0 | 923.3894 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1177.282 | 0 | 995.3117 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 312.4371 | 0 | 829.4264 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 471.6255 | 0 | 933.8297 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 880.2885 | 0 | 1272.561 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 583.2951 | 0 | 912.9491 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 586.859 | 0 | 1838.659 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1577.629 | 0 | 446.6142 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 812.574 | 0 | 1438.446 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 784.0626 | 0 | 1794.577 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1211.733 | 0 | 1625.212 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 742.4835 | 0 | 1237.759 | 7.544715 |
| 0 | 0 | 0 | 0 | 0 | 0 | 520.3325 | 0 | 1429.165 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 457.3699 | 0 | 589.2988 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 599.9267 | 0 | 1354.923 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1046.605 | 0 | 635.7002 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 908.7998 | 0 | 1496.448 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 460.9338 | 0 | 617.1396 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 553.5957 | 0 | 1530.089 | 3.772358 |


| 0 | 0 | 0 | 0 | 0 | 0 | 958.6947 | 0 | 792.3052 | 3.772358 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 937.3112 | 0 | 838.7067 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 634.3779 | 0 | 1631.012 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1043.041 | 0 | 769.1045 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 816.1379 | 0 | 1136.836 | 8.802168 |
| 0 | 0 | 0 | 0 | 0 | 0 | 728.2278 | 0 | 1027.793 | 16.34688 |
| 0 | 0 | 0 | 0 | 0 | 0 | 914.7397 | 0 | 750.5439 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 936.1232 | 0 | 731.9833 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1060.86 | 0 | 1132.196 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 527.4603 | 0 | 1158.877 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 608.2425 | 0 | 1675.093 | 1.257453 |
| 0 | 0 | 0 | 0 | 0 | 0 | 946.815 | 0 | 1147.277 | 7.544715 |
| 0 | 0 | 0 | 0 | 0 | 0 | 742.4835 | 0 | 1908.261 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 724.6639 | 0 | 1388.564 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 626.0621 | 0 | 1258.64 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 522.7084 | 0 | 1195.998 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 662.8893 | 0 | 1284.161 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 368.2718 | 0 | 1023.153 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 953.9428 | 0 | 998.7918 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 390.8433 | 0 | 1176.277 | 2.514905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1540.802 | 0 | 396.7326 | 5.02981 |
| 0 | 0 | 0 | 0 | 0 | 0 | 363.5199 | 0 | 767.9444 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 438.3623 | 0 | 881.6281 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 700.9044 | 0 | 736.6235 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 997.8979 | 0 | 823.6262 | 6.287263 |
| 0 | 0 | 0 | 0 | 0 | 0 | 528.6483 | 0 | 540.5772 | 3.772358 |
| 0 | 0 | 0 | 0 | 0 | 0 | 656.7766 | 0 | 844.6487 | 4.181818 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1015.117 | 0 | 1512.385 | 6.272727 |
| 0 | 0 | 0 | 0 | 0 | 0 | 753.7138 | 0 | 1179.056 | 3.136364 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1128.392 | 0 | 1916.91 | 9.409091 |
| 1289.252 | 6 | 2464.195 | 125.9427 | 1063.162 | 7.583333 | 2270.761 | 0 | 1394.693 | 6 |
| 1222.748 | 11 | 2644.805 | 127.0573 | 980.8377 | 5.416667 | 2429.239 | 0 | 1307.307 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 965.1382 | 0 | 1170.192 | 5.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 700.7642 | 0 | 932.3573 | 8.432432 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1163.707 | 0 | 798.3658 | 9.486486 |
| 0 | 0 | 0 | 0 | 0 | 0 | 953.5935 | 0 | 980.3709 | 7.378378 |
| 0 | 0 | 0 | 0 | 0 | 0 | 423.6911 | 0 | 528.1497 | 5.27027 |
| 0 | 0 | 0 | 0 | 0 | 0 | 763.1057 | 0 | 1087.564 | 3.162162 |

LocalityCoc LocalityNar PrecinctNa GE17ATGD GE17ATGR GE17ATGU GE17GOV[ GE17GOVL GE17GOVR GE17GOVV

1 ACCOMACI 101 -CHINI 415.5453815 .5336
1 ACCOMACI 201 -ATLA $132.219 \quad 422.48$
1 ACCOMACI 202 -GREE 215.5503477 .1292
1 ACCOMACI301-NEW 384.435393 .0536
1 ACCOMACI401-BLOX 92.21996236 .4627
1 ACCOMACI 402 - PARK 176.6623364 .678
1 ACCOMACI 403 -SAXIS 32.22143111 .4002
1 ACCOMACI501-MAPF 244.4384188 .1192 1 ACCOMACI502 - RUE 262.2158 98.78887 1 ACCOMACI 601 - ACCC 366.6577506 .5557 1 ACCOMACI602-TANE 17.77734162 .8965 1 ACCOMACI 701-NAN[ 712.2047821 .8393 1 ACCOMACI801-BOBT 194.4397320 .5383 1 ACCOMACI 802 - MELF $333.3251 \quad 280.6024$ 1 ACCOMACI 803 -WACI $148.8852 \quad 287.959$ 1 ACCOMACI 901 -PAIN ${ }^{-} 792.2028514 .9632$ 3 ALBEMARL 101 - WOO 1091.363629 .8815 3 ALBEMARL 103 - BRAN 442.3861172 .0755 3 ALBEMARL 104 - AGNC 911.8128316 .534 3 ALBEMARL 105 - DUNL 1333.648556 .59 3 ALBEMARL 106 - NORT 1055.669755 .2204 3 ALBEMARL 201 -JACK 828.5274514 .1022 3 ALBEMARL 202 -UNIV 1435.321368 .5816 3 ALBEMARL 203-GEOR 1055.669294 .2279 3 ALBEMARL 204 - BELFI 462.937315 .4718 3 ALBEMARL 301 - IVY 1645.157885 .8704 3 ALBEMARL 302 -RED F 1081.629613 .9485 3 ALBEMARL 304 -EAST 414.2637257 .0511 3 ALBEMARL 305 -COUN 996.1799458 .8681 3 ALBEMARL 306 -PORT 517.0184272 .984 3 ALBEMARL 307 - YELLC 232.5501177 .3865 3 ALBEMARL 401 - SCOT 411.0188446 .1218 3 ALBEMARL 402 - MON 388.3046402 .5718 3 ALBEMARL 405 - CALE 2016.156633 .068 3 ALBEMARL 406 - STON 869.6293971 .9082 3 ALBEMARL 501 -KESW 467.2635348 .3999 3 ALBEMARL 502-STON 507.2838458 .8681 3 ALBEMARL 503-HOLL 896.67583 .1449
3 ALBEMARL 504 - FREE 1702.483788 .1485 3 ALBEMARL 506-BAKE 1035.118882 .6838 3 ALBEMARL 601 - CROZ 1562.953899 .6789
3 ALBEMARL 602 - FREE 462.937373 .8925
3 ALBEMARL 603 -EARL' 1018.894941 .1045
3 ALBEMARL 604 - BROV 1751.1571120 .615
5 ALLEGHAN 101 - ARRI 100.8848303 .4613
5 ALLEGHAN' 103 - DAMI 40.98445126 .7886

| 2 | 454.7393 | 11.02041 | 783.8535 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 143.8348 | 1.102041 | 413.9923 | 0 |
| 0 | 224.6036 | 7.714286 | 467.5801 | 0 |
| 1 | 394.9925 | 4.408163 | 383.5208 | 0 |
| 0 | 102.8972 | 1.102041 | 232.214 | 0 |
| 1 | 212.4329 | 2.204082 | 343.5926 | 0 |
| 0 | 32.08623 | 0 | 112.4294 | 0 |
| 0 | 260.0091 | 2.204082 | 177.5754 | 0 |
| 1 | 265.5412 | 2.204082 | 96.66825 | 0 |
| 0 | 403.8439 | 4.408163 | 483.3413 | 0 |
| 0 | 19.91559 | 0 | 163.9157 | 0 |
| 0 | 806.5813 | 7.714286 | 750.2297 | 0 |
| 0 | 205.7944 | 3.306122 | 305.7659 | 0 |
| 0 | 357.3742 | 1.102041 | 261.6347 | 0 |
| 0 | 157.1119 | 0 | 279.4973 | 0 |
| 0 | 834.2419 | 5.510204 | 480.189 | 0 |
| 0 | 1101.834 | 21.35198 | 610.6199 | 0 |
| 0 | 448.2951 | 4.270396 | 165.9525 | 0 |
| 0 | 901.9913 | 23.48718 | 303.1824 | 1.090909 |
| 1.04 | 1366.49 | 22.41958 | 518.0695 | 0 |
| 0 | 1045.662 | 22.41958 | 748.9136 | 0 |


| 1.04 | 833.9369 | 16.01399 | 496.7936 | 1.090909 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 2.08 | 1477.753 | 14.94639 | 338.2877 | 2.181818 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 1.04 | 1068.347 | 14.94639 | 278.715 | 0 |
| :--- | :--- | :--- | :--- | :--- |


| 0 | 473.1404 | 3.202797 | 308.5014 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 1688.398 | 23.48718 | 838.2727 | 3.272727 |


| 0 | 1688.398 | 23.48718 | 838.2727 | 3.272727 |
| ---: | ---: | ---: | ---: | ---: |
| 2.08 | 1088.871 | 10.67599 | 607.4285 | 0 |
| 0 | 415.8882 | 6.405594 | 252.1201 | 0 |


| 2.08 | 1014.335 | 16.01399 | 428.7105 | 2.181818 |
| :--- | :--- | :--- | :--- | :--- |


| 1.04 | 523.9111 | 6.405594 | 269.1408 | 0 |
| :--- | :--- | :--- | :--- | :--- |

$\begin{array}{lllll}0 & 235.4899 & 5.337995 & 170.2076 & 1.090909\end{array}$
$\begin{array}{llllll}0 & 400.765 & 9.608392 & 446.7951 & 1.090909\end{array}$
$\begin{array}{lllll}0 & 379.1604 & 7.473193 & 408.4984\end{array}$
$\begin{array}{llllll}3.12 & 2032.991 & 34.16317 & 595.7268 & 2.181818\end{array}$
$\begin{array}{llllll}0 & 886.8681 & 10.67599 & 954.2266 & 1.090909\end{array}$

| 2.08 | 477.4613 | 9.608392 | 336.1601 | 1.090909 |
| :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{llllll}1.04 & 522.8309 & 10.67599 & 439.3485 & 1.090909\end{array}$
$\begin{array}{lllll}0 & 927.9168 & 22.41958 & 537.2179 & 0\end{array}$
$\begin{array}{llllll}2.08 & 1713.243 & 24.55478 & 764.8706 & 1.090909\end{array}$
$\begin{array}{llllll}0 & 1051.063 & 33.09557 & 837.2089 & 2.181818\end{array}$
$\begin{array}{llllll}2.08 & 1584.696 & 32.02797 & 856.3572 & 2.181818\end{array}$
$\begin{array}{lllll}1.04 & 470.9799 & 5.337995 & 364.8826 & 0\end{array}$
$\begin{array}{lllll}1.04 & 1058.625 & 10.67599 & 908.4833 & 1.090909\end{array}$
$\begin{array}{lllll}3.12 & 1778.057 & 36.29837 & 1072.308 & 0\end{array}$
$\begin{array}{lllll}0 & 97.76245 & 3.085714 & 306.6811 & 1\end{array}$
$\begin{array}{lllll}0 & 33.63869 & 2.057143 & 135.1476 & 0\end{array}$

| ALLEGHAN 201 - HUM | 77.76537 | 188.1044 | 0 | 81.99431 | 0 | 185.0482 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 202 - DOLL | 90.37597 | 231.753 | 0 | 91.45519 | 2.057143 | 229.7509 | 0 |
| 5 ALLEGHAN 301 - CALL | 49.39152 | 198.4969 | 0 | 45.20199 | 4.114286 | 198.563 | 0 |
| 5 ALLEGHAN 302 - GRIFF | 150.2763 | 319.0501 | 2 | 152.4253 | 4.114286 | 317.077 | 0 |
| 5 ALLEGHAN 401 - LOW | 106.1392 | 221.3605 | 0 | 99.86486 | 2.057143 | 224.5529 | 0 |
| 5 ALLEGHAN 402 -JACKs | 120.8516 | 280.5978 | 0 | 119.8378 | 4.114286 | 280.6911 | 0 |
| 5 ALLEGHAN 501 -IRON | 78.81625 | 94.57184 | 0 | 76.73826 | 2.057143 | 95.64291 | 0 |
| 5 ALLEGHAN 502 - PETEI | 149.2254 | 340.8743 | 1 | 152.4253 | 2.057143 | 337.869 | 0 |
| 5 ALLEGHAN 601 - DISTF | 304.7562 | 373.0911 | 0 | 310.1067 | 6.171429 | 366.9777 | 0 |
| 5 ALLEGHAN' 701 - DISTF | 217.5329 | 207.8502 | 0 | 216.5491 | 4.114286 | 209.9986 | 0 |
| 7 AMELIA CC 101 - NUM | 220.3671 | 532.3837 | 0 | 224.8259 | 6.315789 | 524.2155 | 0 |
| 7 AMELIA CC 201 - NUM | 328.9382 | 663.5974 | 0 | 339.4006 | 5.263158 | 658.492 |  |
| 7 AMELIA CC 301 - NUM | 234.3416 | 693.7121 | 0 | 231.3112 | 12.63158 | 689.6442 |  |
| 7 AMELIA CC 401 - NUM | 233.2666 | 652.8422 | 1.5 | 230.2304 | 7.368421 | 650.9726 |  |
| 7 AMELIA CC 501 - NUM | 374.0866 | 647.4646 | 1.5 | 377.2319 | 8.421053 | 646.6757 |  |
| 9 AMHERST ( 101 - WRIG | 374.153 | 278.0247 | 0 | 381.3462 | 2.02439 | 274.7847 | 0 |
| 9 AMHERST (102-NEW | 278.2164 | 575.7602 | 2 | 284.1403 | 7.085366 | 570.308 | 0 |
| 9 AMHERST (103-COOL | 90.60686 | 335.082 | 0 | 84.38754 | 8.097561 | 334.9263 |  |
| 9 AMHERST ( 201 - COUF | 558.5646 | 902.5429 | 2 | 571.4852 | 11.13415 | 895.902 | 2 |
| 9 AMHERST ( 202 -TEMF | 163.0923 | 376.5783 | 0 | 158.0931 | 8.097561 | 375.3663 |  |
| 9 AMHERST (301-MON | 158.8285 | 432.5982 | 0 | 160.2295 | 5.060976 | 431.3602 |  |
| 9 AMHERST ( $302-E L O N$ | 338.9763 | 1128.697 | 2 | 336.482 | 13.15854 | 1124.025 |  |
| 9 AMHERST ( 303 - PLEA! | 95.93668 | 258.314 | 0 | 94.00131 | 1.012195 | 261.3047 |  |
| 9 AMHERST ( 401 - AMEL | 509.5303 | 1028.069 | 2 | 517.0072 | 11.13415 | 1019.296 |  |
| 9 AMHERST (402-LONC | 117.2559 | 236.5285 | 0 | 118.5698 | 4.04878 | 234.3447 |  |
| 9 AMHERST (501-MADI | 546.8391 | 909.8048 | 6 | 552.2577 | 12.14634 | 909.382 | 2 |
| 11 APPOMAT1 101 - VERA | 68.36497 | 335.6172 | 0 | 72.11499 | 5.102041 | 329.085 |  |
| 11 APPOMAT 102 - PAMF | 188.2666 | 513.7843 | 1 | 189.1712 | 7.142857 | 510.7566 |  |
| 11 APPOMAT1 201 - CHAP | 79.93443 | 159.5218 | 0 | 79.43101 | 2.040816 | 157.7947 |  |
| 11 APPOMAT1202-SPOU | 154.61 | 702.31 | 1 | 158.862 | 9.183673 | 697.6188 |  |
| 11 APPOMAT 301 - US 41 | 98.86626 | 428.8442 | 0 | 102.4242 | 6.122449 | 418.3636 |  |
| 11 APPOMAT1302-STON | 146.1959 | 474.4218 | 1 | 143.1848 | 5.102041 | 473.3842 |  |
| 11 APPOMAT1401-COUF | 204.0431 | 611.1548 | 1 | 200.6678 | 8.163265 | 611.4545 |  |
| 11 APPOMAT1501-OAKV | 188.2666 | 500.3182 | 0 | 193.3518 | 5.102041 | 492.0704 |  |
| 11 APPOMAT1502-AGEE | 90.45211 | 203.0277 | 0 | 87.79216 | 2.040816 | 203.4721 | 0 |
| 13 ARLINGTOI 001 - ARLII | 1165.412 | 223.0019 | 4.45 | 1187.579 | 10.80972 | 204.9318 | 2.039216 |
| 13 ARLINGTOI 002 -ASHT | 1484.005 | 325.5828 | 1.1125 | 1509.314 | 15.1336 | 297.879 | 2.039216 |
| 13 ARLINGTOIOO3-AURC | 901.2989 | 352.343 | 1.1125 | 920.2556 | 8.647773 | 330.3545 | 0 |
| 13 ARLINGTOI 004 -BALLS | 1343.066 | 321.1228 | 0 | 1347.264 | 22.7004 | 306.8378 | 1.019608 |
| 13 ARLINGTOI 005 - BARC | 1199.758 | 326.6978 | 1.1125 | 1223.065 | 21.61943 | 286.6805 | 2.039216 |
| 13 ARLINGTOIO06-CRYS | 939.1985 | 293.2475 | 0 | 960.4724 | 11.89069 | 266.5233 | 0 |
| 13 ARLINGTOI 007 -CHER | 1411.759 | 379.1033 | 2.225 | 1431.246 | 10.80972 | 360.5903 | 0 |
| 13 ARLINGTOIOO8-HUM | 1518.351 | 449.3489 | 3.3375 | 1529.422 | 22.7004 | 427.7811 | 1.019608 |
| 13 ARLINGTOIOO9-COLU | 1783.648 | 376.8733 | 3.3375 | 1800.294 | 25.94332 | 346.0324 | 1.019608 |
| 13 ARLINGTOI010-WILSI | 1582.307 | 421.4736 | 0 | 1598.027 | 11.89069 | 407.6239 | 2.039216 |
| 13 ARLINGTOI 011 -EAST | 1012.629 | 305.5126 | 0 | 1016.066 | 8.647773 | 296.7591 | 0 |
| 13 ARLINGTOI 012 - FAIRL | 1467.424 | 415.8986 | 4.45 | 1489.205 | 12.97166 | 407.6239 | 2.039216 |

13 ARLINGTOI 013 -GLEN 965.2544 13 ARLINGTOP 014 -CLAR 1055.266 13 ARLINGTOI 015 - LYON 799.4439 13 ARLINGTOP 016 -LYON 1448.474 13 ARLINGTOI 017 -OVER 1543.223 13 ARLINGTOP 018 - PARK 1776.542 13 ARLINGTOP 019 -ROSS 1499.401 13 ARLINGTOP 020 -THRIF 1337.144 13 ARLINGTOP 021 - VIRGI 824.3155 13 ARLINGTOP 022 -ABINI 1620.206 13 ARLINGTOr 023 - WEST 1447.289 13 ARLINGTOP 024 -WOO 1858.263 13 ARLINGTOI 025 -ARLIN 1255.423 13 ARLINGTOP 026 -FILLN 1757.592 13 ARLINGTOr 027 -JEFFE 1425.971 13 ARLINGTOr 028 - WAKI 1608.363 13 ARLINGTOP 029 - DOM 1546.776 13 ARLINGTOr 030 -GLEB 1315.825 13 ARLINGTOP 031 -LEXIN 1486.373 13 ARLINGTOI 032 - OAKR 529.4095 13 ARLINGTOI 033 -ROCK 1436.63 13 ARLINGTOI 034 - YORK 1324.116 13 ARLINGTOI 035 - MADI 1370.306 13 ARLINGTOP 036 - MAR؟ 1498.217 13 ARLINGTOP 037 - NOTT 1301.613 13 ARLINGTOI 038 - ARLIN 1260.16 13 ARLINGTOI 039 - ASHL، 857.4776 13 ARLINGTOP 040 - VIRGI 1513.614 13 ARLINGTOP 041 - NAVY 1142.909 13 ARLINGTOI 042 - SHIRL 1193.836 13 ARLINGTOP 043 - CAMI 992.4948 13 ARLINGTOI 044 - DAW: 1081.322 13 ARLINGTOr 045 - BUCK 1017.366 13 ARLINGTOI 046 -CENT 1457.949 13 ARLINGTOP 047 -FOUR 1192.652 13 ARLINGTOP 048 -AUSA 914.3269 13 ARLINGTOP 049 - MON 806.55 13 ARLINGTOr 050-CRYS 929.7236 13 ARLINGTOP 051 - TAYL( 381.3643 13 ARLINGTOr 052 -GUNS 938.0141 13 ARLINGTOP 053 - MET I 1075.4 13 ARLINGTOP 054 -GARF 594.5494 15 AUGUSTA (101-JOLIV 215.2524 15 AUGUSTA (102-STUA 224.7488 15 AUGUSTA (103-VERO 285.9481 15 AUGUSTA (201-CRIM 262.7346 15 AUGUSTA (202-NEW 180.4322
245.3021
226.347
189.5516
395.8284
451.5789
441.5438
334.5029
512.9044
269.8323
394.7134
337.8479
400.2885
343.423
334.5029
356.8031
314.4327
346.768
234.152
400.2885
207.3918
522.9395
401.4035
671.2358
448.2339
433.7387
212.9668
236.382
406.9785
263.1423
246.4171
122.6511
177.2865
205.1618
367.9532
182.8616
272.0623
171.7115
320.0078
114.846
224.1169
303.2826
149.4113
408.9969
469.2045
896.8865
887.544
652.9417

| 0 | 993.5922 | 8.64777 | 过 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 2.225 | 1061.014 | 17.29555 | 216.1302 | 1.019608 |
| 1.1125 | 805.5194 | 9.728745 | 178.0555 | 0 |
| 1.1125 | 1470.28 | 25.94332 | 359.4705 | 0 |
| 0 | 1576.736 | 11.89069 | 412.1033 | 1.019608 |
| 0 | 1807.391 | 16 | 408.7437 | 1.019608 |
| 4.45 | 1516.411 | 17.29555 | 320.2759 | 8 |
| 1.1125 | 1342.532 | 11.89069 | 510.6497 | 0 |
| 2.225 | 837.4563 | 10.80972 | 257.5645 | 0 |
| 5.5625 | 1635.879 | 32.42915 | 356.111 | 3.058824 |
| 0 | 146 | 17.29555 | 310.1973 | 6 |
| 1.1125 | 1883.094 | 19.45749 | 372.9087 | 0 |
| 3.3375 | 1290.487 | 11.89069 | 315.7965 | 2.039216 |
| 6.675 | 1781.369 | 34.59109 | 288.9202 | 2.039216 |
| 0 | 14 | 21 | 316.9164 | 0 |
| 3.3375 | 1622.867 | 12.97166 | 304.5981 | 1.019608 |
| 1.1125 | 1558.993 | 14.05263 | 338.1934 | 608 |
| 2.225 | 1338.984 | 9.728745 | 207.1715 | 0 |
| 1.1125 | 1491.571 | 15.1336 | 389.7063 | 1.019608 |
| 0 | 529.9158 | 8.647773 | 197.0929 | 3.058824 |
| 1.1125 | 14 | 10 | 51 | 1.019608 |
| 1.1125 | 1350.812 | 8.647773 | 379.6277 | 1.019608 |
| 3.3375 | 1398.126 | 7.566802 | 643.9113 | 2.039216 |
| 0 | 1509.314 | 15.1336 | 434.5002 | 1.019608 |
| 1.1125 | 1327.15 | 6.4 | 408.7437 | 2. |
| 2.225 | 1273.927 | 20. | 190.3738 | . 019608 |
| 1.1125 | 862.2961 | 11.89069 | 221.7295 | 0 |
| 3.3375 | 1537.702 | 30.26721 | 367.3094 | 2.039216 |
| 1.1125 | 1165.105 | 17.29555 | 231.8081 | 1.019608 |
| 2.225 | 1206.505 | 12.97166 | 231.8081 | 1.019608 |
| 0 | 999.5064 | 5.404858 | 117.5838 | 1.019608 |
| 1.1125 | 1096.5 | 7.566802 | 173.5761 | 0 |
| 0 | 1029.078 | 5.404858 | 193.7333 | 2.039216 |
| 1.1125 | 1484.474 | 28.10526 | 329.2347 | 0 |
| 2.225 | 1211.236 | 14.05263 | 157.8983 | 1.019608 |
| 0 | 928.5355 | 19.45749 | 249.7256 | 1.019608 |
| 1.1125 | 809.0679 | 10.80972 | 163.4975 | 0 |
| 2.225 | 936.8155 | 19.45749 | 301.2385 | 1.019608 |
| 0 | 386.7912 | 4.323887 | 115.3441 |  |
| 3.3375 | 949.8268 | 9.728745 | 210.531 | 0 |
| 3.3375 | 1103.597 | 14.05263 | 275.4821 | 1.019608 |
| 0 | 598.521 | 9.728745 | 139.9807 | 0 |
| 0 | 219.0047 | 4.160535 | 404.9593 |  |
| 0 | 219.0047 | 4.160535 | 470.3758 | 0 |
| 1.083333 | 290.6024 | 19.76254 | 879.4885 | 1.066667 |
| 1.083333 | 252.6977 | 15.60201 | 884.6803 | 0 |
| 0 | 176.8884 | 13.52174 | 645.8582 |  |


| O3-WEYE | 331.3199 | 882.3536 | 1.083333 | 340.0891 | 15.60201 | 863.9132 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA ( 301 - FORT | 518.083 | 1389.966 | 1.083333 | 548.5647 | 28.08361 | 1346.749 |  |
| 15 AUGUSTA (302-NORT | 109.7365 | 418.3394 | 0 | 117.9256 | 5.200669 | 407.036 |  |
| 15 AUGUSTA (303-MOU | 102.3504 | 569.8966 | 1.083333 | 113.714 | 6.240803 | 554.4827 |  |
| 15 AUGUSTA (304-CHUR | 135.0603 | 486.8516 | 1.083333 | 149.5128 | 6.240803 | 469.3374 | 1.066667 |
| 15 AUGUSTA (401-BUFF. | 143.5016 | 548.0973 | 0 | 150.5657 | 9.361204 | 540.9841 | 0 |
| 15 AUGUSTA (402-CHUR | 142.4464 | 608.305 | 0 | 149.5128 | 15.60201 | 590.8252 | 2.133333 |
| 15 AUGUSTA (403-CRAIC | 80.19207 | 347.7511 | 0 | 75.80932 | 6.240803 | 350.9647 |  |
| 15 AUGUSTA (404-DEER | 42.20635 | 204.4984 | 0 | 42.11629 | 5.200669 | 202.4796 |  |
| 15 AUGUSTA ( 405 - CEDA | 283.8377 | 683.0455 | 0 | 295.8669 | 12.48161 | 656.2417 | 1.066667 |
| 15 AUGUSTA (501-GREE | 217.3627 | 896.8865 | 0 | 224.2693 | 13.52174 | 888.8337 | 1.066667 |
| 15 AUGUSTA ( 502 - MIDC | 147.7222 | 429.7581 | 0 | 148.4599 | 8.32107 | 421.573 | 1.066667 |
| 15 AUGUSTA (503-SPOT | 124.5087 | 472.3187 | 0 | 120.0314 | 4.160535 | 473.4909 |  |
| 15 AUGUSTA (504-WHIT | 260.6242 | 936.3329 | 1.083333 | 256.9094 | 15.60201 | 929.3297 |  |
| 15 AUGUSTA (601-SHER. | 182.5425 | 567.8205 | 0 | 190.5762 | 9.361204 | 556.5594 | 1.066667 |
| 15 AUGUSTA (602-RIDGI | 399.9052 | 1293.427 | 0 | 399.0519 | 16.64214 | 1277.179 | 3.2 |
| 15 AUGUSTA (603-LYND | 357.6989 | 885.4678 | 2.166667 | 363.253 | 18.72241 | 867.0282 | 3.2 |
| 15 AUGUSTA (801-DOOI | 211.0318 | 677.8552 | 0 | 212.6873 | 6.240803 | 671.8171 |  |
| 15 AUGUSTA (802-FISHE | 520.1933 | 1151.212 | 1.083333 | 533.824 | 36.40468 | 1110.004 |  |
| 15 AUGUSTA (803-WILSI | 431.56 | 770.2428 | 2.166667 | 439.0623 | 14.56187 | 752.8089 | 1.066667 |
| 17 BATH COUI 101 - WARI | 93.7233 | 168.1667 | 1 | 104.9279 | 2 | 160.3309 |  |
| 17 BATH COUI 102 - MOU | 13.07767 | 46.71296 | 0 | 12.98077 | 0 | 47.89106 |  |
| 17 BATH COUI201-HOT! | 88.27427 | 137.0247 | 0 | 84.375 | 2 | 145.7554 |  |
| 17 BATH COUI 301 - FAIR | 42.50243 | 192.0422 | 0 | 43.26923 | 4 | 188.4409 |  |
| 17 BATH COUI 302 - BUR^ | 17.43689 | 35.29424 | 0 | 11.89904 | 3 | 38.52107 |  |
| 17 BATH COUI 401 - MILLE | 92.6335 | 217.9938 | 0 | 88.70192 | 2 | 219.6742 |  |
| 17 BATH COUI501-HEAL | 101.3519 | 211.7654 | 1 | 103.8462 | 3 | 212.3864 |  |
| 19 BEDFORD (101-GOOI | 224.1238 | 882.5022 | 0 | 226.0927 | 11.8381 | 875.1609 |  |
| 19 BEDFORD (102-HARC | 141.5519 | 392.9236 | 0 | 152.1572 | 2.152381 | 386.6257 |  |
| 19 BEDFORD (103-CHAN | 211.2554 | 613.5491 | 0 | 218.592 | 4.304762 | 609.3557 |  |
| 19 BEDFORD (104-STEW | 165.1439 | 577.8288 | 1 | 166.0871 | 6.457143 | 573.6349 |  |
| 19 BEDFORD ( 201 - BEDF | 106.1639 | 324.6347 | 0 | 105.0099 | 2.152381 | 324.6395 |  |
| 19 BEDFORD ( 202 - STAU | 128.6835 | 465.4148 | 0 | 135.0127 | 4.304762 | 457.0168 |  |
| 19 BEDFORD ( 203 - MON | 339.939 | 926.6273 | 2 | 364.32 | 9.685714 | 902.4769 |  |
| 19 BEDFORD ( 204 - Quak | 99.72973 | 306.7746 | 1 | 99.65225 | 6.457143 | 307.8297 |  |
| 19 BEDFORD ( 205 -SAUN | 283.1037 | 728.0643 | 0 | 286.0984 | 5.380952 | 727.0244 |  |
| 19 BEDFORD ( 301 - NEW | 383.6397 | 1624.253 | 1 | 399.2419 | 17.19008 | 1604.247 |  |
| 19 BEDFORD ( 302 - BEDF | 174.7951 | 662.9272 | 0 | 196.0899 | 7.533333 | 646.1272 |  |
| 19 BEDFORD ( 303 - BETH | 135.1177 | 400.2778 | 0 | 138.2273 | 2.152381 | 398.1825 |  |
| 19 BEDFORD ( 304 -FORE | 138.9224 | 422.9069 | 1 | 145.8564 | 0 | 418.9502 |  |
| 19 BEDFORD ( 305 -HUDL | 82.57193 | 367.7092 | 0 | 80.36472 | 2.152381 | 368.7653 |  |
| 19 BEDFORD ( 401 - FORE | 353.7179 | 1054.158 | 1 | 374.7551 | 9.669421 | 1040.116 |  |
| 19 BEDFORD ( 402 - THON | 203.0405 | 558.6931 | 4 | 203.3472 | 6.446281 | 563.0939 |  |
| 19 BEDFORD ( 403 -KNIG\| | 442.4146 | 1230.369 | 0 | 463.1206 | 13.96694 | 1206.037 |  |
| 19 BEDFORD ( 404 -FORE | 260.7467 | 967.0885 | 0 | 261.9027 | 10.7438 | 963.378 |  |
| 19 BEDFORD ( 502 - BIG IS | 86.55937 | 238.4034 | 3 | 88.36554 | 6.446281 | 235.4002 |  |
| 19 BEDFORD ( 503 -SEDA | 106.8634 | 322.3628 | 1 | 104.3352 | 11.81818 | 316.2866 |  |


| D (504-SUCK | 141.0597 | 511.0125 | 1 | 139.4685 | 8.595041 | 507.0956 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD ( $505-\mathrm{BOON}$ | 397.5319 | 930.8097 | 3 | 405.6298 | 12.89256 | 920.8607 | 1 |
| 19 BEDFORD ( 506 - BOO | 400.7378 | 1338.169 | 0 | 412.0177 | 17.19008 | 1311.812 | 0 |
| 19 BEDFORD ( 601 -MON | 198.766 | 617.7757 | 1 | 196.9593 | 15.04132 | 608.7221 | 0 |
| 19 BEDFORD ( $602-$ SHAD | 197.3147 | 605.1443 | 1 | 192.8753 | 6.457143 | 606.2039 | 0 |
| 19 BEDFORD ( 603 -THAX | 53.61813 | 153.3873 | 1 | 51.43342 | 0 | 157.592 | 0 |
| 19 BEDFORD ( 604 - BEDF | 360.3139 | 803.7073 | 3 | 363.2485 | 16.14286 | 793.2131 | 0 |
| 19 BEDFORD (701-GOOI | 221.9791 | 1064.256 | 1 | 236.808 | 5.380952 | 1048.512 | 0 |
| 19 BEDFORD ( 702 -LIBER | 198.3871 | 510.5905 | 0 | 200.376 | 5.380952 | 506.3956 | 0 |
| 19 BEDFORD ( 703 -THAX | 108.3086 | 412.8849 | 0 | 105.0099 | 4.304762 | 416.0429 | 0 |
| 19 BEDFORD ( 704 -BEDF | 457.8989 | 784.7966 | 0 | 472.5445 | 10.7619 | 772.2008 |  |
| 21 BLAND COI 101 - BAST | 44.90055 | 201.4649 | 0 | 47.16022 | 0 | 200.2439 |  |
| 21 BLAND COI 102 -CERE: | 47.03867 | 236.9561 | 1 | 45.01657 | 4.444444 | 237.7897 | 0 |
| 21 BLAND COI 201 - DAVI! | 16.03591 | 64.7193 | 0 | 18.22099 | 1.111111 | 63.61917 | 0 |
| 21 BLAND COI 202 - SEDD | 112.2514 | 415.4561 | 1 | 114.6851 | 5.555556 | 417.1749 | 0 |
| 21 BLAND COI 301 - HOLL | 34.20994 | 199.3772 | 0 | 31.08287 | 1.111111 | 204.4157 | 0 |
| 21 BLAND COI 302 - MECF | 14.96685 | 116.9123 | 0 | 16.07735 | 1.111111 | 115.766 |  |
| 21 BLAND COI 401 -ROCK | 117.5967 | 431.114 | 0 | 115.7569 | 6.666667 | 436.9907 |  |
| 23 BOTETOUR 101 - DALE' | 445.8462 | 945.9304 | 0 | 465.4989 | 10.33898 | 924.3351 |  |
| 23 BOTETOUR 102-GREE | 348.9231 | 1154.854 | 1 | 365.5188 | 14.47458 | 1129.159 |  |
| 23 BOTETOUR 201 -bLUE | 330.6154 | 955.3792 | 0 | 339.7174 | 12.40678 | 936.9397 | 0 |
| 23 BOTETOUR 202 -RAINI | 343.5385 | 1020.471 | 3 | 350.468 | 15.50847 | 1007.315 |  |
| 23 BOTETOUR 301 -BUCH | 264.9231 | 799.9988 | 2 | 268.7638 | 10.33898 | 791.9871 |  |
| 23 BOTETOUR 302 - MILL | 295.0769 | 783.201 | 1 | 291.34 | 16.54237 | 783.5841 |  |
| 23 BOTETOUR 403 -EAGL | 170.1538 | 558.5294 | 2 | 155.883 | 7.237288 | 569.3064 |  |
| 23 BOTETOUR 406 - FINC $/$ | 422.1538 | 1095.012 | 4 | 431.0971 | 18.61017 | 1075.59 | 2 |
| 23 BOTETOUR501-TROU | 192.7692 | 527.0334 | 1 | 190.2848 | 2.067797 | 533.5934 | 0 |
| 23 BOTETOUR $502-\mathrm{CLOV}$ | 518 | 1254.591 | 1 | 550.4283 | 14.47458 | 1213.19 |  |
| 25 BRUNSWIC 101 - BROC | 125.8787 | 117.9123 | 0 | 125.666 | 0 | 120.2101 |  |
| 25 BRUNSWIC 102 -ROCK | 159.4463 | 226.0888 | 0 | 158.1298 | 1.117647 | 228.5075 |  |
| 25 BRUNSWIC $103-$ TILLN | 144.7605 | 283.4223 | 0 | 149.752 | 2.235294 | 276.1584 |  |
| 25 BRUNSWIC 201 - DRON | 81.82115 | 81.13233 | 0 | 84.82457 | 1.117647 | 76.89116 |  |
| 25 BRUNSWIC 202 -EDGE | 279.0311 | 135.2205 | 0 | 280.6541 | 3.352941 | 133.2058 | 0 |
| 25 BRUNSWIC 203 -FITZH | 233.9246 | 120.0758 | 0 | 258.6626 | 1.117647 | 123.4591 | 0 |
| 25 BRUNSWIC 301 - ALBEI | 47.20451 | 62.74233 | 0 | 45.03033 | 0 | 64.97845 | 0 |
| 25 BRUNSWIC 302 -DANI | 242.3165 | 227.1705 | 0 | 245.0488 | 1.117647 | 225.2586 |  |
| 25 BRUNSWIC $303-$ ELMC | 109.0949 | 104.9311 | 0 | 103.6745 | 0 | 110.4634 |  |
| 25 BRUNSWIC 304 -SEYM | 114.3398 | 75.72351 | 0 | 114.1466 | 0 | 76.89116 | 0 |
| 25 BRUNSWIC 401 - STUR | 422.7426 | 286.6676 | 0 | 417.8395 | 6.705882 | 288.0711 | 0 |
| 25 BRUNSWIC 402 - KING' | 182.5241 | 82.21409 | 0 | 185.3574 | 1.117647 | 82.30603 | 0 |
| 25 BRUNSWIC 501 -TOTA | 554.9152 | 207.6988 | 0 | 559.2138 | 1.117647 | 203.5991 | 0 |
| 27 BUCHANA「 102 - BLAC | 26.94822 | 146.3494 | 0 | 27.02863 | 1.12 | 150.5215 | 0 |
| 27 BUCHANA「 103 -HURL | 58.38782 | 315.4642 | 1.333333 | 55.18346 | 1.12 | 323.7837 | 1.5 |
| 27 BUCHANAr 201 -GRAS | 22.45685 | 40.11057 | 0 | 21.39767 | 0 | 42.23265 | 0 |
| 27 BUCHANAP 202 - BULL | 48.28223 | 185.3759 | 0 | 41.66914 | 3.36 | 192.7542 | 1.5 |
| 27 BUCHANAP 203 -ROCK | 69.61624 | 198.3847 | 0 | 69.82397 | 0 | 200.3344 | 0 |
| 27 BUCHANAr 301 - SLATI | 97.68731 | 229.8227 | 1.333333 | 88.96925 | 3.36 | 240.4013 |  |


| 27 BUCHANA「 302 －NORT | 62.87919 | 241.7475 | 1.333333 | 59.68823 | 2.24 | 249.0644 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANA 403 －SOUT | 98.81015 | 401.1057 | 0 | 96.8526 | 3.36 | 405.0003 | 0 |
| 27 BUCHANA「 404－OAKV | 8.982741 | 40.11057 | 0 | 7.883351 | 0 | 41.14976 | 0 |
| 27 BUCHANA「 501 －PRAT | 103.3015 | 172.367 | 0 | 95.72641 | 0 | 189.5055 |  |
| 27 BUCHANAP 502 －FOX | 53.89645 | 50.95126 | 0 | 52.93107 | 1.12 | 57.39309 |  |
| 27 BUCHANA「 503 －VANS | 78.59898 | 220.0661 | 0 | 73.20255 | 2.24 | 231.7381 |  |
| 27 BUCHANA「 601 －COUN | 46.03655 | 146.3494 | 0 | 42.79533 | 1.12 | 153.7702 |  |
| 27 BUCHANA「 602 －GARL | 74.10761 | 230.9068 | 0 | 72.07635 | 1.12 | 236.0697 |  |
| 27 BUCHANA「 603 －HURF | 74.10761 | 132.2565 | 0 | 77.70732 | 0 | 134.2782 | 0 |
| 27 BUCHANA「 701 －WHIT | 121.267 | 306.7916 | 0 | 121.6288 | 3.36 | 330.281 | 0 |
| 27 BUCHANA「 702 －CONT | 60.6335 | 255.8404 | 0 | 57.43584 | 4.48 | 270.7221 |  |
| 29 BUCKINGH． 101 －NEW | 276.8816 | 333.5305 | 1 | 274.259 | 7 | 337.2354 |  |
| 29 BUCKINGH． 102 －GEOI | 67.12281 | 122.7141 | 0 | 66.99456 | 2 | 118.7153 |  |
| 29 BUCKINGH． 201 －WHIT | 187.7341 | 225.5002 | 1 | 183.1882 | 4 | 229.0259 |  |
| 29 BUCKINGH． 301 －CURE | 168.8558 | 301.0165 | 0 | 174.8139 | 3 | 292.0605 |  |
| 29 BUCKINGH． 302 －NEW | 81.80592 | 260.1119 | 0 | 84.78999 | 1 | 253.1892 |  |
| 29 BUCKINGH． 401 －MAYS | 271.6376 | 460.4399 | 0 | 264.8379 | 1 | 466.4564 |  |
| 29 BUCKINGH． 501 －WRIG | 78.65954 | 238.0863 | 0 | 78.50925 | 3 | 239.5317 |  |
| 29 BUCKINGH． 502 －GLEN | 237.0274 | 207.6699 | 0 | 238.6681 | 7 | 199.6097 |  |
| 29 BUCKINGH． 601 －SLATE | 342.9556 | 264.3072 | 1 | 352.7682 | 5 | 258.4421 |  |
| 29 BUCKINGH．701－GOLC | 200.3196 | 249.6235 | 0 | 205.1708 | 3 | 243.734 |  |
| 31 CAMPBELL 101－BROC | 383.7292 | 1166.086 | 1.076923 | 395.0595 | 10.33113 | 1149.753 | 1.1 |
| 31 CAMPBELL 102 －NEW | 324.8557 | 1123.399 | 1.076923 | 324.6633 | 18.59603 | 1121.634 | 1.1 |
| 31 CAMPBELL 201 －WALk | 277.5466 | 796.4782 | 1.076923 | 279.4836 | 14.46358 | 790.4551 | 2.2 |
| 31 CAMPBELL 202 －BEDF | 334.3175 | 1202.526 | 0 | 353.0319 | 12.39735 | 1178.913 |  |
| 31 CAMPBELL 301 －EVIN | 126.1576 | 393.5539 | 0 | 130.2856 | 3.099338 | 389.4996 |  |
| 31 CAMPBELL 302－OTTE | 110.3879 | 372.731 | 0 | 112.4238 | 1.033113 | 372.8365 |  |
| 31 CAMPBELL 303 －ALTA＇ | 425.7817 | 807.9308 | 0 | 436.0364 | 15.49669 | 792.5379 |  |
| 31 CAMPBELL 401－THRE | 188.185 | 786.0667 | 0 | 183.8708 | 10.33113 | 788.3722 |  |
| 31 CAMPBELL 402 －COUF | 366.9082 | 1333.711 | 4.307692 | 375.0964 | 16.5298 | 1322.632 | 2.2 |
| 31 CAMPBELL 501－SPRII | 297.5216 | 1118.193 | 2.153846 | 314.1564 | 13.43046 | 1095.598 | 1.1 |
| 31 CAMPBELL 502 －YELLC | 268.0848 | 604.907 | 1.076923 | 261.6218 | 5.165563 | 611.3269 |  |
| 31 CAMPBELL 601 －KING！ | 265.9822 | 651.7586 | 1.076923 | 266.8753 | 5.165563 | 650.9017 | 1.1 |
| 31 CAMPBELL 602 －CONC | 350.0872 | 1029.695 | 0 | 340.4236 | 13.43046 | 1037.277 |  |
| 31 CAMPBELL 701 －BROC | 229.1862 | 484.1338 | 0 | 221.6956 | 7.231788 | 490.5195 |  |
| 31 CAMPBELL 702 －GLAD | 293.3163 | 668.417 | 1.076923 | 295.2439 | 5.165563 | 663.399 | 1.1 |
| 31 CAMPBELL 703 －MOR｜ | 121.9523 | 339.4142 | 1.076923 | 125.0321 | 4.13245 | 335.3446 | 1.1 |
| 33 CAROLINE 101－BOW | 284.3288 | 551.1591 | 0 | 298.3656 | 4.314607 | 536.9581 |  |
| 33 CAROLINE 102－SPAR | 231.0172 | 370.607 | 0 | 227.4255 | 5.393258 | 368.8944 |  |
| 33 CAROLINE 201 －NORT | 348.0937 | 306.1995 | 3 | 348.441 | 10.78652 | 297.0181 |  |
| 33 CAROLINE 202 －SOUT | 382.5895 | 407.5621 | 0 | 381.8245 | 20.49438 | 392.1485 |  |
| 33 CAROLINE 1301－PORT | 136.9378 | 205.8928 | 0 | 139.7937 | 4.314607 | 200.8308 |  |
| 33 CAROLINE 302 －WOO | 398.2694 | 518.4274 | 2 | 400.6028 | 12.94382 | 510.533 |  |
| 33 CAROLINE 401 －DAW | 733.8192 | 430.791 | 1 | 744.8708 | 4.314607 | 424.9156 |  |
| 33 CAROLINE 102 －CARN | 252.969 | 159.4349 | 0 | 253.5064 | 2.157303 | 155.3796 |  |
| 33 CAROLINE 501 －WEST | 468.3063 | 295.6409 | 0 | 467.3699 | 4.314607 | 294.9041 |  |
| 33 CAROLINE \502－MILFI | 240.4251 | 332.596 | 1 | 255.5929 | 4.314607 | 320.2722 |  |


| 33 CAROLINE 601 - CHILE | 363.7736 | 370.607 | 0 | 360.9598 | 14.02247 | 361.4954 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 CAROLINE 602 -LAKE | 241.4704 | 285.0823 | 0 | 247.247 | 8.629213 | 271.6501 |  |
| 35 CARROLL C 101 - MT B | 70.21197 | 228.8382 | 1 | 65.60507 | 2.055556 | 237.566 |  |
| 35 CARROLL C 102 -ST PA | 96.80741 | 361.5435 | 0 | 80.41911 | 8.222222 | 374.6635 |  |
| 35 CARROLL C 103 -LAME | 46.80798 | 215.2542 | 0 | 47.61658 | 1.027778 | 217.6816 |  |
| 35 CARROLL C 105 -FANC | 115.9561 | 321.8364 | 0 | 122.745 | 5.138889 | 313.9638 |  |
| 35 CARROLL C 201 - HILLS | 269.1459 | 722.0421 | 0 | 268.7691 | 2.055556 | 727.3495 |  |
| 35 CARROLL C 202 -LAUR | 82.97778 | 268.5453 | 0 | 84.6517 | 2.055556 | 270.0089 |  |
| 35 CARROLL C 203 -GLAD | 137.2325 | 377.2174 | 0 | 128.0357 | 5.138889 | 380.9428 |  |
| 35 CARROLL C 301 - HILLS | 249.9972 | 758.6144 | 1 | 248.6644 | 11.30556 | 753.5132 |  |
| 35 CARROLL C 302 -SYLV t | 73.40342 | 312.4321 | 0 | 80.41911 | 0 | 307.6845 |  |
| 35 CARROLL C 303 - DUGS | 40.42507 | 168.2327 | 0 | 38.09326 | 4.111111 | 166.4008 |  |
| 35 CARROLL C 402 - WOO | 194.6786 | 552.7645 | 0 | 210.5711 | 4.111111 | 536.8781 |  |
| 35 CARROLL C 403 - OAKL | 95.74359 | 352.1392 | 1 | 85.70984 | 7.194444 | 360.0118 |  |
| 35 CARROLL C 405-OAKL | 89.36068 | 248.6918 | 0 | 81.47726 | 5.138889 | 252.2176 |  |
| 35 CARROLL C 406-WOO | 23.40399 | 95.08804 | 0 | 21.16292 | 2.055556 | 98.37533 |  |
| 35 CARROLL C 501 - VAUG | 48.93561 | 214.2093 | 0 | 45.50029 | 4.111111 | 212.4488 |  |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 117.0199 | 566.3485 | 0 | 120.6287 | 2.055556 | 561.9952 |  |
| 35 CARROLL C $503-$ WOO | 60.63761 | 276.9047 | 2 | 53.96546 | 4.111111 | 282.5674 |  |
| 35 CARROLL C 504 -LAUR | 54.2547 | 309.2974 | 0 | 53.96546 | 4.111111 | 308.7311 |  |
| 36 CHARLES C 101 - PREC | 539.4371 | 393.7975 | 2 | 542.9342 | 9 | 387.931 |  |
| 36 CHARLES C 201 - PREC | 567.944 | 272.2152 | 0 | 579.1298 | 2 | 260.7759 |  |
| 36 CHARLES C 301 - PREC | 575.6189 | 353.9873 | 1 | 576.9361 | 6 | 351.2931 |  |
| 37 CHARLOTTI 101 - COUN | 220.6475 | 372.3892 | 0 | 228.1109 | 7.233333 | 360.9515 |  |
| 37 CHARLOTTI 201 - RED ( | 214.2209 | 410.9841 | 0 | 201.3374 | 7.233333 | 418.3282 |  |
| 37 CHARLOTTI302-DRAK | 163.879 | 299.3717 | 0 | 160.6415 | 3.1 | 303.5748 |  |
| 37 CHARLOTT।401-KEYSI | 208.8654 | 415.1566 | 0 | 221.6853 | 5.166667 | 400.5936 |  |
| 37 CHARLOTT1501-CULLI | 203.5098 | 308.7597 | 4 | 204.5502 | 2.066667 | 308.7909 |  |
| 37 CHARLOTT1602-PHEN | 211.0076 | 465.2257 | 3 | 206.6921 | 3.1 | 474.6616 |  |
| 37 CHARLOTTI 702 - BACC | 193.8699 | 293.1131 | 0 | 195.9826 | 3.1 | 292.0995 |  |
| 41 CHESTERFII 101 - BELLI | 470.9126 | 410.2984 | 1.04 | 462.4347 | 11.58099 | 412.6363 |  |
| 41 CHESTERFII 102 - SOUT | 678.6682 | 800.2425 | 3.12 | 701.1107 | 17.89789 | 764.181 | 2.125 |
| 41 CHESTERFII 103 - ENON | 806.5178 | 1131.266 | 2.08 | 809.7935 | 17.89789 | 1112.51 | 3.1875 |
| 41 CHESTERFII 104 - NORT | 679.7336 | 1070.204 | 2.08 | 681.9313 | 17.89789 | 1057.849 |  |
| 41 CHESTERFII 105 - DREV | 538.756 | 406.8874 | 1.029412 | 527.4396 | 17.69106 | 405.3963 |  |
| 41 CHESTERFII 106 - HARR | 1235.879 | 1029.495 | 0 | 1241.328 | 17.89789 | 1007.476 | 1.0625 |
| 41 CHESTERFII 107 -WELL | 782.0133 | 770.2468 | 2.08 | 783.1555 | 21.05634 | 755.6068 |  |
| 41 CHESTERFII 108 -ECOF | 832.0877 | 1483.716 | 0 | 844.9556 | 26.32042 | 1449.05 | 2.125 |
| 41 CHESTERFII 109 - ELIZA | 1211.375 | 1213.755 | 0 | 1233.87 | 23.16197 | 1178.961 | 1.0625 |
| 41 CHESTERFII 110 - DUTC | 535.9028 | 589.2013 | 2.08 | 542.3485 | 8.422535 | 577.6908 | 1.0625 |
| 41 CHESTERFII111-IRON | 1251.86 | 1357.306 | 4.16 | 1254.114 | 27.37324 | 1337.585 | 3.1875 |
| 41 CHESTERFII 112 - CARV | 736.2005 | 688.8299 | 1.04 | 757.5831 | 12.6338 | 661.2899 |  |
| 41 CHESTERFII 201 -GATE | 563.6036 | 697.4001 | 1.04 | 567.921 | 10.52817 | 690.228 | 1.0625 |
| 41 CHESTERFII 202 - BEUL | 1147.646 | 618.2575 | 1.029412 | 1162.065 | 17.69106 | 593.8051 | 1.108108 |
| 41 CHESTERFII 203 - BIRD | 201.3631 | 241.0369 | 0 | 210.9725 | 5.264085 | 229.3615 | 0 |
| 41 CHESTERFII204-JACO | 606.7646 | 498.8334 | 0 | 616.5843 | 16.65041 | 475.2558 | 1.108108 |
| 41 CHESTERFII 205 - FALLI | 861.7971 | 473.469 | 0 | 868.0997 | 6.243902 | 465.7295 |  |


| M | 283 | 146.9022 | 0 | 751.3626 | 6.243902 | 140.7773 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII 207 - CHIPF | 381.486 | 149.0159 | 0 | 403.2737 | 1.04065 | 134.4265 |  |
| 208 - MEAL | 1066.886 | 399.4895 | 3.088235 | 1047.45 | 15.60976 | 411.7472 | 1.108108 |
| El | 873.6388 | 949 | 0 | 885.4452 | 24.21479 | 917.4459 |  |
| CHESTERFII210 | 1412.242 | 740.8522 | 3.088235 | 1432.683 | 31.21951 | 699.6527 | 1.108108 |
| 41 CHESTERFII 211 - NASH | 861.9192 | 1662.619 | 1.04 | 896.1004 | 17.89789 | 1621.607 |  |
| 41 CHESTERFII212-ST | 419.7409 | 525.2547 | 0 | 423.4374 | 13.52846 | 512.3024 |  |
| 41 CHESTERFII 213 - SOUT | 1916.994 | 512.5725 | 0 | 1920.856 | 19.77236 | 492.1914 | 1.108108 |
| 214 - HOPk | 151.9568 | 22. | 0 | 150.697 | 0 | 22.228 |  |
| 215 - Nortr | 413.3651 | 159 | 0 | 413.8862 | 602 | 156.6545 |  |
| CHESTERFII30 | 1327.505 | 326 | 1.04 | 1331.8 | 8.422535 | 317.2477 | 1.0625 |
| CHESTERFII 302 - DEER | 280.5357 | 415. | 0 | 281.2304 | 15.60976 | 401.1624 |  |
| CHESTERFII 303 - MAT | 1033.451 | 966.2901 | 2.08 | 1038.88 | 13.68662 | 949.5994 |  |
| 41 CHESTERFII304-WINF | 546.5569 | 1479.431 | 2.08 | 549.8071 | 13.68662 | 1468.342 |  |
| 41 CHESTERFII305-BEAC | 159.812 | 582.7737 | 1.04 | 168.3518 | 3.158451 | 572.3319 |  |
| 306 - WINT | 512.1901 | 1522.922 | 3.088235 | 531.6846 | 21.85366 | 1488.217 | 1.108108 |
| 307 - COSB | 989.3 | 115 | 1.029412 | 1012 | 21.85366 | 1115.634 | 1.108 |
| CHESTERFII308-SO | 321.9784 | 234.62 | 1.029412 | 319.4352 | 8.325203 | 229.6893 | 1.108 |
| CHESTERFII 309 - SKINC | 1036.069 | 1833.636 | 1.029412 | 1087.778 | 34.34146 | 1761.304 | 1.108108 |
| CHESTERFII310-TOM, | 775.7236 | 1061.078 | 5.147059 | 817.1599 | 21.85366 | 1007.669 | 2.216216 |
| 41 CHESTERFII313-WOO | 1044.57 | 1399.27 | 3.088235 | 1077.165 | 20.81301 | 1361.2 | 08 |
| CHESTERFII 315 - BAILE | 591.8877 | 1291.471 | 0 | 609.155 | 20.81301 | 1259.587 |  |
| CHESTERFII316-SPR | 675.8359 | 881.4133 | 0 | 694.05 | 22.89431 | 845.7224 |  |
| CHESTERFII317-B | 930.8683 | 1336.916 | 3.088235 | 960.428 | 16.65041 | 1297.692 | 1.1 |
| 41 CHESTERFII318-WEST | 251.8445 | 352.9881 | 1.029412 | 254.6992 | 2.081301 | 348.2386 | 1.108108 |
| 41 CHESTERFII 401 - HARB | 523.8791 | 657.361 | 0 | 532.7458 | 17.69106 | 640.378 |  |
| 402 - GENI ${ }^{-1}$ | 1329.357 | 1201.639 | 3.088235 | 1355.212 | 34.34146 | 1154.797 |  |
| 403 - BRAN | 901.1146 | 1025 | 2.058824 | 922.2233 | 32.26016 | 973.798 | 2.216216 |
| 404 - P | 910.6 | 713 | 2.058824 | 922 | 27.0 | 679.5416 | 3.324 |
| CHESTERFII 405 - LA PR | 886.2377 | 990.268 | 5.147059 | 904.18 | 21.8536 | 956.8624 | 08 |
| CHESTERFII 406 - SMOI | 686.4623 | 1034.657 | 0 | 730.1377 | 18.73171 | 973.798 |  |
| 41 CHESTERFII 407 - MON | 468.6221 | 615.087 | 1.029412 | 481.806 | 14.56911 | 588.5127 |  |
| 408 - REAN | 1359.11 | 801.0926 | 1.029412 | 1367.947 | 27.05691 | 774.8045 |  |
| N | 528.1296 | 448.104 | 0 | 546.5 | 8.32520 | 422.332 | 1.108108 |
| WAG | 501.5 | 513.629 | 0 | 520.0108 | 9.36585 | 489.0159 | 1.108108 |
| CHESTERFII411-SWIF | 862.8597 | 957.5065 | 0 | 885.079 | 22.89431 | 917.6988 |  |
| 41 CHESTERFII413-SHEN | 820.3543 | 700.6919 | 2.058824 | 824.5886 | 19.77236 | 679.5416 | 1.108108 |
| 41 CHESTERFII414-CREN | 1055.197 | 1088.556 | 0 | 1076.104 | 35.38211 | 1042.599 |  |
| 41 CHESTERFII415-EVER | 851.1707 | 952.2223 | 6.176471 | 893.5697 | 32.26016 | 888.0614 | 3.324324 |
| 41 CHESTERFII416-EVER | 432.4925 | 419.5696 | 0 | 448.9073 | 8.325203 | 394.8116 |  |
| 41 CHESTERFII417-EDGE | 416.553 | 442.8203 | 0 | 429.8049 | 16.65041 | 415.9811 | 1.108108 |
| 41 CHESTERFII 501 - HUGI | 713.0281 | 593.95 | 1.029412 | 734.3827 | 18.73171 | 555.6999 | 1.108108 |
| 41 CHESTERFII502-CRES | 520.6912 | 547.4485 | 1.029412 | 547.6033 | 10.4065 | 512.3024 |  |
| 41 CHESTERFII 503 - MIDL | 767.2225 | 1005.065 | 1.029412 | 799.1187 | 13.52846 | 964.2717 | 1.108108 |
| 41 CHESTERFII 504 -ROBII | 1164.648 | 1709.984 | 0 | 1278.802 | 18.73171 | 1584.539 |  |
| 41 CHESTERFII $505-\mathrm{BON}$, | 1067.948 | 1011.406 | 3.088235 | 1118.554 | 28.09756 | 948.3946 | 1.108108 |
| 1 CHESTERFII506-GREE | 984.0001 | 821.172 | 1.029412 | 1023.0 | 26.01626 | 764.2 |  |


| CHESTERFII507-SALIS | 948.9331 | 1655.028 | 3.088235 | 1031.532 | 30.17886 | 1559.135 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII508-BELG | 796.9763 | 876.129 | 2.058824 | 823.5274 | 18.73171 | 835.1376 | 1.108108 |
| 41 CHESTERFII $509-$ CRAN | 648.2074 | 473.469 | 1.029412 | 656.9117 | 18.73171 | 449.8523 | 1.108108 |
| 41 CHESTERFII510-SYCAI | 806.54 | 1151.967 | 3.088235 | 877.651 | 24.97561 | 1070.119 | 0 |
| 41 CHESTERFII511-BLAC | 524.9417 | 844.4235 | 0 | 569.8894 | 19.77236 | 779.0384 | 3.324324 |
| 41 CHESTERFII513-BEAU | 524.9417 | 191.2899 | 0 | 522.1333 | 13.52846 | 179.9409 | 1.108108 |
| 41 CHESTERFII514-WATr | 883.0498 | 1300.983 | 3.088235 | 956.1832 | 35.38211 | 1202.429 | 0 |
| 41 CHESTERFII515-DAVI! | 1041.382 | 259.9852 | 0 | 1053.818 | 12.4878 | 249.8004 |  |
| 41 CHESTERFII516-POCC | 698.1513 | 205.029 | 0 | 700.4228 | 11.44715 | 194.7596 |  |
| 41 CHESTERFII517-ROSE | 279.473 | 471.3553 | 0 | 307.7615 | 6.243902 | 440.326 |  |
| 41 CHESTERFII518-MIDL | 786.35 | 1346.427 | 1.029412 | 823.5274 | 13.52846 | 1307.218 | 1.108108 |
| 43 CLARKE CO 101 - RUSS | 420.7764 | 718.1563 | 2.4 | 410.613 | 9.590164 | 731.2087 | 0 |
| 43 CLARKE CO 201 - BERR | 494.5775 | 503.0305 | 0 | 495.151 | 13.85246 | 491.7674 | 0 |
| 43 CLARKE CO 301 - MILLI | 373.4115 | 465.5708 | 0 | 368.893 | 6.393443 | 467.0717 | 1.25 |
| 43 CLARKE CO 302 - PINE | 144.2977 | 225.8286 | 1.2 | 141.6285 | 7.459016 | 223.3354 | 0 |
| 43 CLARKE CO 401 - WHIT | 498.9835 | 590.7933 | 0 | 507.2278 | 10.65574 | 583.0343 | 1.25 |
| 43 CLARKE CO 501 - BUCK | 335.9602 | 454.868 | 2.4 | 340.3477 | 7.459016 | 446.6708 | 2.5 |
| 43 CLARKE CO 502 - BLUE | 140.9931 | 163.7525 | 0 | 136.1391 | 9.590164 | 158.9117 |  |
| 45 CRAIG COU 101 - COUF | 61 | 261 | 0 | 54 | 3 | 267 |  |
| 45 CRAIG COU 201 - AMM | 75 | 317 | 0 | 71 | 7 | 317 |  |
| 45 CRAIG COU 301 - GIVEI | 76 | 160 | 0 | 73 | 4 | 158 |  |
| 45 CRAIG COU 303 - MAR | 70 | 125 | 0 | 75 | 4 | 117 |  |
| 45 CRAIG COU 401 - BARB | 37 | 121 | 0 | 31 | 7 | 121 |  |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 12 | 24 | 0 | 11 | 0 | 25 |  |
| 45 CRAIG COU 403 - CRAIC | 40 | 137 | 0 | 40 | 0 | 137 |  |
| 45 CRAIG COU 501 - CRAIC | 59 | 256 | 0 | 58 | 3 | 256 | 0 |
| 47 CULPEPER 101-WEST | 811.4034 | 811.8532 | 0 | 826.8532 | 17.76774 | 796.3987 | 1.090909 |
| 47 CULPEPER 201 - EAST | 701.1468 | 580.3482 | 2 | 700.6324 | 16.72258 | 573.2378 | 1.090909 |
| 47 CULPEPER 302 - EGGE | 248.3451 | 598.3189 | 2 | 242.8146 | 7.316129 | 601.7939 |  |
| 47 CULPEPER 303 - CARD | 183.0475 | 443.9822 | 0 | 182.9132 | 5.225806 | 441.0335 | 1.090909 |
| 47 CULPEPER 304 - WILL | 142.3703 | 153.2796 | 0 | 145.4748 | 4.180645 | 152.2993 | 0 |
| 47 CULPEPER 401 - ELDO | 283.6701 | 565.5488 | 2 | 284.5316 | 6.270968 | 558.4309 | 2.181818 |
| 47 CULPEPER 402 - BROV | 512.747 | 1020.102 | 4 | 523.0675 | 20.90323 | 998.4068 | 1.090909 |
| 47 CULPEPER 501 - JEFFE | 393.9267 | 880.5647 | 1 | 407.5434 | 15.67742 | 857.7415 |  |
| 47 CULPEPER 502 - RIXEY | 381.0813 | 838.2807 | 1 | 384.0107 | 17.76774 | 822.8395 |  |
| 47 CULPEPER 601 - MITC | 56.73401 | 155.3938 | 0 | 59.90139 | 0 | 152.2993 | 0 |
| 47 CULPEPER 602 - PEAR | 475.2812 | 797.0538 | 1 | 483.4898 | 15.67742 | 781.5918 | 1.090909 |
| 47 CULPEPER 603 - SOUT | 164.8498 | 210.363 | 1 | 166.8682 | 8.36129 | 199.8929 | 2.181818 |
| 47 CULPEPER 702 - BRAN | 332.9109 | 804.4535 | 1 | 340.1543 | 8.36129 | 798.5139 | 1.090909 |
| 47 CULPEPER 703 - LIGNI | 174.4838 | 434.4683 | 0 | 170.0772 | 10.45161 | 430.4572 | 0 |
| 47 CULPEPER 704 - RICH/ | 76.00217 | 258.9896 | 1 | 71.66774 | 7.316129 | 258.0628 | 1.090909 |
| 49 CUMBERLA 101 - PREC | 268.0813 | 438.9189 | 0 | 276.7085 | 5 | 427.9133 | 0 |
| 49 CUMBERLA 201 - PREC | 208.6235 | 435.7838 | 1 | 209.0918 | 11 | 428.9595 | 0 |
| 49 CUMBERLA 301 - PREC | 331.7114 | 251.8559 | 0 | 342.2448 | 2 | 243.7746 | 0 |
| 49 CUMBERLA 401 - PREC | 183.5887 | 402.3423 | 1 | 193.4879 | 4 | 393.3873 | 0 |
| 49 CUMBERLA 501 - PREC | 265.995 | 327.0991 | 1 | 270.467 | 11 | 315.9653 | 0 |
| 51 DICKENSOP 101 - SOUT | 218.5327 | 523.8355 | 2.5 | 226.4797 | 4.545455 | 518.266 |  |


| 51 DICKENSOP 201 - NORA | 64.96917 | 176.4046 | 1.25 | 61.33825 | 4.545455 | 177.4147 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 DICKENSOP 202-FRYIN | 21.26264 | 83.89974 | 0 | 23.59164 | 0 | 82.79353 |  |
| 51 DICKENSOr 203 - CLINC | 90.95684 | 186.0853 | 0 | 88.46863 | 2.272727 | 193.5433 |  |
| 51 DICKENSOR 301 -WEST | 14.17509 | 124.774 | 0 | 15.33456 | 0 | 123.6527 |  |
| 51 DICKENSOP 302 - HERA | 34.25647 | 194.6904 | 0 | 34.20787 | 2.272727 | 195.6938 |  |
| 51 DICKENSO 303 -RIDG\| | 79.14427 | 309.7836 | 0 | 76.67282 | 0 | 312.895 |  |
| 51 DICKENSOP 401 - HAYS | 217.3514 | 332.372 | 0 | 217.0431 | 5.681818 | 337.6255 |  |
| 51 DICKENSOP 501 -TARP | 59.06289 | 119.3958 | 1.25 | 61.33825 | 2.272727 | 116.126 |  |
| 51 DICKENSOR 502 - NORT | 158.2885 | 394.759 | 0 | 154.5252 | 3.409091 | 399.9895 |  |
| 53 DINWIDDIE 101 - WHIT | 91.40853 | 266.8603 | 0 | 96.77868 | 6.339623 | 260.5814 |  |
| 53 DINWIDDIE 102-ROCK | 152.706 | 394.3959 | 1.25 | 153.7706 | 2.113208 | 396.77 |  |
| 53 DINWIDDIE 103-CHUR | 179.5909 | 682.6907 | 0 | 178.5029 | 3.169811 | 685.2326 |  |
| 53 DINWIDDIE 201 - ROHC | 257.0193 | 177.9068 | 0 | 266.679 | 1.056604 | 171.5762 |  |
| 53 DINWIDDIE 202-SUTH | 492.5307 | 719.1295 | 0 | 488.1947 | 5.283019 | 717.4031 |  |
| 53 DINWIDDIE 301 - REAN | 119.3688 | 218.6325 | 0 | 122.5863 | 4.226415 | 217.6873 |  |
| 53 DINWIDDIE 302 - NEW | 225.8328 | 398.6828 | 1.25 | 225.8169 | 5.283019 | 397.8424 |  |
| 53 DINWIDDIE 303 - LITTL | 481.7767 | 374.0331 | 0 | 493.5713 | 5.283019 | 366.7442 |  |
| 53 DINWIDDIE 401 - DINM | 350.5786 | 534.7923 | 0 | 359.1564 | 6.339623 | 520.0904 |  |
| 53 DINWIDDIE 402 - MCKE | 209.7019 | 260.4299 | 1.25 | 211.8378 | 3.169811 | 258.4367 |  |
| 53 DINWIDDIE 403 - CHER | 195.7218 | 174.6917 | 0 | 202.1599 | 1.056604 | 169.4315 |  |
| 53 DINWIDDIE 501 - EDGE | 102.1625 | 40.72566 | 0 | 97.854 | 3.169811 | 41.82171 |  |
| 53 DINWIDDIE 502-CHES | 821.6014 | 359.0289 | 1.25 | 815.0915 | 9.509434 | 361.3824 |  |
| 57 ESSEX COU 101-GREA | 381.9238 | 444.257 | 0 | 388.8131 | 6.24 | 438.9923 | 333 |
| 57 ESSEX COU 201 - NORT | 544.3512 | 334.2711 | 1 | 548.2702 | 5.2 | 324.0955 |  |
| 57 ESSEX COU 301 - SOUT | 367.6566 | 662.0724 | 1 | 376.7992 | 5.2 | 654.6946 | 2.666667 |
| 57 ESSEX COU 401 - CENT | 406.0684 | 556.3996 | 0 | 416.1174 | 9.36 | 545.2176 |  |
| 59 FAIRFAX CC 104 - CHAP | 949.5414 | 596.6591 | 0 | 944.9969 | 6.494991 | 595.5583 | 1.121495 |
| 59 FAIRFAX CC 105 -FAIR | 1759.043 | 932.9782 | 1.098958 | 1796.745 | 16.23748 | 881.0232 | 1.121495 |
| 59 FAIRFAX CC 106 - HERIT | 1202.297 | 389.9513 | 0 | 1212.234 | 22.73247 | 371.6642 | 1.121495 |
| 59 FAIRFAX CC 108 - KING! | 892.6145 | 540.7921 | 2.197917 | 916.5674 | 17.31998 | 503.7617 | 242991 |
| 59 FAIRFAX CC 109-LITTL | 576.1007 | 318.4416 | 0 | 573.1389 | 10.82499 | 313.4517 |  |
| 59 FAIRFAX CC 110 - NORT | 1420.897 | 707.2757 | 2.197917 | 1445.356 | 11.90748 | 691.8327 |  |
| 59 FAIRFAX CC 113 - CANT | 1566.63 | 840.239 | 5.494792 | 1626.168 | 19.48497 | 784.7487 | 1.121495 |
| 59 FAIRFAX CC 114 - OLDE | 713.8639 | 450.2877 | 1.098958 | 734.6186 | 4.329994 | 428.7572 | 1.121495 |
| 59 FAIRFAX CC 115 - RAVE | 587.4861 | 410.0635 | 0 | 592.471 | 8.659988 | 401.8899 |  |
| 59 FAIRFAX CC 116-WAKI | 1014.438 | 478.2211 | 3.296875 | 1038.246 | 10.82499 | 452.266 |  |
| 59 FAIRFAX CC 117 - WOO | 996.2215 | 591.0724 | 2.197917 | 1014.365 | 12.98998 | 567.5715 | 2.242991 |
| 59 FAIRFAX CC 118 - LAKE | 1500.594 | 646.9393 | 2.197917 | 1523.822 | 20.56747 | 613.4698 |  |
| 59 FAIRFAX CC 119 - LAUR | 1525.642 | 851.4124 | 1.098958 | 1556.8 | 17.31998 | 817.2134 | 1.121495 |
| 59 FAIRFAX CC 120 - SIDEE | 1098.69 | 839.1217 | 3.296875 | 1120.123 | 14.07248 | 818.3329 | 6.728972 |
| 59 FAIRFAX C( 121 - VILLA | 688.816 | 403.3594 | 1.098958 | 698.2288 | 17.31998 | 382.8589 | 1.121495 |
| 59 FAIRFAX C( 123 - ROBII | 1453.914 | 852.5297 | 3.296875 | 1469.237 | 31.39246 | 809.3771 | 1.121495 |
| 59 FAIRFAX C( 125 - SIGN, | 1180.665 | 652.526 | 0 | 1202 | 17.31998 | 622.4255 | 1.121495 |
| 59 FAIRFAX CC 126 - BON | 950.68 | 423.4715 | 2.197917 | 968.8777 | 15.15498 | 398.5315 | 2.242991 |
| 59 FAIRFAX CC 127 - BURK | 1625.834 | 773.1987 | 4.395833 | 1660.283 | 31.39246 | 724.2973 | $0$ |
| 59 FAIRFAX CC 128 - CARD | 866.4281 | 403.3594 | 1.098958 | 873.3546 | 9.742487 | 388.4562 | 1.121495 |
| 59 FAIRFAX CC 129 - KEEN | 687.6775 | 362.0179 | 0 | 695.9544 | 15.15498 | 342.5579 |  |


| 59 FAIRFAX C $130-$ TERR، | 876.6749 | 511.7413 | 0 | 890 | 18 | 48 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX C( 131 - EAGL | 1127.153 | 559.7869 | 3.296875 | 1138.318 | 19.48497 | 541.8237 |  |
| FAIRFAX C( 132 - MON | 1336.645 | 474.8691 | 2.197917 | 1363.479 | 19.48497 | 435.474 | 2.242991 |
| FAIRFAX CC 133 - DANE | 277.8035 | 134.0807 | 0 | 282.0207 | 2.164997 | 128.7391 |  |
| C( 134 - UNIV | 1251.254 | 206.7077 | 1.098958 | 1259.996 | 23.81497 | 176.8763 |  |
| 201 - Arms | 1460.745 | 617.8885 | 2.197917 | 1473.786 | 21.64997 | 594.4388 | 1.12 |
| 59 FAIRFAX C( 202 - FLINT | 1133.985 | 751.9692 | 0 | 1155.37 | 15.15498 | 718.7 | 1.1 |
| 59 FAIRFAX C( 203 - FLOR | 1439.113 | 782.1374 | 0 | 1453.317 | 20.56747 | 756.762 |  |
| 204-M | 316.5138 | 121.79 | 1.098958 | 333.1939 | 4.32999 | 105.2302 |  |
| C( 208 - RES | 1416.342 | 414.5328 | 2.197917 | 1416.927 | 24.89747 | 391.8146 | 1.121495 |
| C( 209 - REST( | 1440.252 | 339.6711 | 7.692708 | 1465.826 | 18.40247 | 312.3322 | 5.607477 |
| C(213-VIENI | 1609.894 | 795.5454 | 0 | 1634.128 | 12.98998 | 769.0762 | 1.121495 |
| 214-VIEN | 1251.254 | 627.9446 | 5.494792 | 1270.231 | 27.06246 | 598.9167 |  |
| 216 | 644.41 | 280.4521 | 0 | 655.015 | 8.659988 | 264.195 | 24 |
| C( 218 - VIEN | 913.1082 | 382.13 | 0 | 924.5277 | 6.494991 | 366.0668 | 95 |
| FAIRFAX CC 219 - WEST | 1384.463 | 706.1583 | 1.098958 | 1406.692 | 18.40247 | 676.1601 |  |
| FAIRFAX CC 220 - DOG | 1621.279 | 505.0373 | 0 | 1639.814 | 20.56747 | 488.0891 | 3.364486 |
| 22 | 1261.501 | 550.8482 | 0 | 1294.11 | 15.15498 | 503.7617 | 1.121495 |
| REST | 1141.955 | 232.4065 | 3.296875 | 1149.689 | 20.56747 | 212.6994 | 1.121495 |
| 223 - GLAD | 1752.211 | 536.3228 | 1.098958 | 1781.962 | 29.22746 | 491.4475 |  |
| 224 - SOUT | 2137.037 | 605.5978 | 6.59375 | 2149.271 | 40.05245 | 567.5715 | 3.364486 |
| X CC 225 - HUGF | 1615.587 | 376.5433 | 2.197917 | 1617.071 | 32.47496 | 357.1111 |  |
| FAIRFAX CC 226 - WOLI | 1408.373 | 848.0604 | 1.098958 | 1440.808 | 11.90748 | 809.3771 | 242991 |
| C 227 - SUNR | 736.6347 | 367.6046 | 1.098958 | 757.3622 | 8.659988 | 350.3942 |  |
| 229 - FOX $\uparrow$ | 1840.985 | 1055.133 | 6.393443 | 1866.257 | 24.84965 | 1023.162 | . 181818 |
| 233 - N | 1281.995 | 712.8623 | 0 | 1310.032 | 6.494991 | 687.3548 |  |
| FAIRFAX CC 234 - ALDR | 1226.206 | 499.4506 | 1.098958 | 1239.527 | 11.90748 | 481.3723 |  |
| 235 - FRYIN | 1154.478 | 357.5485 | 3.296875 | 1174.707 | 17.31998 | 328.0048 |  |
| FAIRFAX CC 236 - STUA | 576.1007 | 259.2227 | 2.197917 | 585.6479 | 7.57749 | 246.2835 |  |
| 237 - MCN, | 1178.388 | 336.3191 | 1.098958 | 1184.942 | 29.22746 | 316.8101 | 2.242991 |
| 238-C | 1188.63 | 502.8026 | 2.197917 | 1175.845 | 19.48497 | 502.6422 |  |
| 40 | 846. | 604.07 | 1.065574 | 869.825 | 8.643357 | 579.1051 |  |
| FAIRFAX CC 301 - CH | 1087.215 | 747.9567 | 2.131148 | 1116.003 | 8.643357 | 723.3092 | 2.181818 |
| FAIRFAX CC 302 - CHES | 1031.521 | 589.6876 | 1.041322 | 1048.13 | 10.82774 | 564.7319 | 2.117647 |
| FAIRFAX CC $303-\mathrm{CHUR}$ | 544.7814 | 350.569 | 0 | 546.2787 | 4.321678 | 345.6319 |  |
| FAIRFAX CC 304 - COOF | 671.584 | 479.6058 | 0 | 681.09 | 6.482517 | 464.6575 |  |
| C( 305 - EL NII | 903.29 | 422.6468 | 0 | 915.5554 | 7.579418 | 413.9867 |  |
| 306-GREA | 665.7135 | 578.9528 | 1.065574 | 681.09 | 4.321678 | 566.5159 |  |
| FAIRFAX CC 307 | 1021.308 | 488. | 1.041322 | 1057.194 | 10.827 | 454.4854 |  |
| FAIRFAX C 309 - KENN | 1201.102 | 811.9042 | 2.131148 | 1209.785 | 12.96503 | 795.4112 | 2.181818 |
| FAIRFAX C 310 - KIRBY | 832.9332 | 365.4718 | 1.041322 | 853.2341 | 11.91051 | 338.6141 | 1.058824 |
| FAIRFAX C( 311 - LANG | 686.8472 | 525.2826 | 3.196721 | 710.3968 | 6.482517 | 500.1362 | 3.272727 |
| FAIRFAX CC 312 -LONG | 996.3424 | 445.0684 | 0 | 1007.338 | 7.579418 | 431.9861 | 0 |
| FAIRFAX CC 314 - MCLE | 898.1848 | 486.4574 | 0 | 894.4434 | 6.482517 | 488.6915 | 1.090909 |
| FAIRFAX C( 315 - PIMN | 1217.626 | 541.4812 | 3.123967 | 1221.496 | 25.98658 | 523.1082 |  |
| 59 FAIRFAX CC 316 - SALO | 337.0316 | 220.8526 | 1.041322 | 336.5346 | 2.165548 | 223.8678 |  |
| FAIRFAX C( 317 - WEST | 939.6031 | 438.3419 | 0 | 962.013 | 6.496644 | 410.6118 | . 05882 |


| 59 FAIRFAX C( 318 - WEST | 601.4368 | 280.2698 | 0 | 602.8162 | 4.331096 | 277.8661 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FAIRFAX C( 319 - HERN | 1491.486 | 720.6837 | 3.296875 | 1495.392 | 31.39246 | 697.4301 |  |
| 20 | 1532.473 | 578.7817 | 5.494792 | 1564.76 | 21.64997 | 541.8237 | 3.364486 |
| 321 - CLEAI | 1507.542 | 823.3234 | 5.327869 | 1541.538 | 30.25175 | 780.533 |  |
| 322 - FORE | 879.3993 | 849.5875 | 2.131148 | 886.2375 | 11.88462 | 836.6123 | 1.090909 |
| 323-SHOL | 866.4842 | 527.5664 | 0 | 866.3089 | 9.723776 | 521.8813 |  |
| 59 FAIRFAX C( 324 - HERN | 1261.501 | 445.8183 | 792 | 1256 | 28.14496 | 441.0713 |  |
| 59 FAIRFAX C( 325 - HUTC | 898. | 185.4783 | 1.098958 | 900. | 15.15498 | 179.1153 |  |
| 59 FAIRFAX C( 327 - SUGA | 1322 | 773.0789 | 0 | 1332.87 | 12.96503 | 756.499 |  |
| C( 328 - HIC | 1015.595 | 802.7688 | 3.196721 | 1056.217 | 9.723776 | 763.3658 | 1.090909 |
| FAIRFAX C( 329 - SENE | 1114.219 | 870.142 | 0 | 1126.553 | 15.12587 | 845.7682 |  |
| 331 - SPR | 776.0787 | 537.8437 | 1.065574 | 804.1785 | 3.241259 | 516.1589 |  |
| 332 - COAT | 1162.448 | 300.5642 | 3.296875 | 1166.747 | 17.31998 | 285.465 |  |
| (333-SALO | 635. | 382.2879 | 2.08264 | 653.806 | 5.41387 | 367.8632 | 1.058824 |
| -1-BUS | 1298 | 663.6788 | 4.165289 | 1287.21 | 23.82103 | 655.854 | 1.058824 |
| FAIRFAX CC 402 - CA | 482.2842 | 173.7672 | 1.041322 | 477.0406 | 4.331096 | 178.8693 |  |
| FAIRFAX CC 403 - FORE | 528.8105 | 199.5521 | 1.041322 | 532.5631 | 8.662192 | 188.9939 | 1.058824 |
| 404-FRAN | 1362.878 | 467.4899 | 1.041322 | 1375.599 | 16.24161 | 446.6107 |  |
| 05-GRO\ | 746.689 | 211.8839 | 2.082645 | 761.45 | 6.496644 | 197.9936 | 4.235294 |
| - 06 - HAYF | 861.3029 | 630.046 | 1.041322 | 894.0262 | 11.91051 | 591.731 |  |
| 408-MOU | 1068.969 | 292.6016 | 2.082645 | 1084.389 | 17.32438 | 265.4915 |  |
| 409-PION | 1381.035 | 445.0684 | 1.041322 | 1393.729 | 9.744966 | 430.8612 |  |
| FAIRFAX CC 410 - ROSE | 1541.04 | 790.3607 | 5.206612 | 1570.495 | 25.98658 | 748.101 |  |
| 411-VIRGI | 896.4812 | 355.382 | 3.123967 | 911.022 | 12.99329 | 331.8643 | 588 |
| 13 - FA | 871.5159 | 131.1662 | 0 | 895.1593 | 3.248322 | 112.4964 |  |
| CRES | 910.0987 | 432.7365 | 3.123967 | 914.4222 | 16.24161 | 417.3616 | 3.176471 |
| GAR | 1228 | 513 | 1.041322 | 1243.025 | 8.662192 | 506.2338 | 1.058824 |
| 18- LYNB | 748.959 | 243 | 1.041322 | 755.786 | 4.331096 | 238.4923 |  |
| FAIRFAX CC 419 - LANE | 1404.866 | 421.5257 | 1.041322 | 1414.125 | 18.40716 | 397.1123 | 2.117647 |
| FAIRFAX CC 420 - VILLA | 1578.488 | 597.5351 | 5.206612 | 1595.423 | 24.9038 | 563.6069 | . 117647 |
| G: | 1341.318 | 476.4586 | 0 | 1362.002 | 10.82774 | 448.8606 | . 058824 |
| VA | 1385.57 | 519.0596 | 1.041322 | 1403.92 | 15.15884 | 492.7342 | 1.058 |
| 23 - CL | 106 | 51 | 5.206612 | 1079 | 15.15884 | 496.1091 | 1.05 |
| FAIRFAX CC 424 - HUN | 1098.473 | 498.8802 | 2.082645 | 1116.11 | 18.40716 | 471.3599 |  |
| FAIRFAX CC 426 - GREE | 865.2896 | 468.1651 | 0 | 879.0405 | 1.082499 | 458.9829 | 1.121 |
| FAIRFAX CC 427 - ISLAN | 1044.003 | 404.7095 | 2.082645 | 1054.928 | 14.07606 | 385.8626 | 1.058824 |
| FAIRFAX CC 428 - PINE | 1232.378 | 219.7315 | 1.041322 | 1246.424 | 10.82774 | 202.4935 | 1.058824 |
| 229-HYBL. | 1214.221 | 202.9153 | 0 | 1209.032 | 9.744966 | 201.3685 | 1.058824 |
| FAIRFAX CC501-BAILE | 1371.957 | 383.409 | 2.082645 | 1399.395 | 10.82774 | 364.4883 | 1.058824 |
| FAIRFAX CC502-BARC | 629.612 | 275.9828 | 0 | 645.9185 | 1.082499 | 259.7171 |  |
| FAIRFAX CC 503 - BELVI | 732.0805 | 264.8094 | 1.098958 | 734.6186 | 8.659988 | 256.3587 |  |
| 59 FAIRFAX CC504-BRIST | 898.3072 | 310.6203 | 1.098958 | 918.8418 | 7.57749 | 297.7791 | 1.121495 |
| FAIRFAX CC505-GLEN | 1117.765 | 312.781 | 2.082645 | 1118.383 | 11.91051 | 305.9902 | 2.117647 |
| FAIRFAX CC506-HOLA | 201.992 | 43.72208 | 0 | 207.3597 | 3.248322 | 39.37374 |  |
| FAIRFAX CC 507 - LINCC | 1294.791 | 409.1938 | 0 | 1321.21 | 6.496644 | 380.2378 |  |
| FAIRFAX CC508-MASC | 1132.846 | 461.4611 | 5.494792 | 1138.318 | 25.97996 | 438.8324 | 1.121495 |
| FAIRFAX C( 509 - PLAZ | 469.8016 | 80.71769 | 2.082645 | 467.9757 | 3.248322 | 82.1223 | . 05 |

59 FAIRFAX CC 510 - PARK 862.4377 59 FAIRFAX C( 511 - RAVE 1067.949 59 FAIRFAX C( 512 - SLEEF 621.6422 59 FAIRFAX C(513-SAIN1 1018.953 59 FAIRFAX CC 514 - CROS 569.6628 59 FAIRFAX C(515-WEST 691.0849 59 FAIRFAX C(516-WEY/ 1200.604 59 FAIRFAX C(517-WILL؛ 655.9065 59 FAIRFAX CC 518 - COLU 954.0956 59 FAIRFAX C(519-HUM 640.9974 59 FAIRFAX C(520-SKYLI 947.5466 59 FAIRFAX C( 521 - BROC 752.3634 59 FAIRFAX C(522-CAMI 582.9319 59 FAIRFAX CC523-POE 967.9728 59 FAIRFAX C(525 - WALI 1219.895 59 FAIRFAX C(526-BREN 1371.957 59 FAIRFAX C(527-EDSA 778.4635 59 FAIRFAX C(528-RIDGI 510.0654 59 FAIRFAX C(530-HOLN 761.6825 59 FAIRFAX CC 601 - BELLE 753.4982 59 FAIRFAX C( 602 - BELLE 966.838 59 FAIRFAX C( 604 - BUCK 1342.452 59 FAIRFAX C( 605 - FORT 889.6725 59 FAIRFAX C(606-HOLL 1093.934 59 FAIRFAX C( 607 - HUN1 1536.501 59 FAIRFAX CC 608 - KIRKS 912.3683 59 FAIRFAX C( 609 - MARI 851.0898 59 FAIRFAX C( 610 - SHER' 801.1592 59 FAIRFAX C( 611 - STRA 1096.204 59 FAIRFAX C( 612 - WAY 533.3496 59 FAIRFAX C(613 - WEST 1029.251 59 FAIRFAX C( 614 - RIVEF 760.3069 59 FAIRFAX C(615-WOO 996.3424 59 FAIRFAX CC 616 - GUN 744.4199 59 FAIRFAX C( 617 - LORT 848.8202 59 FAIRFAX CC 618 - NEWI 1811.415 59 FAIRFAX C( 619 - BELVI 1213.087 59 FAIRFAX C( 621 - GROS 861.3029 59 FAIRFAX CC 622 -LORT 1328.835 59 FAIRFAX C( 623 - ALBA 1126.843 59 FAIRFAX C(626-SARA 1261.882 59 FAIRFAX CC 627 - WOO 1382.17 59 FAIRFAX C(628-LAUR 1497.179 59 FAIRFAX C(629-SOUT 979.1434 59 FAIRFAX CC 630-ARMY 273.4835 59 FAIRFAX CC 701 - BLAK 1719.194 59 FAIRFAX CC 703 - FORT 789.8113
350.8977 434.6449 280.4521 456.4316 99.77603 214.1261 363.2296 181.6148 423.4715 319.559 202.9153 385.6512 356.4312 436.0997 514.5753 383.409 298.207 282.6868
176.5396 533.6336 412.5571 386.7723 632.2886 602.0194
512.3331
354.261
548.2076 330.7183 710.7641 357.6242
1121.079 570.6292 600.8983
639.015
206.2785 924.0394 623.3199 247.7585
355.382 431.6154 700.6744 420.4046 489.3945 703.9236 151.3457 624.5926 223.0947
1.041322874 .7633
2.1979171086 .007
1.098958636 .821
$0 \quad 1035.811$
$2.082645 \quad 581.287$
1.041322700 .2639
2.0826451203 .366
2.082645673 .0692
2.197917959 .7803
0650.4672
1.041322941 .617
1.041322
772.7831
595.8825
1.041322984 .6753
1.0413221229 .428
1.0413221407 .326
2.082645786 .3805
2.197917515 .1427
0771.0083
1.041322760 .3189
3.123967967 .6786
2.082645
$0 \quad 914.4222$
4.1652891091 .188
$\begin{array}{rr}2.082645 & 1555.764 \\ 0 & 924.6203\end{array}$
2.082645853 .2341
1.041322811 .309
1.0413221124 .048
1.041322541 .628
4.1652891053 .795
2.082645786 .3805
2.0826451015 .269
$0 \quad 748.9877$
0875.8964
1.0989581861 .564
1.0413221243 .025
3.123967877 .0295
2.0826451337 .073
$2.082645 \quad 1144.444$
3.1239671308 .746
$0 \quad 1401.661$
$2.197917 \quad 1520.41$
1.098958999 .5816
$0 \quad 275.3465$
2.1979171737 .612
3.123967805 .6434
4.331096
15.15498
337.4892
15.15498411 .96510
1.058824
$8.659988 \quad 263.0755 \quad 0$
$7.578041 \quad 438.504 \quad 0$
$4.331096 \quad 93.372 \quad 0$
$10.82774 \quad 203.6185 \quad 0$
$\begin{array}{lll}14.07606 & 357.7385 & 2.117647\end{array}$
$\begin{array}{lll}6.496644 & 181.1192 & 0\end{array}$
14.07248407 .48721 .121495
$\begin{array}{llll}7.57749 & 304.4959 & 0\end{array}$
$\begin{array}{lll}10.82774 & 195.7437 & 1.058824\end{array}$
$\begin{array}{llll}11.91051 & 365.6133 & 0\end{array}$
$\begin{array}{llll}5.412493 & 341.4385 & 0\end{array}$
$\begin{array}{llll}7.579418 & 415.1117 & 3.176471\end{array}$
$\begin{array}{lll}16.24161 & 500.6089 & 0\end{array}$
$\begin{array}{llll}10.82774 & 355.4886 & 1.058824\end{array}$
$4.331096 \quad 287.9908 \quad 2.117647$
$10.82499 \quad 267.55341 .121495$
$9.742487163 .4427 \quad 0$
$4.331096 \quad 525.3581 \quad 0$
8.662192410 .61181 .058824
$24.9038 \quad 352.1137 \quad 0$
$\begin{array}{llll}10.82774 & 602.9806 & 2.117647\end{array}$
$\begin{array}{llll}16.24161 & 600.7307 & 3.176471\end{array}$
$29.2349 \quad 473.6098 \quad 2.117647$
343.1140
$\begin{array}{llll}11.91051 & 542.2326 & 1.058824\end{array}$
1.058824
1.058824
1.058824
2.117647
2.117647

0
0
0
0
0
2.117647
1.058824
1.058824
1.058824
404.987
$457.8634 \quad 3.364486$
683.9964
150.7452
$600.0361 \quad 1.121495$
202.4935

59 FAIRFAX CC 704 - FREEI 905.1384 59 FAIRFAX CC 705 - GRAF 1491.109 59 FAIRFAX CC 707 - MAN 923.355 59 FAIRFAX CC 708 - MAR 1990.415 59 FAIRFAX CC 709 - MOSI 1219.375 59 FAIRFAX CC 710 - PINE 923.7161 59 FAIRFAX CC 711 - PRICE 850.4885 59 FAIRFAX C( 712 - SHRE' 678.6023 59 FAIRFAX CC 713 - TIMB 1295.926 59 FAIRFAX CC 714 - WALk 1229.622 59 FAIRFAX CC 717 - WOO 781.0377 59 FAIRFAX CC 718 - PINE 867.5666 59 FAIRFAX CC 720 - THOR 1271.748 59 FAIRFAX CC 721 - MERF 1447.083 59 FAIRFAX CC 723-GALLI 692.2316 59 FAIRFAX CC 726 - MAG، 1353.8 59 FAIRFAX CC 727 - OAKT 884.6447 59 FAIRFAX CC 729 - NOTT 1399.264 59 FAIRFAX CC 730 - PEND 1237.592 59 FAIRFAX CC 731 - TYSO 859.5969 59 FAIRFAX CC 732 - OAK I 1241.007 59 FAIRFAX CC 733 - KILMI 1617.864 59 FAIRFAX CC 734 - HUN7 832.2719 59 FAIRFAX CC 735 - ROTC 490.7103 59 FAIRFAX CC 801 - BURK 1700.977 59 FAIRFAX C( 802 - CEDA 422.3979 59 FAIRFAX C( 803 - CLIFT 1158.835 59 FAIRFAX CC 804 - COLC 572.9597 59 FAIRFAX C( 805 - FAIRF 529.5181 59 FAIRFAX C( 806 - SYDEI 1211.405 59 FAIRFAX CC 807 - HUN1 778.7606 59 FAIRFAX CC 811 - POHII 827.7178 59 FAIRFAX C( 812 - VALLI 1062.257 59 FAIRFAX CC 815 - WOO 785.4714 59 FAIRFAX C( 824 - ORAN 1459.607 59 FAIRFAX C( 825 - CHER 1022.408 59 FAIRFAX CC 827 -IRVIN 1050.871 59 FAIRFAX C( 833 - WHIT 1066.811 59 FAIRFAX C( 838 - SANG 777.2528 59 FAIRFAX C( 839 - SILVE 1124.786 59 FAIRFAX CC 840 - WEST 1120.322 59 FAIRFAX CC 841 - POPE 518.9512 59 FAIRFAX C( 842 - PARK 787.8689 59 FAIRFAX C( 843 - FAIR। 1195.466 59 FAIRFAX CC 844 - CENT 952.957 59 FAIRFAX C( 845 - FOUN 1176.446 59 FAIRFAX C( 846 - GREE 1266.055
374.3086
465.9304
588.5665
400.0074
329.5972
405.5941
299.3281
383.409 481.5732 280.4521 375.4259 555.3175 381.0126 198.8864 480.9429 607.8325 562.0216 591.0724 272.6307 801.1321
589.955 293.8602 200.0037 787.7241 156.4275 1368.019 582.3785 491.025 746.3825 526.2667 296.0949 595.5417 869.0001 937.4475 671.5208 610.06721 .098958 498.33324 .395833 626.91333 .196721 970.63091 .065574 641.35263 .296875 520.71492 .131148 606.71514 .395833 566.49093 .296875
326.2633 .296875 1188.7370 528.50142 .197917
5.206612
5.494792
2.082645
1.098958

0
1.041322
2.197917
1.098958
3.296875
5.494792

0
1.041322
1.098958
2.197917
1.098958
3.296875
1.098958
1.098958
1.098958
3.296875
5.494792

0
1.065574
2.131148
1.098958
2.197917
1.098958
1.098958
2.197917
$922.2533 \quad 6.494991$
$1521.771 \quad 25.98658$
7.57749
$0 \quad 1179.306$
1502.215
1051.892
1080.321
1076.91
803.0062
1160.549
1136.043
513.4551
819.9071
1212.234
962.0546
1196.89
1262.27
28.15213
18.40247
20.57271
11.90748
9.744966
10.82774
20.56747
16.23748
15.15498
20.56747
32.47496
11.90748
22.73826
12.98998
22.73247
$15.15498 \quad 5$
17.31998
22.73247
16.23748
12.98998
6.494991
21.64997
6.494991
17.28671
4.321678
9.723776
16.23748
10.82499


513
266.4341 .121495
769.0762
$\begin{array}{ll}560.8547 & 1 \\ 277.6287 & 1\end{array}$
1.121495
277.62871 .121495
$194.7878 \quad 2.242991$
$747.8062 \quad 2.242991$
144.4117
$1336.749 \quad 2.181818$
556.21561 .090909
471.5243
22.05841 .121495
$\begin{array}{rr}513.8369 & 0 \\ 283.226 & 4.485981\end{array}$
$584.3635 \quad 0$
$837.7568 \quad 2.181818$
$869.8285 \quad 2.242991$
$7.57749 \quad 642.576 \quad 1.121495$
$\begin{array}{llll}9.742487 & 577.6467 & 2.242991\end{array}$
$\begin{array}{lll}16.23748 & 489.2086 & 2.242991\end{array}$
$\begin{array}{rrr}7.562937 & 604.2836 & 0 \\ 14.04545 & 924.737 & 3.272727\end{array}$
$\begin{array}{llll}16.23748 & 619.0671 & 2.242991\end{array}$
10.804251

519
585.483
$\begin{array}{llll}20.56747 & 535.1068 & 1.121495\end{array}$
16.23748


417
1168
512
$\begin{array}{rr}512.7174 & 2.242991\end{array}$

| EE | 855.9173 | 485.3154 | 2.131148 | 873.3425 | 14.04545 | 456.6461 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 848 -FAIR | 1023.546 | 458.109 | 1.098958 | 1033.697 | 14.07248 | 441.0713 | 91 |
| FAIRFAX CC 849 - NEW | 1561.55 | 1385.147 | 2.131148 | 1607.185 | 20.52797 | 1332.171 |  |
| 59 FAIRFAX CC850-SOUT | 962.7602 | 798.2011 | 0 | 997.6034 | 6.482517 | 767.9438 | 09 |
| (851-WILL | 868.7052 | 612.3018 | 0 | 875.6289 | 6.494991 | 601.1556 | . 121495 |
| IRFAX CC 901 - CENT | 1081.612 | 434.6449 | 0 | 1101.928 | 18.40247 | 401.8899 |  |
| CC902-BROC | 1450.011 | 641.7583 | 1.065574 | 1453.617 | 21.60839 | 623.7397 | 818 |
| CC903-CUB F | 1320.86 | 854.1552 | 3.196721 | 1331.701 | 29.17133 | 822.8786 | 27 |
| FAIRFAX CC 904 - STON | 457.8982 | 374.5493 | 0 | 468.9088 | 9.723776 | 357.0767 |  |
| 9 FAIRFAX CC 905 - FRAN | 381.5818 | 227.2418 | 0 | 388.022 | 10.8042 | 209.4392 | 909 |
| FAIRFAX CC 908 - HIDD | 860.6137 | 586.9462 | 1.065574 | 887.4098 | 8.643357 | 558.5045 | 090909 |
| FAIRFAX CC 909 - OAK I | 892.3143 | 495.5927 | 1.065574 | 934.3007 | 12.96503 | 447.4903 |  |
| FAIRFAX CC 910 - LONL | 1293.38 | 529.6187 | 3.296875 | 1317.992 | 20.56747 | 494.8059 | 2.242991 |
| CC911-NAV | 1291.508 | 723.9764 | 1.065574 | 1310.6 | 18.36713 | 694.6973 | 1.090909 |
| FAIRFAX CC913-ROCK | 1380.739 | 994.6112 | 1.065574 | 1410.243 | 21.60839 | 961.3603 | 090909 |
| FAIRFAX C( 914 - VALE | 899.3589 | 586.9462 | 2.131148 | 914.3721 | 14.04545 | 565.3714 |  |
| FAIRFAX CC915-VIRGI | 765.5118 | 858.7228 | 3.196721 | 772.5272 | 12.96503 | 845.7682 |  |
| FAIRFAX CC916-WAPI | 1575.639 | 1115.655 | 3.196721 | 1600.151 | 14.04545 | 1095.264 | 1.090909 |
| FAIRFAX CC 917 - STON | 752.5967 | 376.8332 | 1.065574 | 759.6322 | 17.28671 | 357.0767 | 3.272727 |
| FAIRFAX CC 918 - CENT | 1554.106 | 608.9498 | 3.296875 | 1555.663 | 28.14496 | 584.3635 |  |
| FAIRFAX CC919-GREE | 1436.836 | 627.9446 | 1.098958 | 1447.631 | 25.97996 | 601.1556 | 991 |
| FAIRFAX CC920-CHAN | 1032.032 | 536.7018 | 0 | 1052.7 | 11.88462 | 504.7142 | 1.090909 |
| 59 FAIRFAX CC 921 - DEER | 1051.992 | 876.9935 | 2.131148 | 1073.801 | 27.01049 | 836.6123 | 181818 |
| FAIRFAX CC 923 - BULL | 595.2676 | 735.3956 | 0 | 633.0268 | 7.562937 | 698.1307 |  |
| X CC924-SPINL | 713.8639 | 236.8759 | 0 | 711.8749 | 11.90748 | 228.372 |  |
| FAIRFAX CC925-OLD 1 | 619.9237 | 367.6978 | 1.065574 | 624.8209 | 14.04545 | 349.0653 | . 090909 |
| FAIRFAX CC926- POW | 1423.174 | 593.3071 | 2.197917 | 1427.161 | 30.30996 | 567.5715 |  |
| FAIRFAX CC 927 - ARMI | 662.1912 | 348.2852 | 0 | 671.7118 | 9.723776 | 328.4648 |  |
| 59 FAIRFAX CC 928 - POPL | 1030.858 | 688.577 | 0 | 1052.7 | 10.8042 | 659.2185 | 727 |
| FAIRFAX CC929-DIFFII | 228.9491 | 219.2484 | 0 | 232.1098 | 2.160839 | 214.0171 |  |
| FAIRFAX CC930-LEES | 854.7432 | 500.1604 | 0 | 859.2753 | 18.36713 | 480.6801 |  |
| 59 FAIRFAX CC 931 - CARS | 952.1933 | 422.5099 | 1.065574 | 949.5402 | 12.96503 | 413.156 | 2.181818 |
| 59 FAIRFAX CC 932 - STON | 576. | 210.113 | 1.065574 | 580.2746 | 11.88462 | 195.7055 | 1.090909 |
| 59 FAIRFAX CC933-COMI | 237.9546 | 158.6622 | 0 | 246.7682 | 4.329994 | 146.6506 |  |
| 61 FAUQUIER 101 -KETTI | 180.4522 | 490.539 | 2.206897 | 190.0025 | 8.543689 | 480.4632 |  |
| 61 FAUQUIER 102-CATLI | 359.5383 | 1000.511 | 0 | 360.9977 | 14.58333 | 991.1724 |  |
| 61 FAUQUIER 103-CASA | 267.3773 | 388.567 | 2.206897 | 270.1769 | 4.271845 | 382.6508 |  |
| 61 FAUQUIER 104 -LOIS | 202.438 | 419.9418 | 0 | 208.3894 | 5.208333 | 418.3315 |  |
| FAUQUIER 105-OPAL | 177.1512 | 426.1356 | 2.206897 | 172.43 | 7.475728 | 426.7201 |  |
| 61 FAUQUIER 106-BALD | 321.2929 | 508.7866 | 1.103448 | 326.1892 | 17.08738 | 490.137 |  |
| 61 FAUQUIER 201 - COUF | 766.9218 | 851.1978 | 3.310345 | 775.3857 | 21.35922 | 776.0502 |  |
| 61 FAUQUIER 202 - AIRLII | 571.0652 | 788.9413 | 2.206897 | 593.0713 | 11.74757 | 764.2267 |  |
| 61 FAUQUIER 203 -WARI | 733.9123 | 756.7396 | 1.103448 | 734.7494 | 21.35922 | 747.029 |  |
| 61 FAUQUIER 301 - MORI | 244.6126 | 613.115 | 3 | 231.5437 | 14.58333 | 618.0375 |  |
| 61 FAUQUIER 302 -REMI | 481.9394 | 825.4365 | 0 | 484.3415 | 16.01942 | 812.5955 |  |
| 61 FAUQUIER 303 -BEALI | 570.4112 | 851.432 | 3 | 583.0692 | 15.625 | 832.4587 |  |
| FAUQUIER 401 - MAR | 568.8645 | 818.9962 | 3.310345 | 578.7936 | 18.15534 | 798.6223 |  |


| QUIER 402 -LEED! | 642.5859 | 732.0516 | 1.103448 | 647.9853 | 12.81553 | 724.4569 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 403 - WATE | 606.2754 | 1065.876 | 3.310345 | 596.3661 | 22.42718 | 1060.889 |  |
| 61 FAUQUIER 404-SPRII | 278.3805 | 473.3648 | 1.103448 | 289.9459 | 6.407767 | 463.2654 |  |
| 61 FAUQUIER 501 -THE F | 628.2817 | 624.7127 | 3.310345 | 634.8059 | 8.543689 | 621.2701 |  |
| 61 FAUQUIER 502 - NEW | 474.2372 | 857.6382 | 3.310345 | 478.8501 | 13.8835 | 842.6917 |  |
| 61 FAUQUIER 503-BROA | 470.9362 | 801.8219 | 2.206897 | 482.145 | 10.67961 | 783.5743 |  |
| 61 FAUQUIER 504 - VINT | 782.3263 | 1319.196 | 0 | 790.7617 | 19.2233 | 1297.358 |  |
| 63 FLOYD COL 101 - LOCU | 355.3844 | 723.32 | 0 | 348.9069 | 11.31429 | 720.137 |  |
| 63 FLOYD COL 201 - LITTL | 507.2101 | 761.84 | 1 | 521.1093 | 17.48571 | 742.6078 | 25 |
| 63 FLOYD COL 301 - COUF | 448.7291 | 599.2 | 1 | 462.583 | 18.51429 | 574.6115 | 2.5 |
| 63 FLOYD COL 401 - BURK | 321.6454 | 698.71 | 1 | 323.0202 | 13.37143 | 692.316 | 0 |
| 63 FLOYD COL 501 - INDIA | 289.031 | 747.93 | 1 | 290.3806 | 11.31429 | 738.3277 | 25 |
| 65 FLUVANNA 101 - PALN | 1000.958 | 1015.902 | 0 | 1019.48 | 25.57471 | 978.8977 |  |
| 65 FLUVANNA 201 -COLU | 672.1036 | 804.0291 | 2 | 656.8018 | 13.29885 | 815.5666 |  |
| 65 FLUVANNA 301 -FORK | 678.7471 | 768.1737 | 1 | 686.6564 | 13.29885 | 754.5897 |  |
| 65 FLUVANNA 401 - CUN | 746.2897 | 1203.871 | 0 | 762.9515 | 21.48276 | 1177.073 |  |
| 65 FLUVANNA 501 - RIVAI | 1144.901 | 1143.025 | 1 | 1141.11 | 15.34483 | 1137.873 |  |
| 67 FRANKLIN (102-BURA | 349.448 | 900.3603 | 1.125 | 366.4412 | 15.78534 | 880.285 |  |
| 67 FRANKLIN (103-SCRU | 598.7492 | 1660.105 | 1.125 | 620.7065 | 24.20419 | 1630.623 |  |
| 67 FRANKLIN (201-GLAD | 243.9743 | 718.8191 | 2.25 | 243.5819 | 7.366492 | 719.9474 | 1.111111 |
| 67 FRANKLIN (202-PENH | 258.8898 | 632.7707 | 0 | 280.9739 | 5.26178 | 614.1036 |  |
| 67 FRANKLIN ${ }^{\text {203 - HODC }}$ | 59.66185 | 104.9371 | 0 | 50.21206 | 1.052356 | 115.2754 |  |
| 67 FRANKLIN 1204 - DUDL | 199.2279 | 433.3902 | 0 | 204.0533 | 4.209424 | 427.567 |  |
| 67 FRANKLIN (301-SNOV | 116.1275 | 374.6255 | 0 | 121.791 | 7.366492 | 365.7374 | 11 |
| 67 FRANKLIN (302-FORK | 90.55816 | 322.1569 | 0 | 87.60402 | 5.26178 | 325.915 |  |
| 67 FRANKLIN $1303-$ SONT | 348.3826 | 395.6129 | 2.25 | 332.2543 | 12.62827 | 410.7997 | 1.111111 |
| 67 FRANKLIN (304-DICKI | 177.9201 | 198.3311 | 0 | 182.6864 | 6.314136 | 194.9202 | 0 |
| 67 FRANKLIN (401-HENR | 142.7623 | 615.9808 | 2.25 | 146.3628 | 8.418848 | 608.8638 | 1.111111 |
| 67 FRANKLIN (402-FERRI | 135.3045 | 326.3544 | 1.125 | 136.7477 | 2.104712 | 325.915 |  |
| 67 FRANKLIN (403-ENDI | 136.3699 | 339.9962 | 1.125 | 134.6111 | 3.157068 | 341.6344 |  |
| 67 FRANKLIN (501-WAID | 151.2854 | 395.6129 | 1.125 | 164.5246 | 4.209424 | 385.6487 |  |
| 67 FRANKLIN (502-CALL) | 196.0318 | 593.944 | 0 | 200.8482 | 6.314136 | 584.7607 | 1.111111 |
| 67 FRANKLIN (503-BOW | 148.0892 | 304.3176 | 0 | 162.3879 | 7.366492 | 285.0447 | 1.111111 |
| 67 FRANKLIN (504-GOG( | 190.7048 | 519.4387 | 1.125 | 189.0965 | 11.57592 | 518.7394 | 0 |
| 67 FRANKLIN (601-BOON | 306.8323 | 738.7572 | 1.125 | 306.6141 | 30.51832 | 720.9953 | 2.222222 |
| 67 FRANKLIN (602-BONE | 252.4975 | 655.8569 | 0 | 244.6503 | 7.366492 | 662.3096 |  |
| 67 FRANKLIN (603-COOF | 148.0892 | 550.9198 | 0 | 150.6362 | 3.157068 | 552.274 |  |
| 67 FRANKLIN (701-ROCK | 368.625 | 622.277 | 2.25 | 372.8513 | 13.68063 | 618.2954 | 0 |
| 67 FRANKLIN (702-ROCK | 318.5516 | 398.761 | 0 | 324.7759 | 4.209424 | 397.1762 | 1.111111 |
| 67 FRANKLIN (703-ROCK | 291.9169 | 375.6748 | 1.125 | 290.5889 | 9.471204 | 375.1691 |  |
| 69 FREDERICK 101 - RUSS | 240.0392 | 803.2201 | 1 | 240.473 | 15.44444 | 790.7808 |  |
| 69 FREDERICK 102 -GORE | 266.3593 | 767.7993 | 1 | 264.6253 | 10.2963 | 761.5699 |  |
| 69 FREDERICK 103 - Kern | 525.349 | 898.023 | 1 | 512.449 | 11.32593 | 899.2785 |  |
| 69 FREDERICK 104 - CEDA | 230.564 | 517.7697 | 1 | 232.0722 | 5.148148 | 516.407 |  |
| 69 FREDERICK 201 -GAIN | 148.4453 | 562.5666 | 1 | 143.8638 | 5.148148 | 566.4828 |  |
| 69 FREDERICK 202 - ALBII | 350.5836 | 767.7993 | 0 | 336.0321 | 14.41481 | 770.9592 |  |
| 69 FREDERICK 203 -REDL, | 440.0719 | 953.2379 | 0 | 433.6915 | 12.35556 | 951.4408 |  |


| 20-NAIN | 405.3294 | 849.0589 | 1 | 403.2386 | 10.2963 | 839.8134 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 69 FREDERICK 301 - CLEAI | 180.0294 | 489.6413 | 1 | 173.2666 | 12.35556 | 490.3258 | 0 |
| 69 FREDERICK 302 - NEFF' | 584.306 | 757.3814 | 1 | 583.8559 | 23.68148 | 738.6185 | 0 |
| 69 FREDERICK 303 - WHIT | 516.9266 | 1056.375 | 1 | 529.2506 | 10.2963 | 1042.203 | 0 |
| 69 FREDERICK 401 - CARP | 467.4448 | 813.638 | 0 | 477.7957 | 12.35556 | 791.8241 | 0 |
| 69 FREDERICK 402 - SHEN | 195.8215 | 394.8384 | 1 | 196.3688 | 4.118519 | 396.4337 | 0 |
| 69 FREDERICK 403 - PARK | 423.2271 | 710.5008 | 0 | 412.6895 | 25.74074 | 697.9319 | 0 |
| 69 FREDERICK 404 - ARMI | 422.1743 | 736.5456 | 1 | 427.3909 | 10.2963 | 721.9266 | 2 |
| 69 FREDERICK 501 - STEPY | 483.2369 | 803.2201 | 1 | 498.7977 | 8.237037 | 783.4781 | 1 |
| 69 FREDERICK 502 - NEW | 520.085 | 907.3991 | 4 | 521.8999 | 19.56296 | 894.0622 | 4 |
| 69 FREDERICK $503-\mathrm{CANT}$ | 548.5107 | 902.1902 | 0 | 534.5011 | 12.35556 | 912.8407 | 0 |
| 69 FREDERICK 601 - MILLE | 291.6266 | 471.9309 | 0 | 304.5291 | 8.237037 | 453.8122 | 0 |
| 69 FREDERICK 602 - ASH - | 448.4943 | 559.4413 | 0 | 441.0422 | 18.53333 | 555.0071 | 0 |
| 69 FREDERICK 603 -GREE | 685.3752 | 1107.423 | 3 | 695.1665 | 27.8 | 1080.803 | 1 |
| 71 GILES COUI 101 - GLEN | 17.33596 | 51.01323 | 0 | 13.04949 | 0 | 55.21102 | 0 |
| 71 GILES COUI 102 - RICH | 70.42735 | 255.0661 | 0 | 76.12203 | 3 | 252.6966 | 0 |
| 71 GILES COUI 103 - NARR | 310.9638 | 804.5211 | 0 | 302.3132 | 10 | 828.1653 | 0 |
| 71 GILES COUI 201 - PEAR | 407.3951 | 1124.417 | 0 | 390.3973 | 15 | 1148.814 | 0 |
| 71 GILES COUI 202 - STAFI | 54.17488 | 201.9274 | 0 | 64.16 | 0 | 193.2386 | 1 |
| 71 GILES COUI 203 - WHIT | 29.25444 | 144.5375 | 0 | 28.2739 | 3 | 142.2746 | 0 |
| 71 GILES COUI301-EGGL | 156.0237 | 317.7699 | 0 | 150.0692 | 7 | 319.5869 | 0 |
| 71 GILES COUI 302 - PEME | 338.0513 | 787.5167 | 1 | 318.6251 | 15 | 815.4243 | 0 |
| 71 GILES COUI303-NEWI | 264.3734 | 410.2314 | 1 | 260.9898 | 13 | 405.5887 | 2 |
| 73 GLOUCESTI 101 - HARC | 278.9488 | 663.9461 | 0 | 303.5355 | 14.84848 | 624.5574 | 0 |
| 73 GLOUCESTI 102 - SALEI | 235.1293 | 541.6127 | 0 | 244.9584 | 15.90909 | 523.0799 | 0 |
| 73 GLOUCEST1103-PEASI | 174.2094 | 402.55 | 2 | 176.7961 | 9.545455 | 393.3561 | 1 |
| 73 GLOUCEST1201-COUF | 422.1639 | 695.3136 | 2 | 449.4455 | 5.30303 | 683.1423 | 1 |
| 73 GLOUCEST1202-BOTE | 515.1468 | 946.2539 | 1 | 523.998 | 15.90909 | 932.1283 | 0 |
| 73 GLOUCESTI301-WHIT | 369.7942 | 724.59 | 0 | 386.6083 | 7.424242 | 708.2502 | 0 |
| 73 GLOUCESTI302-ROAN | 446.7456 | 952.5274 | 1 | 495.2421 | 11.66667 | 905.9744 | 0 |
| 73 GLOUCEST। 401 - HAYE | 469.1898 | 830.194 | 0 | 497.3721 | 19.09091 | 796.1276 |  |
| 73 GLOUCEST। 402 - SARA | 441.4018 | 714.1341 | 0 | 450.5105 | 10.60606 | 693.6039 | 1 |
| 73 GLOUCESTI501-ACHII | 422.1639 | 1203.468 | 0 | 440.9252 | 13.78788 | 1185.299 | 0 |
| 73 GLOUCEST1502-WALk | 359.1065 | 743.4105 | 0 | 386.6083 | 15.90909 | 713.481 | 0 |
| 75 GOOCHLAP 101 - FIFE | 282.2815 | 399.2583 | 2 | 287.1751 | 10.50505 | 387.9687 | 0 |
| 75 GOOCHLAP 102 - HADE | 412.5652 | 699.764 | 1 | 421.5514 | 12.60606 | 679.211 | 2 |
| 75 GOOCHLAr 201 - THRE | 182.3972 | 159.2786 | 0 | 178.8071 | 4.20202 | 159.4392 | 0 |
| 75 GOOCHLAr 202 - SAND | 649.2473 | 836.7436 | 0 | 662.1283 | 15.75758 | 812.0769 | 0 |
| 75 GOOCHLAP 301 -GOO( | 402.7939 | 625.434 | 1 | 410.7146 | 9.454545 | 607.9948 | 3 |
| 75 GOOCHLAP $302-\mathrm{GOO}$ | 154.1691 | 287.7633 | 0 | 153.8825 | 3.151515 | 288.0535 | 0 |
| 75 GOOCHLAN 401 - SHAL | 407.1367 | 593.5782 | 0 | 422.6351 | 14.70707 | 566.5406 | 0 |
| 75 GOOCHLAN 402 - CENT | 460.3359 | 1210.517 | 3 | 487.6559 | 14.70707 | 1177.724 | 0 |
| 75 GOOCHLAP 501 - MAN, | 533.0777 | 1159.548 | 1 | 555.9277 | 14.70707 | 1128.829 | 0 |
| 75 GOOCHLAr 502 - BLAIR | 303.9954 | 740.1145 | 0 | 330.5223 | 4.20202 | 712.1617 | 1 |
| 77 GRAYSON ( 101 - BRIDI | 62.07121 | 154.7735 | 1 | 58.0627 | 1.076923 | 159.8715 | 0 |
| 77 GRAYSON (102-FLATF | 23.54425 | 106.0092 | 1 | 24.73041 | 3.230769 | 105.8752 | 0 |
| 77 GRAYSON (103-GRAN | 59.93082 | 151.5932 | 0 | 64.51411 | 1.076923 | 150.3428 | 0 |


| 77 GRAYSON (104-MOU | 55.65005 | 98.5886 | 0 | 53.76176 | 1.076923 | 101.6402 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 GRAYSON (105-MOU | 28.89522 | 126.151 | 0 | 30.10658 | 0 | 130.2265 | 0 |
| 77 GRAYSON (106-RUGE | 29.96541 | 125.0909 | 0 | 27.95611 | 1.076923 | 129.1677 | 0 |
| 77 GRAYSON (107-TROU | 14.98271 | 82.68721 | 0 | 10.75235 | 2.153846 | 88.93516 | 0 |
| 77 GRAYSON (108-COMI | 41.73754 | 122.9707 | 0 | 40.85893 | 1.076923 | 122.8152 |  |
| 77 GRAYSON ( 202 - ELK C | 84.54527 | 237.4607 | 0 | 78.49216 | 2.153846 | 241.3954 |  |
| 77 GRAYSON ( 203 - INDEI | 214.0387 | 633.9353 | 0 | 207.5204 | 4.307692 | 641.6037 |  |
| 77 GRAYSON (301-BAYM | 94.17701 | 372.0924 | 0 | 94.62069 | 1.076923 | 371.6219 |  |
| 77 GRAYSON ( 302 - FAIR | 108.0895 | 470.681 | 1 | 103.2226 | 6.461538 | 474.3209 | 0 |
| 77 GRAYSON ( 401 - FRIES | 71.70295 | 166.4345 | 1 | 75.26646 | 0 | 163.0478 | 0 |
| 77 GRAYSON ( 402 -PROV | 103.8087 | 424.037 | 1 | 94.62069 | 2.153846 | 435.147 |  |
| 77 GRAYSON ( 403 - OLDT | 58.86063 | 167.4946 | 0 | 64.51411 | 1.076923 | 161.989 |  |
| 79 GREENE CC 101 - DYKE | 215.7251 | 420.9037 | 0 | 205.8643 | 4.35443 | 431.468 |  |
| 79 GREENE CC 102 - SWIF | 278.5997 | 510.4806 | 1 | 270.874 | 10.88608 | 513.6523 |  |
| 79 GREENE CC 201 - RUCK | 530.0983 | 977.7916 | 1 | 529.8296 | 21.77215 | 971.0733 |  |
| 79 GREENE CC 301 - STAN | 531.1823 | 947.5729 | 0 | 500.5752 | 21.77215 | 964.585 |  |
| 79 GREENE CC 401 - MIDV | 727.3946 | 1120.251 | 0 | 711.8569 | 27.21519 | 1119.221 |  |
| 81 GREENSVIL 101 - PREC | 182 | 105.0862 | 0 | 188 | 3 | 100.0812 |  |
| 81 GREENSVIL 102 - PREC | 49 | 74.06076 | 0 | 46 | 1 | 79.06418 |  |
| 81 GREENSVIL 103 - PREC | 157 | 35.02874 | 0 | 157 | 3 | 34.02762 |  |
| 81 GREENSVIL 201 - PREC | 258 | 107.0878 | 0 | 256 | 0 | 111.0902 |  |
| 81 GREENSVIL 202 - PREC | 195 | 252.2069 | 0 | 182 | 2 | 266.2161 |  |
| 81 GREENSVIL 302 - PREC | 484 | 269.2209 | 1 | 488 | 3 | 267.2169 |  |
| 81 GREENSVIL 401 - PREC | 65 | 141.1158 | 0 | 63 | 1 | 142.1154 |  |
| 81 GREENSVIL 402 - PREC | 205 | 139.1141 | 0 | 206 | 1 | 138.1121 |  |
| 81 GREENSVIL 403 - PREC | 56 | 96.07882 | 0 | 57 | 4 | 94.07636 |  |
| 83 HALIFAX C( 101 - CHILE | 213.889 | 283.4254 | 1 | 221.3636 | 5.197368 | 278.177 |  |
| 83 HALIFAX C( 102 - LIBER | 96.45973 | 167.9558 | 0 | 95.46959 | 0 | 167.9559 |  |
| 83 HALIFAX C( 103 - REPU | 222.2768 | 280.2762 | 0 | 219.2653 | 5.197368 | 285.5251 |  |
| 83 HALIFAX C( 201 - CLAY! | 104.8475 | 273.9779 | 0 | 101.7643 | 4.157895 | 276.0776 |  |
| 83 HALIFAX C( 202 - CROS | 123.7201 | 235.1381 | 0 | 124.8449 | 2.078947 | 241.4367 |  |
| 83 HALIFAX C( $203-\mathrm{CLOV}$ | 242.1978 | 296.0221 | 0 | 243.395 | 5.197368 | 302.3207 |  |
| 83 HALIFAX C( 302 - MEAI | 142.5927 | 69.28177 | 0 | 145.8272 | 1.039474 | 69.28183 |  |
| 83 HALIFAX C( 304 - VERN | 127.914 | 272.9282 | 0 | 132.1887 | 1.039474 | 273.9781 |  |
| 83 HALIFAX C( $305-$ SINAI | 397.3722 | 271.8785 | 1 | 390.2713 | 7.276316 | 280.2765 |  |
| 83 HALIFAX C( 401 - COUF | 311.3972 | 353.7569 | 1 | 314.7349 | 3.118421 | 349.5583 |  |
| 83 HALIFAX C( 403 - CENT | 183.4832 | 472.3757 | 0 | 186.7427 | 8.315789 | 465.028 |  |
| 83 HALIFAX C( 502 - DAN | 267.3612 | 599.3923 | 0 | 267.5247 | 6.236842 | 597.2933 |  |
| 83 HALIFAX C(503-SCOT | 83.87803 | 350.6077 | 0 | 90.22401 | 4.157895 | 345.3594 |  |
| 83 HALIFAX C(601-BLAC | 171.95 | 339.0608 | 0 | 161.5639 | 4.157895 | 350.608 |  |
| 83 HALIFAX C(603-MT C | 339.706 | 439.8343 | 0 | 346.2084 | 10.39474 | 435.6357 |  |
| 83 HALIFAX C( $605-$ UNIO | 73.39328 | 158.5083 | 0 | 78.68373 | 1.039474 | 154.3095 | 0 |
| 83 HALIFAX C(701-HYCC | 185.5801 | 480.7735 | 1 | 179.3989 | 2.078947 | 493.3706 | 0 |
| 83 HALIFAX C( 702 - MIDV | 74.44175 | 395.7459 | 0 | 75.53638 | 3.118421 | 391.5473 |  |
| 83 HALIFAX C( 703 - VIRGI | 73.39328 | 249.8343 | 0 | 73.43815 | 0 | 250.8842 |  |
| 83 HALIFAX C( 801 - SOUT | 587.1462 | 279.2265 | 1 | 588.5543 | 5.197368 | 282.3759 |  |
| 85 HANOVER 101 -ASHL | 606.4492 | 477.5298 | 2.03125 | 625.7323 | 10.52724 | 457.7978 | 0 |


| 85 HANOVER 104 - SLIDII | 56 | 681.7366 | 2.03125 | 538.9132 | 27 | 78 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 05-bERK | 603.2685 | 362.3362 | 1.015625 | 607.7332 | 12.63269 | 345.7054 |  |
| 85 HANOVER 106 - KERSI | 268.2371 | 489.0491 | 1.015625 | 289.0438 | 10.52724 | 463.0357 |  |
| 85 HANOVER 107 - CHIC | 432.5721 | 601 | 0 | 430.9188 | 21.05448 | 585.604 |  |
| 85 H | 389.1029 | 1095.38 | 5625 | 387.5093 | 22.10721 | 1080.067 |  |
| 85 HANOVER $1202-\mathrm{BLUN}$ | 301.1041 | 519. | 0 | 308.1017 | 10.5272 | 504.9394 |  |
| 85 HANOVER 1203 -WILN | 373.1995 | 860.8 | 2.03125 | 377.9804 | 15.79086 | 843.3116 |  |
| 85 HANOVER 1206 - COUF | 439.9937 | 555.0236 | 1.015625 | 471.1521 | 15.79086 | 512.2725 |  |
| 85 HANOVER $1208-$ OAK I | 328.67 | 715 | 5.078125 | 334.5709 | 14.73814 | 703.9819 |  |
| 85 HANOVER $1209-$ WEST | 92.23965 | 207. | 0 | 86.81903 | 5.26362 | 207.4232 |  |
| 85 | 130.4078 | 301 | 1.015625 | 13 | 3.1 | 296.4686 |  |
| 85 H | 449.5358 | 102 | 1.015625 | 464.7994 | 3.15 | 1010.926 | 1.043478 |
| 85 HANOVER1303-SHAD | 411.3676 | 936.2097 | 4.0625 | 431.9776 | 10.52724 | 912.4527 | 2.08 |
| 85 HANOVER 1304 - ATLEI | 1140.803 | 1767.698 | 9.140625 | 1176.292 | 70.53251 | 1679.29 | 1.043478 |
| 85 HANOVER $1305-\mathrm{COOL}$ | 520.5709 | 910.0293 | 2.03125 | 548.4422 | 18.94903 | 870.549 |  |
| 85 HANOVER 1401 - BATT | 298.9837 | 1213.721 | 3.046875 | 318.6894 | 11.57996 | 1182.731 | 2.086957 |
| 85 HANOVER 1403 - COLD | 513.1493 | 1209.5 | 3.046875 | 509.2677 | 29.47627 | 1191.112 | 2.086957 |
| 85 HANOVER 1404 - BLAC | 310.6462 | 1351.9 | 1.015625 | 317.6306 | 7.369069 | 1338.823 |  |
| 85 HANOVER $1405-$ PEBB | 312.7666 | 577.0151 | 1.015625 | 333.5121 | 11.57996 | 552.081 |  |
| 85 HANOVER 1406 - BEAV | 84.81807 | 195.8291 | 0 | 88.93657 | 8.421793 | 182.281 | 2.086957 |
| 85 HANOVER 1502 - RURA | 479.2221 | 974.9566 | 5.078125 | 498.68 | 12.63269 | 950.166 | 1.043478 |
| 85 HANOVER 1503 - N | 395.4642 | 703.7 | 1.015625 | 411.861 | 12.63269 | 676.7445 |  |
| 85 HANOVER 150 | 212.0452 | 750.85 | 1.015625 | 219.1651 | 12.6326 | 733.3145 | 1.043478 |
| 85 HANOVER 1505 -TOTO | 167.5157 | 577.0 | 1.015625 | 173.6381 | 7.369069 | 568.8425 |  |
| 85 HANOVER 1506 -GEOR | 331.8507 | 821.016 | 1.015625 | 362.0989 | 14.73814 | 780.4561 |  |
| 85 HANOVER 1507 -LAUR | 367.8984 | 880.7073 | 1.015625 | 362.0989 | 23.15993 | 871.5966 |  |
| 85 HANOVER 1601 - VILLA | 587.3651 | 1488.09 | 4.0625 | 632.0849 | 37.89807 | 1416.345 | 2.0869 |
| 85 HANOVER 1602 -L | 463.3187 | 1035 | 2.03125 | 459.5056 | 16.84359 | 1023.497 | 3.130435 |
| 85 HANOVER 1603 - MECF | 396.5245 | 495.332 | 1.015625 | 393.8619 | 10.52724 | 493.4159 |  |
| 85 HANOVER160 | 305.345 | 711. | 1.015625 | 293.2789 | 11.5 | 717.6006 |  |
| 85 HANOVER 1701 -FARR | 405.0063 | 950.870 | 1.015625 | 413.9785 | 16.84359 | 931.3094 | 1.043478 |
| 85 HANOVER 1702 - MON | 465.4391 | 764.4665 | 0 | 476.4459 | 20.00176 | 738.5524 |  |
| 85 HANOVER $1703-$ ROCK | 445.2949 | 930.9736 | 1.015625 | 459.5056 | 24.21265 | 899.8816 | 2.0869 |
| 85 HANOVER 1704 -ELMC | 533.2936 | 923.6 | . 03125 | 553.736 | 20.00176 | 888.3581 | 2.086957 |
| 85 HANOVER $1705-$ SOUT | 258.6951 | 525. | 2.03125 | 263.6334 | 14.7381 | 510.1774 | 1.043478 |
| 87 HENRICO C 101 - COAL | 1083.936 | 957 | 3.070588 | 1115.806 | 33.02503 | 900.5373 | 2.16216 |
| 87 HENRICO C 102 - DUM | 1162.652 | 394.162 | 3.070588 | 1178.503 | 16.5125 | 366.1759 | 2. |
| 87 HENRICO C 103 - GLEN | 1121.167 | 1219.673 | 2.047059 | 1175.315 | 15.48048 | 1158.138 | 2.1621 |
| 87 HENRICO C 104 - GLEN | 832.897 | 219.9236 | 2.047059 | 842.699 | 16.51251 | 199.0549 | 8 |
| 87 HENRICO C 105 - GREE | 998.8381 | 654.4587 | 5.117647 | 998.9117 | 31.99299 | 631.2277 |  |
| 87 HENRICO C 106 - HERN | 927.5685 | 606.6492 | 5.117647 | 921.3367 | 26.83283 | 599.2937 | 1.081081 |
| 87 HENRICO C 108-HUN( | 1174.353 | 1161.23 | 2.047059 | 1206.133 | 27.86486 | 1117.688 | 2.162162 |
| 87 HENRICO C 109-HUN1 | 244.6568 | 382.4759 | 1.023529 | 235.9132 | 9.288288 | 386.4008 |  |
| 87 HENRICO C 110 - JOHN | 320.1813 | 212.4866 | 1.023529 | 319.8643 | 15.48048 | 197.9905 | 1.081081 |
| 87 HENRICO C 111 -LAKE | 1238.176 | 860.5707 | 2.047059 | 1248.64 | 42.31331 | 819.638 | 1.081081 |
| 87 HENRICO C 112 -LONG | 721.2058 | 721.392 | 0 | 731.1184 | 22.7047 | 697.2245 |  |
| 87 HENRICO C 113 - MAU | 345.7107 | 350.6029 | 1.023529 | 365.5592 | 9.288288 | 328.9197 |  |


| 87 HENRICO C 114 - MON | 334.0098 | 350.6029 | 0 | 367.6845 | 6.192192 | 316.1461 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 115 - STAPI | 1070.108 | 1227.11 | 4.094118 | 1105.179 | 19.60861 | 1181.556 |  |
| 87 HENRICO C 117 - WEST | 731.8431 | 519.5297 | 3.070588 | 728.993 | 20.64064 | 508.8142 |  |
| 87 HENRICO C 201 - ADAn | 1104.072 | 41.87427 | 1.125 | 1097.581 | 9.651584 | 41.88242 |  |
| 87 HENRICO C 202 - AZALI | 1382.843 | 95.61897 | 3.070588 | 1375.098 | 9.288288 | 94.73738 | 3.243243 |
| 87 HENRICO C 203 - BELM | 912.6764 | 375.0388 | 0 | 911.7726 | 16.51251 | 365.1115 |  |
| 87 HENRICO C 204 - BROC | 207.4264 | 139.1787 | 0 | 202.9704 | 4.128128 | 139.4449 |  |
| 87 HENRICO C $205-$ CANT | 225.5098 | 320.8548 | 1.023529 | 228.4745 | 2.064064 | 322.5329 |  |
| 87 HENRICO C 206 - C | 1383.771 | 49.20226 | 0 | 1401.413 | 7.506787 | 31.41182 |  |
| 87 HENRICO C 207 - CHAN | 1248.814 | 396.2875 | 0 | 1264.58 | 18.57658 | 370.4338 |  |
| 87 HENRICO C 208 - FAIRF | 1137.72 | 47.10855 | 1.125 | 1134.377 | 7.506787 | 42.92949 |  |
| 87 HENRICO C 209 - GLEN | 822.2711 | 127.7165 | 4.5 | 832.6477 | 7.506787 | 116.2237 |  |
| 87 HENRICO C 210 - GREE | 741.4166 | 149.803 | 1.023529 | 728.993 | 16.51251 | 149.0251 | 1.081081 |
| 87 HENRICO C 211 - HIGH | 498.4098 | 33.49941 | 2.25 | 507.7889 | 3.217195 | 26.17652 | 2.166667 |
| 87 HENRICO C 212 - HOLL | 347.8382 | 141.3036 | 0 | 353.8698 | 5.16016 | 127.7358 | 81 |
| 87 HENRICO C 213 - HU | 752.0538 | 148.7406 | 0 | 754.4972 | 11.35235 | 136.2515 |  |
| 87 HENRICO C 214 - LONG | 596.7499 | 261.3585 | 1.023529 | 598.2844 | 13.41642 | 248.0203 | 81 |
| 87 HENRICO C 215 - MAPI | 1536.238 | 69.09254 | 0 | 1550.701 | 7.506787 | 53.40009 |  |
| 87 HENRICO C 216 - MOO | 322.3088 | 279.4199 | 0 | 318.8016 | 14.44845 | 271.4386 |  |
| 87 HENRICO C 217 - MOU | 260.6127 | 175.3014 | 0 | 273.1067 | 11.35235 | 156.4763 |  |
| 87 HENRICO C 218 - OAKV | 40.42156 | 46.74705 | 0 | 39.31887 | 1.032032 | 46.83646 |  |
| 87 HENRICO C 219 - RANL | 184.0245 | 33.99785 | 0 | 184.9049 | 1.032032 | 30.86948 |  |
| 87 HENRICO C 220 - RATC | 1660.315 | 107.8262 | 2.25 | 1671.603 | 8.579186 | 92.14133 |  |
| 87 HENRICO C 221 - STRA | 121.2647 | 79.68247 | 1.023529 | 123.27 | 8.256256 | 70.25468 |  |
| 87 HENRICO C 222 - WILD | 1059.47 | 209.2993 | 3.070588 | 1060.547 | 15.48048 | 199.0549 |  |
| 87 HENRICO C 223 - YELLC | 1066.917 | 673.5825 | 0 | 1066.923 | 9.288288 | 669.5484 |  |
| 87 HENRICO C 224 - ESSE | 314.3978 | 11.51542 | 1.125 | 323.8074 | 0 | 5.235303 | . 083333 |
| 87 HENRICO C 301 -CAUS | 571.2205 | 588.5879 | 0 | 595.0964 | 9.288288 | 556.7151 | 081081 |
| 87 HENRICO C 302 - CEDA | 689.294 | 890.3188 | 2.047059 | 710.9276 | 19.60861 | 856.8943 |  |
| 87 HENRICO C 303 -INNSI | 892.4656 | 751.1401 | 3.070588 | 938.3394 | 16.51251 | 697.2245 | 1.081081 |
| 87 HENRICO C 304 -JACKS | 428.6813 | 508.9054 | 1.023529 | 427.1942 | 15.48048 | 499.234 | 081081 |
| 87 HENRICO C 305 - NUCK | 845.6617 | 1076.245 | 2.047059 | 894.7699 | 21.67267 | 1020.822 |  |
| 87 HENRICO C 306 - POCA | 789.2842 | 676.7698 | 2.047059 | 808.6934 | 9.288288 | 654.6459 | 1.081081 |
| 87 HENRICO C 307 - RIDG\| | 421.2352 | 458.971 | 0 | 419.7555 | 14.44845 | 451.3331 |  |
| 87 HENRICO C 308 - RIVEF | 761.6274 | 975.3135 | 0 | 789.5653 | 19.60861 | 931.4068 |  |
| 87 HENRICO C 309 - SADL | 854.1715 | 808.5115 | 0 | 874.5791 | 10.32032 | 785.5751 |  |
| 87 HENRICO C 310 - SHAD | 786.0931 | 1090.056 | 2.047059 | 841.6363 | 8.256256 | 1031.466 | 1.081081 |
| 87 HENRICO C 311 -SHOR | 1108.402 | 1012.499 | 2.047059 | 1159.375 | 25.8008 | 946.3093 | 1.081081 |
| 87 HENRICO C 312 - SPRIN | 598.8774 | 423.9108 | 1.023529 | 607.8484 | 11.35235 | 406.6256 |  |
| 87 HENRICO C 313 - STON | 1148.823 | 1120.867 | 0 | 1179.566 | 21.67267 | 1079.367 |  |
| 87 HENRICO C 314 -THRE | 793.5391 | 794.6999 | 2.047059 | 822.5082 | 25.8008 | 747.2544 | 1.081081 |
| 87 HENRICO C 315 -TUCK | 1062.662 | 398.4124 | 0 | 1077.549 | 17.54454 | 366.1759 | 1.081081 |
| 87 HENRICO C 401 - QUIO | 913.7401 | 766.0142 | 1.023529 | 935.1514 | 20.64064 | 728.094 | 1.081081 |
| 87 HENRICO C 402 - CRES | 746.7352 | 482.3446 | 1.023529 | 772.5626 | 21.67267 | 442.8174 | 1.081081 |
| 87 HENRICO C 403 - DERB | 530.799 | 790.4501 | 0 | 562.1535 | 18.57658 | 745.1254 |  |
| 87 HENRICO C 404 - FREEI | 564.8382 | 532.2789 | 0 | 587.6577 | 14.44845 | 501.363 |  |
| 87 HENRICO C 405 - GAYt | 862.6813 | 1198.424 | 1.023529 | 886.2685 | 25.8008 | 1152.815 |  |

87 HENRICO C 406 - GODI 785.0293 87 HENRICO C 407 - LAKEI 507.397 87 HENRICO C 408 - LAUD 740.3529 87 HENRICO C 409 - MAYE 755.245 87 HENRICO C 410 - MOO 362.7304 87 HENRICO C 411 - PEME 682.9117 87 HENRICO C 412 - PINCF 902.0391 87 HENRICO C 413 - RIDGI 883.9558 87 HENRICO C 414 - ROLLI 636.1078 87 HENRICO C 415 - SKIPV 478.6764 87 HENRICO C 416 -SPOT 341.4558 87 HENRICO C 417 - TUCK 867.9999 87 HENRICO C 418 - WELE 570.1568 87 HENRICO C 419 - WEST 725.4607 87 HENRICO C501-ANTI( 284.9558 87 HENRICO C502-CEDA 546.7787 87 HENRICO C503-CHICl 545.7272 87 HENRICO C504-DON/ 601.4566 87 HENRICO C505-DORE 744.4602 87 HENRICO C506-EANE 848.5585 87 HENRICO C507-ELKO 74.65632 87 HENRICO C508-HIGH 806.4986 87 HENRICO C509-LABU 719.2243 87 HENRICO C510-MEHF 871.6914 87 HENRICO C511-MON 1814.885 87 HENRICO C 512 - NINE 340.6852 87 HENRICO C513-PLEA؛ 1296.496 87 HENRICO C 514 - ROLF 2461.556 87 HENRICO C515-SAND 370.1271 87 HENRICO C516-SULLI 787.5716 87 HENRICO C517-TOWI 283.9043 87 HENRICO C518-WHIT 542.5727 89 HENRY COI 101 - BASSI 156.1963 89 HENRY COI 102 -GUN 106.2135 89 HENRY COI 103 - SCOT 212.427 89 HENRY COI 201 - FIELD 130.1636 89 HENRY COI 202 - HORS 245.7488 89 HENRY COI 203 - HORS 471.7128 89 HENRY COI 204 - SPEN 208.2617 89 HENRY COI 302 - AXTO 248.8162 89 HENRY COI 303 - IRISBI 352.0595 89 HENRY COI 304 - MOU 532.744 89 HENRY COI 305 - MOU 193.0649 89 HENRY COI 401 - COLLI 111.42 89 HENRY COI 402 - DANI 129.1223 89 HENRY COI 404 - COLLI 258.2445 89 HENRY COI 405 - MOU 204.4216
715.01742 650.209 609.8365 836.1347 704.3931 558.8397 789.3877 946.6278 669.3328 347.4156 370.7891 1500.155 454.7213 767.0766 830.1573
94.2171 643.8168 241.8239 682.5505 265.9016 349.6501 169.5908 237.6365 301.4947 251.2456 197.8559 144.4662 250.1987 616.5986 347.5564 340.2284 674.1757 147.3312 436.7692 775.3175 223.6091 407.5119 169.2742 544.3941 220.8265 439.5399 494.4824 253.5807 357.3566 316.6054 586.1902 279.9954
2.047059814 .0068
2.047059
1.023529
1.023529
0
4.094118
1.023529
1.023529
3.070588
1.023529
3.070588
2.047059

| 0 | 301.7296 |
| ---: | ---: |
| 0 | 546.6879 |

$1.125 \quad 540.3799$
1.125
2.25
1.125 1.125808 .4672

0 $\begin{array}{rr}0 & 869.444 \\ 1.125 & 1827.199\end{array}$

| 1.125 | 335.372 | 8.579186 | 196.8474 | 1.083333 |
| ---: | ---: | ---: | ---: | ---: |
| 1.125 | 1295.23 | 5.361991 | 143.4473 | 0 |


| 1.125 | 2465.352 | 23.59276 | 227.2122 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 2.25 | 357.4498 | 13.94118 | 617.7658 | 2.166667 |
| ---: | ---: | ---: | ---: | ---: |
| 1.125 | 792.6974 | 5.361991 | 338.2006 | 0 |


| 0 | 293.3191 | 5.361991 | 326.6829 | 0 |
| :--- | :--- | :--- | :--- | :--- |
| 0 | 542.4826 | 7.506787 | 671.1659 | 0 |


| 0 | 155.457 | 2.028571 | 146.1911 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 100.1602 | 3.042857 | 447.9712 | 2 |
| 1.25 | 209.7104 | 9.128571 | 771.68 | 0 |
| 1.25 | 126.2436 | 3.042857 | 226.5961 | 0 |
| 0 | 235.7938 | 4.057143 | 421.8656 | 0 |
| 0 | 482.021 | 2.028571 | 168.1197 | 0 |
| 0 | 219.1005 | 3.042857 | 537.7743 | 0 |
| 0 | 252.0746 | 8.842105 | 211.0698 | 0 |
| 0 | 350.2184 | 8.842105 | 441.1358 | 0 |
| 0 | 527.9206 | 6.631579 | 497.0693 | 0 |
| 0 | 195.2545 | 6.631579 | 253.2837 | 0 |
| 0 | 121.0269 | 4.057143 | 349.8143 | 0 |
| 0 | 132.5036 | 3.042857 | 311.1781 | 0 |
| 0 | 263.9639 | 9.128571 | 578.4989 | 1 |
| 0 | 200.42 | 6.631579 | 278.6121 | 0 |


| 89 HENRY COI 501 - BASS | 166.6094 | 194.3518 | 0 | 169.0204 | 2.028571 | 191.0926 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 502 - FIGSE | 134.3288 | 415.8711 | 0 | 146.067 | 4.057143 | 404.1139 |  |
| 89 HENRY COI $503-$ STAN | 148.9071 | 676.0518 | 0 | 141.8936 | 5.071429 | 685.0096 |  |
| 89 HENRY COI 504 - OAK I | 79.13946 | 228.8336 | 0 | 81.38017 | 2.028571 | 224.5077 |  |
| 89 HENRY COI 505 - DYER | 123.8536 | 237.6368 | 0 | 119.9221 | 3.042857 | 239.5608 |  |
| 89 HENRY COI 601 - FONT | 205.1378 | 498.4184 | 0 | 207.6238 | 7.1 | 491.8285 |  |
| 89 HENRY COI 602 - HILLC | 117.6679 | 161.9599 | 1.25 | 116.8536 | 5.071429 | 159.7659 |  |
| 89 HENRY COI 603 -RIDG\| | 181.7081 | 549.4249 | 0 | 185.9567 | 4.421053 | 546.6707 |  |
| 89 HENRY COI 604 -RIDGI | 152.0311 | 457.6672 | 1.25 | 154.4137 | 0 | 462.5903 |  |
| 91 HIGHLAND 001 - MON | 134 | 224 | 0 | 125 | 7 | 225 | 0 |
| 91 HIGHLAND 003 -WILSI | 23 | 60 | 0 | 26 | 3 | 54 |  |
| 91 HIGHLAND 005 - BLUE | 66 | 118 | 0 | 62 | 3 | 119 |  |
| 91 HIGHLAND 007 - MILL | 41 | 78 | 0 | 38 | 2 | 80 |  |
| 91 HIGHLAND 008 - MCD | 56 | 163 | 1 | 51 | 3 | 164 |  |
| 91 HIGHLAND 010 - HEAD | 14 | 56 | 0 | 15 | 0 | 57 |  |
| 93 ISLE OF WII 101 - SMITI | 626.7139 | 1153.819 | 2.153846 | 664.2207 | 16.81356 | 1105.021 |  |
| 93 ISLE OF WII 102 - CYPR | 553.2299 | 867.9911 | 1.076923 | 578.1763 | 9.457627 | 837.9653 |  |
| 93 ISLE OF WII 201 - BART | 668.7048 | 1102.328 | 3.230769 | 703.0456 | 18.91525 | 1060.862 |  |
| 93 ISLE OF WII 202 - CARR | 715.9446 | 959.4139 | 2.153846 | 749.2158 | 19.9661 | 910.5119 |  |
| 93 ISLE OF WII301-RUSH | 704.3971 | 601.0786 | 1.076923 | 727.18 | 16.81356 | 570.9099 |  |
| 93 ISLE OF WII302-PONS | 800.9761 | 448.7073 | 1.076923 | 821.619 | 8.40678 | 435.2794 |  |
| 93 ISLE OF WII 401 - COUF | 141.7192 | 373.047 | 0 | 151.1023 | 1.050847 | 362.7328 |  |
| 93 ISLE OF WII 402 - WINE | 341.1759 | 658.8746 | 1.076923 | 338.9309 | 6.305085 | 664.4844 |  |
| 93 ISLE OF WII403-LONG | 411.5107 | 541.1809 | 0 | 424.9753 | 4.20339 | 526.7511 |  |
| 93 ISLE OF WII 501 - WALI | 157.4658 | 419.2838 | 0 | 156.349 | 7.355932 | 414.2514 |  |
| 93 ISLE OF WII502-CAMI | 165.864 | 128.2021 | 0 | 164.7435 | 0 | 129.3221 |  |
| 93 ISLE OF WII503-CARR | 152.217 | 229.0824 | 0 | 155.2996 | 4.20339 | 223.9481 |  |
| 93 ISLE OF WII504-ZUNI | 213.1037 | 507.5541 | 1.076923 | 217.2096 | 8.40678 | 497.3119 |  |
| 93 ISLE OF WII505-RAYN | 104.9772 | 298.4376 | 1.076923 | 104.9322 | 2.101695 | 299.6488 |  |
| 95 JAMES CIT) 101 - BERK | 1008.459 | 1196.616 | 3.272727 | 1058.983 | 22.93548 | 1131.219 |  |
| 95 JAMES CIT) 102 - BERK | 699.2131 | 697.6542 | 1.090909 | 732.0104 | 26.21198 | 639.0435 |  |
| 95 JAMES CIT) 103 - BERK | 1133.521 | 1777.065 | 3.272727 | 1207.195 | 12.01382 | 1708.6 |  |
| 95 JAMES CIT) 104- BERKE | 312.1944 | 256.5125 | 0 | 322.1938 | 11 | 239.501 |  |
| 95 JAMES CIT) 201 - JAME | 354.2206 | 228.4565 | 0 | 373.2245 | 4 | 208.4361 |  |
| 95 JAMES CIT) 202 - JAME | 1139.206 | 733.3741 | 4.363636 | 1166.465 | 30.58065 | 681.6464 |  |
| 95 JAMES CIT) 203 -JAME | 831.0972 | 895.2299 | 0 | 870.0401 | 14.19816 | 857.6636 |  |
| 95 JAMES CIT) 204 - JAME | 1051.662 | 1446.656 | 0 | 1121.209 | 16.38249 | 1382.352 |  |
| 95 JAMES CIT\301-POW | 1085.77 | 1414.285 | 1.090909 | 1133.654 | 8.737327 | 1384.594 |  |
| 95 JAMES CIT\302-POW | 342.2165 | 269.0155 | 0 | 352.9942 | 10.92166 | 254.4963 |  |
| 95 JAMES CIT) 303 - POW | 277.4114 | 564.8208 | 1.090909 | 293.0304 | 15.29032 | 541.5053 |  |
| 95 JAMES CIT\304-POW | 1085.77 | 740.0716 | 1.090909 | 1105.37 | 9.829493 | 722.007 |  |
| 95 JAMES CIT 401 - STON | 876.5745 | 1172.059 | 4.363636 | 913.033 | 27.30415 | 1124.492 | 0 |
| 95 JAMES CIT 402 - STON | 1368.866 | 1580.605 | 3.272727 | 1418.765 | 31.67281 | 1518.009 |  |
| 95 JAMES CIT) 403 - STON | 832.2341 | 1157.548 | 1.090909 | 863.2518 | 10.92166 | 1123.371 |  |
| 95 JAMES CIT\} 5 0 1  - ROBE  | 547.3408 | 232.4645 | 0 | 552.3322 | 9 | 221.4633 |  |
| 95 JAMES CIT\} 5 0 2  - ROBE  | 815.5078 | 1284.567 | 2 | 860.5176 | 10 | 1236.587 |  |
| 95 JAMES CIT\} 5 0 3  -ROBE  | 206.1283 | 77.15415 | 0 | 207.1246 | 3 | 74.15514 |  |


| 95 JAMES CIT\504-ROBE | 976.6081 | 923.8458 | 3 | 1009.607 | 16 | 887.8574 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 97 KING \& QU 101 - OWEI | 261.8062 | 186.6431 | 0 | 264.7604 | 4 | 180.5446 | 0 |
| 97 KING \& QU 201 - CLAR | 187.9093 | 332.9882 | 0 | 191.9777 | 6 | 323.9183 | 0 |
| 97 KING \& QU 301 - SHAC | 205.8557 | 295.8717 | 1 | 205.6904 | 8 | 289.9334 | 0 |
| 97 KING \& QU 401 - COUF | 245.9711 | 288.4484 | 1 | 254.2122 | 5 | 277.1891 | 1 |
| 97 KING \& QU 501 - OLDN | 122.4577 | 334.0487 | 0 | 122.3594 | 5 | 332.4145 | 0 |
| 99 KING GEOR 101 - COUF | 465.7921 | 871.9911 | 2 | 471.7014 | 22.77108 | 846.047 | 0 |
| 99 KING GEOR 102 - PASS, | 241.4427 | 390.1864 | 0 | 240.664 | 3.253012 | 389.6552 | 1.25 |
| 99 KING GEOR 201 - MON | 622.8367 | 1228.764 | 1 | 633.2137 | 26.0241 | 1204.487 | 2.5 |
| 99 KING GEOR 301 - DAHL | 676.2533 | 902.1713 | 1 | 699.53 | 16.26506 | 872.9569 | 0 |
| 99 KING GEOR 401 - SHILC | 604.6751 | 1105.887 | 3 | 612.8909 | 21.68675 | 1082.854 | 1.25 |
| 101 KING WILLI 101 - WEST | 405.7093 | 763.0802 | 3 | 413.1832 | 18.11475 | 750.6361 | 2 |
| 101 KING WILLI 201 - SWEE | 154.3573 | 283.0447 | 1 | 150.9107 | 8.52459 | 278.8966 | 1 |
| 101 KING WILLI 202 - COUF | 347.3038 | 426.1222 | 0 | 339.289 | 6.393443 | 430.2679 | 0 |
| 101 KING WILLI 301 - AYLE ${ }^{-}$ | 287.8554 | 822.1774 | 2 | 286.21 | 13.85246 | 810.7699 | 3 |
| 101 KING WILLI 401 - MAN | 337.9172 | 838.7661 | 0 | 356.9819 | 6.393443 | 822.1746 | 0 |
| 101 KING WILLI 501 - MAN | 457.857 | 811.8095 | 1 | 470.4252 | 11.72131 | 796.2549 | 0 |
| 103 LANCASTEF 101 - PREC | 376.2562 | 606.4523 | 0 | 399.5139 | 3.24 | 586.0792 | 1 |
| 103 LANCASTEF 201 - PREC | 408.1609 | 350.9308 | 2 | 423.7938 | 5.4 | 340.0571 | 0 |
| 103 LANCASTEF 301 - PREC | 244.2365 | 523.1062 | 0 | 256.0421 | 2.16 | 513.9127 | 0 |
| 103 LANCASTEF 302 - PREC | 124.3186 | 255.5215 | 0 | 136.8501 | 2.16 | 243.8352 | 0 |
| 103 LANCASTEF 401 - PREC | 466.4696 | 281.8413 | 1 | 469.0426 | 6.48 | 277.7315 | 1 |
| 103 LANCASTEF 501 - PREC | 390.5583 | 739.148 | 1 | 412.7575 | 7.56 | 718.3843 | 1 |
| 105 LEE COUNT 101 - ELYD, | 74.16336 | 253.9327 | 0 | 77.70776 | 2.075949 | 257.7445 | 1 |
| 105 LEE COUNT 102 - EWIN | 67.8065 | 267.5737 | 0 | 63.86939 | 2.075949 | 273.4606 | 0 |
| 105 LEE COUNT 103 - ROSE | 129.2561 | 524.6542 | 1 | 124.5453 | 14.53165 | 520.7276 | 0 |
| 105 LEE COUNT 201 - BLAC | 27.54639 | 103.8815 | 0 | 36.19265 | 0 | 95.34449 | 0 |
| 105 LEE COUNT 202 - FLAT | 83.69865 | 470.0902 | 0 | 85.15918 | 5.189873 | 467.2928 | 0 |
| 105 LEE COUNT 203 - JONE | 188.5868 | 634.8316 | 2 | 184.1567 | 6.227848 | 654.8385 | 1 |
| 105 LEE COUNT 301 - BEN + | 161.0404 | 700.9381 | 1 | 173.5118 | 8.303797 | 694.6527 | 0 |
| 105 LEE COUNT 302 - WOO | 99.5908 | 444.9068 | 0 | 100.062 | 0 | 451.5767 | 0 |
| 105 LEE COUNT 401 - STICK | 73.10389 | 232.9465 | 0 | 75.57878 | 4.151899 | 235.7419 | 0 |
| 105 LEE COUNT 402 - JASPE | 33.90325 | 161.5935 | 1 | 32.99918 | 7.265823 | 161.3522 | 0 |
| 105 LEE COUNT 403 - SEMII | 40.26011 | 248.6861 | 0 | 41.5151 | 1.037975 | 247.267 | 0 |
| 105 LEE COUNT 404 - DRYD | 105.9477 | 377.7511 | 0 | 89.41714 | 5.189873 | 397.0941 | 0 |
| 105 LEE COUNT 501 - SAIN 7 | 95.35289 | 157.3963 | 1 | 80.90122 | 11.41772 | 165.5432 | 0 |
| 105 LEE COUNT 502 - PENN | 108.0666 | 483.7312 | 0 | 98.99755 | 11.41772 | 487.1999 | 0 |
| 105 LEE COUNT 503 -ROBE | 8.475813 | 81.84606 | 0 | 8.515918 | 2.075949 | 80.67611 | 0 |
| 105 LEE COUNT 504 - KEOK | 39.20063 | 90.24053 | 1 | 30.8702 | 1.037975 | 98.48772 | 1 |
| 107 LOUDOUN 107-LITTL | 761.4924 | 553.5169 | 2.337662 | 779.0155 | 11.61881 | 533.1492 | 1.317073 |
| 107 LOUDOUN 108-MERC | 746.2189 | 473.976 | 1.168831 | 756.1353 | 16.90008 | 455.5804 | 2.634146 |
| 107 LOUDOUN 112 - FREEI | 595.666 | 338.8656 | 0 | 610.138 | 12.67506 | 314.6454 | 1.317073 |
| 107 LOUDOUN 114 - DULL | 685.125 | 370.464 | 1.168831 | 686.4053 | 10.56255 | 367.0863 | 0 |
| 107 LOUDOUN 117-CART | 406.9293 | 139.4688 | 1.168831 | 410.7536 | 4.225021 | 133.2873 | 0 |
| 107 LOUDOUN 118-MOO | 880.4074 | 379.1808 | 2.337662 | 883.6106 | 12.67506 | 370.3639 | 1.317073 |
| 107 LOUDOUN 119 - ARCC | 1422.616 | 755.0929 | 2.337662 | 1432.735 | 22.18136 | 745.0979 | 0 |
| 107 LOUDOUN 120 - LUNS | 826.9502 | 495.7681 | 0 | 840.0293 | 14.78757 | 477.4308 | 0 |

107 LOUDOUN 121 - TOWI 559.6642 107 LOUDOUN 122 -HUTC 873.8616 107 LOUDOUN 123 -CARD 512.7528 107 LOUDOUN 124 - LIBER 555.3003 107 LOUDOUN 125 - ROCK 794.2213 107 LOUDOUN 207 -RIVEF 574.9377 107 LOUDOUN 208 -ALGO 592.3931 107 LOUDOUN 209 - POTC 880.4074 107 LOUDOUN 210 -CASC 1038.597 107 LOUDOUN 213 -COUN 316.3794 107 LOUDOUN 214 - SUGA 1054.962 107 LOUDOUN 215 - SUGA 973.1393 107 LOUDOUN 216-LOWL 830.2231 107 LOUDOUN 217 -SOUT 1028.778 107 LOUDOUN 218 - UNIV 591.3021 107 LOUDOUN 219 - GALIL 754.9466 107 LOUDOUN 301 -PURC 891.317 107 LOUDOUN 302 -ROUN 664.3967 107 LOUDOUN 303 -HILLS 608.7575 107 LOUDOUN 305 -PHILC 301.1059 107 LOUDOUN 307 - MIDC 427.6576 107 LOUDOUN 308 - ST LO 402.5655 107 LOUDOUN 309 - ALDIE 280.3776 107 LOUDOUN 310 - MOU 713.49 107 LOUDOUN 311 - ROUN 557.4822 107 LOUDOUN 312 - BRIAF 920.773 107 LOUDOUN 313 -PINEE 1181.513 107 LOUDOUN 314 -LEGA 824.7683 107 LOUDOUN 315 - FIREF 216.0107 107 LOUDOUN 316-CREIC 871.6797 107 LOUDOUN 318 - MADI 593.484 107 LOUDOUN 319-JOHN 847.6785 107 LOUDOUN 320-STON 948.0471 107 LOUDOUN 321 - BRAN 582.5744 107 LOUDOUN 401 -WEST 812.7677 107 LOUDOUN 402 - WATE 665.4876 107 LOUDOUN 403 -LUCK 821.4954 107 LOUDOUN 407 - HARP 511.6618 107 LOUDOUN 408 - EVER 653.487 107 LOUDOUN 409 - CLAR 685.125 107 LOUDOUN 411 -EAST 571.6648 107 LOUDOUN 413 -TUSC 41.45661 107 LOUDOUN 414 -RED F 481.1148 107 LOUDOUN 416 - HAMI 987.3218 107 LOUDOUN 420 - RIVEF 675.3063 107 LOUDOUN 421 - BETV 73.09454 107 LOUDOUN 422 - SYCO 642.5774
365.016 587.2945


3


4

107 LOUDOUN 501 - WEST 941.5013 107 LOUDOUN 502 -EAST 939.3194 107 LOUDOUN 503 - DRY $~ 495.2973$ 107 LOUDOUN 504 - SMAF 994.9585 107 LOUDOUN 505-COOL 886.9532 107 LOUDOUN 506 - BRAN 510.5708 107 LOUDOUN 507-GREE 489.8425 107 LOUDOUN 508 -BALL؛ 857.4972 107 LOUDOUN 509-TOLB 1000.413 107 LOUDOUN 510 -HERI7 490.9335 107 LOUDOUN 615 -HILLS 847.6785 107 LOUDOUN 616 -EAGL 943.6833 107 LOUDOUN 617-OAK ( 454.9317 107 LOUDOUN 619 - RIDG| 413.4751 107 LOUDOUN 620 -RUSS 1049.507 107 LOUDOUN 621 -DOM 1119.328 107 LOUDOUN 622 -FARN 1098.6 107 LOUDOUN 623 -WELL 849.8604 107 LOUDOUN 625 -MILL 375.2914 107 LOUDOUN 626 - ASHB 470.2052 107 LOUDOUN 627-ASHB 799.6761 107 LOUDOUN 628-MOO 878.2255 107 LOUDOUN 629 - DISCC 207.283 107 LOUDOUN 701 - SULL) 793.1303 107 LOUDOUN 702 - PARK 712.399 107 LOUDOUN 703 -ROLLI 990.5947 107 LOUDOUN 705 -FORE 932.7736 107 LOUDOUN 707 - CLAU 732.0364 107 LOUDOUN 708 - SENE 764.7653 107 LOUDOUN 709 - MIRR 885.8622 107 LOUDOUN 710 - STERI 620.7581 107 LOUDOUN 808 - STON 1076.781 107 LOUDOUN 810 -CEDA 943.6833 107 LOUDOUN 813 - SELDI 670.9424 107 LOUDOUN 814 - NEW 785.4936 107 LOUDOUN 815 - BELM 964.4116 107 LOUDOUN 817 - SAND 1023.324 107 LOUDOUN 818 - BROA 738.5822 107 LOUDOUN 819 - HERI 673.1244 107 LOUDOUN 820 - BELM 782.2207 107 LOUDOUN 822 - RIVEF 594.575 109 LOUISA CO 101 - ZION 633.5524 109 LOUISA CO 102 - MECF 283.6315 109 LOUISA CO 201 - LOUIS 273.8511 109 LOUISA CO 202 - LOUIS 287.9784 109 LOUISA CO 301 - PATR 753.0906 109 LOUISA CO 302 - PATR 155.3997
584.0257 418.4064
310.536 592.7425 726.7633 274.5792 337.776 602.5489 470.7072 441.288 591.6529 543.7105 129.6624 144.9168 697.3441 615.6241 558.9649 556.7857 286.5648 411.8688
331.2384
362.8368
137.2896
430.392
392.256
332.328
570.9505
249.5184
466.3488
394.4352
338.8656
712.5985
534.9937
315.984
774.7057
648.3121
785.6017
482.6928
496.8577
506.6641
378.0912
815.9442
407.4374
473.7396
428.8252
628.8011
196.7677

| 0 | 911.9384 | 26.40638 | 592.1452 | 1.317073 |
| ---: | ---: | ---: | ---: | ---: |
| 1.168831 | 926.1024 | 24.29387 | 419.5273 | 0 |
| 1.168831 | 468.4988 | 9.506297 | 331.0332 | 2.634146 |
| 3.506494 | 970.7732 | 26.40638 | 604.163 | 0 |
| 2.337662 | 868.3572 | 17.95634 | 740.7278 | 1.317073 |
| 0 | 506.6325 | 19.01259 | 265.4821 | 0 |
| 1.168831 | 490.2895 | 6.337531 | 336.4958 | 0 |
| 0 | 837.8503 | 17.95634 | 609.6255 | 1.317073 |
| 3.506494 | 1005.638 | 20.06885 | 458.8579 | 0 |
| 0 | 477.2151 | 13.73132 | 442.4702 | 0 |
| 0 | 863.999 | 15.84383 | 565.9248 | 0 |
| 1.168831 | 958.7883 | 16.90008 | 521.1315 | 0 |
| 0 | 464.1407 | 10.56255 | 111.4369 | 0 |
| 1.168831 | 414.0222 | 6.337531 | 142.0275 | 0 |
| 1.168831 | 1065.562 | 30.6314 | 667.529 | 0 |
| 3.506494 | 1115.681 | 20.06885 | 608.533 | 1.317073 |
| 2.337662 | 1108.054 | 15.84383 | 542.9819 | 0 |
| 0 | 859.6409 | 3.168766 | 556.0921 | 0 |
| 0 | 373.7095 | 5.281276 | 284.0549 | 0 |
| 0 | 0 | 0 |  |  |
| 0 | 150.0553 | 4.317881 | 200.921 | 0 |
| 0 | 588.3474 | 5.281276 | 385.6592 | 0 |
| 1.25 | 636.1041 | 17.27152 | 803.6838 | 0 |
| 1.25 | 285.975 | 11.87417 | 393.2921 | 0 |
| 0 | 267.4899 | 12.95364 | 467.0344 | 0 |
| 0 | 288.1497 | 11.87417 | 418.9416 | 0 |
| 0 | 758.9755 | 16.19205 | 608.1065 | 0 |
| 1.168831 | 473.9465 | 2.11251 | 418.4347 | 0 |
| 3.506494 | 816.0596 | 13.73132 | 308.0903 | 1.317073 |
| 2.337662 | 870.5362 | 14.78757 | 357.2537 | 0 |
| 0 | 218.996 | 2.11251 | 127.8247 | 0 |
| 0 | 813.8806 | 13.73132 | 408.6021 | 1.317073 |
| 1.168831 | 795.3585 | 4.225021 | 768.0408 | 1.317073 |
| 0 | 748.5086 | 10.56255 | 464.3205 | 0 |
| 0 | 16831 | 0262 | 11.61881 | 475.2457 | 1.3170730

109 LOUISA CO 401 - MINE 390.1292 109 LOUISA CO 402 - YANC 183.6541 109 LOUISA CO 501 - FRED 199.9548 109 LOUISA CO 502 -CUCK 194.5212 109 LOUISA CO 503 -ELK C 131.492 109 LOUISA CO 601 - BUMI 145.6193 109 LOUISA CO 602 -LOCU 249.9435 109 LOUISA CO 701 -SHEL- 302.1056 109 LOUISA CO 702 - SOUT 239.0764 111 LUNENBUR 101 - PLYM 108.4596 111 LUNENBUR 201 -BROV 145.3582 111 LUNENBUR 301 -ROSE 61.49771 111 LUNENBUR 302 -FLAT 112.9322 111 LUNENBUR 401 - ARRC 40.25305 111 LUNENBUR 402 - PLEA؛ 101.7508 111 LUNENBUR501-REED 145.3582 111 LUNENBUR502-PEOP 220.2736 111 LUNENBUR601-HOUP 318.67 111 LUNENBUR 701 - MEHI 101.7508 111 LUNENBUR 702 - VICTC 110.6959 113 MADISON 1001 - OAKI 265.6679 113 MADISON (002-RADI، 339.1046 113 MADISON 1003 -ROCF 113.3948 113 MADISON 1004 -GRAV 14.03936 113 MADISON 1005 - MADI 349.9041 113 MADISON $\mathbf{1 0 0 6}$ - WOLI 191.1513 113 MADISON (007-BRIGl 227.8696 113 MADISON 1008 -CRIGI 173.8721 113 MADISON 000 - ETLAI 80.99631 115 MATHEWS 001 - CHES، 291.1209 115 MATHEWS 002 -WEST 508.2877 115 MATHEWS 003 - PIANI 530.5914 117 MECKLENB 101 - WRIG 150.4236 117 MECKLENB 102 - PEAR 35.457 117 MECKLENB 103 -SOUT 239.6033 117 MECKLENB 201 - BOYD 146.1258 117 MECKLENB 202 -BLUE: 75.21181 117 MECKLENB 203 -CHAS 164.3915 117 MECKLENB 301 -BRAC 162.2426 117 MECKLENB 302 -LACR 167.6149 117 MECKLENB 401 - AMEF 482.43 117 MECKLENB 402 - PARK 84.8819 117 MECKLENB 501 -SOUT 372.8357 117 MECKLENB 601 -BASK 143.9769 117 MECKLENB 602 -UNIO 34.38254 117 MECKLENB 603 - SMITI 56.94608 117 MECKLENB 604 -LAKE 80.58408
845.8871 219.2249
214.9473
393.5354
394.6047
532.556
615.9684
660.8827
475.8783
296.4566
298.5517
236.7462
169.7031
170.7506
251.4119
120.4682
114.1829
210.5575
121.5158
168.6555
301.5194
458.1391
290.865
41.55215
544.4397
321.7628
680.816
303.6503
183.2556
606.0862
929.1038
1047.81
165.6399
97.68507
271.8193
165.6399
54.15151
56.2751
479.931
212.3589
271.8193
50.96613
537.2679
259.0778
176.2579
123.1681
131.6625

| 0 | 402.3223 | 21.5894 | 826.1271 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 187.0255 | 3.238411 | 216.9519 | 0 |
| 1.25 | 205.5106 | 3.238411 | 209.4708 | 0 |
| 0 | 195.7243 | 4.317881 | 392.2234 | 0 |
| 1.25 | 142.4438 | 5.397351 | 379.3986 | 0 |
| 2.5 | 157.6668 | 15.11258 | 512.9897 | 0 |
| 0 | 251.1796 | 5.397351 | 611.3127 | 0 |
| 1.25 | 304.4601 | 20.50993 | 646.5808 | 0 |
| 1.25 | 247.9175 | 9.715232 | 465.9656 | 0 |
| 0 | 103.9787 | 6.272727 | 297.6552 | 0 |
| 1.5 | 144.2285 | 5.227273 | 295.559 | 0 |
| 0 | 60.37471 | 2.090909 | 236.8664 | 0 |
| 1.5 | 108.4509 | 0 | 175.0296 | 1 |
| 0 | 42.48591 | 0 | 168.7411 | 0 |
| 0 | 100.6245 | 3.136364 | 249.4434 | 0 |
| 0 | 152.0548 | 1.045455 | 121.5775 | 0 |
| 0 | 223.6101 | 2.090909 | 110.0486 | 0 |
| 0 | 330.9429 | 2.090909 | 202.2797 | 0 |
| 0 | 99.50647 | 0 | 123.6736 | 0 |
| 0 | 101.7426 | 1.045455 | 177.1258 | 0 |
| 0 | 269.2184 | 2.107143 | 300.657 | 0 |
| 1.2 | 339.7797 | 8.428571 | 463.203 | 0 |
| 0 | 117.2403 | 7.375 | 286.8459 | 0 |
| 0 | 16.28337 | 1.053571 | 39.30851 | 0 |
| 1.2 | 345.2075 | 12.64286 | 540.7577 | 0 |
| 3.6 | 198.6572 | 10.53571 | 310.2185 | 1 |
| 0 | 244.2506 | 7.375 | 661.8704 | 0 |
| 0 | 178.0316 | 5.267857 | 299.5946 | 0 |
| 0 | 80.33131 | 4.214286 | 179.5443 | 0 |
| 0 | 302.0169 | 5.535714 | 596.7398 | 0 |
| 1 | 519.75 | 8.857143 | 916.8302 | 0 |
| 4 | 564.2331 | 16.60714 | 1017.43 | 2 |
| 0 | 145.8246 | 2.242424 | 167.8238 | 0 |
| 0 | 34.31167 | 1.121212 | 97.72021 | 0 |
| 0 | 248.7596 | 0 | 268.7306 | 0 |
| 0 | 145.8246 | 2.242424 | 164.6373 | 0 |
| 0 | 75.05678 | 1.121212 | 53.10881 | 0 |
| 0 | 168.3416 | 1.121212 | 54.17098 | 0 |
| 0 | 162.9804 | 1.121212 | 481.1658 | 0 |
| 0 | 167.2694 | 0 | 214.5596 | 0 |
| 0 | 494.3025 | 2.242424 | 261.2953 | 0 |
| 0 | 83.6347 | 0 | 52.04663 | 0 |
| 0 | 372.0672 | 6.727273 | 532.1503 | 0 |
| 0 | 147.9691 | 1.121212 | 255.9845 | 0 |
| 0 | 35.38391 | 1.121212 | 174.1969 | 0 |
| 0 | 56.82871 | 2.242424 | 123.2124 | 0 |
| 0 | 81.49022 | 1.121212 | 129.5855 | 0 |
|  |  |  |  | 0 |


| AS | 145.0513 | 266.5104 | 0 | 150.1136 | 2.242424 | 261.2953 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 MECKLENB 702 - SUNS | 139.6791 | 233.5947 | 0 | 143.6801 | 1.121212 | 232.6166 | 0 |
| 117 MECKLENB 801 - FINCF | 52.64827 | 93.4379 | 0 | 51.46751 | 2.242424 | 93.4715 | 0 |
| 117 MECKLENB 802 - BLUE: | 151.4981 | 364.1954 | 0 | 153.3303 | 2.242424 | 361.1399 | 0 |
| 117 MECKLENB $803-$ CHAS | 147.2003 | 219.7914 | 0 | 147.9691 | 3.363636 | 217.7461 | 0 |
| 117 MECKLENB 901 - AVER | 20.41463 | 102.994 | 0 | 18.22808 | 0 | 105.1554 | 0 |
| 117 MECKLENB 902 - BUFF. | 41.90372 | 199.6173 | 0 | 48.25079 | 1.121212 | 194.3782 | 0 |
| 117 MECKLENB 903 - CLAR | 252.4968 | 638.1384 | 0 | 265.9155 | 1.121212 | 628.8083 | 0 |
| 119 MIDDLESE) 101 - SALU | 124.1404 | 212.4902 | 0 | 122.4548 | 1.078947 | 213.9256 | 0 |
| 119 MIDDLESE) 102 - URBA | 198.189 | 369.4553 | 0 | 196.1444 | 8.631579 | 364.7431 | 0 |
| 119 MIDDLESE) 201 - NEW | 267.8819 | 725.0294 | 2 | 287.1727 | 7.552632 | 703.8151 | 0 |
| 119 MIDDLESE) 302 - CHUR | 319.0625 | 406.828 | 0 | 320.7665 | 7.552632 | 405.389 | 0 |
| 119 MIDDLESE) 401- HARN | 309.262 | 398.2857 | 2 | 318.5992 | 9.710526 | 387.2053 | 0 |
| 119 MIDDLESE> 501 - WILTI | 348.4642 | 612.9114 | 0 | 360.8623 | 6.473684 | 597.922 | 0 |
| 121 MONTGON 101 - PREC | 882.227 | 700.6604 | 0 | 924.7124 | 29.04782 | 633.5875 | 0 |
| 121 MONTGON 102 - PREC | 972.7938 | 298.4876 | 2.235294 | 986.502 | 25.93555 | 276.4745 | 1.055556 |
| 121 MONTGON 103 - PREC | 1470.378 | 671.3353 | 0 | 1492.537 | 37.34719 | 627.304 | 1.055556 |
| 121 MONTGON 201 - PREC | 87.37031 | 89.02262 | 1.117647 | 83.09628 | 1.037422 | 92.15818 | 1.055556 |
| 121 MONTGON 202 - PREC | 775.6778 | 797.0143 | 1.117647 | 767.0426 | 29.04782 | 786.4863 | 0 |
| 121 MONTGON 203 - PREC | 433.6551 | 587.5493 | 0 | 449.5722 | 17.63617 | 553.9963 | 2.111111 |
| 121 MONTGON 204 - PREC | 899.2749 | 976.1068 | 3.352941 | 933.2351 | 24.89813 | 929.9598 | 1.055556 |
| 121 MONTGON 301 - PREC | 304.7306 | 744.648 | 1.117647 | 305.7517 | 13.48649 | 738.3127 | 1.055556 |
| 121 MONTGON 302 - PREC | 425.1311 | 826.3394 | 1.117647 | 453.8335 | 22.82328 | 784.3918 | 2.111111 |
| 121 MONTGON 303 - PREC | 139.5794 | 299.5349 | 0 | 131.0364 | 6.224532 | 303.7031 | 0 |
| 121 MONTGON 304 - PREC | 416.6072 | 718.4649 | 1.117647 | 422.9388 | 22.82328 | 697.4698 | 1.055556 |
| 121 MONTGON 401 - PREC | 345.2193 | 518.4258 | 0 | 357.9532 | 10.37422 | 497.4447 | 0 |
| 121 MONTGON 402 - PREC | 337.7608 | 869.2797 | 1.117647 | 350.4958 | 11.41164 | 854.5576 | 0 |
| 121 MONTGON 403 - PREC | 265.3074 | 594.8806 | 0 | 269.5302 | 8.299376 | 592.7446 | 0 |
| 121 MONTGON 404 - PREC | 155.5618 | 394.8415 | 0 | 155.5392 | 8.299376 | 389.5777 | 0 |
| 121 MONTGON 405 - PREC | 525.2873 | 776.0678 | 0 | 531.6031 | 17.63617 | 760.305 | 0 |
| 121 MONTGON 501 - PREC | 751.1715 | 581.2653 | 0 | 753.1932 | 20.74844 | 568.6578 | 0 |
| 121 MONTGON 502 - PREC | 409.1488 | 552.9876 | 0 | 415.4814 | 14.52391 | 534.0985 | 0 |
| 121 MONTGON 503 - PREC | 622.2471 | 258.6893 | 0 | 632.8101 | 20.74844 | 235.6317 | 1.055556 |
| 121 MONTGON 601 - PREC | 1232.774 | 463.9649 | 1.117647 | 1248.575 | 32.16008 | 423.0898 | 3.166667 |
| 121 MONTGON 602 - PREC | 1063.361 | 380.179 | 1.117647 | 1067.468 | 40.45946 | 348.7349 | 1.055556 |
| 121 MONTGON 603 - PREC | 199.2469 | 118.3477 | 0 | 193.8913 | 10.37422 | 113.1032 | 0 |
| 121 MONTGON 701 - PREC | 1427.759 | 612.6851 | 2.235294 | 1438.205 | 44.60915 | 567.6106 | 2.111111 |
| 121 MONTGON 702 - PREC | 727.7307 | 226.2222 | 2.235294 | 749.9972 | 29.04782 | 190.5999 | 1.055556 |
| 125 NELSON CC 101 - ROCK | 699.5019 | 641.875 | 1 | 693.1403 | 32.75591 | 638.0578 | 0 |
| 125 NELSON CC 201 - LOVIT | 311.3637 | 365.1322 | 1 | 313.9957 | 13.30709 | 360.5499 | 0 |
| 125 NELSON CC 202 - SCHU | 211.1302 | 190.458 | 0 | 199.7184 | 13.30709 | 190.2611 | 0 |
| 125 NELSON CC 301 - SHIPN | 397.7351 | 414.5881 | 3 | 394.0967 | 7.165354 | 415.2106 | 3 |
| 125 NELSON CC 302 - GLAD | 55.44832 | 81.02357 | 0 | 54.46865 | 6.141732 | 76.73512 | 0 |
| 125 NELSON CC 401 - ROSE | 395.6025 | 561.9037 | 0 | 390.8927 | 22.51969 | 550.811 | 0 |
| 125 NELSON CC 402 - MON | 33.05573 | 56.82172 | 0 | 37.38045 | 3.070866 | 52.5583 | 0 |
| 125 NELSON CC 501 - FABE | 271.9101 | 227.2869 | 1 | 274.4793 | 7.165354 | 220.7449 | 2 |
| 125 NELSON CC 502 - NELL) | 647.2526 | 541.9109 | 1 | 656.8278 | 24.56693 | 515.0714 | 4 |


| 127 NEW KENT 102 - TUNS | 113.0445 | 339.9623 | 2.363636 | 119.9792 | 4.037383 | 331.33 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 127 NEW KENT 103 - SOUT | 287.3654 | 916.6469 | 1.181818 | 297.843 | 15.14019 | 894.6955 | 1 |
| 127 NEW KENT 201 - QUIN | 417.3137 | 840.5203 | 1.181818 | 449.3957 | 17.15888 | 795.401 | 0 |
| 127 NEW KENT 202 - KENT | 157.4171 | 532.8857 | 4.727273 | 162.0771 | 16.14953 | 520.5121 | 2 |
| 127 NEW KENT 301 - WATr | 334.9075 | 441.1168 | 0 | 334.6788 | 7.065421 | 437.9409 | 0 |
| 127 NEW KENT 302 - CUMI | 300.0433 | 613.1836 | 0 | 313.6298 | 8.074766 | 597.8572 | 0 |
| 127 NEW KENT 401 - PROV | 433.1611 | 838.4347 | 0 | 445.1859 | 11.1028 | 820.4859 | 0 |
| 127 NEW KENT 403 - MOU | 156.3606 | 309.7203 | 1.181818 | 166.2869 | 5.046729 | 297.8834 | 1 |
| 127 NEW KENT 501 - ELTH, | 223.976 | 394.1894 | 1.181818 | 224.1716 | 12.11215 | 385.6806 | 0 |
| 127 NEW KENT $502-\mathrm{CHICl}$ | 213.4111 | 641.34 | 1.181818 | 215.752 | 12.11215 | 629.2134 | 0 |
| 131 NORTHAM 101 - PREC | 516.6339 | 581.3478 | 1 | 568.8499 | 2.153846 | 537.585 | 1 |
| 131 NORTHAM 201 - PREC | 537.3866 | 263.6473 | 0 | 567.7559 | 11.84615 | 236.7144 | 1 |
| 131 NORTHAM 301 - PREC | 482.7741 | 211.8003 | 1 | 515.2467 | 4.307692 | 197.9994 | 0 |
| 131 NORTHAM 401 - PREC | 417.2392 | 473.2414 | 0 | 459.4557 | 2.153846 | 438.0322 | 0 |
| 131 NORTHAM 501 - PREC | 342.9662 | 480.9632 | 1 | 380.6918 | 7.538462 | 444.6691 | 1 |
| 133 NORTHUM 101-1A | 305.2458 | 538.5669 | 0 | 308.8862 | 5 | 532.79 | 0 |
| 133 NORTHUM 201-2A | 339.2841 | 703.0394 | 0 | 343.9372 | 8 | 696.3942 | 0 |
| 133 NORTHUM 301-3A | 338.186 | 195.6471 | 1 | 347.2232 | 3 | 186.2074 | 1 |
| 133 NORTHUM 302-3B | 192.1512 | 64.49903 | 0 | 193.8754 | 2 | 62.42792 | 0 |
| 133 NORTHUM 401-4A | 419.4385 | 958.8856 | 2 | 433.7551 | 11 | 937.4951 | 2 |
| 133 NORTHUM 501-5A | 388.6944 | 865.362 | 0 | 394.3229 | 6 | 869.6855 | 0 |
| 135 NOTTOWA 101 - PREC | 177.1878 | 315.4991 | 0 | 185.0058 | 4.285714 | 305.3738 | 0 |
| 135 NOTTOWA 102 - PREC | 130.5036 | 250.9171 | 2 | 134.2614 | 4.285714 | 249.1766 | 0 |
| 135 NOTTOWA 201 - PREC | 196.2859 | 357.848 | 0 | 194.5204 | 5.357143 | 357.3298 | 0 |
| 135 NOTTOWA 202 - PREC | 74.27033 | 236.095 | 0 | 74.00233 | 4.285714 | 234.332 | 0 |
| 135 NOTTOWA 301 - PREC | 284.3493 | 164.1019 | 0 | 284.3804 | 3.214286 | 163.2902 | 0 |
| 135 NOTTOWA 302 - PREC | 123.0766 | 206.4508 | 0 | 122.6324 | 0 | 205.7032 | 0 |
| 135 NOTTOWA 401 - PREC | 328.9115 | 104.8135 | 0 | 331.9533 | 1.071429 | 103.9119 | 0 |
| 135 NOTTOWA 402 - PREC | 117.7715 | 292.2073 | 0 | 122.6324 | 0 | 287.3483 | 0 |
| 135 NOTTOWA 501 - PREC | 341.6435 | 524.0674 | 1 | 362.6114 | 7.5 | 501.5341 | 0 |
| 137 ORANGE C101-ONE | 470.1826 | 776.2373 | 2.666667 | 477.8887 | 10.31915 | 767.2496 |  |
| 137 ORANGE C102-ONE I | 479.866 | 616.5782 | 0 | 492.9573 | 7.223404 | 609.5956 | 0 |
| 137 ORANGE Cl201-TWO | 327.0836 | 691.1558 | 0 | 326.1268 | 5.159574 | 689.4736 | 0 |
| 137 ORANGE Cl202-TWO | 239.933 | 633.3844 | 1.333333 | 242.1734 | 10.31915 | 623.2589 | 1 |
| 137 ORANGE Cl301-THRE | 597.1427 | 683.8031 | 0 | 608.1242 | 22.70213 | 656.8918 | 1 |
| 137 ORANGE Cl302-THRE | 143.0991 | 277.3026 | 0 | 140.9987 | 1.031915 | 278.5221 | 1 |
| 137 ORANGE C1401-FOUR | 249.6164 | 799.3459 | 0 | 259.3946 | 6.191489 | 794.5763 | 0 |
| 137 ORANGE C1402-FOUR | 393.7914 | 568.2603 | 1.333333 | 403.6223 | 10.31915 | 553.8912 | 0 |
| 137 ORANGE CI501-FIVE ! | 582.0796 | 741.5745 | 0 | 575.8344 | 12.38298 | 738.8719 | 0 |
| 137 ORANGE CI502-FIVE I | 612.2057 | 966.3577 | 2.666667 | 632.8797 | 11.35106 | 940.669 | 1 |
| 139 PAGE COUI 101 - WEST | 469.6039 | 857.1317 | 0 | 471.4364 | 12.82759 | 858.7334 | 1 |
| 139 PAGE COUI 201 - EAST | 455.3402 | 1009.815 | 1 | 472.5327 | 13.89655 | 997.8166 | 1 |
| 139 PAGE COUI 301 - MARI | 362.0778 | 1102.478 | 1 | 355.2218 | 12.82759 | 1116.88 | 1 |
| 139 PAGE COUI 401 - NEWI | 249.0656 | 844.4959 | 3 | 244.4891 | 7.482759 | 858.7334 | 1 |
| 139 PAGE COUI 501 - SHEN | 269.9125 | 1015.08 | 1 | 265.32 | 14.96552 | 1017.836 | 1 |
| 141 PATRICK C( 101 - ARAR | 88.66694 | 249.7978 | 0 | 84.43209 | 1.058824 | 257.9417 | 0 |
| 141 PATRICK C( 102 - CLAU | 52.34555 | 282.3345 | 0 | 52.36927 | 0 | 285.2039 | 0 |


| 03 - WILLI | 73.71107 | 233.0047 | 0 | 65.1944 | 3.176471 | 241.165 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 141 PATRICK C( 201 - DRY F | 44.86761 | 178.427 | 0 | 43.81919 | 4.235294 | 178.2524 | 0 |
| 141 PATRICK C( 202 - PATR | 145.2856 | 500.6452 | 1 | 137.8701 | 6.352941 | 509.5922 | 0 |
| 141 PATRICK C( 203 -RUSS | 106.8276 | 326.4164 | 0 | 105.8073 | 5.294118 | 326.0971 | 0 |
| 141 PATRICK C( 301 - CRITZ | 163.4463 | 440.8196 | 0 | 163.5204 | 4.235294 | 441.4369 | 0 |
| 141 PATRICK C( 302 - LIBER | 56.61865 | 360.0027 | 1 | 54.50679 | 4.235294 | 359.6505 | 0 |
| 141 PATRICK C( 401 - MEAL | 144.2173 | 314.8712 | 0 | 142.1452 | 2.117647 | 317.7087 | 0 |
| 141 PATRICK C(402-STUA | 151.6953 | 458.6623 | 2 | 156.039 | 8.470588 | 460.3107 | 0 |
| 141 PATRICK C( 501 - STUA | 49.14072 | 205.7158 | 1 | 51.30051 | 5.294118 | 203.4175 | 0 |
| 141 PATRICK C( 502 - ELAN | 84.39384 | 310.6729 | 0 | 81.22581 | 3.176471 | 314.5631 | 0 |
| 141 PATRICK C( $503-$ WOO | 121.7835 | 415.6299 | 2 | 120.7699 | 6.352941 | 424.6602 | 0 |
| 143 PITTSYLVAI 103 -TWIN | 231.6301 | 1308.704 | 2.222222 | 238.8966 | 6.349515 | 1305.404 | 0 |
| 143 PITTSYLVAI 105 - CHAT | 184.879 | 441.4529 | 1.111111 | 192.179 | 1.058252 | 439.3085 | 0 |
| 143 PITTSYLVAI 106 -TUNS | 151.9408 | 495.7214 | 0 | 152.8938 | 3.174757 | 493.5699 | 0 |
| 143 PITTSYLVAI 108 - WEST | 119.0026 | 250.4697 | 0 | 119.9792 | 1.058252 | 252.5241 | 0 |
| 143 PITTSYLVAI 201 -CALL | 140.2531 | 488.416 | 0 | 144.3997 | 4.23301 | 484.1785 | 0 |
| 143 PITTSYLVAI 202-BEARS | 47.81354 | 111.6678 | 0 | 48.84108 | 1.058252 | 109.5663 | 0 |
| 143 PITTSYLVAI 204 -SAND | 100.9397 | 312.0435 | 0 | 105.1145 | 6.349515 | 309.916 | 0 |
| 143 PITTSYLVAI 206 -CLIM | 94.56456 | 381.9663 | 0 | 86.00277 | 2.116505 | 393.395 | 0 |
| 143 PITTSYLVAI 207 -GRET | 268.8184 | 876.6441 | 1.111111 | 274.9965 | 3.174757 | 878.6171 | 1 |
| 143 PITTSYLVAI301-CENT | 318.757 | 212.8993 | 1.111111 | 321.714 | 4.23301 | 210.7846 | 0 |
| 143 PITTSYLVAI 305 -RICEV | 274.131 | 234.8154 | 1.111111 | 281.3671 | 1.058252 | 228.5239 | 0 |
| 143 PITTSYLVAI307-EAST | 472.8228 | 133.5839 | 0 | 478.8549 | 0 | 131.4795 | 0 |
| 143 PITTSYLVAI308-MT A | 159.3785 | 125.2349 | 0 | 158.2026 | 1.058252 | 127.3056 |  |
| 143 PITTSYLVAI 309 -EAST | 144.5032 | 179.5033 | 1.111111 | 146.5232 | 1.058252 | 178.4365 | 0 |
| 143 PITTSYLVAI 402 -KEELI | 107.3148 | 520.7683 | 0 | 97.68215 | 6.349515 | 524.8746 | 0 |
| 143 PITTSYLVAI 404 -KENT | 268.8184 | 868.2951 | 1.111111 | 262.2553 | 6.349515 | 874.4431 | 0 |
| 143 PITTSYLVAI 405 -RING | 348.5076 | 844.2917 | 0 | 344.0111 | 13.75728 | 845.2254 |  |
| 143 PITTSYLVAI 501 -HURT | 269.8809 | 643.9159 | 0 | 281.3671 | 3.174757 | 634.4408 | 0 |
| 143 PITTSYLVAI502-MOTI | 303.8816 | 698.1844 | 0 | 305.7876 | 3.174757 | 704.3545 | 0 |
| 143 PITTSYLVAI 503 -RENA | 134.9404 | 385.0972 | 0 | 139.0909 | 4.23301 | 381.9167 | 0 |
| 143 PITTSYLVAI 603 -STON | 165.7536 | 524.9428 | 0 | 166.6967 | 4.23301 | 525.9181 |  |
| 143 PITTSYLVAI 604 -SWAr | 192.3167 | 372.5737 | 0 | 202.7966 | 3.174757 | 363.1339 | 0 |
| 143 PITTSYLVAI 605 - WHIT | 185.9416 | 436.2348 | 0 | 177.3143 | 5.291262 | 439.3085 | 0 |
| 143 PITTSYLVAI 606 -BROS | 280.5061 | 303.6946 | 0 | 277.12 | 4.23301 | 302.6116 | 0 |
| 143 PITTSYLVAI 607 - DRY F | 70.12653 | 230.6409 | 0 | 66.89104 | 2.116505 | 232.6979 | 0 |
| 143 PITTSYLVAI 702 -BACH | 130.6904 | 773.3253 | 0 | 134.8438 | 3.174757 | 772.1813 | 0 |
| 143 PITTSYLVAI 703 -FERR' | 60.56382 | 111.6678 | 0 | 62.64399 | 0 | 110.6097 | 0 |
| 143 PITTSYLVAI 704 -MT H | 381.4458 | 961.1776 | 1.111111 | 376.9257 | 10.58252 | 964.1831 | 1 |
| 143 PITTSYLVAI 705 -MT C | 116.8776 | 480.067 | 0 | 113.6086 | 3.174757 | 482.0915 | 0 |
| 145 POWHATAI 101 - SUBL | 332.0092 | 1039.576 | 0 | 343.897 | 20.75758 | 1005.133 | 2.666667 |
| 145 POWHATAI 102 -MAN, | 290.2403 | 766.7794 | 0 | 310.6857 | 4.151515 | 744.8943 | 0 |
| 145 POWHATAI 103 - FLAT | 159.5786 | 558.2323 | 0 | 155.3429 | 11.41667 | 558.4074 | 0 |
| 145 POWHATAI 201 - POW | 204.5605 | 804.6971 | 0 | 202.4814 | 14.5303 | 796.5207 | 0 |
| 145 POWHATAI 202 -GRAC | 292.3823 | 960.5808 | 2 | 311.7571 | 19.7197 | 929.2741 | 0 |
| 145 POWHATAI301-BETH | 277.3884 | 732.0216 | 1 | 278.5458 | 14.5303 | 718.5544 | 0 |
| 145 POWHATAI 302 -LEE'S | 246.3294 | 667.7722 | 0 | 247.4773 | 7.265152 | 664.8208 | 0 |

145 POWHATAI 401 - POW 355.5712 145 POWHATAI 402 - MT ZI 154.2236 145 POWHATAI501-SMITI 380.2041 145 POWHATAI502 - PINE 225.9805 145 POWHATAI503 - TOBA 98.53177 147 PRINCE ED 101 -FARN 366.2778 147 PRINCE ED'201-LOCK 411.6667 147 PRINCE ED 301 -LEIGF 268.1111 147 PRINCE ED 302 - MT P 175.2222 147 PRINCE ED 401 - HAMI 292.3889 147 PRINCE ED 501 - DARL 149.8889 147 PRINCE ED 502 -BUFF، 99.22222 147 PRINCE ED 601 -PROS 449.6667 147 PRINCE ED'701 - WEST 377.8889 147 PRINCE ED' 801 -CENT 240.6667 149 PRINCE GEI 101 - RICH $/ 254.7035$ 149 PRINCE GEI 102 -TEMF 443.5727 149 PRINCE GEI 103 - UNIO 497.5353 149 PRINCE GEI 104 - RIVES 424.1461 149 PRINCE GEI 105 - HARR 91.73644 149 PRINCE GEI 201 - BLAN 570.9244 149 PRINCE GEI 202 - BLAC 374.5005 149 PRINCE GEI 203 - BRAN 152.1746 149 PRINCE GEI 204 - COUF 736.05 149 PRINCE GEI 205 - JEFFE 553.6564 153 PRINCE WI 101 - BREN 336.007 153 PRINCE WI 102 -CEDA 1085.046 153 PRINCE WI 103 -GLEN 695.4563 153 PRINCE WI 104 - NOKE 570.4305 153 PRINCE WI 105 - LIME! 1030.347 153 PRINCE WI 106 - WEST 637.4086 153 PRINCE WI 107 - MAR؛ 1225.7 153 PRINCE WI 108 - VICTC 1189.978 153 PRINCE WI 109 - PINE 905.3211 153 PRINCE WI 110 - BUCK 670.115 153 PRINCE WI 111 - BRIST 1189.978 153 PRINCE WI 112 -BURK 923.8753 153 PRINCE WI 201 - SAUN 886.1337 153 PRINCE WI 202 - MAR؟ 766.8997 153 PRINCE WI 203 -BENN 840.5756 153 PRINCE WI 204 -ELLIS 663.0835 153 PRINCE WI 205 - BUCK 776.5752 153 PRINCE WI 206 -COLE: 579.3609 153 PRINCE WI 207 - SPRIG 1220.118 153 PRINCE WI 208 - HYLTI 488.9404 153 PRINCE WI 209 - INDEI 394.0547 153 PRINCE WI 210 - PENN 703.8503
1275.508 446.5858 547.6996 329.673 313.874 334.1891 495.3736 255.746 116.0528 311.6233 274.0136 166.5573 384.6936 339.5619 89.18874 484.1247 1337.713 648.6847 310.0097 321.6881
1036.197
734.6805 326.9965
683.72 244.1857 888.1145 984.3082 759.4833 862.3882
958.582
243.84 955.2264 857.9141 588.3479

### 617.782

1087.213 795.2116 333.9989 979.8341 832.1879 483.2058 839.9631 702.4381 755.0091
701.3196 724.8088 833.7847

| 2 | 381.3935 | 19.7197 | 1234.818 | 1.333333 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 152.1289 | 8.30303 | 440.4043 | 0 |
| 1 | 383.5362 | 12.45455 | 536.2818 | 0 |
| 0 | 241.0493 | 2.075758 | 317.1332 | 0 |
| 0 | 100.705 | 2.075758 | 309.758 | 0 |
| 2.2 | 364.4829 | 8.689655 | 332.599 | 1 |
| 2.2 | 428.9278 | 5.431034 | 478.5135 | 1 |
| 2.2 | 266.231 | 9.775862 | 253.2044 | 0 |
| 0 | 175.3744 | 2.172414 | 116.9461 | 0 |
| 0 | 291.5864 | 7.603448 | 305.7765 | 0 |
| 1.1 | 161.6403 | 1.086207 | 270.3708 | 0 |
| 0 | 99.3084 | 1.086207 | 165.2266 | 0 |
| 1.1 | 454.2831 | 11.94828 | 383.0254 | 0 |
| 2.2 | 403.5724 | 4.344828 | 318.6513 | 0 |
| 0 | 235.5933 | 10.86207 | 83.68621 | 0 |
| 1.428571 | 248.2263 | 7.411765 | 485.0123 | 1.333333 |
| 1.428571 | 462.0663 | 8.470588 | 1328.188 | 0 |
| 1.428571 | 498.6018 | 12.70588 | 647.0384 | 0 |
| 0 | 429.8291 | 4.235294 | 305.9309 | 0 |
| 0 | 92.41326 | 6.352941 | 320.8543 | 0 |
| 0 | 585.6422 | 14.82353 | 1017.993 | 1.333333 |
| 1.428571 | 370.7276 | 18 | 729.1175 | 0 |
| 0 | 155.8131 | 6.352941 | 316.5905 | 0 |
| 2.857143 | 750.0518 | 26.47059 | 652.3683 | 0 |
| 1.428571 | 556.6287 | 3.176471 | 240.9072 | 1.333333 |
| 7.205882 | 349.1531 | 8.702011 | 874.2912 | 0 |
| 4.117647 | 1101.003 | 26.10603 | 950.4138 | 1.032258 |
| 1.029412 | 711.6922 | 13.05302 | 735.4793 | 0 |
| 2.058824 | 581.1781 | 16.31627 | 838.4688 | 1.032258 |
| 3.088235 | 1067.538 | 25.01828 | 905.6358 | 1.032258 |
| 0 | 646.9929 | 13.05302 | 231.7263 | 1.032258 |
| 3.088235 | 1234.864 | 23.93053 | 938.0999 | 1.032258 |
| 1.029412 | 1221.478 | 21.75503 | 814.9603 | 1.032258 |
| 2.058824 | 920.2916 | 20.66728 | 556.3671 | 1.032258 |
| 1.029412 | 678.7224 | 11.0955 | 604.2346 | 0 |
| 3.088235 | 1220.362 | 20.66728 | 1043.328 | 0 |
| 1.071429 | 946.3839 | 16.725 | 765.4223 | 0 |
| 1.178571 | 887.205 | 11.97716 | 327.6786 | 0 |
| 1.029412 | 787.5465 | 23.93053 | 940.3388 | 0 |
| 1.029412 | 848.8993 | 17.40402 | 807.1241 | 0 |
| 0 | 674.8805 | 22.84278 | 456.736 | 1.032258 |
| 2.142857 | 802.7812 | 15.61 | 807.8661 | 1.384615 |
| 4.117647 | 593.4486 | 29.36929 | 669.4317 | 0 |
| 0 | 1232.633 | 15.22852 | 733.2404 | 1.032258 |
| 0 | 497.5152 | 11.96527 | 685.104 | 0 |
| 0 | 390.4267 | 13.05302 | 717.568 | 0 |
| 0 | 712.2813 | 16.31735 | 807.5125 | 1.032258 |

153 PRINCE WI 211 - SIGN, 655.0141 153 PRINCE WI 212 - YORK 1077.528 153 PRINCE WI 213 - SARA 631.8271 153 PRINCE WI 214 - LUCA 353.8678 153 PRINCE WI 215 - ROSA 842.8806 153 PRINCE WI 301 - DUM 666.5411 153 PRINCE WI 302 - POTC 1438.442 153 PRINCE WI 303 - GRAF 527.9094 153 PRINCE WI 304 - QUA 73.67595 153 PRINCE WI 305 - PATT 824.9474 153 PRINCE WI 306 - WASF 929.8798 153 PRINCE WI 307 - HEN[ 740.1084 153 PRINCE WI 308-MON 510.1501 153 PRINCE WI 309 - ASHL، 607.2684 153 PRINCE WI 310 - FORE 841.6919 153 PRINCE WI 311 - SWAr 1382.99 153 PRINCE WI 312-TRIAr 992.7623 153 PRINCE WI 313 - CARD 680.9444 153 PRINCE WI 314 - CABII 717.7824 153 PRINCE WI 401 - EVERI 679.7984 153 PRINCE WI 402 - BATT 672.7171 153 PRINCE WI 403 - BULL 669.1765 153 PRINCE WI 404 - BEN L 802.6213 153 PRINCE WI 405 - UNIT 1021.417 153 PRINCE WI 406 - ALVE' 433.1354 153 PRINCE WI 407 - HERI 1046.842 153 PRINCE WI 408 - SUDL 468.847 153 PRINCE WI 409 - TYLEF 895.776 153 PRINCE WI 410 - MOU 835.5855 153 PRINCE WI 411 - MULI 814.9007 153 PRINCE WI 412 - CATH 414.2521 153 PRINCE WI 413 - REAG 876.8927 153 PRINCE WI 501 - LAKE 871.8321 153 PRINCE WI 502-OCCC 588.9074 153 PRINCE WI 503-OLD E 784.1008 153 PRINCE WI 504 - ROCK 676.5226 153 PRINCE WI 505-MOH 928.7635 153 PRINCE WI 506 - BETH 1117.926 153 PRINCE WI 507 - CHINI 774.1193 153 PRINCE WI 508 - SPRIN 668.6651 153 PRINCE WI 509-MCC 830.5289 153 PRINCE WI 510 - YATE! 498.0467 153 PRINCE WI 511 - WEST 925.4146 153 PRINCE WI 512 - YORK 1065.8 153 PRINCE WI 513 - LYNN 799.6275 153 PRINCE WI 514 - ANTII 1069.128 153 PRINCE WI 601 - DALE 782.9917

### 322.1372

463.0723
513.3108
1303.109 461.9537
618.3062
934.459
250.5512
643.9717
979.957
512.2877
321.5447
300.0329
473.2594
587.2293
652.1469
465.334
290.8183
894.8256
620.6394
570.4513
243.4229
672.5265
601.1979
186.8129

3.214286
2.142857
3.088235
2.058824
1.178571

0
0
$\begin{array}{rr}66 & 663.6796 \\ 7 & 1086.879 \\ 5 & 638.0688 \\ 4 & 355.8461 \\ 1 & 860.5889 \\ 0 & 666.5128 \\ 0 & 1441.708 \\ 0 & 525.669 \\ 0 & 75.85434\end{array}$
$\begin{array}{rr}663.6796 \\ 7 & 1086.879 \\ 638.0688 \\ & 355.8461 \\ 1 & 860.5889 \\ 0 & 666.5128 \\ 0 & 1441.708 \\ 0 & 525.669 \\ 0 & 75.85434\end{array}$
6.176471
719.2161 630.8521 440.7016 530.1842 371.3526 444.9544 422.6772 318.7816 414.9754 957.7913 998.6228
848.8993
044.8327
5.147059761 .8899
$0 \quad 523.1718$
0629.1448
3.088235
2.357143
3.237395
1.029412
1.029412
1.071429
2.142857
844.4373
1396.239
1008.147
690.4976
719.5007
682.5409
677.8256
661.322
807.6256
1.0294121021 .803
3.214286434 .9872
2.1428571079 .806
2.058824475 .2051
3.214286902 .9815
2.142857845 .219
$0 \quad 822.1272$
1.071429426 .7354
5.357143874 .6897
2.058824887 .9419
1.178571592 .2093
4.714286795 .1575
1.178571684 .2569
1.029412933 .6776
1.1785711143 .385
797.3755
677.1115
858.9388
486.8556
948.1792
1083.499
832.8637
1.1785711073 .518
0787.3945
23.415
22.3
7.61426
10.87751
11.97716
10.88832
6.532995185 .9491
1.08775170 .52541
17.40402
14.14077
10.87751
7.61426
9.789762
13.05302
14.15482
8.709579
6.526508
11.96527
23.415
14.495
10.035
17.40402
21.75
2.23
17.84
25.01828
23.415
14.495
20.6
5.57
13.38
8.702011
14.15482
11.97716
15.24365
17.40402
15.24365
11.97716430 .8576
6.526508
9.789762
11.15
15.22852
11.97716
10.88832
33.75381
9.79949
2.27907
643.2575
2.769231
1.384615
275.38492 .064516
610.10081 .032258
$339.0169 \quad 2.27907$
238.10550

0
595.54791 .032258
698.53740
$605.623 \quad 2.064516$
420.91362 .064516
502.6335
2.064516
1.139535

0
2.064516
1.032258
1.384615
1.384615
2.064516
1.032258
1.384615
1.384615
2.064516

0
0
0
1.384615
4.153846
1.032258
1.139535
1.139535
1.139535
1.032258
1.139535

0
$\begin{array}{ll}277.6238 & 0 \\ 861.9772 & 0\end{array}$
624.57851 .384615
536.2171 .032258
217.69654 .55814
639.48343 .418605
566.91791 .139535
175.7446

153 PRINCE WI 602 - BEVIL 1397.407 153 PRINCE WI 603 - HAMI 699.8127 153 PRINCE WI 604 - GIDE 729.7572 153 PRINCE WI 605 - MINN 801.8456 153 PRINCE WI 606 - BEL A 750.8292 153 PRINCE WI 607 - KERR' 973.7489 153 PRINCE WI 608 - ENTE 889.4609 153 PRINCE WI 609 - KING 1173.422 153 PRINCE WI 610 - FITZG 983.7304 153 PRINCE WI 611 - NEAB 718.6666 153 PRINCE WI 701 - BELM 856.1892 153 PRINCE WI 702 - LIBRA 936.0411 153 PRINCE WI 703 - LYNN 503.5103 153 PRINCE WI 704 - PORT 956.0041 153 PRINCE WI 705 - POTC 486.8745 153 PRINCE WI 706 - RIPPC 971.5308 153 PRINCE WI 707 - KILBY 649.9053 153 PRINCE WI 708 - RIVEF 1138.998 153 PRINCE WI 709 - FREEI 1143.434 153 PRINCE WI 710 - POW 926.0596 153 PRINCE WI 711 - GRAY 958.2222 153 PRINCE WI 712 - LEESY 973.7489 155 PULASKI CC 101 - BELSF 172.5656 155 PULASKI C( 102 -NEW 612.9785 155 PULASKI CC 103 - WEST 223.3825 155 PULASKI CC 201 - DRAP 243.4975 155 PULASKI CC 202 -SOUT 57.16898 155 PULASKI CC 203 -NEWI 449.941 155 PULASKI C( 301 - DUBL 351.4833 155 PULASKI C( 302 -HIWA 51.87555 155 PULASKI CC 304 - SNOV 184.2111 155 PULASKI CC 401 - MAS§ 517.6968 155 PULASKI C( 402 - WALk 121.7487 155 PULASKI CC501-ROBII 603.4503 157 RAPPAHAN 101 - WASł 346.6354 157 RAPPAHAN 201 - AMIS 234.0625 157 RAPPAHAN 301 - SPERI 361.125 157 RAPPAHAN 401 - SCRA 276.4167 157 RAPPAHAN 501 - CHES 81.36458 157 RAPPAHAN 502 - FLINT 198.3958 159 RICHMON[ 101 - PREC 299.3374 159 RICHMON[ 201 - PREC 133.389 159 RICHMON[ 301 - PREC 147.0429 159 RICHMON[ 401 - PREC 149.1436 159 RICHMON[ 501 - PREC 127.0871 161 ROANOKE 101 - CATA 101.07 161 ROANOKE 102 - MASC 86.05962
486.8458
163.0367 255.8771
381.5512 367.9648 365.7004 324.9413

344.1887
224.1755
477.7882
285.3143
127.9385
174.3587
294.3719
433.6324
241.1585
221.9111 218.5145 153.9791 276.2567 474.3916 314.8564 812.9402 574.9551 662.3567 121.0986 918.2433 957.2054 216.9244 540.2051 1215.198 495.9777 1212.039 360.1168 408.3467 307.5998 314.0304 187.5608 184.3455 181.0717 325.5104 300.3907
332.837
363.1901
287.1078
267.1003
2.3571431400 .675
1.178571709 .764
1.178571746 .3612
2.357143816 .2286
4.714286
4.714286
1.178571
5.8928571177 .804
1.178571995 .8876
$0 \quad 723.0721$
$2.357143 \quad 881.66$ 1.178571940 .4373
1.178571517 .9059
$0 \quad 957.0724$
2.357143497 .9438
$0 \quad 993.6696$
2.357143659 .8587
$1.178571 \quad 1144.494$
2.3571431147 .821
$2.357143 \quad 928.2382$
1.178571954 .8544
$0 \quad 987.0156$
2.142857172 .5739
2.142857619 .3602
$\begin{array}{lll}0 & 214.9233\end{array}$
$\begin{array}{lr}0 & 224.4519 \\ 0 & 53.9955\end{array}$
1.071429445 .7276
1.071429340 .9128
$0 \quad 48.70183$
$\begin{array}{rr}0 & 188.4549\end{array}$
1.071429124 .9308
3.214286586 .5394

| 86 | 586.5394 | 38.4 | 1217.887 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 1 | 346.9025 | 3.125 | 359.971 | 0 |
| 0 | 233.1274 | 9.375 | 402.8247 | 0 |
| 1 | 358.057 | 5.208333 | 309.6179 | 1 |
| 1 | 271.0525 | 6.25 | 323.5453 | 1 |
| 0 | 79.1964 | 0 | 191.7703 | 0 |
| 1 | 199.6642 | 1.041667 | 184.2709 | 0 |
| 0 | 298.6364 | 6 | 178.1928 | 0 |
| 0 | 137.2679 | 3 | 320.747 | 0 |
| 0 | 159.2727 | 1 | 291.3976 | 0 |
| 0 | 146.6986 | 4 | 331.2289 | 2 |
| 0 | 134.1244 | 0 | 357.4337 | 0 |
| 0 | 107.1451 | 7.21374 | 294.0383 | 0 |
| 1 | 91.23249 | 4.122137 | 277.2959 | 1.5 |

161 ROANOKE 103 -GLEN 282.1955 161 ROANOKE 104 - NORT 351.2433 161 ROANOKE 105 -PETEI 584.4049 161 ROANOKE 106 -GREE 497.3445 161 ROANOKE 107 - BENN 117.0811 161 ROANOKE 108 - WILD 232.1608 161 ROANOKE 201 -PLAN 317.5508 161 ROANOKE 1202 - BURL 272.945 161 ROANOKE 1203 - MOU 528.8974 161 ROANOKE 1204 - BOTE 502.348 161 ROANOKE 205 - ORCF 552.2623 161 ROANOKE 206 - HOLL 215.5947 161 ROANOKE 301 - BENT 133.0922 161 ROANOKE 302 - POAC 584.1236 161 ROANOKE 1303 -WIN[ 336.6676 161 ROANOKE 304 - OAK 1735.9958 161 ROANOKE 305 -CASTI 802.9045 161 ROANOKE 306 -GARS 358.9705 161 ROANOKE (402-BONS 104.0802 161 ROANOKE 403 - NORT 297.372 161 ROANOKE 404 - SOUT 407.8245 161 ROANOKE 1405 - LINDE 627.6674 161 ROANOKE 1406 -MOU 383.3975 161 ROANOKE 501 -COTT 385.5216 161 ROANOKE 1502 -PENN 348.3501 161 ROANOKE 503 - CAVE 440.7478 161 ROANOKE 504 - OGDE 369.591 161 ROANOKE 1505 - CLEAI 238.9597 161 ROANOKE 1506 - MOU 366.4048 161 ROANOKE 507 -HUN7 619.171 163 ROCKBRID( 101 - AIRP( 344.7508 163 ROCKBRID( 102 - BEN $\subseteq 197.9327$ 163 ROCKBRID( 103 - PLAN 84.82828 163 ROCKBRID( 104 - EFFIN 108.7542 163 ROCKBRID( 201 - COLLI 210.9832 163 ROCKBRID( 202 -HIGH 402.3906 163 ROCKBRID( 203 - VO-TI 142.468 163 ROCKBRID( 301 - MAU 172.9192 163 ROCKBRID 302 - NATL 131.5926 163 ROCKBRID(303-FALLI 65.25253 163 ROCKBRID( 401 - FAIRF 158.7811 163 ROCKBRID( 402 - MOU 213.1582 163 ROCKBRID( 403 - VESU 52.20202 163 ROCKBRID(501-GOSF 35.88889 163 ROCKBRID(502-MEA[ 213.1582 163 ROCKBRID 503 - ROCK 140.2929 163 ROCKBRID(504-ROCK 231.6465
632.2374 407.1529 937.3519 986.3703 368.1382 481.1807 573.3282 335.7613 1026.289 718.2697 1220.566 293.5271 242.0909 1208.952 547.9877 1129.763 1144.545

### 452.961

258.684

### 606.0596

662.0199 1278.638 885.8607 614.5065 485.69241 670.4667 382.2188 493.0834 414.9502 891.14 439.5505 349.7385 201.8129 222.9451 290.5683 570.5704 119.3971 272.6059 271.5492
174.341 358.1914 471.2489 164.8314 180.6806 266.2662 201.8129 389.8898

| 0 | 309.7661 | 9.274809 | 645.6286 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 384.0252 | 7.21374 | 412.2815 | 0 |
| 1 | 632.2624 | 21.64122 | 958.5021 | 0 |
| 1 | 537.8474 | 18.54962 | 1017.101 | 0 |
| 0 | 126.2403 | 9.274809 | 377.7503 | 1.5 |
| 0 | 249.2981 | 24.73282 | 479.2511 | 0 |
| 3.209302 | 324.0434 | 17.57955 | 555.6971 | 4.2 |
| 0 | 275.1713 | 18.61364 | 319.0504 | 0 |
| 18.18605 | 549.2801 | 8.272727 | 1007.861 | 3.15 |
| 3 | 543.1516 | 18.54962 | 728.2942 | 0 |
| 1.069767 | 564.1542 | 19.64773 | 1191.685 | 1.05 |
| 5.348837 | 225.2367 | 1.034091 | 288.4131 | 0 |
| 1 | 140.0313 | 14.42748 | 244.8575 | 0 |
| 2.139535 | 610.9014 | 20.68182 | 1173.725 | 2.1 |
| 3.209302 | 349.5419 | 14.47727 | 530.3421 | 0 |
| 1.069767 | 753.268 | 16.54545 | 1102.943 | 1.05 |
| 2.139535 | 826.5762 | 22.75 | 1109.281 | 1.05 |
| 0 | 359.1038 | 8.272727 | 452.1642 | 0 |
| 2.139535 | 115.8057 | 4.136364 | 246.1548 | 0 |
| 0 | 298.5449 | 8.272727 | 596.899 | 0 |
| 1.069767 | 417.5379 | 8.272727 | 644.4396 | 1.05 |
| 0 | 643.837 | 22.75 | 1259.298 | 1.05 |
| 0 | 386.7272 | 9.306818 | 881.0863 | 1.05 |
| 0 | 398.414 | 10.34091 | 593.7296 | 1.05 |
| 1.069767 | 355.9165 | 8.272727 | 475.4063 | 0 |
| 0 | 454.7232 | 6.204545 | 655.0042 | 0 |
| 1.069767 | 375.0404 | 14.47727 | 366.591 | 1.05 |
| 0 | 232.6738 | 8.272727 | 493.366 | 0 |
| 2.139535 | 369.7282 | 7.238636 | 412.0188 | 2.1 |
| 2.139535 | 642.7746 | 17.57955 | 857.8442 | 1.05 |
| 2 | 382.8998 | 5.422535 | 403.0935 | 2 |
| 1 | 194.7132 | 8.676056 | 346.1117 | 0 |
| 0 | 87.02268 | 2.169014 | 199.4363 | 0 |
| 0 | 110.9539 | 1.084507 | 221.5959 | 0 |
| 1 | 218.6445 | 5.422535 | 282.7986 | 1 |
| 0 | 406.831 | 8.676056 | 567.7077 | 1 |
| 0 | 145.763 | 4.338028 | 112.9084 | 0 |
| 0 | 167.5187 | 4.338028 | 277.5225 | 0 |
| 0 | 137.0607 | 5.422535 | 268.0256 | 0 |
| 0 | 60.91587 | 3.253521 | 176.2215 | 0 |
| 0 | 152.2897 | 4.338028 | 366.1609 | 0 |
| 1 | 219.7323 | 6.507042 | 462.1858 | 1 |
| 0 | 51.12582 | 1.084507 | 166.7246 | 0 |
| 0 | 34.80907 | 0 | 184.6633 | 1 |
| 0 | 224.0834 | 7.591549 | 251.1421 | 2 |
| 1 | 154.4653 | 0 | 195.2155 | 1 |
| 0 | 225.1712 | 8.676056 | 391.4861 | 0 |

165 ROCKINGH 101 - BROA 347.6849 165 ROCKINGH 102 -TIMB 156.1908 165 ROCKINGH 103 - FULK! 105.9102 165 ROCKINGH 104 - BERG 42.79199 165 ROCKINGH 105 -LACE' 99.49137 165 ROCKINGH 106 -TENT 89.86317 165 ROCKINGH 107 - PLAIN 126.2364 165 ROCKINGH 108 - LITTL 83.44438 165 ROCKINGH 201 - SINGI 189.3545 165 ROCKINGH 202 - EDON 420.4313 165 ROCKINGH 203 - DAYT 204.3317 165 ROCKINGH 204 - MT C 220.3787 165 ROCKINGH 205 - SILVE 359.4527 165 ROCKINGH 301 - KEEZI 142.2834 165 ROCKINGH 302 - PORT 241.7747 165 ROCKINGH 303 -MELR 134.7948 165 ROCKINGH 304-GROT 180.7961 165 ROCKINGH 305 -MAS؟ 515.6435 165 ROCKINGH 306 - CROS 93.07257 165 ROCKINGH 307 - CROS 615.1348 165 ROCKINGH 401 - BRID( 710.347 165 ROCKINGH 402 - MON 194.7035 165 ROCKINGH 403 - MT C 44.93159 165 ROCKINGH 404 - NORT 241.7747 165 ROCKINGH 405 - OTTO 143.3532 165 ROCKINGH 501-ELKTC 223.5881 165 ROCKINGH 502 - SWIF 204.3317 165 ROCKINGH 503 -MCG/ 298.4741 165 ROCKINGH 504 -SOUT 93.07257 165 ROCKINGH 505-STON 419.3615 167 RUSSELL C( 101 - MOCI 78.11221 167 RUSSELL C(102-COPP 93.96107 167 RUSSELL C( 103 - SOUT 79.24427 167 RUSSELL C( 201 - NORT 191.3183 167 RUSSELL C( 202 - DANT 32.82977 167 RUSSELL C(301-COOk 36.22595 167 RUSSELL C( 302 - DAUC 58.86718 167 RUSSELL C(303-NEW 101.8855 167 RUSSELL C( 304 - CLEVI 79.24427 167 RUSSELL C( 401 - DRILL 26.0374 167 RUSSELL C(402-SWOI 93.96107 167 RUSSELL C(403-HON/ 78.11221 167 RUSSELL C(501 - WEST 268.2985 167 RUSSELL C(601-EAST 119.9985 167 RUSSELL C( 602 - ELK G 144.9038 169 SCOTT COL 101 - WEBE 83.24051 169 SCOTT COL 102 - YUM/ 105.6514438 .9542
874.9603
422.3946
559.7249
222.6415 453.6061
394.3043
456.7272
291.3066
627.3497
872.8795
426.5562
706.4186
866.6373
447.3638
682.4898 410.9504 585.7344 659.6015 261.1356 944.6658
1174.59 732.4281 99.87656 595.0979 793.8106 631.5112
1026.856
834.3855
442.1619
639.8342
419.4011
303.7767
221.7886
627.525
116.6755
114.5732
201.8171
326.9016
187.1012
43.09635
519.2585
176.5899
854.5692
487.7246
559.2015
342.9329

| 1.0625 | 360.7029 | 24.6901 | 853.2619 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 1.0625 | 156.2689 | 8.230032 | 415.1848 | 1 |
| 0 | 103.8225 | 5.14377 | 559.8231 | 0 |
| 0 | 39.6024 | 3.086262 | 226.8428 | 0 |
| 0 | 90.97848 | 8.230032 | 460.9696 | 0 |
| 0 | 101.6818 | 8.230032 | 382.9273 | 0 |
| 1.0625 | 116.6665 | 7.201278 | 463.0507 | 0 |
| 1.0625 | 85.6268 | 9.258786 | 286.1549 | 0 |
| 0 | 189.4493 | 12.34505 | 622.2569 | 0 |
| 2.125 | 420.6417 | 22.63259 | 860.5459 | 0 |
| 0 | 204.434 | 6.172524 | 423.5093 | 0 |
| 1.0625 | 222.6297 | 11.31629 | 700.2991 | 1 |
| 0 | 381.0393 | 13.3738 | 834.5318 | 0 |
| 0 | 151.9876 | 13.3738 | 426.631 | 0 |
| 0 | 242.966 | 7.201278 | 679.4879 | 0 |
| 0 | 134.8622 | 7.201278 | 404.7791 | 0 |
| 0 | 183.0273 | 5.14377 | 587.9183 | 0 |
| 0 | 534.0972 | 11.31629 | 637.8653 | 1 |
| 0 | 92.04881 | 3.086262 | 259.1003 | 0 |
| 0 | 642.201 | 11.31629 | 921.9391 | 0 |
| 1.0625 | 728.8981 | 23.66134 | 1150.863 | 1 |
| 2.125 | 210.856 | 5.14377 | 720.0698 | 0 |
| 0 | 50.30575 | 0 | 92.61014 | 0 |
| 1.0625 | 244.0364 | 11.31629 | 587.9183 | 0 |
| 0 | 145.5656 | 13.3738 | 781.4631 | 1 |
| 1.0625 | 223.7 | 8.230032 | 630.5814 | 1 |
| 1.0625 | 198.012 | 10.28754 | 1031.198 | 1 |
| 1.0625 | 292.2015 | 28.80511 | 814.7611 | 0 |
| 0 | 81.34546 | 6.172524 | 447.4422 | 0 |
| 2.125 | 431.345 | 16.46006 | 616.0135 | 0 |
| 0 | 79.6766 | 2.142857 | 421.294 | 0 |
| 0 | 96.50969 | 3.214286 | 298.0655 | 0 |
| 1 | 78.5544 | 4.285714 | 219.0729 | 0 |
| 0 | 194.1416 | 7.5 | 627.7281 | 0 |
| 0 | 37.03279 | 2.142857 | 114.8026 | 1 |
| 0 | 38.15499 | 1.071429 | 114.8026 | 0 |
| 0 | 67.33234 | 2.142857 | 195.9017 | 0 |
| 0 | 102.1207 | 0 | 329.6626 | 0 |
| 0 | 70.69896 | 4.285714 | 194.8485 | 0 |
| 1 | 25.81073 | 0 | 43.18264 | 0 |
| 1 | 87.53204 | 7.5 | 517.1384 | 0 |
| 2 | 70.69896 | 3.214286 | 184.3161 | 0 |
| 1 | 274.9404 | 13.92857 | 843.6413 | 0 |
| 1 | 139.1535 | 6.428571 | 475.009 | 0 |
| 0 | 143.6423 | 2.142857 | 564.534 | 0 |
| 1 | 87.54706 | 1.0625 | 346.076 | 1 |
| 0 | 104.6294 | 2.125 | 439.9808 | 0 |


| 169 SCOTT COL 202 - WEBE | 53.3593 | 299.6706 | 0 | 55.51765 | 1.0625 | 300.7063 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 169 SCOTT COL 203 - HILTC | 103.517 | 472.7199 | 0 | 99.29118 | 2.125 | 475.8545 | 0 |
| 169 SCOTT COL 204 - CLAR | 24.54528 | 127.6766 | 0 | 25.62353 | 1.0625 | 127.6683 | 0 |
| 169 SCOTT COL 301 - NICKI | 46.95618 | 343.9881 | 1 | 49.11176 | 1.0625 | 342.9107 | 1 |
| 169 SCOTT COL 302 - SNOV | 51.22493 | 271.1808 | 0 | 54.45 | 4.25 | 266.9428 | 0 |
| 169 SCOTT COL 303 - TWIN | 60.8296 | 230.0289 | 3 | 60.85588 | 4.25 | 238.4548 | 0 |
| 169 SCOTT COL 304 - COPP | 19.20935 | 69.64177 | 0 | 20.28529 | 1.0625 | 67.52703 | 0 |
| 169 SCOTT COL 401 - GATE | 212.37 | 883.1842 | 3 | 214.5971 | 15.9375 | 870.4656 | 0 |
| 169 SCOTT COL 501 - DUNC | 62.96397 | 174.1044 | 0 | 61.92353 | 3.1875 | 173.038 | 0 |
| 169 SCOTT COL 502 - FORT | 55.49367 | 186.7666 | 0 | 49.11176 | 0 | 201.526 | 0 |
| 169 SCOTT COL 503 - MAN' | 23.47809 | 128.7317 | 0 | 20.28529 | 3.1875 | 128.7234 | 0 |
| 169 SCOTT COL 504 - RYE C | 42.68744 | 291.2292 | 1 | 38.43529 | 1.0625 | 299.6512 | 0 |
| 169 SCOTT COL 601 - CLINC | 30.94839 | 201.539 | 0 | 28.82647 | 3.1875 | 200.4709 | 0 |
| 169 SCOTT COL 602 - DUFF | 84.30769 | 423.1265 | 0 | 85.41176 | 5.3125 | 428.3746 | 0 |
| 169 SCOTT COL 603 - FAIR | 35.21714 | 86.52462 | 0 | 33.09706 | 1.0625 | 88.62922 | 0 |
| 171 SHENANDC 101 - ORKN | 236.8549 | 441.3043 | 0 | 240.7347 | 12.47682 | 431.046 | 0 |
| 171 SHENANDC 103 - NEW | 430.8401 | 1131.951 | 0 | 429.0427 | 22.87417 | 1131.365 | 1.2 |
| 171 SHENANDC 201 - CON ${ }^{\text {I }}$ | 259.3614 | 803.3198 | 2 | 246.0844 | 10.39735 | 815.1257 | 0 |
| 171 SHENANDC 202 - MT Jt | 267.9354 | 639.526 | 1 | 267.483 | 18.71523 | 633.5228 | 0 |
| 171 SHENANDC 302 -EDINI | 271.1506 | 748.0264 | 0 | 262.1333 | 8.317881 | 753.5477 | 0 |
| 171 SHENANDC 303 - ST LU | 225.0657 | 822.0987 | 0 | 211.8465 | 5.198675 | 840.1743 | 0 |
| 171 SHENANDC 304 - FORT | 158.6177 | 410.0061 | 1 | 153.0003 | 13.51656 | 405.9973 | 1.2 |
| 171 SHENANDC 401 - WOO | 745.9321 | 1393.812 | 3 | 779.9804 | 27.03311 | 1353.672 | 3.6 |
| 171 SHENANDC 501 - CEDA | 39.65444 | 63.63962 | 0 | 39.58748 | 2.07947 | 61.57799 | 0 |
| 171 SHENANDC 503 - TOM | 419.0509 | 1027.623 | 2 | 415.1336 | 13.51656 | 1040.564 | 0 |
| 171 SHENANDC 504 - LEBAI | 251.8593 | 688.5598 | 3 | 259.9935 | 11.43709 | 682.5764 | 0 |
| 171 SHENANDC 601 - STRA: | 607.6774 | 1088.133 | 0 | 626.9801 | 11.43709 | 1070.831 | 0 |
| 173 SMYTH COI 101 - SALT | 223.1716 | 793.6847 | 0 | 223.8935 | 4.105263 | 799.7875 | 2 |
| 173 SMYTH COI 201 - SEVEI | 127.3762 | 610.6848 | 1 | 136.6486 | 9.236842 | 595.9806 | 0 |
| 173 SMYTH COI 202 - RICH | 86.32108 | 205.6178 | 0 | 89.34717 | 1.026316 | 205.8655 | 0 |
| 173 SMYTH COI 301 - CHIL | 174.7475 | 803.9656 | 0 | 179.7455 | 14.36842 | 794.6408 | 0 |
| 173 SMYTH COI 302 -ST CL | 42.10784 | 241.6009 | 0 | 36.79001 | 4.105263 | 244.9799 | 4 |
| 173 SMYTH COI 401 - EAST | 201.065 | 479.0894 | 0 | 211.2798 | 5.131579 | 469.3733 | 0 |
| 173 SMYTH COI 402 - WEST | 110.5331 | 218.9829 | 0 | 110.37 | 1.026316 | 218.2174 | 0 |
| 173 SMYTH COI 501 - ATKIN | 107.375 | 603.4882 | 0 | 100.9097 | 5.131579 | 611.4205 | 0 |
| 173 SMYTH COI 502 - WASS | 186.3272 | 358.803 | 0 | 201.8195 | 5.131579 | 345.854 | 0 |
| 173 SMYTH COI 601 - ROYA | 160.0098 | 494.5108 | 1 | 169.2341 | 6.157895 | 484.8132 | 0 |
| 173 SMYTH COI 602 -ROYA | 81.0576 | 297.1177 | 0 | 85.1426 | 4.105263 | 292.329 | 0 |
| 173 SMYTH COI 701 - ADW | 91.58456 | 629.1904 | 0 | 75.68231 | 8.210526 | 641.271 | 0 |
| 173 SMYTH COI 702 -SUGA | 115.7966 | 339.2694 | 0 | 115.6258 | 8.210526 | 332.4728 | 1 |
| 173 SMYTH COI 703 - KON | 10.52696 | 72.99432 | 0 | 10.51143 | 2.052632 | 69.99427 | 0 |
| 175 SOUTHAMI 101 - BERLI | 89.52109 | 363.5105 | 1 | 89.46689 | 7.5 | 359.2992 | 0 |
| 175 SOUTHAMI 102 - IVOR | 248.7854 | 372.8313 | 0 | 245.5138 | 3.214286 | 373.7955 | 0 |
| 175 SOUTHAMI 201 - BOYK | 359.1253 | 250.6255 | 1 | 363.0691 | 7.5 | 247.4712 | 0 |
| 175 SOUTHAMI 202 - BRAN | 81.19355 | 125.3127 | 0 | 87.38626 | 1.071429 | 118.0407 | 0 |
| 175 SOUTHAMI301-CAPR | 258.1538 | 257.875 | 0 | 256.9572 | 4.285714 | 255.7548 | 0 |
| 175 SOUTHAMI302-SEBRI | 183.206 | 283.766 | 0 | 181.0144 | 5.357143 | 282.6764 | 0 |


| $\checkmark$ | 184.2469 | 165.7028 | 0 | 187.2563 | 2.142857 | 163.6002 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 175 SOUTHAMI501-HUN1 | 243.5806 | 536.4628 | 1 | 233.03 | 10.71429 | 540.502 | 2 |
| 75 SOUTHAMI502-FORK | 160.3052 | 171.9166 | 0 | 153.9663 | 3.214286 | 173.9547 | 0 |
| 175 SOUTHAMI 601 - COUF | 294.5868 | 412.1857 | 1 | 308.9729 | 8.571429 | 392.4335 | 0 |
| 175 SOUTHAMI 602 - SEDLI | 52.04715 | 225.77 | 0 | 46.81407 | 4.285714 | 227.7978 | 0 |
| 175 SOUTHAMI701-BLAC | 189.4516 | 121.1702 | 0 | 192.4578 | 1.071429 | 121.147 | 0 |
| 175 SOUTHAMI702-NEW: | 172.7965 | 315.8709 | 0 | 183.095 | 1.071429 | 307.527 | 0 |
| 177 SPOTSYLVA 101 - PART | 286.6006 | 765.6736 | 1.107143 | 281.2688 | 20.47183 | 756.0602 | 0 |
| 177 SPOTSYLVA 102 - BLAYI | 347.3947 | 734.3113 | 3.321429 | 326.8799 | 16.16197 | 751.7337 | 1.666667 |
| 177 SPOTSYLVA 103 -TRAV | 607.9538 | 813.2723 | 0 | 628.7952 | 9.697183 | 790.6853 | 1.666667 |
| 177 SPOTSYLVA 104 -MASS | 610.6782 | 802.9508 | 2 | 609.7484 | 19.28571 | 790.5378 | 2.333333 |
| 77 SPOTSYLVf 201 - WILD | 506.9791 | 723.4967 | 0 | 515.8404 | 12.92958 | 708.4685 | 0 |
| 177 SPOTSYLVA 202 - WILD | 467.8972 | 786.2214 | 2.214286 | 446.3377 | 22.62676 | 790.6724 | 0 |
| 177 SPOTSYLVA 203 - NI RII | 414.7024 | 847.8646 | 1.107143 | 414.8443 | 8.619718 | 843.6724 | 0 |
| 77 SPOTSYLVA 204 - CHAN | 742.5562 | 760.2663 | 1.107143 | 741.7242 | 24.78169 | 747.4072 | 0 |
| 177 SPOTSYLVA 301 - PLAN | 625.3105 | 847.8646 | 2.214286 | 629.8683 | 17.23944 | 832.8561 | 0 |
| 177 SPOTSYLVA 302 - HAZE | 819.6344 | 797.036 | 4.428571 | 818.8288 | 26.93662 | 788.5092 | 0 |
| 177 SPOTSYLVA 303 - RIVEF | 829.4048 | 1281.53 | 3.321429 | 860.096 | 18.3169 | 1241.713 | 0 |
| 177 SPOTSYLVA 401 - SUMI | 770.4108 | 826.8223 | 0 | 779.3041 | 18.21429 | 808.9982 | 0 |
| SPOTSYLVA 402 - PARK | 838.7326 | 778.6066 | 2 | 870.4742 | 17.14286 | 737.8847 | 2.333333 |
| 77 SPOTSYLVf 403 - LEE H | 919.2772 | 1066.623 | 0 | 945.5992 | 22.5 | 1025.093 | 1.166667 |
| 77 SPOTSYLVA 501 - BELM | 283.3438 | 648.8759 | 0 | 284.5267 | 8.619718 | 635.9992 | 3.333333 |
| 177 SPOTSYLVA 502 -BROK | 223.6353 | 620.758 | 1.107143 | 228.0558 | 6.464789 | 613.2849 | 1.666667 |
| 77 SPOTSYLVf 503 - POST | 236.6626 | 701.8675 | 0 | 237.8296 | 8.619718 | 697.6522 | 0 |
| 177 SPOTSYLVA 504 - COUF | 565.602 | 825.1539 | 2.214286 | 571.2254 | 16.16197 | 811.2234 | 0 |
| 177 SPOTSYLVA 505 - BROC | 514.5784 | 1061.994 | 0 | 523.4423 | 6.464789 | 1054.59 | 3.333333 |
| SPOTSYLVf 601 - SALEI | 762.0971 | 839.2129 | 4.428571 | 778.6476 | 17.23944 | 815.55 | 0 |
| 177 SPOTSYLVA 602 - SMIT | 1061.725 | 964.6622 | 1.107143 | 1058.83 | 24.78169 | 951.8355 | 1.666667 |
| 177 SPOTSYLVA 603 - PIEDN | 428.8153 | 547.2187 | 1.107143 | 428.962 | 21.5493 | 531.0809 | 0 |
| 177 SPOTSYLVA 701 - BATT | 648.7098 | 635.8502 | 1 | 652.1374 | 18.21429 | 621.1369 | 0 |
| 77 SPOTSYLVA 702 - BREN | 741.8424 | 748.5446 | 1 | 751.8369 | 21.44668 | 727.2015 | 2.833333 |
| 177 SPOTSYLVA 703 -FAIR\} | 388.7456 | 329.1247 | 2.214286 | 395.3873 | 8.595573 | 319.4914 | 0 |
| 77 SPOTSYLVf 704 - GAYL | 1069.71 | 1113.199 | 0 | 1088.509 | 12.91751 | 1087.662 | 0 |
| STAFFORD 101 - HART | 774.1027 | 1656.211 | 2.111111 | 791.5944 | 27.28326 | 1628.267 | 0 |
| 179 STAFFORD 102 -ROCK | 672.0232 | 765.2182 | 0 | 690.7882 | 10.49356 | 746.3771 | 0 |
| 179 STAFFORD 103 - SIMP! | 597.5902 | 850.8296 | 0 | 610.1432 | 13.64163 | 830.0136 | 0 |
| 179 STAFFORD 104 - COLLI | 784.7359 | 1024.166 | 0 | 811.7557 | 18.88841 | 991.9933 | 0 |
| 179 STAFFORD 201 -ROCK | 586.957 | 777.9013 | 2.111111 | 602.7153 | 17.83906 | 753.7879 | 1.105263 |
| 179 STAFFORD 202 -ROSE | 899.5754 | 895.2207 | 2.111111 | 905.1341 | 26.23391 | 868.1265 | 0 |
| STAFFORD 203 -RUBY | 380.6714 | 841.3172 | 1.055556 | 379.8804 | 18.88841 | 832.131 | 0 |
| 179 STAFFORD 204 - STEF/ | 785.7993 | 1112.949 | 1.055556 | 812.8168 | 12.59227 | 1081.982 | 0 |
| 179 STAFFORD 301 -GRIFF | 677.3398 | 339.2749 | 0 | 688.6659 | 10.49356 | 320.7833 | 0 |
| 179 STAFFORD 302 - WIDE | 986.7682 | 687.0053 | 2.111111 | 984.718 | 17.83906 | 674.3861 | 0 |
| 179 STAFFORD 303 - HARB | 403.0013 | 630.9879 | 0 | 425.5085 | 13.64163 | 604.5125 | 1.105263 |
| 179 STAFFORD 304 - BARR | 354.0882 | 272.6882 | 2.111111 | 351.2302 | 10.49356 | 277.377 | 2.210526 |
| 179 STAFFORD 401 - AQUI | 373.2281 | 179.6783 | 0 | 366.0859 | 6.296137 | 181.0361 | 0 |
| 179 STAFFORD 402 - COUF | 1193.054 | 695.4607 | 2.111111 | 1195.881 | 20.98712 | 674.3861 | 4.421053 |

179 STAFFORD 403 - BROC 727.3162 179 STAFFORD 404 -GOVE 541.2339 179 STAFFORD 501-GRAF 834.7124 179 STAFFORD 502 -FALM 650.7566 179 STAFFORD 503 - DREV 567.8171 179 STAFFORD 504 -GAYL 786.8626 179 STAFFORD 601 -FERR' 562.5004 179 STAFFORD 602 - CHAT 787.9259 179 STAFFORD 603 -WHIT 581.6403 179 STAFFORD 604 - ENGL 484.8775 179 STAFFORD 701 -WOO 886.8154 179 STAFFORD 702 - WHIT 794.3059 179 STAFFORD 703 -HAMI 1029.301 181 SURRY COL 101 - SURR 259 181 SURRY COL 201 - BACC 373 181 SURRY COL 301 - DENL 165 181 SURRY COL 302 - WALL 155 181 SURRY COL 401 - CARS 327 181 SURRY COL 501 - CLAR 202 181 SURRY COL 502 - SPRIN 156 183 SUSSEX CO 101 - WAVI 372.8646 183 SUSSEX CO 201 - STON 288.97 183 SUSSEX CO 202 - LITTL 60.07262 183 SUSSEX CO 301-COUF 151.2173 183 SUSSEX CO 302 - WAKI 22.78617 183 SUSSEX CO 401 - MAR 272.3983 183 SUSSEX CO 402 - WEST 50.75101 183 SUSSEX CO 501 - HENR 238.219 183 SUSSEX CO 502 - YALE 100.4663 183 SUSSEX CO 601 - BLAC 153.2888 183 SUSSEX CO 602 -NEW 85.96599 185 TAZEWELL 101 - ABBS 20.6498 185 TAZEWELL 102 -TIP T( 41.2996 185 TAZEWELL 103 -BOIS 36.95227 185 TAZEWELL 104 -FALL؟ 38.0391 185 TAZEWELL 106 - POCA 26.08396 185 TAZEWELL 107 - AMO 8.694652 185 TAZEWELL 109 - BISHC 14.12881 185 TAZEWELL 110 -ADRI, 32.60495 185 TAZEWELL 111 - GAP 40.21277 185 TAZEWELL 112 -BANL 19.56297 185 TAZEWELL 203 - BURK 19.56297 185 TAZEWELL 204 - CLEAI 38.0391 185 TAZEWELL 207 -FREE؛ 24.99712 185 TAZEWELL 209 -JEFFE 380.391 185 TAZEWELL 214 -THON 61.9494 185 TAZEWELL 301 -CEDA 185.8482

| 1122.461 | 1.055556 | 727.9273 | 17.83906 | 1115.86 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 764.1612 | 1.055556 | 542.2316 | 22.03648 | 748.4944 | 1.105263 |
| 1178.478 | 1.055556 | 847.8337 | 27.28326 | 1155.032 | 0 |
| 783.186 | 4.222222 | 676.9936 | 27.28326 | 742.1423 | 2.210526 |
| 720.8271 | 2.111111 | 583.6152 | 29.38197 | 689.2077 | 0 |
| 577.0844 | 2.111111 | 808.5723 | 12.59227 | 554.754 | 0 |
| 910.0177 | 0 | 552.8428 | 33.5794 | 891.4177 | 2.210526 |
| 865.6266 | 2.111111 | 791.5944 | 16.7897 | 856.4809 | 0 |
| 1146.77 | 2.111111 | 583.6152 | 16.7897 | 1134.917 | 1.105263 |
| 230.411 | 4.222222 | 487.0534 | 5.246781 | 228.6772 | 1.105263 |
| 971.3198 | 1.055556 | 923.1731 | 16.7897 | 929.5306 | 1.105263 |
| 558.0597 | 0 | 793.7167 | 15.74034 | 544.1671 | 1.105263 |
| 1126.689 | 2.111111 | 1074.913 | 22.03648 | 1067.16 | 2.210526 |
| 378 | 1 | 260 | 9 | 373 | 0 |
| 221 | 0 | 387 | 4 | 205 | 0 |
| 165 | 1 | 170 | 1 | 160 | 0 |
| 116 | 0 | 158 | 0 | 116 | 0 |
| 218 | 0 | 325 | 8 | 214 | 0 |
| 179 | 1 | 199 | 9 | 173 | 1 |
| 30 | 0 | 159 | 1 | 27 | 0 |
| 128.8416 | 0 | 374.0667 | 6.521739 | 133.0269 | 0 |
| 135.0759 | 0 | 291.4 | 1.086957 | 130.9484 | 0 |
| 43.63991 | 0 | 64.06667 | 0 | 40.53164 | 0 |
| 275.3471 | 0 | 146.7333 | 3.26087 | 278.5251 | 0 |
| 104.9436 | 0 | 24.8 | 4.347826 | 99.77018 | 1 |
| 189.1063 | 0 | 284.1667 | 3.26087 | 182.912 | 0 |
| 14.54664 | 0 | 52.7 | 0 | 15.58909 | 0 |
| 148.5835 | 0 | 246.9667 | 2.173913 | 151.7338 | 0 |
| 67.53796 | 0 | 107.4667 | 0 | 62.35636 | 0 |
| 217.1605 | 0 | 148.8 | 3.26087 | 223.4436 | 0 |
| 112.2169 | 0 | 87.83333 | 1.086957 | 110.1629 | 0 |
| 130.7222 | 0 | 11.95213 | 1.117647 | 140.1777 | 0 |
| 203.9267 | 1 | 31.51016 | 2.235294 | 213.4048 | 0 |
| 90.98267 | 1 | 28.25049 | 2.235294 | 99.37969 | 0 |
| 192.4231 | 0 | 32.59672 | 0 | 201.8977 | 0 |
| 74.25023 | 0 | 26.07738 | 0 | 76.36544 | 0 |
| 41.83111 | 0 | 8.692459 | 0 | 42.89018 | 0 |
| 73.20445 | 0 | 9.779016 | 1.117647 | 77.41154 | 0 |
| 204.9725 | 1 | 19.55803 | 0 | 218.6353 | 0 |
| 191.3773 | 0 | 36.94295 | 2.235294 | 199.8055 | 0 |
| 89.93689 | 0 | 16.29836 | 0 | 93.10307 | 0 |
| 75.296 | 0 | 10.86557 | 0 | 84.73426 | 0 |
| 290.7262 | 0 | 33.68328 | 0 | 296.0469 | 0 |
| 92.02845 | 0 | 20.64459 | 0 | 97.28748 | 0 |
| 1094.929 | 5 | 340.0925 | 8.941176 | 1138.159 | 3 |
| 278.1769 | 0 | 49.98164 | 0 | 298.1391 | 0 |
| 966.2987 | 2 | 155.3777 | 13.41176 | 1002.166 | 0 |


| 185 TAZEWELL 302 - BAPT | 58.6889 | 171.5076 | 0 | 43.4623 | 0 | 188.2984 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 185 TAZEWELL 303 - WARI | 86.94652 | 406.8076 | 0 | 78.23213 | 2.235294 | 417.3947 | 0 |
| 185 TAZEWELL 305 - POUN | 47.82059 | 289.6805 | 1 | 44.54885 | 2.235294 | 295.0007 | 0 |
| 185 TAZEWELL 401 - RICHI | 252.1449 | 1010.221 | 2 | 229.2636 | 8.941176 | 1037.733 | 3 |
| 185 TAZEWELL 402 - JEWE | 22.82346 | 115.0356 | 0 | 20.64459 | 0 | 121.3478 | 0 |
| 185 TAZEWELL 404 - RAVE | 65.20989 | 335.6947 | 1 | 57.58754 | 1.117647 | 345.2136 | 0 |
| 185 TAZEWELL 501 - SPRIN | 95.64117 | 570.9947 | 1 | 79.31869 | 4.470588 | 586.8632 | 2 |
| 185 TAZEWELL 502 - GRAF | 271.7079 | 1095.975 | 2 | 271.6393 | 6.705882 | 1101.545 | 1 |
| 187 WARREN C 101 - FORK | 251.8133 | 388.5808 | 0 | 250.3042 | 4.233333 | 388.0155 | 1 |
| 187 WARREN C 102 - OTTE | 407.5962 | 938.0258 | 1 | 397.9194 | 7.408333 | 949.1778 | 0 |
| 187 WARREN C 201 - HAPP | 396.9261 | 762.5377 | 0 | 404.3375 | 12.7 | 748.9117 | 1 |
| 187 WARREN C 202 - LINDE | 425.7353 | 705.0862 | 4 | 422.522 | 28.575 | 695.716 | 1 |
| 187 WARREN C 301 - NORT | 332.9058 | 455.4335 | 1 | 329.4602 | 12.7 | 450.5987 | 0 |
| 187 WARREN C 302 - RIVEF | 314.7667 | 697.7742 | 0 | 301.6486 | 7.408333 | 709.2757 | 0 |
| 187 WARREN C 401 - EAST | 425.7353 | 995.4772 | 4 | 419.3129 | 20.10833 | 988.8138 | 1 |
| 187 WARREN C 402 - TOW | 252.8803 | 476.3249 | 1 | 250.3042 | 15.875 | 470.4167 | 0 |
| 187 WARREN C 501 -SOUT | 472.6835 | 706.1308 | 1 | 470.6574 | 10.58333 | 705.1035 | 0 |
| 187 WARREN C 502 - BENT | 136.5767 | 341.5751 | 0 | 134.7792 | 4.233333 | 345.2504 | 0 |
| 187 WARREN C 504 - BROV | 149.3808 | 259.0539 | 0 | 149.7546 | 3.175 | 259.7201 | 0 |
| 191 WASHINGT 101 - EAST | 530.5871 | 932.2514 | 0 | 519.9124 | 13.94203 | 930.4702 | 0 |
| 191 WASHINGT 102 - WEST | 285.9517 | 509.0721 | 2.153846 | 286.5488 | 4.289855 | 505.0525 | 2.4 |
| 191 WASHINGT 201 - CLINC | 93.50511 | 383.3753 | 0 | 87.91838 | 2.144928 | 389.7916 | 0 |
| 191 WASHINGT 202 -GREE | 141.3449 | 628.4841 | 1.076923 | 151.9577 | 10.72464 | 619.2657 | . 4 |
| 191 WASHINGT 203 - HAYT | 53.27617 | 257.6785 | 0 | 52.09978 | 5.362319 | 257.7654 | 0 |
| 191 WASHINGT 204 WOOD | 193.5338 | 626.3891 | 0 | 214.9116 | 7.507246 | 604.5961 | 0 |
| 191 WASHINGT 301 - WAT/ | 334.8788 | 1031.761 | 1.076923 | 342.9902 | 8.57971 | 1019.536 | 0 |
| 191 WASHINGT 302 -SOUT | 451.2165 | 835.8838 | 1.076923 | 476.4959 | 9.652174 | 812.0658 | 0 |
| 191 WASHINGT 401 - GLAD | 206.5811 | 681.9052 | 2.153846 | 217.0824 | 10.72464 | 666.4179 | 0 |
| 191 WASHINGT 402 - MEAI | 290.3007 | 836.9313 | 2.153846 | 294.1467 | 8.57971 | 834.0702 | 1.2 |
| 191 WASHINGT 501 - RHEA | 262.0318 | 1173.17 | 1.076923 | 276.7801 | 9.652174 | 1167.279 | 0 |
| 191 WASHINGT 502 - DAM, | 254.4209 | 488.1226 | 0 | 237.7053 | 9.652174 | 501.9091 | 0 |
| 191 WASHINGT 504 -GREE | 23.91991 | 92.17766 | 0 | 23.87907 | 0 | 95.35224 | 0 |
| 191 WASHINGT 601 - BURS | 157.654 | 929.109 | 0 | 151.9577 | 7.507246 | 932.5659 | 0 |
| 191 WASHINGT 602 - MENI | 34.7926 | 187.4977 | 0 | 36.90401 | 3.217391 | 182.3219 | 0 |
| 191 WASHINGT 603 - VALLI | 157.654 | 670.383 | 0 | 150.8723 | 2.144928 | 675.8483 | 0 |
| 191 WASHINGT 701 - HIGH | 157.654 | 799.2223 | 2.153846 | 163.8972 | 13.94203 | 795.3006 | 0 |
| 191 WASHINGT 702 - WALL | 95.67965 | 388.6127 | 0 | 100.9433 | 4.289855 | 386.6481 | 0 |
| 191 WASHINGT 703 -JOHN | 212.0174 | 881.9727 | 1.076923 | 215.997 | 16.08696 | 870.7441 | 0 |
| 193 WESTMOR 101 - PREC | 429.7699 | 233.844 | 1 | 439.4512 | 2 | 234.8361 | 0 |
| 193 WESTMOR 102 - PREC | 213.7942 | 190.3381 | 1 | 220.8134 | 4 | 186.7766 | 0 |
| 193 WESTMOR 201 - PREC | 399.2279 | 411.1303 | 0 | 416.6085 | 3 | 400.8597 | 0 |
| 193 WESTMOR 202 - PREC | 162.5272 | 253.4216 | 0 | 169.6891 | 2 | 245.7587 | 0 |
| 193 WESTMOR 301 - PREC | 271.6058 | 316.5051 | 0 | 270.8499 | 8 | 310.2021 | 0 |
| 193 WESTMOR 302 - PREC | 210.5218 | 220.7922 | 0 | 208.8481 | 4 | 220.6367 | 0 |
| 193 WESTMOR 401 - PREC | 294.5124 | 659.1137 | 2 | 279.5519 | 12 | 664.0945 | 2 |
| 193 WESTMOR 501 - PREC | 445.0409 | 593.8549 | 0 | 436.188 | 16 | 601.8357 | 0 |
| 195 WISE COUT 101 - APPA | 124.3635 | 353.1256 | 1 | 125.8986 | 4.048193 | 355.7204 | 1 |

195 WISE COUN 102 - DORC 82.18807 195 WISE COUN 103 -GUES 55.15252 195 WISE COUN 104 - WEST 210.8773 195 WISE COUN 201 - NORT 93.00229 195 WISE COUN 202 - WISE 354.7064 195 WISE COUT 203 -EAST 34.6055 195 WISE COUN 301 - BIG S 295.2282 195 WISE COUN 302 -EAST 220.6101 195 WISE COUN 401 -CLINC 186.0046 195 WISE COUN 402 - SOUT 141.6663 195 WISE COUN 403 - ST PA 87.59518 197 WYTHE CO 101 - ROYA 50.91844 197 WYTHE CO 102 - RURA 255.653 197 WYTHE CO 203 - WEST 461.4483 197 WYTHE CO 303 - EAST 537.826 197 WYTHE CO 401 - FORT 147.4513 197 WYTHE CO 402 - MAX 170.7889 197 WYTHE CO 501 - JACK؛ 99.71527 197 WYTHE CO 502 - SHEFI 123.0529 197 WYTHE CO 601 -HUD[ 63.64805 197 WYTHE CO 602 - ZION 132.6001 197 WYTHE CO 603 EVER 102.8977 199 YORK COUI 101 - QUEE 688.972 199 YORK COUI 102 - WALL 771.094 199 YORK COUI 103 - MAG 1209.434 199 YORK COUI 201 - COVE 968.4002 199 YORK COUI 202 - KILN 533.26 199 YORK COUI 301 - SEAF 558.8565 199 YORK COUI 302 - YORK 653.7768 199 YORK COUI 303 - EDGE 799.89 199 YORK COUI 401 - HARV 690.0385 199 YORK COUI 402 - DARE 629.2468 199 YORK COUI 403 -GRAF 393.5459 199 YORK COUI 501 -TABB 856.4156 199 YORK COUI 502 - BETH 947.0698 510 ALEXANDR 101 - LADR 1042.042 510 ALEXANDR 102 - CITY I 959.7755 510 ALEXANDR 103 - LYLES 1582.487 510 ALEXANDR 104 -DURA 1348.256 510 ALEXANDR 105 - LEE C 1816.718 510 ALEXANDR 106 - CORA 1920.694 510 ALEXANDR 107 - MT V 2293.178 510 ALEXANDR 108 - GEOR 2241.761 510 ALEXANDR 109 - FIRE I 1135.734 510 ALEXANDR 110-CHAR 1382.534 510 ALEXANDR 111 - POTC 597.5745 510 ALEXANDR 201 - MAU 1496.793454 .8364
260.1428 265.3665 712.5196 371.9311 1010.273 175.518 769.9809 938.1856 727.1461 782.5179
240.2925 279.7558 928.3749 898.327 991.5789 593.704 552.2587 373.0078 591.6317 275.6113 466.2597 329.4902 708.7207 873.4903 641.1229 1198.805 609.4364 1607.56 981.2243 795.3304 1362.518 1341.394 600.9867 1434.341 1091.071 417.7756 550.2959
637.894 347.0233 524.4657 357.1308 471.6822 487.4049 458.2055 308.8395
212.257

| 0 | 83.93239 | 5.060241 | 254.2354 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 53.80282 | 5.060241 | 270.9752 | 0 |
| 2 | 221.6676 | 6.072289 | 717.7182 | 0 |
| 1 | 100.0732 | 3.036145 | 368.2752 | 0 |
| 2 | 379.8479 | 10.12048 | 990.7859 | 0 |
| 0 | 29.05352 | 2.024096 | 187.2763 | 0 |
| 1 | 306.6761 | 17.20482 | 754.3364 | 0 |
| 1 | 216.2873 | 10.12048 | 948.9364 | 1 |
| 0 | 175.3972 | 12.14458 | 737.5967 | 1 |
| 1 | 134.507 | 7.084337 | 796.1859 | 1 |
| 0 | 82.85634 | 2.024096 | 247.958 | 0 |
| 0 | 48.84179 | 2 | 284.2064 | 0 |
| 0 | 248.4561 | 7 | 948.0463 | 1 |
| 2 | 465.0588 | 16 | 890.9975 | 2 |
| 0 | 529.8272 | 15 | 992.648 | 0 |
| 2 | 141.2165 | 8 | 596.4186 | 2 |
| 1 | 168.8227 | 5 | 551.8169 | 0 |
| 1 | 111.4867 | 2 | 365.1119 | 0 |
| 2 | 125.2898 | 3 | 593.3069 | 3 |
| 1 | 54.15068 | 2 | 289.3927 | 0 |
| 2 | 119.9809 | 6 | 478.1721 | 0 |
| 0 | 100.8689 | 5 | 330.8827 | 0 |
| 1.088235 | 720.3589 | 13.76772 | 665.2794 | 3.214286 |
| 3.264706 | 811.8668 | 22.24016 | 819.7004 | 2.142857 |
| 4.352941 | 1226.845 | 23.29921 | 611.3378 | 0 |
| 5.441176 | 1003.395 | 26.47638 | 1147.581 | 1.071429 |
| 3.264706 | 530.9588 | 20.12205 | 602.8764 | 0 |
| 3.264706 | 590.5453 | 19.06299 | 1564.306 | 3.214286 |
| 1.088235 | 672.4769 | 18.00394 | 947.6794 | 0 |
| 0 | 833.1477 | 21.1811 | 743.5476 | 0 |
| 4.352941 | 732.0634 | 25.41732 | 1303.059 | 3.214286 |
| 3.264706 | 665.0285 | 25.41732 | 1294.598 | 0 |
| 0 | 404.3373 | 6.354331 | 584.8959 | 0 |
| 3.264706 | 879.9658 | 28.59449 | 1389.789 | 1.071429 |
| 4.352941 | 997.0108 | 19.06299 | 1033.351 | 1.071429 |
| 0 | 1054.968 | 7.829897 | 400.315 | 3.7 |
| 1.125 | 971.6211 | 11.18557 | 538.6261 | 1.233333 |
| 1.125 | 1599.578 | 15.65979 | 617.3398 | 0 |
| 1.125 | 1380.364 | 17.89691 | 308.1076 | 2.466667 |
| 2.25 | 1849.619 | 17.89691 | 495.8959 | 0 |
| 3.375 | 1953.518 | 27.96392 | 315.979 | 0 |
| 4.5 | 2328.009 | 19.01546 | 435.1739 | 3.7 |
| 5.625 | 2272.063 | 26.84536 | 447.5432 | 3.7 |
| 3.375 | 1154.3 | 12.30412 | 438.5474 | 3.7 |
| 2.25 | 1405.482 | 14.54124 | 285.618 | 1.233333 |
| 0 | 608.5476 | 16.77835 | 187.7882 | 0 |
| 0 | 1529.932 | 17.89691 | 418.3067 | 1.233333 |

510 ALEXANDR 202 - GEOR 1365.395 510 ALEXANDR 203 - CHAR 1527.643 510 ALEXANDR 204 - BLES§ 1320.834 510 ALEXANDR 205 - DOU( 1611.052 510 ALEXANDR 206 - CHINI 1221.429 510 ALEXANDR 207-TEMF 1548.209 510 ALEXANDR 208 -NOVt 1449.947 510 ALEXANDR 209 - JAME 1646.472 510 ALEXANDR 210 - The 750.6815 510 ALEXANDR 302 - PATR 1122.023 510 ALEXANDR 303-CHAR 1420.239 510 ALEXANDR 304 - SAMI 1948.116 510 ALEXANDR 305 -JOHN 1311.693 510 ALEXANDR 306 - WILLI 1433.95 510 ALEXANDR 307 - SOUT 1288.841 510 ALEXANDR 308 - CAMI 1521.93 520 BRISTOL Cl 001 - FIRST 196.3424 520 BRISTOL Cl 002 - SECO 368.9511 520 BRISTOL Cl 003 - THIR[ 239.4946 520 BRISTOL Cl' 004 - FOUR 386.212 530 BUENA VIS 001 - FIRST 293 530 BUENA VIS 002 - SECO 244 540 CHARLOTTI 101 - Key R 1966.058 540 CHARLOTTI 102 - CLAR 1897.846 540 CHARLOTTI 201 - CARV 1564.485 540 CHARLOTTI 202 - WALk 2126.687 540 CHARLOTTI 301 - BENJ/ 1528.178 540 CHARLOTTI302-JOHN 1897.846 540 CHARLOTTI303 - BUFC 899.9639 540 CHARLOTTI 401 - VENA 752.5371 540 CHARLOTTI 402 - ALUN 1091.399 550 CHESAPEAI 001 -GREA 460.5885 550 CHESAPEAIOO2 - BETH 254.5913 550 CHESAPEAIOO3-CAMI 1531.029 550 CHESAPEAIO04-CHUR 352.5942 550 CHESAPEAIO05-CRES 1109.788 550 CHESAPEAIO06-DEEP 1278.239 550 CHESAPEAI 007 - GREE 642.2885 550 CHESAPEAIOO8 - SOUT 697.9078 550 CHESAPEAIO09-BELLS 810.2554 550 CHESAPEAI 010 - OSCA 290.1882 550 CHESAPEAIO11 - GENE 395.2384 550 CHESAPEAIO12-GEOR 1044.261 550 CHESAPEAIO13-GILM 539.8124 550 CHESAPEAI 014 -GRAS 163.7413 550 CHESAPEAIO15 - B M V 663.5845 550 CHESAPEAIO16-HICKC 398.2611
621.0482 378.4688
505.3738
586.2336
381.838
583.9875
317.8239
407.6682
256.056
218.9953
252.6869
297.609
258.3021
266.1635
311.0856
591.8488
497.9769
763.9902
355.3938
1422.639

613
455
355.7725 303.7082
175.7169
536.9127
178.9709
419.7681
139.9227
110.6366
276.5914
811.7094
916.072 107.2304
669.409
116.6
940.3179
873.9053 549.6858
1453.698 273.8018 470.5644 148.8732
517.4126
228.7545
397.6893
974.0512

| 3.375 | 1400.915 | 13.42268 | 581.3564 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 2.25 | 1556.192 | 13.42268 | 347.4645 | 2.466667 |
| 1.125 | 1327.844 | 11.18557 | 495.8959 | 2.466667 |
| 2.25 | 1634.972 | 22.37113 | 554.3689 | 1.233333 |
| 1.125 | 1236.505 | 10.06701 | 368.8296 | 0 |
| 1.125 | 1551.625 | 20.13402 | 572.3606 | 1.233333 |
| 4.5 | 1467.136 | 20.13402 | 300.2363 | 1.233333 |
| 2.25 | 1678.358 | 8.948454 | 377.8254 | 2.466667 |
| 2.25 | 763.8243 | 6.71134 | 245.1367 | 0 |
| 1.125 | 1138.315 | 13.42268 | 196.7841 | 0 |
| 1.125 | 1442.018 | 17.89691 | 237.2654 | 1.233333 |
| 0 | 1958.085 | 15.65979 | 290.116 | 1.233333 |
| 2.25 | 1334.695 | 15.65979 | 232.7675 | 0 |
| 1.125 | 1456.861 | 13.42268 | 246.2612 | 2.466667 |
| 2.25 | 1294.734 | 11.18557 | 313.73 | 0 |
| 1.125 | 1545.917 | 14.54124 | 572.3606 | 0 |
| 0 | 206.8205 | 4.095238 | 489.9695 | 1 |
| 1 | 389.9428 | 10.2381 | 749.3651 | 1 |
| 1 | 245.5993 | 8.190476 | 352.2656 | 0 |
| 1 | 399.6375 | 20.47619 | 1414.4 | 1 |
| 2 | 289 | 15 | 630 | 1 |
| 0 | 240 | 18 | 460 | 2 |
| 3.5 | 1983.371 | 28.84472 | 334.4371 | 2.4 |
| 5.83333 | 1909.668 | 28.84472 | 287.7462 | 3.6 |
| 2.333333 | 1588.457 | 21.36646 | 154.1886 | 4.8 |
| 0 | 2165.978 | 18.16149 | 514.6857 | 0 |
| 1.166667 | 1560.956 | 16.02484 | 158.5319 | 3.6 |
| 2.333333 | 1939.37 | 28.84472 | 381.128 | 1.2 |
| 0 | 910.8327 | 16.02484 | 124.871 | 1.2 |
| 2.333333 | 776.6279 | 3.204969 | 98.81098 | 0 |
| 3.5 | 1107.74 | 10.68323 | 260.6004 | 1.2 |
| 0 | 478.8391 | 13.46099 | 785.5807 | 1.181818 |
| 1.076923 | 554.1392 | 15.56818 | 494.4288 | 0 |
| 0 | 168.7539 | 5.177305 | 222.7924 | 0 |
| 0 | 686.1761 | 10.37879 | 369.2569 | 1.058824 |
| 0 | 426.1036 | 14.49645 | 938.6845 | 0 |
| 1.032258 | 276.3345 | 13.46099 | 892.2254 | 0 |
| 0 | 1534.539 | 15.56818 | 92.83578 | 0 |
| 0 | 380.5158 | 4.151515 | 647.7643 | 0 |
| 0 | 1053.176 | 9.34090 | 139.7752 | 0 |
| 1.076923 | 1121.794 | 16.60606 | 101.1806 | 1.058824 |
| 0 | 1305.733 | 24.85106 | 900.6725 | 1.181818 |
| 0 | 654.976 | 14.49645 | 859.4929 | 1.181818 |
| 1.076923 | 713.2073 | 16.60606 | 526.7648 | 0 |
| 4.129032 | 858.5354 | 21.74468 | 1406.443 | 1.181818 |
| 0 | 289.0257 | 10.37879 | 265.9902 | 0 |
| 0 | 388.831 | 15.5688 | 465.222 | 0 |

0 667 33
0
3

0

33

## 0

0
1
1
0

1

2
2.4
3.6
4.8
3.6
1.2
1.2
1.2
1.181818

0
0
 1 4

| A | 254.5913 | 667.2884 | 1.032258 | 275.2798 | 12.42553 | 643.0358 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAIO18-INDIA | 574.1358 | 261.309 | 0 | 572.8531 | 16.60606 | 249.3006 | 1.058824 |
| 0 CHESAPEAIO19-JOLLI | 348.6105 | 611.4175 | 1.032258 | 389.1886 | 10.35461 | 564.9001 | 0 |
| 50 CHESAPEAIO20-E W C | 664.4076 | 836.8915 | 1.032258 | 673.9006 | 9.319149 | 819.254 | 1.181818 |
| CHESAPEAIO21-FELLC | 591.8175 | 701.6822 | 1.076923 | 600.9239 | 16.60606 | 679.0572 | 0 |
| 50 CHESAPEAIO22-NORF | 329.712 | 394.5661 | 0 | 330.6121 | 12.45455 | 374.4724 | 0 |
| CHESAPEAIO23-OAK | 708.8414 | 556.6007 | 0 | 720.3681 | 12.42553 | 538.5029 | 2.363636 |
| CHESAPEAIO24-OAKL | 613.6596 | 379.9911 | 2.153846 | 621.7171 | 22.83333 | 357.7828 | 2.117647 |
| 50 CHESAPEAIO25-ST JU | 342.1932 | 260.2679 | 1.076923 | 334.7708 | 12.45455 | 258.6885 | 0 |
| CHESAPEAIO26-JOHN | 361.9552 | 166.5715 | 1.076923 | 359.7226 | 9.340909 | 160.6372 | 0 |
| CHESAPEAI027-SILVE | 691.6672 | 844.3091 | 2.153846 | 727.7625 | 25.94697 | 793.7981 | 1.058824 |
| CHESAPEAIO28-SUNR | 48.5942 | 133.8793 | 0 | 52.73559 | 1.035461 | 131.986 | 0 |
| 50 CHESAPEAIO29-TANE | 330.7521 | 654.834 | 1.076923 | 327.4931 | 19.7197 | 644.635 | 1.058824 |
| CHESAPEAI030-SOUT | 533.5718 | 29.15 | 1.076923 | 532.3063 | 17.64394 | 20.86197 | 0 |
| 50 CHESAPEAI031-CARV | 1098.347 | 182.1875 | 3.230769 | 1110.358 | 16.60606 | 164.8096 | 3.176471 |
| 550 CHESAPEAIO32-PROV | 1369.813 | 70.79287 | 0 | 1379.63 | 12.45455 | 60.49972 | 0 |
| CHESAPEAI033-WEST | 260.0253 | 398.7304 | 2.153846 | 259.9152 | 9.340909 | 394.2913 | 2.117647 |
| CHESAPEAIO34-HICKC | 483.8292 | 1311.385 | 0 | 513.6446 | 20.70922 | 1272.345 | 1.181818 |
| CHESAPEAI035-TAYL | 575.1759 | 246.734 | 2.153846 | 580.1307 | 18.68182 | 229.4817 | 1.058824 |
| 50 CHESAPEAI036-GREA | 684.5443 | 1208.077 | 2.064516 | 734.0794 | 20.70922 | 1148.806 |  |
| CHESAPEAI037-BRID | 425.7274 | 649.3675 | 1.032258 | 444.0337 | 16.56738 | 620.8622 |  |
| 50 CHESAPEAI038-BAILE | 362.9953 | 777.6805 | 0 | 391.9521 | 8.30303 | 755.2034 |  |
| 50 CHESAPEAI039-LAKE | 191.2076 | 345.7671 | 0 | 204.6141 | 8.283688 | 327.3253 |  |
| CHESAPEAI040-RIVEF | 871.6047 | 610.0679 | 0 | 884.7513 | 11.41667 | 594.5662 |  |
| 50 CHESAPEAI041-JOHN | 1145.133 | 825.4136 | 3.096774 | 1174.949 | 25.88652 | 776.0777 |  |
| 50 CHESAPEAI 042 - PARK | 631.3413 | 438.2911 | 2.153846 | 654.9863 | 10.37879 | 409.9378 |  |
| 50 CHESAPEAI 043 - PLEA | 308.4675 | 781.1385 | 0 | 320.6324 | 8.283688 | 765.5188 | 1.181818 |
| 50 CHESAPEAI044-NANS | 539.8124 | 381.0322 | 0 | 546.8616 | 6.227273 | 370.3 | 647 |
| 50 CHESAPEAI045-SUNR | 353.8925 | 148.6377 | 0 | 354.3832 | 8.283688 | 142.5449 |  |
| CHESAPEAIO46-BELLS | 538.7617 | 597.7133 | 1.032258 | 555.8331 | 17.60284 | 570.1795 |  |
| CHESAPEAI047-GREE | 213.3919 | 493.3506 | 0 | 221.4895 | 13.46099 | 473.0378 | 0 |
| CHESAPEAI048-JOLLI | 1366.976 | 126.5002 | 3.096774 | 1369.016 | 17.60284 | 108.7565 | 1.181818 |
| 550 CHESAPEAIO49-WATE | 1151.471 | 1215.456 | 0 | 1171.785 | 16.56738 | 1184.706 | 0 |
| 550 CHESAPEAI050-RIVEF | 809.199 | 539.734 | 3.096774 | 824.7846 | 16.56738 | 517.3851 |  |
| 550 CHESAPEAI051-COOF | 402.4867 | 1085.793 | 0 | 434.5413 | 9.319149 | 1059.056 |  |
| 50 CHESAPEAI 052 - SHIPY | 811.3118 | 484.9173 | 2.064516 | 837.4412 | 13.46099 | 452.976 |  |
| 50 CHESAPEAI 053 - FAIRV | 490.9277 | 346.6768 | 1.076923 | 508.3941 | 9.340909 | 328.5761 | 0 |
| CHESAPEAI054-PUG' | 843.5219 | 331.0608 | 1.076923 | 858.7598 | 15.56818 | 305.6279 | 1.058824 |
| 50 CHESAPEAI055-GEOR | 794.6372 | 173.859 | 0 | 788.0629 | 6.227273 | 179.413 | 0 |
| 550 CHESAPEAI056-GREE | 660.4642 | 360.2108 | 1.076923 | 668.5019 | 4.151515 | 349.438 | 0 |
| 550 CHESAPEAI 057 - CYPR | 682.3063 | 465.359 | 2.153846 | 706.9693 | 14.5303 | 436.0152 | 058824 |
| 550 CHESAPEAI 058 - EXPR | 371.8512 | 134.9335 | 1.032258 | 375.4774 | 3.106383 | 129.8742 | 0 |
| 550 CHESAPEAI059-CLEAI | 488.0547 | 458.5631 | 2.064516 | 495.7145 | 10.35461 | 442.4171 | 1.181818 |
| 550 CHESAPEAI060-PARK | 529.2542 | 1071.035 | 3.096774 | 579.0368 | 14.49645 | 1014.708 | 0 |
| 550 CHESAPEAI061-CENT | 338.0466 | 764.2718 | 0 | 361.7661 | 11.39007 | 732.7863 | 0 |
| 550 CHESAPEAI 062 -FENT | 457.4193 | 884.447 | 0 | 502.0428 | 19.67376 | 827.8162 | 0 |
| 550 CHESAPEAI063-POPL | 227.125 | 628.2841 | 2.064516 | 234.146 | 12.42553 | 616.6386 |  |


| NIAL 001 - FIRST | 258.8863 | 430.2326 | 1 | 242.4554 | 10.86207 | 439.2389 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 570 COLONIAL 002 - SECO | 228.5565 | 591.1507 | 1 | 211.2056 | 11.94828 | 606.1945 | 0 |
| 570 COLONIAL 003 - THIRI | 297.8817 | 726.3667 | 0 | 294.1792 | 13.03448 | 726.0888 | 0 |
| 570 COLONIAL 004 - FOUR | 358.5412 | 860.4651 | 0 | 372.8425 | 9.775862 | 849.3446 | 0 |
| 570 COLONIAL 005 - FIFTH | 275.1344 | 1091.785 | 1 | 268.3173 | 17.37931 | 1089.133 | 1 |
| 580 COVINGTO 101 - PREC | 80.28794 | 120.5176 | 1 | 82.54369 | 2 | 119.3491 | 0 |
| 580 COVINGTO 201 - PREC | 119.3755 | 133.9085 | 0 | 120.6408 | 1 | 130.6667 | 1 |
| 580 COVINGTO 301 - PREC | 124.6576 | 86.52549 | 0 | 128.0485 | 1 | 84.36745 | 0 |
| 580 COVINGTO 401 - PREC | 118.3191 | 242.0654 | 1 | 119.5825 | 3 | 242.8136 | 0 |
| 580 COVINGTO 501 - PREC | 100.3599 | 204.983 | 0 | 94.18447 | 5 | 206.8031 | 0 |
| 590 DANVILLE (001-WARI | 215.1802 | 37.25011 | 1.111111 | 217.2718 | 1.104167 | 37.2524 | 1.166667 |
| 590 DANVILLE (002-WARI | 211.0221 | 135.1647 | 1.111111 | 218.3113 | 1.104167 | 130.9156 | 1.166667 |
| 590 DANVILLE (003-WARI | 470.9015 | 213.9221 | 0 | 486.5224 | 8.833333 | 201.1629 | 0 |
| 590 DANVILLE (004-WARI | 620.5921 | 609.8376 | 2.222222 | 619.5884 | 6.625 | 615.1967 | 1.166667 |
| 590 DANVILLE (006-WARI | 249.4843 | 37.25011 | 0 | 253.657 | 1.104167 | 39.3811 | 0 |
| 590 DANVILLE (007-WARI | 460.5064 | 84.07883 | 1.111111 | 464.6913 | 1.104167 | 83.01963 | 1.166667 |
| 590 DANVILLE (008-WARI | 344.0804 | 178.8005 | 0 | 352.4169 | 3.3125 | 177.7471 | 0 |
| 590 DANVILLE (009-WARI | 279.6303 | 210.7292 | 0 | 278.6069 | 2.208333 | 216.0639 | 0 |
| 590 DANVILLE (010-WARI | 357.5941 | 327.801 | 0 | 370.0897 | 9.9375 | 320.3706 | 0 |
| 590 DANVILLE (011-WARI | 673.6075 | 324.6081 | 0 | 678.8443 | 3.3125 | 328.8854 | 0 |
| 590 DANVILLE (012-WARI | 652.8171 | 484.2515 | 2.222222 | 669.4881 | 4.416667 | 481.0881 | 0 |
| 590 DANVILLE (013-WARI | 554.063 | 346.9582 | 0 | 560.3325 | 3.3125 | 344.8508 | 0 |
| 590 DANVILLE (014-WARI | 119.5445 | 5.321445 | 0 | 122.6702 | 0 | 5.321771 | 0 |
| 590 DANVILLE (015-WARI | 384.6216 | 421.4584 | 1.111111 | 383.6042 | 2.208333 | 424.6773 | 0 |
| 590 DANVILLE (016-WARI | 374.2264 | 608.7733 | 0 | 377.3668 | 1.104167 | 604.5532 | 2.333333 |
| 590 DANVILLE (017-WARI | 240.1286 | 658.7949 | 1.111111 | 250.5383 | 3.3125 | 653.5135 | 0 |
| 595 EMPORIA ( 101 - PREC | 167.418 | 92.53495 | 0 | 169.0677 | 2.095238 | 91.23853 | 0 |
| 595 EMPORIA ( 201 - PREC | 143.5011 | 18.29179 | 0 | 140.8898 | 5.238095 | 15.02752 | 0 |
| 595 EMPORIA ( 301 - PREC | 108.1458 | 142.0304 | 0 | 102.2755 | 3.142857 | 145.9817 | 0 |
| 595 EMPORIA ( 401 - PREC | 128.9431 | 172.1581 | 1 | 132.5408 | 3.142857 | 171.7431 | 0 |
| 595 EMPORIA ( 501 - PREC | 128.9431 | 10.75988 | 0 | 134.628 | 0 | 7.513761 | 0 |
| 595 EMPORIA ( 601 - DISTF | 121.664 | 204.4377 | 0 | 115.8427 | 4.190476 | 205.0183 | 0 |
| 595 EMPORIA ( 701 - DISTF | 114.385 | 67.78723 | 0 | 113.7555 | 4.190476 | 65.47706 | 0 |
| 600 FAIRFAX Cl 001 - ONE | 775.6897 | 412.5479 | 4.571429 | 800.2185 | 19.71429 | 398.7249 | 2.4 |
| 600 FAIRFAX Cl 002 - TWO | 790.4108 | 521.7518 | 1.142857 | 795.6975 | 13.14286 | 509.175 | 1.2 |
| 600 FAIRFAX Cl 003 - THRE | 1125.599 | 633.1618 | 1.142857 | 1142.685 | 21.90476 | 600.8485 | 1.2 |
| 600 FAIRFAX Cl 004 - FOUR | 1024.816 | 534.9886 | 0 | 1027.399 | 15.33333 | 533.474 | 0 |
| 600 FAIRFAX Cl 005 - FIVE | 825.5151 | 399.3111 | 1.142857 | 835.2563 | 9.857143 | 389.8888 | 1.2 |
| 600 FAIRFAX Cl 006 - SIX | 760.9686 | 409.2387 | 0 | 778.7437 | 12.04762 | 389.8888 | 0 |
| 610 FALLS CHU 001 - FIRST | 1628.745 | 451.3629 | 0 | 1690.62 | 20.1875 | 408.6946 | 0 |
| 610 FALLS CHU 002 - SECO | 1244.362 | 352.5914 | 4 | 1262.122 | 24.9375 | 328.1069 | 2 |
| 610 FALLS CHU 003 - THIRI | 1779.893 | 503.0457 | 4 | 1828.259 | 30.875 | 458.1985 | 0 |
| 620 FRANKLIN (101-PREC | 221.6889 | 425.2612 | 0 | 219.4094 | 4 | 425.2549 | 0 |
| 620 FRANKLIN (201-PREC | 199.7292 | 296.4925 | 0 | 204.7821 | 2 | 291.0778 | 0 |
| 620 FRANKLIN (301-PREC | 348.219 | 27.05224 | 0 | 348.9654 | 3 | 25.96976 | 0 |
| 620 FRANKLIN (401-PREC | 244.6944 | 30.29851 | 1 | 242.3951 | 3 | 31.38013 | 0 |
| 620 FRANKLIN (501-PREC | 267.6999 | 10.8209 | 0 | 271.6497 | 0 | 8.656587 | 0 |


| LIN 1601 - PREC | 250.9686 | 225.0746 | 0 | 251.7984 | 3 | 219.6609 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 630 FREDERICK 101 - PREC | 1082.139 | 789.1042 | 1 | 1094.897 | 31.47059 | 769.417 | 1 |
| 630 FREDERICK 201 - PREC | 1385.008 | 674.0713 | 6 | 1399.873 | 27.27451 | 659.0365 | 1 |
| 630 FREDERICK 301 - PREC | 945.2546 | 703.0983 | 0 | 961.2675 | 23.07843 | 680.6797 | 0 |
| 630 FREDERICK 401 - PREC | 777.1136 | 212.8646 | 0 | 793.1535 | 14.68627 | 193.7069 | 0 |
| 630 FREDERICK 402 - PREC | 394.4848 | 169.8617 | 1 | 399.8097 | 10.4902 | 160.1599 | 0 |
| 640 GALAX CIT 001 - EAST | 172.6089 | 391.292 | 0 | 174.3798 | 8 | 388.3747 | 0 |
| GALAX CIT 003 - SOUT | 97.88189 | 259.8095 | 7 | 102.5142 | 3 | 256.1174 | 3 |
| 640 GALAX CIT 005 - WEST | 130.5092 | 281.8985 | 0 | 132.1059 | 2 | 285.5079 | 0 |
| 650 HAMPTON 101 - ABER | 1061.235 | 164.1487 | 1.088235 | 1072.496 | 6.282353 | 153.9143 | 1.041667 |
| 650 HAMPTON 102 - BASSI | 1285.308 | 77.91869 | 1.088235 | 1297.575 | 7.329412 | 66.55752 | 3.125 |
| 650 HAMPTON 103 - CITY I | 634.8736 | 113.2418 | 0 | 642.0453 | 8.376471 | 101.9162 | 0 |
| 650 HAMPTON 104 - COOF | 1518.717 | 225.4447 | 4.352941 | 1533.026 | 17.8 | 206.9523 | 2.083333 |
| 650 HAMPTON 105 - EAST | 739.6485 | 204.6664 | 2.176471 | 754.0661 | 7.329412 | 188.233 | 1.041667 |
| 650 HAMPTON 106 - ARM | 959.5721 | 481.018 | 1.088235 | 973.9588 | 15.70588 | 453.4231 | 1.041667 |
| 650 HAMPTON 107 - LIND | 1124.515 | 210.8999 | 0 | 1136.804 | 4.188235 | 201.7525 | 1.041667 |
| 650 HAMPTON 108-THON | 1385.933 | 179.7324 | 2.176471 | 1407.521 | 10.47059 | 161.194 | 1.041667 |
| 650 HAMPTON 109 - PHEN | 1465.811 | 107.0083 | 1.088235 | 1496.723 | 9.423529 | 84.23687 | 0 |
| 650 HAMPTON 110 - PHOE | 226.998 | 138.2404 | 1 | 233.2576 | 2.030769 | 135.2683 | 0 |
| 650 HAMPTON 111 - HAM | 318.4742 | 247.262 | 1.088235 | 341.2486 | 11.51765 | 219.4318 | 1.041667 |
| 650 HAMPTON 112 - SMITI | 1329.915 | 430.1111 | 4.352941 | 1360.846 | 16.75294 | 392.0654 | . 041667 |
| 650 HAMPTON 115 - WYT | 472.0057 | 376.0875 | 1.088235 | 482.3119 | 11.51765 | 358.7867 | 0 |
| 650 HAMPTON 116 - JONE | 528.024 | 134.0201 | 0 | 538.3223 | 7.329412 | 125.8353 | 0 |
| 650 HAMPTON 117 - KECO | 767.6577 | 227.5226 | 1.088235 | 786.2202 | 12.56471 | 210.0722 | 1.041667 |
| 650 HAMPTON 118 - MALL | 1570.586 | 162.0709 | 1.088235 | 1579.701 | 11.51765 | 147.6745 | 1.041667 |
| 650 HAMPTON 201 - BOOk | 802.8234 | 767.0781 | 1 | 816.4017 | 24.36923 | 741.8945 | 0 |
| 650 HAMPTON 202 - BRYA | 852.8046 | 630.9166 | 6 | 878.8814 | 22.33846 | 598.302 | 0 |
| 650 HAMPTON 203 - BURB | 651.8384 | 397.0513 | 0 | 657.0784 | 17.26154 | 378.7512 | 1 |
| 650 HAMPTON 204 - FORR | 845.4608 | 390.6323 | 1.088235 | 861.938 | 12.56471 | 367.1063 | . 125 |
| 650 HAMPTON 205 - ASBU | 894.4556 | 1276.385 | 0 | 911.1626 | 26.4 | 1245.509 | 2 |
| 650 HAMPTON 208 - KRAF | 1342.364 | 812.4322 | 5.441176 | 1375.367 | 26.17647 | 770.6113 | 1.041667 |
| 650 HAMPTON 209 - LANG | 755.966 | 495.7944 | 1 | 743.5087 | 16.24615 | 506.7358 | 0 |
| 650 HAMPTON $210-\mathrm{MACl}$ | 1620.38 | 445.6949 | 5.441176 | 1626.376 | 21.98824 | 433.6639 | 2.083333 |
| 650 HAMPTON 212 - BETH | 1780.136 | 536.0806 | 2.176471 | 1789.221 | 16.75294 | 517.9007 | 0 |
| 650 HAMPTON 213 - PHILL | 1118.33 | 1009.259 | 4 | 1132.966 | 22.33846 | 982.2558 | 1 |
| 650 HAMPTON 214 -TUCK | 1042.562 | 581.7929 | 0 | 1053.825 | 13.61176 | 568.8588 | 1.041667 |
| 650 HAMPTON 215 - TYLEF | 295.726 | 81.03883 | 0 | 297.7587 | 2.062443 | 78.00105 | 0 |
| 650 HAMPTON 216 - SAND | 720.9758 | 308.558 | 1.088235 | 726.0609 | 8.376471 | 299.5089 | 1.041667 |
| 650 HAMPTON 217 - SYMS | 385.9036 | 370.8929 | 0 | 399.3335 | 8.376471 | 353.5869 | 2.083333 |
| 660 HARRISONI 101 - NORT | 961.653 | 502.2484 | 3.214286 | 968.496 | 31.82667 | 478.1801 | 1 |
| 660 HARRISONI 102 - EAST | 568.3454 | 237.2322 | 4.285714 | 594.3762 | 7.186667 | 216.5748 | 1 |
| 660 HARRISONI 103 - SOUT | 868.8619 | 460.5724 | 2.142857 | 879.9719 | 16.42667 | 442.799 | 2 |
| 660 HARRISONI 104 - EAST | 746.5464 | 558.8849 | 1.071429 | 769.3167 | 17.45333 | 537.1485 | 1 |
| 660 HARRISONI 105 - Soutr | 532.4943 | 267.1534 | 2.142857 | 557.4912 | 13.34667 | 239.09 | 0 |
| 660 HARRISONI 201 - NORT | 853.0453 | 626.2075 | 0 | 861.0024 | 25.66667 | 610.0549 | 1 |
| 660 HARRISONI 202 - SOUT | 970.0886 | 590.9433 | 0 | 981.1423 | 22.58667 | 569.3131 | 0 |
| 660 HARRISONI203-WES | 928.9652 | 525.7579 | 2.142857 | 943.2034 | 19.50667 | 502.8396 | 1 |


| 670 HOPEWELL 101 - WARI | 281.8195 | 335.4216 | 1.230769 | 282.5316 | 18.11842 | 323.9166 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 70 HOPEWELL 201 - WARI | 384.4898 | 83.85539 | 1.230769 | 382.9873 | 3.197368 | 83.13859 | 3.375 |
| 70 HOPEWELL 301 - WARI | 272.3906 | 772.9747 | 3.692308 | 284.6245 | 9.592105 | 764.4432 | 1.125 |
| 670 HOPEWELL 401 - WARI | 586.6875 | 606.339 | 3.692308 | 588.0844 | 19.18421 | 591.6877 | 1.125 |
| 70 HOPEWELL 501 - WARI | 292.2961 | 537.5346 | 2.461538 | 291.9494 | 14.92105 | 524.7449 | 1.125 |
| 70 HOPEWELL 601 - WARI | 498.6844 | 115.0324 | 2.461538 | 515.8819 | 11.72368 | 95.01554 | 2.25 |
| 70 HOPEWELL 701 - WARI | 365.632 | 269.8424 | 1.230769 | 381.9409 | 4.263158 | 258.0536 | 0 |
| 8 LEXINGTON 001 - LEXIN | 1129 | 606 | 2 | 1161 | 13 | 572 | 1 |
| 80 LYNCHBUR 101 - FIRST | 851.3807 | 916.1879 | 3.272727 | 858.6367 | 24.87591 | 902.7748 | 2.125 |
| 80 LYNCHBUR 102 - FIRST | 905.1854 | 1167.854 | 0 | 943.1274 | 26.94891 | 1119.898 | 3.1875 |
| 80 LYNCHBUR 103 - FIRST | 710.0114 | 816.3536 | 0 | 740.3497 | 14.51095 | 783.3051 | 1.0625 |
| 80 LYNCHBUR 104 - FIRST | 362.9182 | 233.9867 | 2.181818 | 369.6468 | 6.218978 | 233.7449 | 0 |
| 80 LYNCHBUR 105 - FIRST | 531.7173 | 408.6967 | 1.090909 | 547.0773 | 12.43796 | 392.6914 | 1.0625 |
| LYNCHBUR 201 - SECO | 1130.954 | 307.8225 | 2.181818 | 1159.635 | 20.72993 | 282.5716 | 1.0625 |
| 30 LYNCHBUR 202 - SECO | 957.9351 | 199.6686 | 4.363636 | 964.2501 | 19.69343 | 189.0737 | 4.25 |
| 80 LYNCHBUR 203 - SECO | 333.3783 | 92.55473 | 0 | 330.5699 | 3.109489 | 96.61456 | 0 |
| 680 LYNCHBUR 204 - SECO | 193.064 | 154.9512 | 0 | 197.497 | 1.036496 | 159.9854 | 0 |
| 80 LYNCHBUR 301 - THIRI | 356.5882 | 268.3047 | 1.090909 | 355.9171 | 9.328467 | 269.0664 | 0 |
| 80 LYNCHBUR 302 - THIRI | 49.58475 | 1297.846 | 3.272727 | 53.86282 | 39.38686 | 1260.145 | 1.0625 |
| 30 LYNCHBUR 303-THIR | 317.5534 | 417.0163 | 1.090909 | 316.8401 | 7.255474 | 424.8963 | 0 |
| 30 LYNCHBUR 304 - THIRI | 278.5186 | 467.9734 | 0 | 279.8754 | 5.182482 | 468.5287 | 0 |
| 30 LYNCHBUR 305 -THIRI | 489.5175 | 1005.623 | 2.181818 | 505.888 | 15.54745 | 986.9229 | 1.0625 |
| 680 LYNCHBUR 401 - FOUR | 698.4064 | 1312.405 | 2.181818 | 689.6553 | 23.83942 | 1301.699 | 1.0625 |
| 80 LYNCHBUR 402 - FOUR | 340.7633 | 456.534 | 0 | 353.8048 | 10.36496 | 439.4404 | 0 |
| 680 LYNCHBUR 403 - FOUR | 586.577 | 850.6716 | 0 | 617.8382 | 25.91241 | 814.4711 | 1.0625 |
| 80 LYNCHBUR 404 - FOUR | 727.9463 | 873.5503 | 1.090909 | 762.5285 | 17.62044 | 833.1707 | 0 |
| 33 MANASSAS001-DEAN | 823.4523 | 423.0593 | 1.2 | 836.5853 | 23.52 | 397.7164 | . 2 |
| 33 MANASSAS002-WEER | 1002.562 | 716.5639 | 0 | 1009.749 | 17.92 | 703.4752 | 0 |
| 83 MANASSAS003-METZ | 1030.723 | 748.666 | 2.4 | 1024.367 | 14.56 | 748.3045 | . 2 |
| 33 MANASSAS004-HAYD | 852.7406 | 749.8125 | 0 | 856.8252 | 21.28 | 739.1088 | 0 |
| 33 MANASSAS005-BALD | 825.7053 | 545.7351 | 1.2 | 837.7097 | 13.44 | 524.158 | 0 |
| 33 MANASSAS006-ROUN | 719.8167 | 815.1631 | 1.2 | 729.7632 | 21.28 | 786.237 | 3.6 |
| MANASSAS 001 - PREC | 764.2753 | 368.7158 | 1 | 770.5306 | 18.43478 | 346.0639 | 1 |
| 685 MANASSAS002-PREC | 547.5577 | 333.6 | 0 | 541.3294 | 13.82609 | 333.1599 | 0 |
| 685 MANASSAS003-PREC | 635.167 | 409.6842 | 1 | 646.14 | 20.73913 | 384.7762 | 0 |
| 690 MARTINSV 001 - PREC | 386.5118 | 21.48465 | 0 | 387.1823 | 4.071429 | 21.43988 | 0 |
| 690 MARTINSV 002 - PREC | 440.2233 | 323.344 | 1 | 456.8119 | 12.21429 | 307.6623 | 0 |
| 90 MARTINSV 003 - PREC | 276.9826 | 137.5018 | 0 | 272.1881 | 7.125 | 141.5032 | 0 |
| 90 MARTINSV 004 - PREC | 443.3828 | 252.4447 | 0 | 435.712 | 15.26786 | 251.9186 | 0 |
| 690 MARTINSV 005 - PREC | 440.2233 | 763.7794 | 4 | 439.932 | 18.32143 | 762.1879 | 2 |
| 690 MARTINSV 006 - PREC | 191.6762 | 6.445396 | 0 | 195.1737 | 0 | 4.287977 | 0 |
| 700 NEWPORT 101 - DENB | 1237.756 | 325.1301 | 2.071429 | 1254.638 | 17.57989 | 302.6233 | 1.09375 |
| 700 NEWPORT 102 -EPES | 1137.285 | 259.6886 | 2.071429 | 1148.014 | 20.68223 | 241.2667 | 0 |
| 700 NEWPORT 103 -JENKI | 941.523 | 550.5398 | 6.214286 | 957.5413 | 26.88689 | 513.7317 | 2.1875 |
| 700 NEWPORT 104 -MCIN | 848.3029 | 242.0298 | 1.035714 | 860.2344 | 14.47756 | 222.5477 | 3.28125 |
| 700 NEWPORT 105 - OYST | 225.7998 | 155.8132 | 1.035714 | 230.8451 | 7.238779 | 147.6719 | 0 |
| OO NEWPORT 106-RESEI | 1289.545 | 534.9585 | 3.107143 | 1306.397 | 31.02334 | 500.2125 | 1.09375 |

700 NEWPORT 107-RICHI 1128.999 700 NEWPORT 108 -LEE H 987.0973 700 NEWPORT 109 - WIN[ 565.5353 700 NEWPORT 110 -GREE 1055.459 700 NEWPORT 201 -BLAN 188.5118 700 NEWPORT 202 -BOUL 556.2133 700 NEWPORT 203 -CHAR 1010.92 700 NEWPORT 204 - WELL 549.9986 700 NEWPORT 205 -DEEP 621.4674 700 NEWPORT 208 -HIDEI 427.7767 700 NEWPORT 209 -HILTC 697.0792 700 NEWPORT 210 - NELSI 1061.673 700 NEWPORT 211 -PALN 834.8378 700 NEWPORT 212 -RIVEF 372.8804 700 NEWPORT 213 -SANF 245.4796 700 NEWPORT 215 - WAR' 415.3473 700 NEWPORT 216 - YATE! 450.5638 700 NEWPORT 217 -RIVEF 647.3618 700 NEWPORT 218 -KILN । 1301.974 700 NEWPORT 219 -DEER 1075.139 700 NEWPORT 302 -BRIAF 680.5068 700 NEWPORT 303 -CARV 475.4225 700 NEWPORT 304 -CHES 432.9556 700 NEWPORT 305 -DOW 249.6227 700 NEWPORT 306 - DUNE 117.043 700 NEWPORT 307 - HUN 349.0575 700 NEWPORT 308 -JEFFE 355.2722 700 NEWPORT 309 -MAG 428.8125 700 NEWPORT 310 -MAR؟ 561.3922 700 NEWPORT 311 -NEWI 985.0258 700 NEWPORT 312 -NEW! 134.6513 700 NEWPORT 313 -REED 806.8718 700 NEWPORT 314 -RIVEF 419.4905 700 NEWPORT 315 -SEDG 520.9968 700 NEWPORT 316 -SOUT 735.403 700 NEWPORT 317 -WASł 237.1934 700 NEWPORT 318 -WILSI 529.283 700 NEWPORT 319 -SAUN 858.6607 700 NEWPORT 320 - WATF 1007.813 710 NORFOLK (101-GRAN 1074.51 710 NORFOLK ( 102 -OCEA 388.939 710 NORFOLK ( 103 -NORT 540.7708 710 NORFOLK (104-TITUS 509.7664 710 NORFOLK (106-SECO 856.9138 710 NORFOLK (201-LARC 1009.846 710 NORFOLK (203-GHEN 491.3609 710 NORFOLK (207-LAME 930.5604
 277.3474
304.355 310.5876 74.79032 630.5239 996.1655 384.3391 972.2741 581.7025 604.5551 1012.786 484.0596 538.0748 384.3391 329.2851 531.8423 735.4381 907.8714 444.5869 168.2782 140.2318 19.73633 55.05398 5.193772 8.310035 6.232526 14.54256 23.89135 258.6498 6.232526 29.08512 270.0761 435.2381

### 355.254

 12.46505 65.44153 693.8879 1025.251 514.1682 299.7858 447.5968 69.76709 554.8119 500.5794 212.5892 96.34582 1.035714996 .8782 1.035714574 .5248 8.27289
2.0714291074 .517 $0 \quad 191.5083$ $1.035714 \quad 577.6303$ $0 \quad 1039.321$ $0 \quad 581.7711$ 2.071429662 .5151 0453.4088 0722.5555 2.0714291086 .939 1.035714841 .6012 1.035714397 .5091 1.035714265 .006 0426.4941 2.071429
3.107143669 .7613 2.0714291323 .995 4.1428571092 .115 $0 \quad 680.1131$ 1.035714471 .0068 1.035714436 .8459 $0 \quad 254.6542$ 0119.0457
$1.035714 \quad 357.137$ 1.035714359 .2074 0440.9866 $0 \quad 580.7359$ 2.071429983 .4208 $0 \quad 135.6086$ 0816.7569 0414.0719 1.035714530 .0121 2.071429754 .6461 1.035714247 .408 1.035714530 .0121 1.035714873 .6918 5.1785711016 .547 4.0888891106 .649 $0 \quad 391.9756$ 0552.0929 0 515.9018 0948.2274 1035.742 511.091 940.8247
14.47756
6.204668
8.2728950
27.92101
2.068223
1.034111
16.54578
13.44345
14.47756
21.85831
580.2881 265.1854 293.2639
291.184
1.09375
1.09375
2.06822370 .71611
16.54578603 .1668
26.88689950 .5077
13.44345354 .6205
22.75045923 .4692
6.204668553 .2495
18.614576 .1283
20.68223982 .7459
18.614463 .8145
9.307002513 .7317
5.170557319 .2624
$16.54578 \quad 706.1211$
874.5919
28.95512413 .8972
$11.37522 \quad 164.311$
6.204668138 .3124
1.09375
6.20466815 .599141 .09375
2.06822350 .95719
1.0341117 .279599
1.03411111 .43937
4.13644511 .439370
07.279599
$\begin{array}{llll}3.102334 & 22.87874 & 0\end{array}$
$\begin{array}{lll}11.37522 & 266.2253 & 0\end{array}$
$\begin{array}{lll}0 & 7.279599 & 1.09375\end{array}$
$8.27289 \quad 59.276741 .09375$
$18.614674 .9228 \quad 1.09375$
$35.15978 \quad 994.1853 \quad 2.1875$
14.59574279 .9755
26.06383418 .4021
$11.4680954 .14501 \quad 1.333333$
14.59574468 .36050
$\begin{array}{lll}16.65395 & 463.4737 & 0\end{array}$
1
1

| RC | 644.7156 | 471.2567 | 1.022222 | 699.8818 | 11.44959 | 415.2389 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 710 NORFOLK ( 210 - MAU | 998.3703 | 294.2737 | 1.022222 | 1012.795 | 13.53134 | 286.2632 | 0 |
| 710 NORFOLK ( 211 - CHRY | 1169.46 | 533.0437 | 1.022222 | 1213.059 | 15.61308 | 491.7854 | 1 |
| 710 NORFOLK ( 212 - PARK | 720.8714 | 37.70054 | 0 | 734.3022 | 10.40872 | 23.06883 | 1 |
| 710 NORFOLK ( 213 -TAYLC | 1266.48 | 362.3441 | 2.044444 | 1306.933 | 28.10354 | 320.8664 | 0 |
| 710 NORFOLK ( 214 - STUA | 1177.806 | 327.7852 | 3.066667 | 1218.274 | 15.61308 | 282.0688 | 1 |
| 710 NORFOLK ( 215 - SUBU | 663.4842 | 434.0648 | 1 | 698.6939 | 12.51064 | 407.9941 | 0 |
| 710 NORFOLK ( 217 - WESL | 585.4884 | 250.8624 | 1 | 589.5229 | 14.59574 | 234.1803 | 1.333333 |
| 0 NORFOLK ( 218 - WILL | 1167.373 | 769.7193 | 2.044444 | 1205.758 | 46.83924 | 699.4049 | 4 |
| 710 NORFOLK ( 301 - BALLI | 926.3875 | 115.1961 | 1.022222 | 943.9538 | 9.367847 | 96.46964 | 1 |
| 710 NORFOLK ( 302 -TAN^ | 516.3984 | 101.582 | 0 | 525.6936 | 5.20436 | 93.32389 | 0 |
| 710 NORFOLK ( $303-\mathrm{BROA}$ | 1290.474 | 50.26739 | 3.066667 | 1302.761 | 7.286104 | 41.94332 | 4 |
| 710 NORFOLK ( 304 - COLE | 489.2745 | 109.9599 | 1.022222 | 499.6175 | 4.163488 | 101.7126 | 0 |
| 710 NORFOLK ( 305 -LAFA) | 827.2807 | 148.7077 | 1.022222 | 831.3052 | 12.49046 | 136.3158 | 1 |
| 710 NORFOLK ( 306 - LINDI | 652.0182 | 63.88147 | 1.022222 | 668.5905 | 4.163488 | 50.33198 | 3 |
| 710 NORFOLK ( 309 - NOR\ | 1409.403 | 318.3601 | 4.088889 | 1432.098 | 17.69482 | 286.2632 | 3 |
| 710 NORFOLK (310-ROSE | 1441.743 | 78.54279 | 1.022222 | 1457.131 | 8.326975 | 57.67206 | 1 |
| 710 NORFOLK (311-SHER' | 1199.714 | 479.6346 | 6.133333 | 1208.887 | 12.49046 | 467.668 | 1 |
| 710 NORFOLK (313-UNIO | 486.1448 | 23.03922 | 0 | 495.4454 | 4.163488 | 17.82591 | 0 |
| 710 NORFOLK ( 402 - BERK | 874.226 | 19.89751 | 1.022222 | 879.2851 | 6.245232 | 12.583 | 1 |
| 710 NORFOLK ( 403 - BRAN | 355.7411 | 17.80303 | 1.022222 | 360.8928 | 4.163488 | 14.68016 | 1 |
| 710 NORFOLK ( 404 - CAMF | 790.7677 | 35.60607 | 0 | 802.1 | 6.245232 | 23.06883 | 0 |
| 710 NORFOLK ( 405 - CHES | 987.938 | 37.70054 | 0 | 997.149 | 5.20436 | 25.16599 | 0 |
| 710 NORFOLK ( 406 - BARR | 496.0533 | 312.2768 | 2 | 513.6232 | 7.297872 | 295.5875 | 1.333333 |
| 710 NORFOLK ( 408 - EASTI | 658.2776 | 452.4065 | 1.022222 | 687.3652 | 13.53134 | 415.2389 | 0 |
| 710 NORFOLK ( 409 - FAIRL | 535.1766 | 321.5018 | 2.044444 | 547.5975 | 12.49046 | 303.0405 | 0 |
| 710 NORFOLK ( 411 - RUFF | 209.6891 | 9.425135 | 1.022222 | 211.7377 | 1.040872 | 8.388664 | 1 |
| 710 NORFOLK ( 412 - INGLE | 939.9495 | 122.5268 | 1.022222 | 948.126 | 3.122616 | 118.4899 | 2 |
| 710 NORFOLK ( 413 - POPL | 1295.691 | 238.7701 | 0 | 1329.88 | 14.57221 | 202.3765 | 1 |
| 710 NORFOLK ( 414 - YOUN | 845.0156 | 49.22015 | 3.066667 | 852.166 | 13.53134 | 29.36032 | 7 |
| 710 NORFOLK ( 415 - LAKE | 602.9865 | 269.14 | 0 | 619.5675 | 5.20436 | 253.7571 | 0 |
| 710 NORFOLK ( 501 - BAYV | 730.0406 | 600.6125 | 1 | 757.9581 | 25.02128 | 558.9102 | 0 |
| 710 NORFOLK ( $503-$ EAST | 841.3146 | 679.7226 | 3 | 909.7576 | 19.80851 | 605.7463 | 0 |
| 710 NORFOLK ( 504 -LARR' | 704.042 | 414.2873 | 0 | 726.7664 | 8.340426 | 392.382 | 0 |
| 710 NORFOLK ( 505 - LITTL | 387.8991 | 367.4458 | 1 | 396.1345 | 14.59574 | 350.75 | 1.333333 |
| 710 NORFOLK ( 506 - OCEA | 903.7113 | 437.1876 | 1 | 921.1946 | 28.14894 | 400.7085 | 1.333333 |
| 710 NORFOLK ( 507 - PRETI | 662.4443 | 477.7836 | 6 | 665.4227 | 29.19149 | 456.9117 | 2.666667 |
| 710 NORFOLK ( 509 - TARR | 547.0105 | 624.5537 | 1 | 562.4901 | 17.7234 | 600.5423 | 0 |
| 710 NORFOLK ( 510 - THIRI | 641.6454 | 679.7226 | 4 | 662.3035 | 22.93617 | 642.1743 | 1.333333 |
| 710 NORFOLK ( 511 - CROS | 595.8879 | 562.0983 | 1 | 642.5488 | 21.89362 | 508.9518 | 1.333333 |
| 710 NORFOLK ( 512 - AZALI | 388.939 | 367.4458 | 0 | 411.7303 | 5.212766 | 338.2604 | 0 |
| 720 NORTON C 001 - EAST | 281 | 567 | 1 | 287 | 11 | 561 | 1 |
| 730 PETERSBUF 101 - FIRST | 678.2232 | 88.75587 | 0 | 689.8248 | 1.076923 | 84.40811 | 0 |
| 730 PETERSBUF 201 -SECO | 1380.224 | 134.3016 | 2.222222 | 1379.65 | 15.07692 | 130.7731 | 2 |
| 730 PETERSBUF 301 -THIRI | 1340.595 | 356.1913 | 3.333333 | 1345.724 | 12.92308 | 353.0875 | 3 |
| 730 PETERSBUF 401 - FOUR | 896.7492 | 182.1831 | 2.222222 | 904.6882 | 6.461538 | 178.327 | 1 |
| 730 PETERSBUF501-FIFTH | 811.8298 | 84.08451 | 1.111111 | 823.2663 | 9.692308 | 68.95311 | 2 |


| BUF 601 - SIXTH | 827.6814 | 33.86737 | 0 | 836.8366 | 5.384615 | 21.39924 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 730 PETERSBUF 701 - SEVEI | 1161.698 | 115.6162 | 1.111111 | 1184.011 | 5.384615 | 101.052 | 1 |
| 735 POQUOSOIOO1-CENT | 389.3461 | 1089.396 | 4 | 398.7963 | 22.18868 | 1064.375 | 2 |
| 735 POQUOSOI002-EASTI | 401.3764 | 1175.234 | 1.333333 | 398.7963 | 17.96226 | 1174.629 | 0 |
| 735 POQUOSOI003-WEST | 470.2775 | 1266.37 | 2.666667 | 500.4074 | 15.84906 | 1233.996 | 1 |
| 740 PORTSMOL 001 - EMAP | 731.6058 | 310.1359 | 4 | 742.573 | 18.45 | 296.0563 | 0 |
| 740 PORTSMOL 005 - HAMI | 562.2913 | 24.89385 | 0 | 562.9351 | 5.125 | 19.73709 | 0 |
| 740 PORTSMOL007-PARK | 531.9819 | 129.6555 | 0 | 538.9137 | 11.275 | 112.1898 | 0 |
| 740 PORTSMOL 009 -THIRL | 790.1342 | 133.8044 | 0 | 797.9265 | 11.275 | 121.5389 | 0 |
| 740 PORTSMOI 010 - PORT | 362.6674 | 203.2998 | 0 | 364.4978 | 8.2 | 201.5261 | 0 |
| 740 PORTSMOL011-JOSEF | 666.8064 | 26.96834 | 1 | 675.731 | 9.225 | 18.6983 | 0 |
| 740 PORTSMOL013-ST. M | 423.2862 | 19.70763 | 1 | 432.3843 | 2.05 | 14.54312 | 0 |
| 740 PORTSMOI 014 - BRIGI | 764.0055 | 32.15456 | 0 | 773.9052 | 5.125 | 22.85347 | 0 |
| 740 PORTSMOI 016 - CRAD | 501.6725 | 204.337 | 1 | 506.5371 | 16.4 | 186.983 | 1 |
| 740 PORTSMOI 017 - VICTC | 581.104 | 283.1675 | 0 | 591.134 | 11.275 | 268.0089 | 0 |
| 740 PORTSMOI 019 - VICTC | 290.552 | 203.2998 | 1 | 289.3006 | 5.125 | 204.6425 | 2 |
| 740 PORTSMOL 020 - NOBL | 503.7628 | 191.8901 | 1 | 516.9812 | 12.3 | 177.6338 | 1 |
| 740 PORTSMOL021-JOHN | 541.3883 | 19.70763 | 0 | 555.6242 | 0 | 12.46553 | 0 |
| 740 PORTSMOL022-ST. M | 425.3765 | 301.8379 | 5 | 447.006 | 12.3 | 282.552 | 1 |
| 740 PORTSMOL 023 - WEST | 331.3129 | 423.1954 | 2 | 327.9436 | 17.425 | 416.5565 | 1 |
| 740 PORTSMOL 024 -THE S | 447.3247 | 242.715 | 0 | 456.4056 | 16.4 | 225.4183 | 0 |
| 740 PORTSMOLO25-JOHN | 568.5622 | 398.3016 | 1 | 585.912 | 14.35 | 373.9659 | 0 |
| 740 PORTSMOI 026 - WILLI | 1009.616 | 21.78212 | 0 | 1015.163 | 6.15 | 20.77588 | 0 |
| 740 PORTSMOL 027 - CAVA | 930.1845 | 36.30353 | 2 | 946.2322 | 7.175 | 25.96985 | 1 |
| 740 PORTSMOL028-LAKE | 1408.864 | 57.0484 | 2 | 1442.325 | 8.2 | 32.20262 | 1 |
| 740 PORTSMOL029-WOO | 215.3011 | 422.1582 | 1 | 216.1921 | 19.475 | 403.0521 | 0 |
| 740 PORTSMOL030-THE F | 244.5654 | 442.9031 | 2 | 239.1691 | 10.25 | 446.6815 | 0 |
| 740 PORTSMOL031-WEST | 735.7864 | 419.0465 | 2 | 753.017 | 11.275 | 413.4401 | 0 |
| 740 PORTSMOI 032 - HODC | 346.9902 | 449.1265 | 2 | 353.0094 | 8.2 | 439.4099 | 1 |
| 740 PORTSMOL 033- PINEC | 216.3463 | 458.4617 | 1 | 203.6593 | 17.425 | 453.9531 | 0 |
| 740 PORTSMOI 034-CHUR | 468.2277 | 521.7336 | 2 | 468.9385 | 13.325 | 520.4359 | 1 |
| 740 PORTSMOI 035 -CHUR | 503.7628 | 608.8621 | 0 | 525.3364 | 15.375 | 578.6084 | 1 |
| 740 PORTSMOL036-SCOT | 1164.298 | 897.2158 | 2 | 1179.135 | 15.375 | 874.6647 | 3 |
| 740 PORTSMOL037-CHUR | 1012.751 | 447.052 | 0 | 1013.074 | 11.275 | 440.4487 | 0 |
| 740 PORTSMOL038-GRO\} | 1240.594 | 158.6983 | 2 | 1240.755 | 24.6 | 140.2372 | 4 |
| 740 PORTSMOL 039 - CHUR | 1362.877 | 460.5362 | 3 | 1394.283 | 24.6 | 421.7504 | 0 |
| 750 RADFORD (001-EAST | 903.5892 | 499.8914 | 2 | 904.4688 | 29 | 483.2123 | 1.25 |
| 750 RADFORD ( 002 -CENT | 670.7164 | 569.0588 | 1 | 669.5 | 17 | 567.2492 | 3.75 |
| 750 RADFORD (003-WEST | 567.6944 | 678.0498 | 5 | 589.0313 | 19 | 656.5385 | 0 |
| 760 RICHMON[ 101 - ONE I | 851.9541 | 673.1653 | 2.082192 | 888.2126 | 19.76437 | 629.6589 | 2.186047 |
| 760 RICHMON[ 102 - ONE I | 399.2553 | 434.402 | 1.041096 | 434.6795 | 4.16092 | 399.7332 | 0 |
| 760 RICHMONL 104 - ONE I | 635.0359 | 687.8908 | 1.041096 | 693.3924 | 9.362069 | 634.9324 | 0 |
| 760 RICHMONL 105 - ONE I | 730.3961 | 452.2829 | 0 | 752.048 | 14.56322 | 423.9914 | 1.093023 |
| 760 RICHMONL 106 - ONE I | 447.4593 | 935.0686 | 1.041096 | 507.999 | 13.52299 | 866.9675 | 0 |
| 760 RICHMONL 111 - ONE I | 706.2941 | 401.7955 | 1.041096 | 720.6253 | 12.48276 | 380.7485 | 1.093023 |
| 760 RICHMONL 112 - ONE I | 626.6526 | 341.8417 | 1.041096 | 650.4482 | 7.281609 | 318.5209 | 1.093023 |
| 760 RICHMON[113-ONE | 1157.945 | 259.7997 | 2.082192 | 1178.348 | 23.92529 | 228.871 | 0 |


| 760 RICHMON[ 114 - ONE | 1345.522 | 362.8782 | 4.1 | 1375.263 | 35.36782 | 314.3021 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMONL 203 -TWO | 1329.803 | 351.3081 | 1.041096 | 1334.414 | 28.08621 | 326.9585 | 1.093023 |
| RICHMON[ 204 - TWO | 1139.083 | 315.5462 | 0 | 1162.637 | 27.04598 | 276.3327 | 0 |
| RICHMON[ 206 - TWO | 693.7191 | 120.9594 | 0 | 700.7244 | 8.321839 | 104.4158 | 23 |
| RICHMONL 207 - TWO | 1209.293 | 358.6709 | 4.164384 | 1243.288 | 26.00575 | 315.3568 | 0 |
| HMONL 208 - TWO | 1069.92 | 280.8361 | 0 | 1093.507 | 19.76437 | 251.0198 | 0 |
| 213 - TWO | 1514.236 | 72.57563 | 1.041096 | 1520.855 | 13.52299 | 61.17289 | 1.093023 |
| 760 RICHMON[ 214 -TWO | 1425.163 | 120.9594 | 2.082192 | 1442.298 | 21.84483 | 99.14227 | 0 |
| E | 497.7592 | 31.5 | 0 | 506.9516 | 7.281609 | 18.98469 | 0 |
| [ 302 -THRE | 708.3899 | 102.0266 | 1.041096 | 715.3882 | 6.241379 | 94.92345 | 1.093023 |
| RICHMONL 303 - THRE | 592.0714 | 33.65826 | 1.041096 | 594.9349 | 4.16092 | 25.31292 | 0 |
| RICHMONL 304 - THRE | 843.5708 | 33.65826 | 0 | 853.6478 | 7.281609 | 23.20351 | 0 |
| MONL 305 - THRE | 839.3792 | 78.88655 | 1.041096 | 858.8849 | 14.56322 | 52.73525 | 23 |
| MONL 306 - THRE | 673.8087 | 50.48739 | 2.082192 | 685.013 | 6.241379 | 42.1882 | 2.186047 |
| [ 307 - THRE | 891.7749 | 219.8305 | 0 | 910.2085 | 17.68391 | 193.011 | 0 |
| ONL 308 | 939.9789 | 241.918 | 082192 | 954.2001 | 14.56322 | 223.5975 | 3023 |
| RICHMONL309-THRE | 548.0591 | 267.1625 | 2.082192 | 540.469 | 12.48276 | 273.1686 | 0 |
| 760 RICHMONL310-THRE | 211.6786 | 7.362745 | 1.041096 | 216.8161 | 0 | 5.273525 | 3.27907 |
| RICHMONL 402 - FOUR | 1435.642 | 536.4286 | 0 | 1478.958 | 30.16667 | 470.3984 | 1.093023 |
| MONL 404 - FOUR | 1187.287 | 330.2717 | 3.123288 | 1198.249 | 28.08621 | 302.7003 | 1.093023 |
| RICHMON[ 409 - FOUR | 1348.665 | 924.5504 | 1.041096 | 1418.207 | 13.52299 | 857.4751 | 0 |
| 60 RICHMONL 410 -FOUR | 793.271 | 367.0854 | 0 | 816.988 | 14.56322 | 336.4509 | 3023 |
| RICHMON[ 412 - FOUR | 757.6419 | 241.9188 | 0 | 760.4273 | 20.8046 | 227.8163 | 1.093023 |
| 60 RICHMON[413-FOUR | 876.0562 | 416.521 | 3.123288 | 890.3075 | 9.362069 | 405.0067 | 093023 |
| HMONL 414 - FOUR | 847.7625 | 544.8431 | 0 | 856.79 | 22.88506 | 515.7507 | 0 |
| MONL501-FIVE I | 1351.809 | 204.0532 | 1.041096 | 1354.315 | 34.32759 | 181.4093 | 1.093023 |
| ONL503 | 1304.653 | 132.5294 | 1.041096 | 1314.513 | 11.44253 | 120.2364 | 1.093023 |
| RICHMON[504-FIV | 1543.577 | 190.37 | 1.041096 | 1557.514 | 26.00575 | 161.3699 | 0 |
| RICHMON[ 505 - FIV | 664.3775 | 85.19748 | 0 | 664.0646 | 13.52299 | 73.82935 | 1.093023 |
| 60 RICHMON[508-FIVE I | 679.0483 | 127.2703 | 2.082192 | 687.1079 | 7.281609 | 113.9081 | 093023 |
| RICHMON[ 509 - FIVEI | 759.7377 | 63.10924 | 0 | 764.617 | 14.56322 | 48.51643 | 0 |
| MONL510-FIV | 998.6621 | 86.2493 | 2.082192 | 1000.287 | 20.8046 | 74.88405 | 1.093023 |
| RICHMON[602-SIX H | 422.3094 | 13.67367 | 0 | 427.3476 | 3.12069 | 13.71116 | 0 |
| MONL 603 - SIX | 749.2586 | 42.0 | 0 | 759.3799 | 10.4023 | 29.53174 | 1.093023 |
| 760 RICHMONL604-SIX H | 528.1487 | 36.81373 | 3.123288 | 538.3742 | 8.321839 | 25.31292 | 1.093023 |
| 760 RICHMON[ 606 - SIX H | 908.5415 | 31.55462 | 0 | 915.4456 | 9.362069 | 24.25821 | 1.093023 |
| 760 RICHMON[607-SIX H | 950.4581 | 164.084 | 1.041096 | 957.3424 | 16.64368 | 146.604 | 0 |
| 760 RICHMONL609-SIX H | 1023.812 | 90.45658 | 0 | 1021.235 | 14.56322 | 83.32169 | 1.093023 |
| HMON[610-SIX H | 510.3342 | 22.08824 | 1.041096 | 514.2835 | 6.241379 | 13.71116 | 1.093023 |
| RICHMONL 701 - SEVEI | 496.7113 | 18.9327 | 1.041096 | 499.6196 | 5.201149 | 21.0941 | 1.093023 |
| RICHMONL 702 - SEVEI | 623.5089 | 44.17647 | 1.041096 | 634.7369 | 6.241379 | 35.85997 | 0 |
| 60 RICHMONL 703 - SEVEI | 778.6002 | 65.21289 | 1.041096 | 788.7077 | 9.362069 | 54.84466 | 1.093023 |
| 760 RICHMONL 705 -SEVEI | 774.4085 | 100.9748 | 1.041096 | 786.6128 | 21.84483 | 71.71994 | 0 |
| 760 RICHMONL 706 -SEVEI | 1143.274 | 104.1303 | 0 | 1145.878 | 15.60345 | 95.97815 | 0 |
| 760 RICHMON[ 707 -SEVEI | 1715.435 | 262.9552 | 5.205479 | 1738.718 | 22.88506 | 234.1445 | 1.093023 |
| 760 RICHMONL 708 -SEVEI | 1112.885 | 189.3277 | 5.205479 | 1141.688 | 23.92529 | 149.7681 | 1.093023 |
| 60 RICHMON[ 802 - EIGH ${ }^{-1}$ | 595.2152 | 30.5028 | 0 | 600.172 | 8.321839 | 23.2035 | 2.186047 |


| $\mathrm{H}^{-}$ | 783.8397 | 79.93838 | 1.041096 | 784.518 | 10.4023 | 70.66523 | 1.093023 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMON[810-EIGH ${ }^{-}$ | 637.1318 | 64.16106 | 1.041096 | 651.4956 | 5.201149 | 50.62584 | 0 |
| 760 RICHMON[ 811 -EIGH ${ }^{-}$ | 651.8026 | 62.05742 | 0 | 645.2111 | 6.241379 | 65.39171 | 0 |
| 760 RICHMON[ 812 -EIGH ${ }^{-}$ | 1143.274 | 140.944 | 1.041096 | 1137.499 | 8.321839 | 140.2758 | 2.186047 |
| 760 RICHMON[ 814 - EIGH ${ }^{-}$ | 637.1318 | 48.38375 | 1.041096 | 650.4482 | 3.12069 | 37.96938 | 1.093023 |
| 760 RICHMON[ 902 - NINE | 324.8534 | 30.5028 | 1.041096 | 324.7004 | 6.241379 | 25.31292 | 1.093023 |
| 760 RICHMON[ 903 - NINE | 776.5043 | 94.66387 | 0 | 774.0438 | 4.16092 | 95.97815 | 0 |
| 760 RICHMON[ 908 - NINE | 777.5522 | 66.26471 | 0 | 772.9964 | 15.60345 | 62.22759 | 0 |
| 760 RICHMON[ 909 - NINE | 968.2726 | 99.92297 | 1.041096 | 974.1011 | 10.4023 | 92.81404 | 0 |
| 760 RICHMON[910-NINE | 724.1086 | 92.56022 | 1.041096 | 727.9573 | 4.16092 | 88.59522 | 0 |
| RICHMON[911-NINE | 836.2354 | 34.71008 | 2.082192 | 836.889 | 6.241379 | 34.80526 | 1.093023 |
| 770 ROANOKE 001 -Peters | 947.3178 | 177.5391 | 0 | 945.9996 | 7.236196 | 182.9737 | 0 |
| 770 ROANOKE 1002 - Granı | 796.1276 | 364.5329 | 1.058824 | 807.5349 | 10.33742 | 353.3286 | 0 |
| 770 ROANOKE 1003 -Prestc | 489.518 | 624.0131 | 0 | 492.554 | 17.57362 | 624.6345 | 2.25 |
| 770 ROANOKE 1004 - Willia | 579.3863 | 442.2719 | 0 | 585.5685 | 12.40491 | 435.3513 | 1.125 |
| 770 ROANOKE 1005 - East ( | 401.7642 | 609.3057 | 2.117647 | 404.8244 | 20.67485 | 595.1904 | 0 |
| ROANOKE 1006 - Hollir | 472.6016 | 391.8466 | 1.058824 | 472.4713 | 14.47239 | 385.9274 | 1.125 |
| 770 ROANOKE 1007 - Soutr | 327.755 | 370.836 | 2.117647 | 326.6077 | 11.37117 | 371.2053 | 1.125 |
| 770 ROANOKE 1008 - Linco | 692.5147 | 48.32424 | 0 | 698.6657 | 6.202454 | 36.80506 | 0 |
| 770 ROANOKE 1009 - Highli | 741.1493 | 229.0149 | 0 | 744.1159 | 11.37117 | 223.9851 | 0 |
| 770 ROANOKE 010 - Old S | 882.8241 | 382.3918 | 3.176471 | 884.6946 | 25.84356 | 361.7412 | 2.25 |
| 770 ROANOKE 1011 -RALEI | 998.067 | 597.7499 | 2.117647 | 1023.159 | 28.94479 | 562.5917 | 2.25 |
| 770 ROANOKE 1012 -SOUT | 688.2856 | 720.6615 | 0 | 726.1472 | 10.33742 | 688.7805 | 1.125 |
| 770 ROANOKE 1013 -GARL | 405.9933 | 687.0447 | 1.058824 | 405.8814 | 20.67485 | 676.1616 | 0 |
| 770 ROANOKE 1014 - Crysti | 802.4712 | 703.8531 | 0 | 822.3327 | 15.50613 | 676.1616 | . 125 |
| 770 ROANOKE 1015 - Granı | 802.4712 | 615.6088 | 0 | 812.8198 | 20.67485 | 594.1389 | 1.125 |
| 770 ROANOKE 016 - Deye | 815.1585 | 848.8258 | 2.117647 | 832.9025 | 19.6411 | 823.3818 | 1.125 |
| 770 ROANOKE 017 -LEE-H | 757.0084 | 469.5856 | 2.117647 | 755.7427 | 35.14724 | 445.867 | 1.125 |
| 770 ROANOKE 1018 - OLD 1 | 924.0578 | 294.1476 | 1.058824 | 923.803 | 22.74233 | 286.0279 | 0 |
| 770 ROANOKE 1018 -Sumn | 673.4838 | 435.9687 | 0 | 679.64 | 14.47239 | 425.8872 | 0 |
| 770 ROANOKE 019 - Fores | 492.6898 | 61.9811 | 0 | 486.2121 | 8.269939 | 58.8881 | 0 |
| 770 ROANOKE 1020 - EURE | 1243.355 | 93.49691 | 0 | 1267.322 | 3.101227 | 80.97114 | 2.25 |
| 775 SALEM CIT' 001 - NORT | 503.2365 | 631.7156 | 2 | 516.8051 | 12.55556 | 610.2485 | 0 |
| 775 SALEM CIT' 002 - CONE | 174.8534 | 270.4298 | 1 | 174.4083 | 12.55556 | 263.5164 |  |
| 775 SALEM CIT' 003 - BEVE | 172.721 | 433.9704 | 0 | 175.4783 | 7.324074 | 431.0147 | 0 |
| 775 SALEM CIT' 004 - WEST | 297.4639 | 586.8221 | 2 | 309.227 | 13.60185 | 570.7744 | 1 |
| 775 SALEM CIT' 005 - NORT | 476.582 | 600.7177 | 1 | 485.7753 | 11.50926 | 589.978 | 0 |
| 775 SALEM CIT'006-SOUT | 223.8976 | 295.0144 | 0 | 220.4179 | 10.46296 | 294.4556 | 0 |
| 775 SALEM CIT'007-SOUT | 286.8022 | 484.2084 | 0 | 289.9672 | 14.64815 | 472.6225 | 0 |
| 775 SALEM CIT' 008 - EAST | 99.15465 | 194.5385 | 0 | 103.789 | 4.185185 | 188.8356 | 0 |
| 775 SALEM CIT' 009 - SOUT | 346.5082 | 801.6695 | 0 | 353.0966 | 16.74074 | 786.2817 | 1 |
| 775 SALEM CIT' 010 - HIDD | 479.7806 | 758.9138 | 0 | 505.0352 | 9.416667 | 738.2726 | 0 |
| 790 STAUNTON 101 - WARI | 680.9571 | 673.2922 | 3 | 673.6019 | 25.38462 | 667.5504 | 1.333333 |
| 790 STAUNTON 201 - WARI | 747.6544 | 871.4446 | 1 | 754.4341 | 26.4 | 854.1659 | 0 |
| 790 STAUNTON 301 - WARI | 802.5182 | 731.8857 | 4 | 824.4887 | 27.41538 | 697.4089 | 2.666667 |
| 790 STAUNTON 401 - WARI | 708.9269 | 703.1216 | 2 | 724.2567 | 27.41538 | 673.9487 | 0 |
| 790 STAUNTON 501 - WARI | 1049.943 | 542.2559 | 1 | 1070.219 | 25.38462 | 512.9261 | 0 |


| SUFFOLK C 101 - BELLE | 655.1071 | 261.9432 | 0 | 678.9054 | 11.5625 | 230.661 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 800 SUFFOLK C 102 - DRIVI | 844.1007 | 1375.202 | 1 | 876.2123 | 29.43182 | 1327.888 | 1 |
| 800 SUFFOLK C 104 - BENN | 673.157 | 607.328 | 0 | 695.878 | 17.86932 | 571.362 | 1 |
| 800 SUFFOLK C 201 - EBEN | 357.8137 | 774.2112 | 2 | 385.0667 | 8.409091 | 749.1191 | 0 |
| 800 SUFFOLK C 202 - CHUC | 415.1489 | 644.2958 | 1 | 432.8022 | 10.51136 | 629.5563 | 0 |
| 800 SUFFOLK C 203 - KING! | 980.0062 | 473.1877 | 0 | 996.0815 | 12.61364 | 446.5088 | 0 |
| 800 SUFFOLK C 204 - HILLP | 719.8745 | 350.6659 | 1 | 734.0665 | 8.409091 | 334.3526 | 0 |
| 800 SUFFOLK C 301 - WHIT | 292.9437 | 118.2424 | 1 | 292.8939 | 9.3 | 114.297 | 0 |
| 800 SUFFOLK C 302 - JOHN | 1179.401 | 140.2024 | 1 | 1187.391 | 11.49129 | 127.8283 | 1 |
| 800 SUFFOLK C 304 - NANS | 914.177 | 459.4568 | 0 | 930.3126 | 17.86932 | 440.1604 | 1 |
| 800 SUFFOLK C 305 - SHOL | 383.296 | 229.2003 | 0 | 398.8569 | 5.255682 | 208.4413 | 0 |
| 800 SUFFOLK C 401 - AIRP( | 347.6695 | 396.5829 | 0 | 344.3917 | 9.3 | 397.418 | 1 |
| 800 SUFFOLK C 402 - WHA | 239.291 | 604.8151 | 0 | 231.7402 | 6.2 | 609.2345 | 0 |
| 800 SUFFOLK C 403 - SOUT | 483.9473 | 39.76293 | 0 | 488.1564 | 7.233333 | 33.55508 | 0 |
| 800 SUFFOLK C 404 - BOOk | 897.1866 | 55.53746 | 0 | 900.0738 | 7.286742 | 49.33144 | 0 |
| 800 SUFFOLK C 405 - PITTM | 144.8623 | 175.794 | 0 | 151.2749 | 1.033333 | 170.9212 | 0 |
| 800 SUFFOLK C 501 - KILBY | 621.2982 | 901.9907 | 1 | 641.577 | 12.4 | 886.0639 | 0 |
| 800 SUFFOLK C 502 - HOLL | 562.2802 | 781.6555 | 1 | 565.4032 | 10.33333 | 778.0585 | 0 |
| 800 SUFFOLK C 504 - LAKE | 491.1089 | 1013.892 | 1 | 495.2292 | 10.36894 | 1010.707 | 1 |
| 800 SUFFOLK C 601 -LAKE | 723.2383 | 521.1037 | 1 | 723.1152 | 18.6 | 508.5692 | 1 |
| 800 SUFFOLK C 602 - OLDE | 190.1005 | 111.9399 | 0 | 183.5649 | 5.255682 | 113.1954 | 0 |
| 800 SUFFOLK C 603 - ELEPF | 207.0994 | 209.2786 | 0 | 214.5743 | 2.066667 | 203.4277 | 0 |
| 800 SUFFOLK C 604 - WILR | 424.7047 | 442.5573 | 0 | 426.4375 | 8.409091 | 435.9281 | 0 |
| 800 SUFFOLK C 605 - HOLL | 465.0517 | 24.29312 | 0 | 475.2338 | 3.153409 | 19.0454 | 1 |
| 800 SUFFOLK C 702 - HARB | 894.0035 | 677.0387 | 0 | 916.5223 | 11.5625 | 654.9502 | 0 |
| 800 SUFFOLK C 704 - BURB | 1030.971 | 435.1637 | 3 | 1052.303 | 13.66477 | 405.2438 | 1 |
| 800 SUFFOLK C 706 - HUN7 | 1206.161 | 162.6583 | 2 | 1202.936 | 8.409091 | 167.1763 | 1 |
| 810 VIRGINIA B 001 - NORT | 768.3263 | 1182.311 | 1.032787 | 817.9172 | 7.283592 | 1134.841 | 0 |
| 810 VIRGINIA B 002 - SOUT | 670.6937 | 626.8059 | 3.098361 | 692.8988 | 35.37745 | 588.7523 | 2.216216 |
| 810 VIRGINIA B 003 - OCEA | 419.1835 | 523.5798 | 1.032787 | 438.624 | 8.324105 | 503.4259 | 0 |
| 810 VIRGINIA B 004 - LINKF | 610.2039 | 905.6228 | 1.032787 | 644.1628 | 14.56718 | 869.2629 | 1.108108 |
| 810 VIRGINIA B $005-$ SEAT, | 787.4283 | 413.9686 | 2.065574 | 807.3224 | 22.89129 | 378.636 | 1.108108 |
| 810 VIRGINIA B 006 - ALAN | 711.0202 | 1000.335 | 1.032787 | 774.4786 | 9.364619 | 946.0567 | 1.108108 |
| 810 VIRGINIA B 007 - KING! | 439.3468 | 701.299 | 0 | 487.36 | 6.243079 | 651.6805 | 1.108108 |
| 810 VIRGINIA B 008 - LONL | 751.3467 | 702.3631 | 0 | 764.9433 | 22.89129 | 675.1453 | 1.108108 |
| 810 VIRGINIA B 009 - TRAN | 582.6121 | 991.8219 | 2.065574 | 626.1516 | 12.48616 | 944.9901 | 1.108108 |
| 810 VIRGINIA B 010 - GREA | 590.0406 | 1244.034 | 5.163934 | 665.3523 | 13.52667 | 1172.172 | 5.540541 |
| 810 VIRGINIA B 011 - CAPE | 981.6323 | 1003.528 | 2.065574 | 1059.478 | 12.48616 | 927.9248 | 1.108108 |
| 810 VIRGINIA B 012 - PLAZ | 727.9998 | 565.0831 | 3.098361 | 755.408 | 21.85078 | 524.7575 | 2.216216 |
| 810 VIRGINIA B 013 - MT TI | 836.2446 | 860.9269 | 2.065574 | 871.9506 | 19.76975 | 823.4 | 1.108108 |
| 810 VIRGINIA B 014 - MALI | 715.2651 | 723.6469 | 0 | 747.9916 | 13.52667 | 691.144 | 1.108108 |
| 810 VIRGINIA B 015 - OLD [ | 408.5713 | 429.9314 | 1.032787 | 420.6129 | 18.72924 | 405.3005 | 1.108108 |
| 810 VIRGINIA B 016 - ARAG | 812.8977 | 801.3325 | 0 | 823.2146 | 37.45847 | 764.738 | 1.108108 |
| 810 VIRGINIA B 017 - OCEA | 549.7141 | 619.3566 | 0 | 586.951 | 20.81026 | 578.0865 | 0 |
| 810 VIRGINIA B 018 -THOR | 802.2855 | 1018.427 | 1.032787 | 862.4153 | 26.01283 | 951.3896 | 0 |
| 810 VIRGINIA B 019 - LAKE | 345.9591 | 507.617 | 1.032787 | 367.639 | 9.364619 | 481.0277 | 0 |
| 810 VIRGINIA B 020 - BAYS | 543.3468 | 594.8803 | 0 | 574.2372 | 14.56718 | 562.0878 | 0 |

810 VIRGINIA B 021 - DAVI! 947.6732 810 VIRGINIA B 022 - POIN 512.5713 810 VIRGINIA B 023 - ARRC 615.51 810 VIRGINIA B 024 - LARK! 542.2855 810 VIRGINIA B 025 - AVAL 927.5099 810 VIRGINIA B 026 - FAIRF 654.7753 810 VIRGINIA B 027 - EDWI 735.4283 810 VIRGINIA B 028 - THAL 535.9182 810 VIRGINIA B 029 - HOLL 698.2855 810 VIRGINIA B 030 - RED \ 488.1631 810 VIRGINIA B 031 - SIGM 799.1018 810 VIRGINIA B 032 - CREEI 188.8979 810 VIRGINIA B 033 - CAPP 186.7755 810 VIRGINIA B 034 - BLAC 118.8571 810 VIRGINIA B 035 - COUF 629.3059 810 VIRGINIA B 036 - WIN[ 961.4691 810 VIRGINIA B 037 - CHES، 512.5713 810 VIRGINIA B 038 - WITC 794.8569 810 VIRGINIA B 039 - PEME 840.4895 810 VIRGINIA B 040 - BON 508.3264 810 VIRGINIA B 041 - COLLI 1352 810 VIRGINIA B 042 - BRAN 744.9794 810 VIRGINIA B 043 - BELL_ 744.9794 810 VIRGINIA B 044 - CENT 808.6528 810 VIRGINIA B 045 - TIMB 819.265 810 VIRGINIA B 046 - GREE 706.7753 810 VIRGINIA B 047 - KING! 725.8773 810 VIRGINIA B 048 - WOLI 682.3671 810 VIRGINIA B 049 - LYNN 646.2855 810 VIRGINIA B 050 - OCEA 505.1427 810 VIRGINIA B 051 - STRA 590.0406 810 VIRGINIA B 052 - HOM 933.8773 810 VIRGINIA B 053 - SHAN 571.9998 810 VIRGINIA B 054 - CRON 595.3467 810 VIRGINIA B 055 - MAG 766.2038 810 VIRGINIA B 056 - EDINI 325.7958 810 VIRGINIA B 057 - SHER 407.5101 810 VIRGINIA B 058 -GLEN 747.1018 810 VIRGINIA B 059 - SHEL 483.9182 810 VIRGINIA B 060 - FOXF 631.4284 810 VIRGINIA B 061 - BAKE 959.3466 810 VIRGINIA B 062 - LAND 732.2447 810 VIRGINIA B 063 - CULV 751.3467 810 VIRGINIA B 064 - ROSE 1097.306 810 VIRGINIA B 065 - COLO 717.3875 810 VIRGINIA B 066 - HUN 1508.3264 810 VIRGINIA B 067 - EASTI 363.9999
256.469 680.0152 787.4981 510.8096 1013.106 764.086 900.3018 640.6403 432.0598 859.8628 1495.182 571.4682 658.7315
347.989
1134.423 629.9985 436.3165 1211.044 757.7008 501.2319 412.9044 649.1538 433.1239 859.8628 356.5025 358.6309 1205.723 930.0991 997.1428 190.4894 703.4273 954.5754 687.4645
490.59
354.3741 425.6746
490.59
657.6673
452.2793
1020.555 131.9591 848.1567 886.4674 876.8897 608.7147 785.3697 246.8913
1.032787971 .5416
1.032787528 .6796
627.2111
$\begin{array}{ll}1.032787 & 548.8097\end{array}$
$0 \quad 985.3148$
1.032787
2.065574

0
1.032787

0
1.032787
0
0
2.065574
2.065574
3.098361

0
1.032787
1.032787
1.032787
3.098361

| 0 | 770.2407 |
| ---: | ---: |

3.098361
1.032787
1.032787
1.032787
1.032787

0
1.032787
2.065574

0
1.032787
1.032787
2.065574
1.032787
1.032787
3.098361
2.065574
4.131148

0
3.098361
2.065574
$\begin{array}{ll}0 & 527.6202\end{array}$
218.2525
125.0184
999.088
536.096
820.0362
865.5937
529.7391
1370.965
784.0139
770.2407
852.88
828.512
726.8021
790.3708
732.0995
700.3151
500.0737
604.9621
953.5304
603.9026
603.9026
785.0734
347.5089
430.1482
772.3596
490.5384
663.2334
960.9468
780.8355
758.5864
1121.987
16.64821
19.76975
23.9318
10.40513
18.72924
10.40513
24.97232
24.97232
17.68872
17.68872
18.72924
9.364619
20.81026
20.81026
7.283592
7.283592
3.12154
6
5.202566

3
18.87511 .108108
876.7291 .108108
605.81760
$404.2339 \quad 0$
1437.751 .108108
551.4220

0
0
0
0

18
18.72924
$\begin{array}{lll}14.56718 & 579.1531 & 1.108108\end{array}$
$\begin{array}{llll}16.64821 & 751.9391 & 1.108108\end{array}$
$11.44564 \quad 231.44791 .108108$

| 810 VIRGINIA B 068 - MAN | 67 | 765.1501 | 1.032787 | 657.936 | 17.68872 | 747.6728 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 069 - SHELI | 830.9385 | 329.8978 | 1.032787 | 857.1179 | 11.44564 | 294.3762 | 8108 |
| 810 VIRGINIA B 070 - CORP | 609.1427 | 585.3026 | 3.098361 | 635.6869 | 18.72924 | 545.0225 | 2.216216 |
| 810 VIRGINIA B 071 - ROUN | 443.5917 | 319.256 | 1.032787 | 462.992 | 6.243079 | 299.7091 | 0 |
| GINIA B 072 - RUDE | 593.2243 | 776.8562 | 2.065574 | 628.2706 | 10.40513 | 742.3399 | 1.108108 |
| GINIA B 073 - DAHL | 765.1426 | 340.5397 | 1.032787 | 780.8355 | 15.6077 | 315.7078 | 0 |
| B 074 - BUCK | 689.7957 | 332.0262 | 2.065574 | 699.2556 | 20.81026 | 306.1085 | 0 |
| - B 075 - COLO | 704.6528 | 1075.893 | 2.065574 | 743.7537 | 17.68872 | 1040.982 | 0 |
| VIRGINIA B 076 - VILLA | 669.6324 | 262.8541 | 1.032787 | 675.9471 | 11.44564 | 250.6464 | 0 |
| 810 VIRGINIA B 077 - BROC | 598.5304 | 557.6338 | 1.032787 | 630.3896 | 15.6077 | 520.4912 | 1.108108 |
| 10 VIRGINIA B 078 - INDIA | 640.9794 | 543.7993 | 2.065574 | 660.0549 | 17.68872 | 514.0917 | 3.324324 |
| VIRGINIA B 079 - PLEA؛ | 773.6324 | 293.7155 | 0 | 784.0139 | 18.72924 | 275.1777 | 2.216216 |
| RGINIA B $080-\mathrm{CHIM}$ | 717.3875 | 360.7592 | 1.032787 | 737.3969 | 16.64821 | 331.7065 | 1.108108 |
| IRGINIA B 081 - ROCK | 863.8365 | 532.0933 | 2.065574 | 878.3075 | 13.52667 | 510.8919 | 108 |
| VIRGINIA B 082 - SHELI | 503.0202 | 615.0998 | 2.065574 | 531.8581 | 7.283592 | 584.486 | 0 |
| 810 VIRGINIA B 083 - STRA' | 565.6325 | 826.873 | 1.032787 | 624.0327 | 18.72924 | 761.5383 | 0 |
| 810 VIRGINIA B 084 -TALLI | 764.0814 | 475.6914 | 2.065574 | 794.6087 | 10.40513 | 447.9637 | 108108 |
| 810 VIRGINIA B 085 - UPTC | 708.8977 | 906.687 | 2.065574 | 749.0511 | 19.76975 | 866.0632 | 0 |
| RGINIA B 086 - HAYG | 767.2651 | 815.1669 | 2.065574 | 789.3113 | 11.44564 | 791.4026 |  |
| 810 VIRGINIA B 087 - HILLC | 615.51 | 700.2348 | 1.032787 | 644.1628 | 9.364619 | 668.7458 | 0 |
| VIRGINIA B 088 - NORT | 494.5305 | 610.8431 | 3.098361 | 527.6202 | 13.52667 | 571.687 | 108 |
| VIRGINIA B 089 - LAKE | 680.2447 | 721.5185 | 1.032787 | 713.0289 | 9.364619 | 689.0108 | 0 |
| 810 VIRGINIA B 090 - LAKE | 407.5101 | 518.2589 | 3.098361 | 425.9103 | 16.64821 | 492.7601 | 2.216216 |
| VIRGINIA B 091 - LEXIN | 786.3671 | 460.7928 | 2.065574 | 816.8577 | 20.81026 | 415.9663 | 2.216216 |
| VIRGINIA B 092 - LITTL | 449.959 | 692.7855 | 2.065574 | 479.9436 | 11.44564 | 661.2798 | 0 |
| 810 VIRGINIA B 093 - NEW | 913.714 | 169.2057 | 0 | 923.865 | 10.40513 | 151.4544 | 0 |
| VIRGINIA B 094 - PINEI | 314.1223 | 400.1342 | 1.032787 | 334.7951 | 11.44564 | 374.3697 | 1.108108 |
| 810 VIRGINIA B 095 - DAM | 357.6325 | 362.8876 | 0 | 385.6501 | 6.243079 | 339.1725 | 0 |
| 810 VIRGINIA B 096 - HILLT | 493.4692 | 308.6141 | 2.065574 | 500.0737 | 8.324105 | 294.3762 | 2.216216 |
| VIRGINIA B 097 - INDIA | 806.5304 | 378.8504 | 2.065574 | 820.0362 | 19.76975 | 351.9715 | 1.108108 |
| VIRGINIA B 098 - INDEI | 438.2856 | 273.496 | 0 | 449.2188 | 14.56718 | 250.6464 | 0 |
| NESBC001-WARI | 399.6588 | 393.8215 | 1.333333 | 393.5022 | 19.4 | 391.5681 |  |
| WAYNESBC 002 - WARI | 803.4916 | 911.6239 | 0 | 812.1215 | 32.67368 | 892.4836 | 0 |
| 820 WAYNESBC 003 - WARI | 530.0958 | 639.6995 | 1.333333 | 538.9724 | 14.29474 | 630.0497 | 0 |
| 820 WAYNESBC 004 - WARI | 881.7538 | 1265.855 | 1.333333 | 908.4039 | 30.63158 | 1229.899 | 0 |
| 830 WILLIAMSE 001 - STRYY | 1794.387 | 808.7104 | 1.333333 | 1816.652 | 25.96154 | 781.3634 |  |
| 830 WILLIAMSE 002 - MAT( | 1894.613 | 740.2896 | 2.666667 | 1908.348 | 28.03846 | 710.6366 | 1 |
| 840 WINCHEST 101 - MERF | 916.1632 | 770.5266 | 1 | 932.5868 | 15.28571 | 751.4403 | 0 |
| 40 WINCHEST 102 - OLD 1 | 617.9526 | 571.1596 | 1 | 618.4976 | 24.45714 | 561.1475 | 1 |
| 840 WINCHEST 201 - VIRGI | 650.2498 | 350.2394 | 1 | 657.2209 | 30.57143 | 323.2815 | 1 |
| 840 WINCHEST 301 - WAR | 556.588 | 501.1117 | 1 | 565.7908 | 22.41905 | 475.732 | 0 |
| 840 WINCHEST 401 - FRED | 268.0665 | 224.1532 | 0 | 269.9876 | 2.038095 | 229.2163 | 0 |
| 840 WINCHEST 402 -ROLLI | 533.9799 | 621.8096 | 2 | 524.9162 | 12.22857 | 628.1824 | 1 |

GE17LTGD GE17LTGR GE17LTGWGE17SLLD GE17SLLG GE17SLLI GE17SLLL GE17SLLR GE17SLLW

|  |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 410.2244 | 829.121 | 0 | 356.7851 | 0 | 0 | 0 | 878.7336 | 0 |
| 136.7415 | 414.0351 | 0 | 106.7021 | 0 | 0 | 0 | 446.7423 | 0 |
| 222.3439 | 470.781 | 0 | 202.2893 | 0 | 0 | 0 | 493.1023 | 7 |
| 385.7666 | 388.8146 | 1 | 362.3425 | 0 | 0 | 0 | 418.294 | 0 |
| 88.93755 | 238.543 | 0 | 70.02324 | 0 | 0 | 0 | 263.4093 | 0 |
| 185.6571 | 360.4417 | 0 | 127.8202 | 0 | 0 | 0 | 428.8304 | 0 |
| 27.79298 | 114.5427 | 0 | 23.34108 | 0 | 0 | 0 | 123.2756 | 0 |
| 240.1314 | 189.1531 | 0 | 226.7419 | 0 | 0 | 0 | 206.5129 | 0 |
| 264.5892 | 99.83079 | 0 | 257.8633 | 0 | 0 | 0 | 107.471 | 0 |
| 365.7557 | 503.3573 | 0 | 327.8866 | 0 | 0 | 0 | 553.1596 | 1 |
| 12.22891 | 167.0852 | 0 | 8.89184 | 0 | 0 | 0 | 174.9038 | 0 |
| 680.3722 | 856.4431 | 0 | 581.304 | 0 | 0 | 0 | 964.0782 | 1 |
| 186.7688 | 327.8653 | 0 | 162.2761 | 0 | 0 | 0 | 349.8076 | 0 |
| 330.1806 | 284.7805 | 0 | 308.9914 | 0 | 0 | 0 | 305.5548 | 1 |
| 135.6298 | 295.289 | 0 | 123.3743 | 0 | 0 | 0 | 310.823 | 1 |
| 794.8793 | 514.9167 | 1 | 771.3671 | 0 | 0 | 0 | 536.3014 | 4 |
| 1069.63 | 649.1953 | 3.24 | 1290.9 | 0 | 0 | 0 | 0 | 64.34968 |
| 442.3443 | 168.9395 | 0 | 496.5001 | 0 | 0 | 0 | 0 | 9.652452 |
| 910.6452 | 319.8163 | 0 | 1006.881 | 0 | 0 | 0 | 0 | 39.6823 |
| 1336.767 | 556.7567 | 0 | 1517.262 | 0 | 0 | 0 | 0 | 61.1322 |
| 1027.45 | 777.7593 | 0 | 906.0852 | 0 | 0 | 0 | 895.9646 | 0 |
| 821.9601 | 517.4437 | 1.08 | 821.7975 | 0 | 0 | 0 | 525.5042 | 1.142857 |
| 1453.572 | 361.2543 | 1.08 | 1580.259 | 0 | 0 | 0 | 0 | 54.69723 |
| 1056.651 | 292.191 | 0 | 1147.823 | 0 | 0 | 0 | 0 | 24.66738 |
| 449.915 | 328.3164 | 1.08 | 435.0693 | 0 | 0 | 0 | 350.6914 | 0 |
| 1634.186 | 888.2607 | 0 | 1628.214 | 0 | 0 | 0 | 922.0306 | 0 |
| 1071.793 | 623.695 | 1.08 | 1049.882 | 13.68421 | 44.49565 | 0 | 578.198 | 0 |
| 403.4094 | 264.5657 | 0 | 399.9122 | 0 | 0 | 0 | 271.8125 | 1.142857 |
| 1002.575 | 450.5054 | 4.32 | 960.9272 | 17.89474 | 44.49565 | 0 | 421.1827 | 4 |
| 513.725 | 277.3158 | 0 | 494.1911 | 8.421053 | 30.0087 | 0 | 254.6193 | 0 |
| 227.1205 | 180.6272 | 0 | 224.1266 | 0 | 0 | 0 | 186.538 | 0 |
| 398.0017 | 457.943 | 0 | 360.2767 | 0 | 0 | 0 | 488.708 | 1 |
| 387.1865 | 406.9424 | 0 | 358.1194 | 0 | 0 | 0 | 430.5285 | 0 |
| 2017.047 | 636.4451 | 3.24 | 2185.668 | 0 | 0 | 0 | 0 | 121.1919 |
| 855.4874 | 986.0118 | 0 | 765.8577 | 0 | 0 | 0 | 1063.099 | 0 |
| 468.3009 | 347.4417 | 2.16 | 432.5478 | 0 | 0 | 0 | 379.7536 | 1 |
| 491.013 | 469.6306 | 1.08 | 463.8293 | 0 | 0 | 0 | 497.1705 | 2 |
| 898.7485 | 576.9444 | 1.08 | 751.835 | 0 | 0 | 0 | 724.5995 | 2 |
| 1677.447 | 811.7597 | 1.08 | 1898.777 | 0 | 0 | 0 | 77.22009 | 127.6269 |
| 1042.591 | 873.3855 | 1.08 | 860.7809 | 0 | 0 | 0 | 1045.116 | 3 |
| 1539.012 | 921.1986 | 2.16 | 1557.9 | 0 | 0 | 0 | 929.4922 | 4.571429 |
| 448.8335 | 387.8172 | 0 | 422.8397 | 0 | 0 | 0 | 408.3145 | 1 |
| 998.2489 | 959.449 | 2.16 | 846.7582 | 0 | 0 | 0 | 1107.527 | 1 |
| 1742.339 | 1128.389 | 1.08 | 1736.981 | 0 | 0 | 0 | 1162.931 | 1.142857 |
| 87.58282 | 317.6511 | 0 | 0 | 0 | 0 | 0 | 355.4433 | 4.313043 |
| 34.82209 | 132.8737 | 0 | 0 | 0 | 0 | 0 | 137.5909 | 6.469565 |


| 73.86503 | 193.082 | 0 | 0 | 0 | 0 | 0 | 220.9794 | 2.156522 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80.19632 | 239.7954 | 1 | 0 | 0 | 0 | 0 | 268.9278 | 1.078261 |
| 46.42945 | 201.3866 | 0 | 0 | 0 | 0 | 0 | 212.6406 | 4.313043 |
| 139.2883 | 332.1841 | 0 | 0 | 0 | 0 | 0 | 388.7987 | 11.86087 |
| 94.96933 | 230.4528 | 1 | 0 | 0 | 0 | 0 | 266.8431 | 8.626087 |
| 106.5767 | 294.8134 | 0 | 0 | 0 | 0 | 0 | 349.1891 | 7.547826 |
| 72.80982 | 101.7314 | 0 | 0 | 0 | 0 | 0 | 139.6757 | 6.469565 |
| 144.5644 | 342.5649 | 0 | 0 | 0 | 0 | 0 | 406.5187 | 18.33043 |
| 281.7423 | 396.5448 | 0 | 0 | 0 | 0 | 0 | 543.0673 | 25.87826 |
| 213.1534 | 215.9197 | 0 | 0 | 0 | 0 | 0 | 303.3255 | 26.95652 |
| 219.754 | 535.5162 | 0 | 0 | 0 | 0 | 0 | 643.0219 | 20.71171 |
| 325.8421 | 669.6636 | 0 | 0 | 0 | 0 | 0 | 821.2216 | 25.07207 |
| 221.9191 | 708.298 | 1 | 0 | 0 | 0 | 0 | 790.0903 | 23.98198 |
| 224.0841 | 662.1513 | 1 | 0 | 0 | 0 | 0 | 745.0036 | 30.52252 |
| 359.4006 | 665.3709 | 0 | 0 | 0 | 0 | 0 | 827.6626 | 20.71171 |
| 380.9846 | 281.1393 | 0 | 355.376 | 0 | 0 | 0 | 288.4356 | 0 |
| 270.7559 | 586.0513 | 2 | 0 | 0 | 216.4241 | 0 | 606.8297 | 8 |
| 79.19343 | 347.2897 | 0 | 0 | 0 | 56.22782 | 0 | 360.3698 | 2 |
| 546.8627 | 918.8706 | 2 | 0 | 0 | 298.1135 | 0 | 1005.515 | 8 |
| 153.0359 | 384.4993 | 0 | 0 | 0 | 103.9684 | 0 | 419.3959 | 2 |
| 157.3167 | 434.1121 | 0 | 0 | 0 | 127.3083 | 0 | 442.1779 | 2 |
| 332.8264 | 1127.658 | 0 | 79.44961 | 0 | 211.1195 | 0 | 1152.07 | 0 |
| 85.61452 | 266.6689 | 0 | 0 | 0 | 60.47143 | 0 | 279.5973 | 0 |
| 479.4413 | 1058.407 | 6 | 134.2054 | 0 | 258.8602 | 0 | 1086.86 | 8 |
| 110.2287 | 243.9297 | 0 | 0 | 0 | 78.50677 | 0 | 258.8864 | 4 |
| 529.7398 | 934.3746 | 4 | 538.969 | 0 | 0 | 0 | 912.8624 | 8 |
| 69.3 | 332.8487 | 0 | 68.90722 | 9.529412 | 13.77037 | 0 | 299.6033 | 0 |
| 172.2 | 530.8989 | 1 | 172.268 | 8.470588 | 19.06667 | 0 | 499.6844 | 1.111111 |
| 76.65 | 161.7583 | 0 | 74.12746 | 1.058824 | 8.474074 | 0 | 154.4668 | 0 |
| 145.95 | 716.5061 | 0 | 132.5942 | 10.58824 | 24.36296 | 0 | 676.9583 | 3.333333 |
| 92.4 | 434.4661 | 0 | 95.00843 | 6.352941 | 14.82963 | 0 | 404.309 | 0 |
| 139.65 | 475.9426 | 0 | 138.8585 | 0 | 15.88889 | 0 | 455.1068 | 1.111111 |
| 193.2 | 621.1102 | 2 | 180.6204 | 12.70588 | 23.3037 | 0 | 582.6196 | 1.111111 |
| 177.45 | 511.1976 | 1 | 167.0478 | 4.235294 | 20.12593 | 0 | 488.2808 | 2.222222 |
| 88.2 | 204.2716 | 1 | 84.56795 | 1.058824 | 3.177778 | 0 | 196.971 | 1.111111 |
| 1165.912 | 220.1177 | 2.2 | 1064.74 | 0 | 0 | 0 | 224.9501 | 2.285714 |
| 1468.931 | 334.0872 | 2.2 | 1595.577 | 0 | 0 | 0 | 0 | 55.64914 |
| 884.1992 | 364.2556 | 2.2 | 926.5007 | 0 | 0 | 0 | 0 | 58.80508 |
| 1333.993 | 328.5005 | 0 | 1442.18 | 0 | 0 | 0 | 0 | 65.12133 |
| 1204.973 | 317.327 | 1.1 | 1328.641 | 0 | 0 | 0 | 0 | 52.09707 |
| 937.4642 | 294.98 | 2.2 | 1041.039 | 0 | 0 | 0 | 0 | 46.09911 |
| 1394.36 | 395.5414 | 2.2 | 1531.226 | 0 | 0 | 0 | 0 | 62.2338 |
| 1517.461 | 451.4088 | 2.2 | 1406.741 | 0 | 0 | 0 | 442.2564 | 3.428571 |
| 1783.786 | 377.6638 | 2.2 | 1639.168 | 0 | 0 | 0 | 375.6449 | 6.857143 |
| 1581.379 | 422.3578 | 0 | 1693.812 | 0 | 0 | 0 | 0 | 87.58831 |
| 997.8312 | 308.3882 | 0 | 1130.553 | 0 | 0 | 0 | 0 | 41.44085 |
| 1449.992 | 443.5874 | 2.2 | 1463.781 | 0 | 0 | 0 | 0 | 62.07203 |


| 980.0762 | 227.9391 | 0 | 1089.486 | 0 | 0 | 0 | 0 | 27.23256 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1039.26 | 243.582 | 1.1 | 1137.8 | 0 | 0 | 0 | 0 | 29.60061 |
| 796.6079 | 188.8319 | 1.1 | 872.0717 | 0 | 0 | 0 | 0 | 34.3367 |
| 1435.788 | 407.8322 | 1.1 | 1562.772 | 0 | 0 | 0 | 0 | 74.91105 |
| 1544.685 | 448.0568 | 2.2 | 1683.751 | 0 | 0 | 0 | 0 | 65.12133 |
| 1760.113 | 444.7047 | 2.2 | 1897.541 | 0 | 0 | 0 | 0 | 76.96158 |
| 1499.706 | 336.3219 | 6.6 | 1584.612 | 0 | 0 | 0 | 0 | 73.75858 |
| 1320.972 | 527.3885 | 2.2 | 1469.346 | 0 | 0 | 0 | 0 | 79.52097 |
| 819.0975 | 278.2198 | 1.1 | 753.7296 | 0 | 0 | 0 | 274.0897 | 1.142857 |
| 1608.603 | 401.1281 | 4.4 | 1636.519 | 0 | 0 | 0 | 0 | 65.33898 |
| 1439.339 | 336.3219 | 0 | 1555.718 | 0 | 0 | 0 | 0 | 56.83316 |
| 1834.684 | 421.2404 | 1.1 | 1997.145 | 0 | 0 | 0 | 0 | 78.36849 |
| 1271.258 | 330.7352 | 1.1 | 1386.618 | 0 | 0 | 0 | 0 | 61.56926 |
| 1736.439 | 345.2607 | 6.6 | 1618.139 | 0 | 0 | 0 | 322.1373 | 6.857143 |
| 1427.502 | 357.5515 | 0 | 1416.654 | 0 | 0 | 0 | 212.9382 | 25.9662 |
| 1609.787 | 308.3882 | 3.3 | 1499.712 | 0 | 0 | 0 | 293.7456 | 4.571429 |
| 1542.318 | 359.7862 | 2.2 | 1674.088 | 0 | 0 | 0 | 0 | 59.20121 |
| 1336.36 | 215.6483 | 2.2 | 1234.08 | 0 | 0 | 0 | 223.8582 | 4.571429 |
| 1463.012 | 420.1231 | 0 | 1610.071 | 0 | 0 | 0 | 0 | 72.22548 |
| 516.0788 | 215.6483 | 1.1 | 542.889 | 0 | 0 | 0 | 0 | 30.49153 |
| 1420.4 | 536.3273 | 0 | 1588.252 | 0 | 0 | 0 | 0 | 69.14867 |
| 1309.136 | 407.8322 | 1.1 | 1430.519 | 0 | 0 | 0 | 0 | 71.45362 |
| 1351.748 | 681.5826 | 3.3 | 1578.546 | 0 | 0 | 0 | 0 | 106.028 |
| 1477.216 | 459.2303 | 2.2 | 1656.199 | 0 | 0 | 0 | 0 | 74.91105 |
| 1291.381 | 438.0006 | 1.1 | 1442.18 | 0 | 0 | 0 | 0 | 62.75329 |
| 1266.524 | 202.2401 | 1.1 | 1152.177 | 0 | 0 | 0 | 220.5822 | 4.571429 |
| 859.3422 | 233.5258 | 0 | 962.6609 | 0 | 0 | 0 | 0 | 37.88878 |
| 1523.379 | 402.2455 | 3.3 | 1622.15 | 0 | 0 | 0 | 0 | 97.08999 |
| 1142.239 | 253.6381 | 4.4 | 1236.844 | 0 | 0 | 0 | 0 | 46.17695 |
| 1184.851 | 254.7555 | 1.1 | 1201.31 | 0 | 0 | 0 | 0 | 40.29237 |
| 982.4436 | 125.143 | 0 | 915.3221 | 0 | 0 | 0 | 123.395 | 0 |
| 1072.402 | 189.9493 | 2.2 | 1122.333 | 0 | 0 | 0 | 0 | 34.57433 |
| 1006.117 | 205.5921 | 0 | 1099.149 | 0 | 0 | 0 | 0 | 30.78463 |
| 1441.706 | 379.8985 | 4.4 | 1578.667 | 0 | 0 | 0 | 0 | 81.69767 |
| 1187.218 | 185.4799 | 1.1 | 1106.798 | 0 | 0 | 0 | 174.7186 | 0 |
| 916.1582 | 271.5157 | 0 | 1003.728 | 0 | 0 | 0 | 0 | 30.78463 |
| 801.3425 | 174.3064 | 0 | 861.201 | 0 | 0 | 0 | 0 | 31.96866 |
| 924.4439 | 321.7964 | 2.2 | 1019.199 | 0 | 0 | 0 | 0 | 48.40407 |
| 377.5898 | 127.3777 | 0 | 431.2044 | 0 | 0 | 0 | 0 | 7.104146 |
| 925.6276 | 226.8218 | 2.2 | 867.7298 | 0 | 0 | 0 | 217.3062 | 1.142857 |
| 1073.586 | 308.3882 | 0 | 1002.759 | 0 | 0 | 0 | 289.3776 | 2.285714 |
| 581.1805 | 156.4288 | 0 | 641.3713 | 0 | 0 | 0 | 0 | 23.68049 |
| 203.5138 | 417.4288 | 0 | 224.3661 | 0 | 0 | 15.70213 | 380.848 | 1 |
| 209.8406 | 482.8467 | 0 | 226.463 | 0 | 0 | 18.84255 | 442.9428 | 0 |
| 297.3621 | 880.5463 | 1.133333 | 339.6784 | 0 | 0 | 0 | 844.0111 | 3.6 |
| 253.0741 | 895.0836 | 0 | 291.1529 | 0 | 0 | 0 | 859.6797 | 0 |
| 176.0974 | 655.2178 | 0 | 195.1569 | 0 | 0 | 0 | 641.3649 | 0 |


| 323.724 | 889.8917 | 0 | 341.7882 | 0 | 0 | 0 | 877.4373 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 506.1482 | 1392.468 | 1.133333 | 580.1961 | 0 | 0 | 0 | 1337.047 | 3.6 |
| 110.7199 | 415.352 | 0 | 126.8612 | 0 | 0 | 16.74894 | 381.883 | 0 |
| 101.2296 | 569.0323 | 0 | 116.3768 | 0 | 0 | 15.70213 | 539.1898 | 0 |
| 141.2997 | 479.7316 | 0 | 166.7019 | 0 | 0 | 14.65532 | 438.8032 | 0 |
| 143.4087 | 545.1495 | 0 | 170.8957 | 0 | 0 | 18.84255 | 505.0376 | 0 |
| 146.5721 | 596.0301 | 1.133333 | 166.7019 | 0 | 0 | 27.21702 | 556.7833 | 0 |
| 81.19461 | 342.6654 | 0 | 0 | 0 | 68.46196 | 0 | 348.2163 | 0 |
| 46.39692 | 199.369 | 0 | 50.3251 | 0 | 0 | 7.32766 | 189.3891 | 0 |
| 268.8912 | 693.6379 | 0 | 314.5319 | 0 | 0 | 39.77872 | 610.5988 | 1 |
| 223.5488 | 896.122 | 0 | 0 | 0 | 193.8 | 0 | 899.9894 | 4.363636 |
| 133.9184 | 441.3115 | 2.266667 | 0 | 0 | 126.3913 | 0 | 438.112 | 1.090909 |
| 128.646 | 466.2326 | 1.133333 | 0 | 0 | 112.6989 | 0 | 476.3434 | 0 |
| 246.7472 | 951.1561 | 1.133333 | 117.4252 | 0 | 133.7641 | 20.93617 | 916.9996 | 0 |
| 177.1519 | 578.3777 | 0 | 208.6395 | 0 | 0 | 17.79574 | 524.701 | 0 |
| 380.6656 | 1311.474 | 2.266667 | 0 | 0 | 333.8837 | 0 | 1321.569 | 6.545455 |
| 343.759 | 897.1603 | 2.266667 | 361.7117 | 0 | 0 | 32.45106 | 847.5939 | 3 |
| 204.5682 | 680.1389 | 1.133333 | 228.9137 | 0 | 0 | 0 | 664.3454 | 0 |
| 492.44 | 1173.369 | 1.133333 | 530.6157 | 0 | 0 | 0 | 1145.891 | 2.4 |
| 408.082 | 790.2072 | 2.266667 | 451.498 | 0 | 0 | 0 | 755.2228 | 2.4 |
| 98.77387 | 165.3664 | 0 | 0 | 0 | 82.03883 | 0 | 177.2375 | 0 |
| 10.85427 | 47.84184 | 1 | 0 | 0 | 8.750809 | 0 | 51.08609 | 0 |
| 83.57789 | 144.5656 | 0 | 0 | 0 | 61.25566 | 0 | 157.4286 | 0 |
| 45.58794 | 189.2873 | 0 | 0 | 0 | 40.47249 | 0 | 193.9186 | 1 |
| 11.9397 | 41.6016 | 0 | 0 | 0 | 6.563107 | 0 | 45.87323 | 0 |
| 90.09045 | 223.6086 | 0 | 0 | 0 | 67.81877 | 0 | 236.6641 | 1 |
| 91.17588 | 226.7287 | 0 | 0 | 0 | 71.10032 | 0 | 239.7919 | 8 |
| 213.939 | 892.5635 | 1 | 0 | 0 | 0 | 0 | 927.4565 | 27.38931 |
| 141.9093 | 394.8281 | 0 | 0 | 0 | 0 | 0 | 427.7358 | 22.12214 |
| 199.9631 | 626.8946 | 0 | 0 | 0 | 0 | 0 | 683.2206 | 17.38843 |
| 150.5099 | 593.2922 | 1 | 0 | 0 | 0 | 0 | 609.2627 | 26.33588 |
| 98.90647 | 330.7735 | 0 | 0 | 0 | 0 | 0 | 340.1021 | 4.21374 |
| 118.2577 | 474.6338 | 1 | 0 | 0 | 0 | 0 | 500.6087 | 11.95455 |
| 311.7704 | 953.4679 | 1 | 0 | 0 | 0 | 0 | 1038.999 | 32.60331 |
| 92.45605 | 318.1726 | 0 | 0 | 0 | 0 | 0 | 348.432 | 4.347107 |
| 244.041 | 761.3042 | 0 | 0 | 0 | 0 | 0 | 835.3973 | 26.08264 |
| 364.2756 | 1642.764 | 0 | 0 | 0 | 0 | 0 | 1752.655 | 41.29752 |
| 170.9362 | 670.9978 | 0 | 0 | 0 | 0 | 0 | 704.1992 | 12.64122 |
| 127.9334 | 406.3789 | 0 | 0 | 0 | 0 | 0 | 444.9855 | 8.694215 |
| 129.2591 | 434.5442 | 1 | 0 | 0 | 0 | 0 | 467.0249 | 18.47521 |
| 79.55521 | 370.6764 | 0 | 0 | 0 | 0 | 0 | 399.8572 | 8.694215 |
| 334.3644 | 1074.434 | 3 | 323.7868 | 0 | 0 | 0 | 1092.371 | 0 |
| 188.0132 | 576.6266 | 2 | 0 | 0 | 0 | 0 | 655.9338 | 24.99587 |
| 414.4837 | 1263.186 | 1 | 0 | 0 | 0 | 0 | 1368.54 | 40.21074 |
| 241.4261 | 987.3176 | 0 | 0 | 0 | 0 | 0 | 1046.346 | 28.2562 |
| 83.32404 | 244.7552 | 0 | 88.69407 | 0 | 0 | 0 | 240.1964 | 0 |
| 102.5527 | 325.6489 | 1 | 99.3801 | 0 | 0 | 0 | 323.743 | 2 |


| 124.9861 | 527.883 | 0 | 130.3696 | 0 | 0 | 0 | 524.2548 | 0 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | ---: | ---: |
| 363.2073 | 969.6869 | 1 | 369.7367 | 0 | 0 | 0 | 964.963 | 3 |
| 374.9582 | 1362.747 | 0 | 384.6972 | 0 | 0 | 0 | 1349.277 | 3 |
| 190.1497 | 626.4074 | 0 | 0 | 0 | 0 | 0 | 659.3391 | 29.49618 |
| 175.2365 | 624.7945 | 0 | 0 | 0 | 0 | 0 | 659.3391 | 31.60305 |
| 47.3031 | 161.7115 | 1 | 50.22435 | 0 | 0 | 0 | 154.5612 | 0 |
| 327.8965 | 833.7593 | 1 | 0 | 0 | 0 | 0 | 898.2452 | 35.81679 |
| 204.2634 | 1081.577 | 0 | 0 | 0 | 0 | 0 | 1102.724 | 29.49618 |
| 188.1373 | 521.8871 | 0 | 173.1137 | 0 | 0 | 0 | 525.2991 | 1 |
| 96.75633 | 424.2302 | 0 | 106.8603 | 0 | 0 | 0 | 406.2452 | 1 |
| 447.2293 | 798.0568 | 0 | 2.137206 | 0 | 0 | 0 | 884.685 | 56.8855 |
| 47.25 | 200.1498 | 0 | 39.64987 | 0 | 0 | 0 | 203.1354 | 0 |
| 44.02841 | 240.8052 | 1 | 55.72414 | 0 | 0 | 0 | 226.0533 | 1 |
| 16.10795 | 64.63171 | 0 | 20.36074 | 0 | 0 | 0 | 59.37805 | 0 |
| 106.3125 | 420.1061 | 0 | 112.5199 | 0 | 0 | 0 | 398.9788 | 1 |
| 32.21591 | 199.1074 | 1 | 36.43501 | 0 | 0 | 0 | 195.8434 | 0 |
| 21.47727 | 110.4994 | 0 | 21.43236 | 0 | 0 | 0 | 111.4641 | 0 |
| 110.608 | 434.7004 | 0 | 117.878 | 0 | 0 | 0 | 428.147 | 0 |
| 417.9504 | 972.3834 | 0 | 0 | 0 | 0 | 0 | 1171.397 | 40.59347 |
| 309.154 | 1187.652 | 0 | 0 | 0 | 0 | 0 | 1277.024 | 47.00297 |
| 309.154 | 975.5337 | 0 | 0 | 0 | 0 | 0 | 1055.208 | 58.75371 |
| 318.8488 | 1041.689 | 3.25 | 0 | 0 | 0 | 0 | 1127.034 | 45.93472 |
| 248.8313 | 810.6695 | 3.25 | 0 | 0 | 0 | 0 | 942.1879 | 26.70623 |
| 268.2207 | 818.0201 | 1.083333 | 0 | 0 | 0 | 0 | 944.3005 | 20.29674 |
| 144.3437 | 579.6497 | 3.25 | 0 | 0 | 0 | 0 | 635.8712 | 20.29674 |
| 408.2557 | 1112.045 | 1.083333 | 0 | 0 | 0 | 0 | 1270.686 | 58.75371 |
| 179.891 | 539.7463 | 0 | 45.86667 | 0 | 0 | 0 | 583.4095 | 22.43323 |
| 479.3503 | 1291.611 | 1.083333 | 434.1333 | 0 | 0 | 0 | 1252.881 | 24.22849 |
| 124.5156 | 120.3878 | 0 | 172.0449 | 0 | 0 | 0 | 0 | 14.56757 |
| 159.0452 | 224.5069 | 0 | 278.6494 | 0 | 0 | 0 | 0 | 21.85135 |
| 144.3963 | 283.0739 | 0 | 265.9836 | 0 | 0 | 0 | 0 | 35.37838 |
| 80.56895 | 82.42766 | 0 | 115.0484 | 0 | 0 | 0 | 0 | 8.324324 |
| 281.4681 | 133.4027 | 1 | 338.8124 | 0 | 0 | 0 | 0 | 16.64865 |
| 257.4021 | 125.8106 | 0 | 320.8691 | 0 | 0 | 0 | 0 | 14.56757 |
| 46.0394 | 63.98989 | 0 | 73.88432 | 0 | 0 | 0 | 0 | 7.283784 |
| 242.7532 | 226.6761 | 0 | 339.8679 | 0 | 0 | 0 | 0 | 20.81081 |
| 104.635 | 111.7112 | 0 | 139.3247 | 0 | 0 | 0 | 0 | 8.324324 |
| 111.9594 | 79.17394 | 0 | 136.1583 | 0 | 0 | 0 | 0 | 17.68919 |
| 417.4936 | 296.0888 | 0 | 546.744 | 0 | 0 | 0 | 0 | 38.5 |
| 182.0649 | 85.68138 | 0 | 221.653 | 0 | 0 | 0 | 0 | 5.202703 |
| 556.6582 | 206.0691 | 0 | 645.9601 | 0 | 0 | 0 | 0 | 21.85135 |
| 33.48113 | 140.2837 | 0 | 36.74194 | 0 | 0 | 0 | 139.2541 | 0 |
| 58.03396 | 314.279 | 1.166667 | 57.89638 | 0 | 0 | 0 | 313.3218 | 2.8 |
| 27.90094 | 33.71158 | 0 | 30.06158 | 0 | 0 | 0 | 30.46184 | 0 |
| 53.56981 | 181.6076 | 1.166667 | 42.3089 | 0 | 0 | 0 | 190.3865 | 1.4 |
| 79.23868 | 184.87 | 0 | 69.0303 | 0 | 0 | 0 | 195.8261 | 1.4 |
| 101.5594 | 225.1064 | 1.166667 | 85.73118 | 0 | 0 | 0 | 239.3431 | 0 |


| 71.42642 | 235.9811 | 0 | 69.0303 | 0 | 0 | 0 | 236.0793 | 1.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 114.9519 | 382.7896 | 0 | 100.2053 | 0 | 0 | 0 | 393.8281 | 0 |
| 7.812264 | 41.32388 | 0 | 7.793744 | 0 | 0 | 0 | 41.34107 | 0 |
| 111.6038 | 163.1206 | 0 | 103.5455 | 0 | 0 | 0 | 168.6281 | 0 |
| 54.68585 | 48.93617 | 1.166667 | 55.6696 | 0 | 0 | 0 | 45.69277 | 0 |
| 74.77453 | 225.1064 | 1.166667 | 71.25709 | 0 | 0 | 0 | 230.6397 | 0 |
| 50.2217 | 142.4586 | 0 | 51.21603 | 0 | 0 | 0 | 141.43 | 0 |
| 73.65849 | 227.2813 | 1.166667 | 85.73118 | 0 | 0 | 0 | 223.0242 | 0 |
| 77.0066 | 127.234 | 0 | 80.16422 | 0 | 0 | 0 | 124.0232 | 0 |
| 128.3443 | 297.9669 | 0 | 124.6999 | 0 | 0 | 0 | 317.6735 | 0 |
| 64.73019 | 247.9433 | 0 | 67.91691 | 0 | 0 | 0 | 248.0464 | 0 |
| 264.833 | 346.5064 | 0 | 246.6179 | 6.26087 | 14.73684 | 0 | 329.9147 | 3.375 |
| 69.08686 | 119.7022 | 1 | 62.69946 | 1.043478 | 4.210526 | 0 | 117.6766 | 2.25 |
| 183.1849 | 232.0543 | 0 | 173.4685 | 2.086957 | 11.57895 | 0 | 221.6943 | 1.125 |
| 172.7171 | 295.0555 | 0 | 158.8386 | 3.130435 | 8.421053 | 0 | 293.1408 | 1.125 |
| 79.55457 | 260.4048 | 0 | 73.14937 | 1.043478 | 8.421053 | 0 | 254.2655 | 0 |
| 260.6459 | 468.3087 | 0 | 244.5279 | 4.173913 | 9.473684 | 0 | 465.4529 | 0 |
| 78.5078 | 238.3544 | 0 | 66.87942 | 4.173913 | 5.263158 | 0 | 239.5559 | 0 |
| 229.2428 | 214.204 | 0 | 205.8632 | 14.6087 | 15.78947 | 0 | 200.6806 | 0 |
| 343.3408 | 262.5049 | 0 | 321.8572 | 6.26087 | 9.473684 | 0 | 252.1641 | 0 |
| 198.8864 | 249.9047 | 1 | 188.0984 | 5.217391 | 12.63158 | 0 | 237.4545 | 1.125 |
| 347.8363 | 1202.912 | 0 | 0 | 0 | 0 | 0 | 1290.854 | 50.3949 |
| 299.4965 | 1158.129 | 1.277778 | 14.70886 | 0 | 2.061856 | 0 | 1225.784 | 41.63057 |
| 255.3602 | 817.5639 | 1.277778 | 0 | 0 | 0 | 0 | 894.7846 | 31.7707 |
| 310.0052 | 1229.991 | 1.277778 | 337.2532 | 13.33333 | 37.1134 | 0 | 1131.026 | 1.227273 |
| 117.6969 | 402.0123 | 1.277778 | 119.7722 | 2.222222 | 26.80412 | 0 | 363.4698 | 3.681818 |
| 104.0356 | 380.1412 | 0 | 100.8608 | 3.333333 | 21.64948 | 0 | 353.0552 | 0 |
| 418.2443 | 824.8543 | 0 | 397.1392 | 15.55556 | 46.39175 | 0 | 761.3079 | 4.909091 |
| 158.6806 | 814.4394 | 2.555556 | 161.7975 | 14.44444 | 65.97938 | 0 | 714.4421 | 6.136364 |
| 337.3277 | 1367.467 | 3.833333 | 336.2025 | 23.33333 | 68.04124 | 0 | 1247.67 | 4.909091 |
| 278.4792 | 1132.092 | 6.388889 | 65.13924 | 2.222222 | 13.40206 | 0 | 1185.153 | 31.7707 |
| 248.0041 | 623.8481 | 0 | 249 | 4.444444 | 32.98969 | 0 | 586.3425 | 1.227273 |
| 252.2076 | 665.5074 | 1.277778 | 95.60759 | 3.333333 | 13.40206 | 0 | 681.6332 | 16.43312 |
| 327.8699 | 1056.063 | 1.277778 | 326.7468 | 32.22222 | 53.60825 | 0 | 959.1855 | 3.681818 |
| 223.8342 | 494.7043 | 0 | 209.1495 | 0 | 0 | 0 | 502.2665 | 0 |
| 276.3775 | 687.3785 | 1.277778 | 262.9305 | 4.444444 | 9.278351 | 0 | 675.7819 | 3.227273 |
| 114.5443 | 348.8967 | 1.277778 | 108.6921 | 1.111111 | 9.278351 | 0 | 342.2438 | 0 |
| 273.7012 | 564.0491 | 1 | 278.5149 | 0 | 0 | 0 | 558.6312 | 0 |
| 227.7361 | 374.9765 | 0 | 224.563 | 0 | 0 | 0 | 377.9507 | 1 |
| 346.8275 | 309.4876 | 1 | 347.7679 | 0 | 0 | 0 | 306.6541 | 2 |
| 376.078 | 413.0022 | 0 | 384.3201 | 0 | 0 | 0 | 401.0908 | 0 |
| 135.806 | 205.973 | 1 | 136.1373 | 0 | 0 | 0 | 204.0387 | 0 |
| 394.8819 | 523.9108 | 1 | 332.2331 | 0 | 0 | 0 | 563.2309 | 1 |
| 730.2182 | 440.4653 | 0 | 724.7776 | 0 | 0 | 0 | 431.8624 | 2 |
| 252.808 | 159.497 | 0 | 239.1557 | 0 | 0 | 0 | 161.2852 | 1 |
| 478.4548 | 286.2496 | 0 | 461.6019 | 0 | 0 | 0 | 297.1043 | 0 |
| 246.54 | 332.7256 | 0 | 239.0736 | 0 | 0 | 0 | 334.6444 | 2 |


| 358.3188 | 374.9765 | 0 | 359.2558 | 0 | 0 | 0 | 373.5026 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 248.6294 | 275.6869 | 0 | 249.5992 | 0 | 0 | 0 | 278.0048 | 0 |
| 66.83776 | 234.2116 | 0 | 0 | 0 | 54.13616 | 0 | 231.2559 | 1.052632 |
| 92.29976 | 364.91 | 0 | 0 | 0 | 77.48902 | 0 | 365.1959 | 1.052632 |
| 42.43667 | 218.5277 | 1 | 0 | 0 | 37.15227 | 0 | 211.3742 | 2.105263 |
| 111.3963 | 325.1776 | 1 | 0 | 0 | 90.22694 | 0 | 333.8037 | 1.052632 |
| 252.4982 | 731.9111 | 0 | 0 | 0 | 174.0849 | 0 | 760.7377 | 1.052632 |
| 80.62967 | 273.9439 | 0 | 0 | 0 | 73.24305 | 0 | 274.1586 | 1.052632 |
| 126.2491 | 386.8673 | 0 | 0 | 0 | 97.65739 | 0 | 389.2633 | 1.052632 |
| 235.5235 | 769.5522 | 1 | 0 | 0 | 188.9458 | 0 | 784.805 | 5.263158 |
| 73.20326 | 314.7218 | 0 | 0 | 0 | 63.6896 | 0 | 313.922 | 2.105263 |
| 43.49759 | 164.1572 | 0 | 0 | 0 | 38.21376 | 0 | 164.2859 | 0 |
| 177.1731 | 570.8907 | 0 | 0 | 0 | 148.6091 | 0 | 574.4773 | 1.052632 |
| 85.93426 | 360.7276 | 0 | 0 | 0 | 83.85798 | 0 | 349.4998 | 1.052632 |
| 81.69059 | 256.1689 | 0 | 0 | 0 | 68.99707 | 0 | 258.4625 | 1.052632 |
| 23.34017 | 96.19403 | 0 | 0 | 0 | 21.22987 | 0 | 97.31582 | 0 |
| 43.49759 | 216.4366 | 0 | 0 | 0 | 47.7672 | 0 | 209.2813 | 0 |
| 110.3353 | 571.9362 | 0 | 0 | 0 | 87.04246 | 0 | 581.8021 | 1.052632 |
| 58.35042 | 279.1718 | 0 | 0 | 0 | 46.70571 | 0 | 290.9011 | 0 |
| 54.10676 | 309.4938 | 0 | 0 | 0 | 50.95168 | 0 | 303.4579 | 0 |
| 544.4555 | 389.9357 | 0 | 538.9263 | 0 | 348.133 | 0 | 0 | 3.5 |
| 569.6516 | 270.3698 | 0 | 570.757 | 0 | 222.8051 | 0 | 0 | 7 |
| 583.8929 | 344.6945 | 1 | 543.3167 | 0 | 347.0618 | 0 | 0 | 10.5 |
| 220.1735 | 371.0908 | 0 | 218.7826 | 0 | 0 | 0 | 372.4286 | 0 |
| 208.3593 | 412.7864 | 0 | 193.0435 | 0 | 0 | 0 | 423.5462 | 1 |
| 156.8065 | 307.505 | 0 | 144.7826 | 0 | 0 | 0 | 312.9652 | 0 |
| 213.7294 | 412.7864 | 0 | 195.1884 | 0 | 0 | 0 | 421.4598 | 0 |
| 201.9152 | 312.717 | 4 | 199.4783 | 0 | 0 | 0 | 316.0948 | 1 |
| 198.6931 | 472.2027 | 2 | 195.1884 | 0 | 0 | 0 | 469.4478 | 3 |
| 193.3231 | 292.9116 | 1 | 185.5362 | 0 | 0 | 0 | 291.0576 | 0 |
| 458.8416 | 428.7218 | 0 | 464.523 | 0 | 0 | 0 | 399.4202 | 1.086957 |
| 680.2779 | 798.4944 | 3.125 | 660.7871 | 0 | 0 | 0 | 817.5189 | 1.0625 |
| 796.319 | 1144.687 | 0 | 780.8611 | 0 | 0 | 0 | 1120.067 | 5.434783 |
| 665.3735 | 1083.594 | 2.083333 | 675.7654 | 0 | 0 | 0 | 1040.817 | 2.173913 |
| 536.232 | 407.1337 | 1.028571 | 728.7201 | 0 | 0 | 0 | 0 | 50.31925 |
| 1227.481 | 1033.22 | 2.083333 | 1220.246 | 0 | 0 | 0 | 1042.93 | 5.3125 |
| 775.0271 | 778.1301 | 1.041667 | 762.1149 | 0 | 0 | 0 | 797.027 | 1.0625 |
| 835.7091 | 1482.306 | 1.041667 | 807.3891 | 0 | 0 | 0 | 1515.322 | 2.125 |
| 1222.158 | 1205.78 | 0 | 1207.55 | 0 | 0 | 0 | 1175.014 | 2.173913 |
| 538.6864 | 586.2771 | 1.041667 | 517.0709 | 0 | 0 | 0 | 586.4503 | 2.173913 |
| 1244.515 | 1369.766 | 3.125 | 1209.467 | 0 | 0 | 0 | 1404.234 | 8.5 |
| 751.6059 | 674.1651 | 1.041667 | 712.529 | 0 | 0 | 0 | 710.7453 | 4.25 |
| 562.1075 | 704.1756 | 1.041667 | 559.1091 | 0 | 0 | 0 | 666.757 | 2.173913 |
| 1141.484 | 627.0917 | 1.028571 | 1161.308 | 0 | 0 | 0 | 583.2803 | 3.26087 |
| 207.5965 | 233.6534 | 0 | 213.3443 | 0 | 0 | 0 | 218.7301 | 1.086957 |
| 619.0559 | 486.4455 | 1.028571 | 594.1954 | 0 | 0 | 0 | 487.7905 | 1.085714 |
| 868.5896 | 468.4682 | 0 | 1092.526 | 0 | 0 | 0 | 0 | 48.13146 |


| 750.7248 | 145.9337 | 0 | 831.8723 | 0 | 0 | 0 | 0 | 16.40845 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 389.6973 | 141.7037 | 0 | 459.1935 | 0 | 0 | 0 | 0 | 9.84507 |
| 1060.784 | 410.3062 | 2.057143 | 1252.245 | 0 | 0 | 0 | 0 | 48.13146 |
| 869.7763 | 956.0497 | 0 | 882.8039 | 0 | 0 | 0 | 904.5071 | 2.173913 |
| 1417.564 | 733.8982 | 4.114286 | 1427.2 | 0 | 0 | 0 | 695.287 | 3.26087 |
| 866.5825 | 1661.297 | 0 | 822.4805 | 0 | 0 | 0 | 1717.005 | 1.0625 |
| 411.9961 | 531.9176 | 1.028571 | 398.2262 | 0 | 0 | 0 | 529.6609 | 1.085714 |
| 1928.311 | 503.3654 | 0 | 2179.505 | 0 | 0 | 0 | 0 | 57.97653 |
| 147.5965 | 24.32228 | 0 | 161.9378 | 0 | 0 | 0 | 0 | 2.187793 |
| 413.0579 | 161.796 | 0 | 401.4656 | 0 | 0 | 0 | 161.6701 | 0 |
| 1331.812 | 322.6132 | 3.125 | 1404.125 | 0 | 0 | 0 | 0 | 32.12319 |
| 281.3891 | 414.5362 | 1.028571 | 269.3267 | 0 | 0 | 0 | 411.377 | 0 |
| 1033.724 | 961.4087 | 2.083333 | 1314.875 | 0 | 0 | 0 | 0 | 110.8768 |
| 531.2342 | 1494.096 | 2.083333 | 503.4055 | 0 | 0 | 0 | 1519.636 | 5.3125 |
| 151.1729 | 590.5643 | 2.083333 | 153.0698 | 0 | 0 | 0 | 591.0295 | 0 |
| 512.8714 | 1524.901 | 1.028571 | 481.8464 | 0 | 0 | 0 | 1584.347 | 0 |
| 992.8256 | 1155.837 | 3.085714 | 975.5502 | 0 | 0 | 0 | 1198.237 | 2.125 |
| 315.3681 | 240.0503 | 1.028571 | 308.1013 | 0 | 0 | 0 | 233.4277 | 1.085714 |
| 1044.856 | 1832.631 | 1.028571 | 1026.614 | 0 | 0 | 0 | 1829.969 | 0 |
| 783.642 | 1060.663 | 3.085714 | 743.4466 | 0 | 0 | 0 | 1084.857 | 3.375 |
| 1051.227 | 1400.117 | 3.085714 | 1010.706 | 0 | 0 | 0 | 1411.902 | 2.25 |
| 585.0769 | 1300.713 | 0 | 567.9963 | 0 | 0 | 0 | 1287.516 | 0 |
| 681.7048 | 876.6594 | 0 | 651.8334 | 0 | 0 | 0 | 881.3726 | 1.085714 |
| 934.424 | 1333.495 | 2.057143 | 914.1067 | 0 | 0 | 0 | 1380.507 | 3.1875 |
| 254.8429 | 346.8568 | 1.028571 | 249.0079 | 0 | 0 | 0 | 363.4615 | 0 |
| 516.0569 | 666.2189 | 0 | 489.3991 | 0 | 0 | 0 | 670.9737 | 0 |
| 1332.616 | 1204.481 | 1.028571 | 1303.667 | 0 | 0 | 0 | 1192.261 | 8.685714 |
| 889.8265 | 1031.053 | 5.142857 | 877.0761 | 0 | 0 | 0 | 1036.171 | 2.25 |
| 906.8161 | 714.8634 | 3.085714 | 885.5294 | 0 | 0 | 0 | 704.47 | 1.085714 |
| 894.0739 | 982.4084 | 1.028571 | 855.1384 | 0 | 0 | 0 | 994.4227 | 3.257143 |
| 711.4365 | 1003.558 | 1.028571 | 678.456 | 0 | 0 | 0 | 1035.721 | 0 |
| 466.1502 | 613.3443 | 1.028571 | 461.104 | 0 | 0 | 0 | 606.0745 | 1.085714 |
| 1364.471 | 793.1177 | 2.057143 | 1333.01 | 0 | 0 | 0 | 778.79 | 4.342857 |
| 541.5412 | 433.571 | 2.057143 | 511.4063 | 0 | 0 | 0 | 449.0604 | 0 |
| 510.7477 | 506.5378 | 1.028571 | 506.1665 | 0 | 0 | 0 | 491.9776 | 1.085714 |
| 842.0435 | 975.006 | 0 | 813.443 | 0 | 0 | 0 | 995.9518 | 1.125 |
| 825.054 | 699.0011 | 1.028571 | 825.8082 | 0 | 0 | 0 | 681.2834 | 2.142857 |
| 1068.217 | 1081.813 | 1.028571 | 1034.34 | 0 | 0 | 0 | 1072.93 | 0 |
| 854.7856 | 952.7987 | 2.057143 | 851.9945 | 0 | 0 | 0 | 919.056 | 3.257143 |
| 427.9237 | 424.0536 | 0 | 426.3417 | 0 | 0 | 0 | 419.1253 | 1.125 |
| 421.5527 | 436.7435 | 0 | 419.9784 | 0 | 0 | 0 | 436.0597 | 0 |
| 727.3642 | 575.2747 | 1.028571 | 709.4714 | 0 | 0 | 0 | 569.4379 | 1.085714 |
| 529.8609 | 534.0326 | 2.057143 | 522.9339 | 0 | 0 | 0 | 523.3804 | 3.257143 |
| 773.0235 | 999.3283 | 1.028571 | 742.3861 | 0 | 0 | 0 | 1017.12 | 3.375 |
| 1220.06 | 1653.915 | 0 | 1124.753 | 0 | 0 | 0 | 1750.962 | 0 |
| 1085.206 | 999.3283 | 3.085714 | 1034.645 | 0 | 0 | 0 | 1041.027 | 4.285714 |
| 983.2689 | 819.5549 | 1.028571 | 962.5594 | 0 | 0 | 0 | 828.7887 | 0 |


| 971.5886 | 1631.707 | 5.142857 | 876.6924 | 0 | 0 | 0 | 1718.065 | 3.214286 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 802.7552 | 867.142 | 1.028571 | 806.7266 | 0 | 0 | 0 | 856.3797 | 1.071429 |
| 660.4679 | 463.1807 | 1.028571 | 642.413 | 0 | 0 | 0 | 476.4739 | 1.071429 |
| 823.9921 | 1137.86 | 2.057143 | 789.7652 | 0 | 0 | 0 | 1165.186 | 2.142857 |
| 538.3557 | 830.1299 | 0 | 497.181 | 0 | 0 | 0 | 869.1139 | 1.071429 |
| 530.9228 | 186.1183 | 1.028571 | 517.6941 | 0 | 0 | 0 | 184.2299 | 2.171429 |
| 921.6819 | 1265.816 | 1.028571 | 867.714 | 0 | 0 | 0 | 1282.282 | 2.171429 |
| 1062.907 | 246.3952 | 0 | 1049 | 44 | 0 | 137 | 0 | 3 |
| 700.818 | 201.9806 | 2.057143 | 693.752 | 0 | 0 | 0 | 190.5105 | 2.171429 |
| 281.3891 | 468.4682 | 1.028571 | 275.7434 | 0 | 0 | 0 | 468.87 | 1.125 |
| 784.7038 | 1349.358 | 1.028571 | 740.265 | 0 | 0 | 0 | 1376.975 | 3.375 |
| 378.3495 | 763.7692 | 0 | 405.9371 | 0 | 0 | 0 | 736.465 | 0 |
| 458.6388 | 535.282 | 2.333333 | 494.8044 | 0 | 0 | 0 | 494.5448 | 1 |
| 353.0529 | 490.2282 | 0 | 358.8724 | 0 | 0 | 0 | 484.0762 | 0 |
| 140.7812 | 230.6325 | 1.166667 | 145.9179 | 0 | 0 | 0 | 224.7931 | 1 |
| 463.0382 | 632.8986 | 1.166667 | 487.6351 | 0 | 0 | 0 | 609.9682 | 0 |
| 316.7577 | 473.0649 | 1.166667 | 342.3037 | 0 | 0 | 0 | 448.5158 | 0 |
| 136.3818 | 164.1246 | 1.166667 | 141.5294 | 0 | 0 | 0 | 161.6369 | 1 |
| 57 | 265 | 0 | 65 | 0 | 0 | 0 | 254 | 1 |
| 65 | 329 | 0 | 72 | 0 | 0 | 0 | 320 | 0 |
| 74 | 161 | 0 | 70 | 0 | 0 | 0 | 161 | 0 |
| 68 | 125 | 0 | 82 | 0 | 0 | 0 | 111 | 1 |
| 32 | 126 | 0 | 30 | 0 | 0 | 0 | 125 | 0 |
| 9 | 27 | 0 | 12 | 0 | 0 | 0 | 24 | 0 |
| 37 | 139 | 1 | 41 | 0 | 0 | 0 | 136 | 0 |
| 48 | 266 | 0 | 60 | 0 | 0 | 0 | 251 | 1 |
| 812.1719 | 811.5778 | 1.066667 | 795.8892 | 0 | 0 | 0 | 845.5174 | 1 |
| 701.9562 | 585.435 | 1.066667 | 705.3422 | 0 | 0 | 0 | 584.046 | 0 |
| 239.6924 | 609.7401 | 0 | 229.1726 | 29.41135 | 0 | 0 | 586.1065 | 0 |
| 176.5591 | 449.1153 | 1.066667 | 182.6806 | 0 | 0 | 0 | 444.5613 | 0 |
| 142.3173 | 156.3978 | 0 | 137.8117 | 0 | 0 | 0 | 162.7222 | 0 |
| 273.9341 | 574.8676 | 1.066667 | 263.872 | 0 | 0 | 0 | 586.0127 | 2 |
| 512.5565 | 1020.813 | 2.133333 | 496.7631 | 0 | 0 | 0 | 1048.654 | 1 |
| 380.9397 | 897.1739 | 1.066667 | 370.1191 | 40.56738 | 0 | 0 | 855.5687 | 0 |
| 362.7487 | 852.7907 | 2.133333 | 331.3857 | 46.65248 | 0 | 0 | 826.2109 | 0 |
| 53.50276 | 155.3411 | 0 | 59.82523 | 0 | 0 | 0 | 151.0232 | 0 |
| 453.7034 | 822.1452 | 3.2 | 449.7575 | 0 | 0 | 0 | 824.2465 | 0 |
| 165.8586 | 209.2349 | 1.066667 | 163.4511 | 0 | 0 | 0 | 212.7088 | 1 |
| 331.7171 | 807.3508 | 2.133333 | 298.9707 | 26.36879 | 0 | 0 | 792.0472 | 6 |
| 163.7185 | 443.8316 | 0 | 161.3145 | 0 | 0 | 0 | 448.8155 | 1 |
| 70.62365 | 264.1855 | 0 | 72.64492 | 0 | 0 | 0 | 263.7589 | 0 |
| 273.1035 | 430.7379 | 1 | 0 | 0 | 0 | 0 | 510.0464 | 24.88889 |
| 206.3912 | 441.1927 | 0 | 0 | 0 | 0 | 0 | 483.8633 | 28 |
| 342.943 | 244.6424 | 0 | 0 | 0 | 0 | 0 | 343.522 | 29.03704 |
| 185.5436 | 400.419 | 1 | 0 | 0 | 0 | 0 | 445.1123 | 25.92593 |
| 271.0187 | 322.008 | 0 | 0 | 0 | 0 | 0 | 408.456 | 32.14815 |
| 226.1896 | 513.5935 | 2 | 0 | 0 | 0 | 0 | 550.0327 | 38.13008 |


| 64.45819 | 176.5814 | 1 | 0 | 0 | 0 | 0 | 181.1745 | 13.07317 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23.43934 | 81.83042 | 0 | 0 | 0 | 0 | 0 | 83.53555 | 3.268293 |
| 96.1013 | 178.7349 | 0 | 0 | 0 | 0 | 0 | 195.2779 | 10.89431 |
| 17.57951 | 120.5922 | 0 | 0 | 0 | 0 | 0 | 126.9306 | 2.178862 |
| 36.33098 | 192.7322 | 0 | 0 | 0 | 0 | 0 | 189.8535 | 7.626016 |
| 78.52179 | 306.8641 | 0 | 0 | 0 | 0 | 0 | 303.7656 | 15.25203 |
| 225.0177 | 324.0915 | 0 | 0 | 0 | 0 | 0 | 351.5002 | 23.96748 |
| 66.80212 | 111.9785 | 0 | 0 | 0 | 0 | 0 | 117.1667 | 3.268293 |
| 160.5595 | 393.0013 | 0 | 0 | 0 | 0 | 0 | 418.7626 | 16.34146 |
| 88.13671 | 271.3629 | 0 | 161.7225 | 0 | 0 | 0 | 0 | 35.41014 |
| 148.3276 | 397.9274 | 1 | 280.4525 | 0 | 0 | 0 | 0 | 63.72711 |
| 176.2734 | 692.8871 | 0 | 330.8927 | 0 | 0 | 0 | 0 | 89.56682 |
| 263.3353 | 172.6855 | 1 | 327.9111 | 0 | 0 | 0 | 0 | 30.36706 |
| 478.3029 | 735.7903 | 0 | 680.9367 | 0 | 0 | 0 | 0 | 110.3963 |
| 113.9328 | 226.3145 | 0 | 219.7403 | 0 | 0 | 0 | 0 | 54.58385 |
| 222.4915 | 406.5081 | 0 | 351.108 | 0 | 0 | 0 | 0 | 49.99078 |
| 483.6771 | 375.4032 | 0 | 599.5479 | 0 | 0 | 0 | 0 | 111.2507 |
| 354.6965 | 525.5645 | 1 | 519.5677 | 0 | 0 | 0 | 0 | 67.778 |
| 203.1444 | 266 | 1 | 327.3296 | 0 | 0 | 0 | 0 | 35.67301 |
| 195.6205 | 173.7581 | 0 | 277.3949 | 0 | 0 | 0 | 0 | 23.09317 |
| 101.0348 | 41.83065 | 0 | 113.8441 | 0 | 0 | 0 | 0 | 6.248848 |
| 819.0265 | 368.9677 | 1 | 872.5518 | 0 | 0 | 0 | 0 | 111.9142 |
| 376.7192 | 449.5845 | 3 | 390.4149 | 0 | 0 | 0 | 440.4164 | 0 |
| 532.2254 | 337.1884 | 0 | 548.3355 | 0 | 0 | 0 | 323.8356 | 0 |
| 360.2925 | 665.7309 | 0 | 366.2881 | 0 | 0 | 0 | 655.2274 | 1 |
| 411.7629 | 555.4962 | 0 | 407.9616 | 0 | 0 | 0 | 550.5205 | 2 |
| 935.4138 | 607.197 | 1.087805 | 1087.518 | 0 | 0 | 0 | 0 | 138.9342 |
| 1749.064 | 930.3645 | 1.087805 | 1985.12 | 0 | 0 | 0 | 0 | 177.8799 |
| 1211.941 | 367.8966 | 1.087805 | 1167.471 | 0 | 0 | 0 | 379.6038 | 2.266667 |
| 905.8265 | 526.6847 | 2.17561 | 1044.459 | 0 | 0 | 0 | 0 | 124.485 |
| 580.3662 | 311.9852 | 0 | 643.8535 | 0 | 0 | 0 | 0 | 70.69587 |
| 1446.364 | 685.4729 | 2.17561 | 1620.789 | 0 | 0 | 0 | 0 | 163.3866 |
| 1572.679 | 839.7882 | 5.439024 | 1811.795 | 0 | 0 | 0 | 0 | 153.3833 |
| 719.1989 | 443.936 | 1.087805 | 813.6485 | 0 | 0 | 0 | 0 | 83.23868 |
| 578.0903 | 419.335 | 0 | 714.3395 | 0 | 0 | 0 | 0 | 80.02608 |
| 1012.796 | 484.1921 | 2.17561 | 1182.469 | 0 | 0 | 0 | 0 | 103.367 |
| 1008.244 | 583.7143 | 2.17561 | 1137.285 | 0 | 0 | 0 | 0 | 128.8489 |
| 1508.952 | 637.3892 | 2.17561 | 1648.949 | 0 | 0 | 0 | 0 | 137.971 |
| 1532.85 | 843.1429 | 0 | 1716.183 | 0 | 0 | 0 | 0 | 201.8253 |
| 1107.248 | 831.9606 | 5.439024 | 1454.744 | 0 | 0 | 0 | 0 | 118.7233 |
| 695.3015 | 398.0887 | 1.087805 | 813.7651 | 0 | 0 | 0 | 0 | 92.46718 |
| 1439.536 | 862.1527 | 2.17561 | 1656.926 | 0 | 0 | 0 | 0 | 180.1604 |
| 1161.87 | 664.2266 | 3.263415 | 1346.964 | 0 | 0 | 0 | 0 | 137.971 |
| 960.4492 | 417.0985 | 3.263415 | 1035.863 | 0 | 0 | 0 | 0 | 91.22047 |
| 1646.647 | 761.5123 | 2.17561 | 1818.744 | 0 | 0 | 0 | 0 | 144.8125 |
| 859.1696 | 405.9163 | 1.087805 | 869.4122 | 0 | 0 | 0 | 409.8523 | 1.071429 |
| 687.3357 | 362.3054 | 0 | 711.5452 | 0 | 0 | 0 | 344.5965 | 2.142857 |


| 873.9633 | 515.5025 | 0 | 1030.166 | 0 | 0 | 0 | 0 | 109.4646 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1136.835 | 552.4039 | 3.263415 | 1268.582 | 0 | 0 | 0 | 0 | 127.8559 |
| 1342.808 | 465.1823 | 2.17561 | 1452.515 | 0 | 0 | 0 | 0 | 86.75933 |
| 276.5274 | 131.9507 | 0 | 308.0382 | 0 | 0 | 0 | 0 | 26.67536 |
| 1255.184 | 203.5172 | 0 | 1303.139 | 0 | 0 | 0 | 0 | 43.37967 |
| 1453.192 | 630.6798 | 0 | 1621.347 | 0 | 0 | 0 | 0 | 160.5929 |
| 1134.559 | 743.6207 | 3.263415 | 1304.202 | 0 | 0 | 0 | 0 | 172.2301 |
| 1423.604 | 796.1773 | 0 | 1405.554 | 0 | 0 | 0 | 759.3029 | 0 |
| 310.6666 | 125.2414 | 0 | 350.1458 | 0 | 0 | 0 | 0 | 32.48076 |
| 1417.914 | 411.5074 | 1.087805 | 1537.465 | 0 | 0 | 0 | 0 | 102.4071 |
| 1452.054 | 332.1133 | 6.526829 | 1539.763 | 0 | 0 | 0 | 0 | 94.26106 |
| 1594.3 | 807.3596 | 1.087805 | 1874.787 | 0 | 0 | 0 | 0 | 142.6833 |
| 1243.804 | 642.9803 | 4.35122 | 1470.149 | 0 | 0 | 0 | 0 | 103.2424 |
| 655.4724 | 267.2562 | 1.087805 | 750.1469 | 0 | 0 | 0 | 0 | 37.12086 |
| 920.6202 | 372.3695 | 1.087805 | 1057.394 | 0 | 0 | 0 | 0 | 62.64146 |
| 1381.499 | 713.4286 | 0 | 1501.85 | 0 | 0 | 0 | 710.3017 | 2.285714 |
| 1627.301 | 502.0837 | 1.087805 | 1784.516 | 0 | 0 | 0 | 0 | 122.1903 |
| 1256.322 | 552.4039 | 1.087805 | 1416.812 | 0 | 0 | 0 | 0 | 126.8451 |
| 1141.387 | 227 | 3.263415 | 1205.382 | 0 | 0 | 0 | 0 | 66.33186 |
| 1761.582 | 526.6847 | 3.263415 | 1902.871 | 0 | 0 | 0 | 0 | 133.8274 |
| 2137.113 | 604.9606 | 3.263415 | 2319.986 | 0 | 0 | 0 | 0 | 138.4823 |
| 1614.784 | 376.8424 | 3.263415 | 1727.063 | 0 | 0 | 0 | 0 | 98.91593 |
| 1400.845 | 854.3251 | 1.087805 | 1535.983 | 0 | 0 | 0 | 850.967 | 0 |
| 739.6824 | 367.8966 | 1.087805 | 851.466 | 0 | 0 | 0 | 0 | 76.80531 |
| 1815.14 | 1082.487 | 5.655738 | 1751.931 | 0 | 0 | 0 | 1007.283 | 6.375 |
| 1281.358 | 706.7192 | 3.263415 | 1458.179 | 0 | 0 | 0 | 0 | 154.7743 |
| 1215.355 | 500.9655 | 2.17561 | 1361.656 | 0 | 0 | 0 | 0 | 104.7345 |
| 1163.008 | 345.532 | 3.263415 | 1289.264 | 0 | 0 | 0 | 0 | 69.82301 |
| 575.8143 | 261.665 | 1.087805 | 562.4444 | 0 | 0 | 0 | 251.2722 | 0 |
| 1184.63 | 333.2315 | 1.087805 | 1265.134 | 0 | 0 | 0 | 0 | 75.64159 |
| 1173.25 | 516.6207 | 2.17561 | 1299.606 | 0 | 0 | 0 | 0 | 100.0796 |
| 853.0101 | 598.9686 | 3.393443 | 897.2089 | 0 | 0 | 0 | 601.0245 | 1.142857 |
| 1070.076 | 761.2845 | 3.393443 | 1176.368 | 0 | 0 | 0 | 711.4642 | 1.142857 |
| 1014.968 | 598.6439 | 3.219512 | 1278.287 | 0 | 0 | 0 | 0 | 113.6772 |
| 540.9046 | 350.9225 | 0 | 582.6982 | 0 | 0 | 0 | 335.9692 | 0 |
| 664.1041 | 484.6616 | 0 | 700.9445 | 0 | 0 | 0 | 482.4471 | 0 |
| 892.4915 | 436.909 | 0 | 1108.514 | 0 | 0 | 0 | 0 | 80.3154 |
| 654.7175 | 595.5394 | 0 | 692.4112 | 0 | 0 | 0 | 589.3993 | 0 |
| 1029.711 | 485.2048 | 2.146341 | 1262.059 | 0 | 0 | 0 | 0 | 91.43599 |
| 1187.409 | 820.7242 | 2.262295 | 1273.89 | 0 | 0 | 0 | 796.3284 | 0 |
| 835.7894 | 360.5342 | 0 | 988.6751 | 0 | 0 | 0 | 0 | 72.90167 |
| 679.3574 | 531.5275 | 4.52459 | 736.2965 | 0 | 0 | 0 | 512.6727 | 4.571429 |
| 988.8852 | 449.2637 | 2.146341 | 1197.146 | 0 | 0 | 0 | 0 | 82.78664 |
| 882.3433 | 501.8077 | 0 | 1062.326 | 0 | 0 | 0 | 0 | 74.13729 |
| 1212.292 | 541.3628 | 3.219512 | 1151.699 | 0 | 470.4899 | 0 | 0 | 24.78873 |
| 326.6043 | 231.3708 | 2.146341 | 368.1482 | 0 | 0 | 0 | 225.5295 | 0 |
| 944.6575 | 430.17 | 1.073171 | 938.0047 | 0 | 333.8605 | 0 | 0 | 13.52113 |


| 596.5064 | 289.7751 | 0 | 715.2914 | 0 | 0 | 0 | 0 | 60.54545 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1482.779 | 722.3744 | 6.526829 | 1484.631 | 0 | 0 | 0 | 673.7167 | 5.3125 |
| 1532.85 | 569.1773 | 6.526829 | 1547.001 | 0 | 0 | 0 | 517.906 | 4.25 |
| 1498.341 | 841.2994 | 3.393443 | 1454.559 | 0 | 0 | 0 | 772.47 | 4.25 |
| 868.2634 | 853.8732 | 1.131148 | 922.8086 | 0 | 0 | 0 | 853.292 | 2.285714 |
| 849.4901 | 547.5305 | 1.131148 | 899.647 | 0 | 0 | 0 | 537.0857 | 1.142857 |
| 1248.356 | 460.7094 | 3.263415 | 1241.833 | 0 | 0 | 0 | 429.0281 | 2.125 |
| 900.1366 | 182.2709 | 1.087805 | 901.0249 | 0 | 0 | 0 | 160.1997 | 2.125 |
| 1318.822 | 771.5722 | 1.131148 | 1277.473 | 0 | 0 | 0 | 707.7317 | 3.1875 |
| 1038.396 | 780.7167 | 3.393443 | 1089.816 | 0 | 0 | 0 | 782.3781 | 2.285714 |
| 1106.449 | 876.7346 | 0 | 1156.863 | 0 | 0 | 0 | 877.705 | 1.142857 |
| 780.2637 | 539.529 | 0 | 824.0669 | 0 | 0 | 0 | 532.4356 | 0 |
| 1159.594 | 298.5665 | 2.17561 | 1136.026 | 0 | 0 | 0 | 288.579 | 1.0625 |
| 636.1979 | 382.9973 | 2.146341 | 782.7011 | 0 | 0 | 0 | 0 | 90.20037 |
| 1273.53 | 680.6346 | 2.146341 | 1513.071 | 0 | 0 | 0 | 0 | 136.1406 |
| 471.7617 | 180.8287 | 1.073171 | 520.5778 | 0 | 0 | 0 | 0 | 35.76574 |
| 528.4639 | 194.3066 | 1.073171 | 567.4969 | 0 | 0 | 0 | 0 | 45.5704 |
| 1367.655 | 457.1259 | 2.146341 | 1498.359 | 0 | 0 | 0 | 0 | 79.60761 |
| 746.2 | 210.0308 | 3.219512 | 810.3188 | 0 | 0 | 0 | 0 | 41.12219 |
| 866.4086 | 618.8608 | 4.292683 | 1029.139 | 0 | 0 | 0 | 0 | 115.3706 |
| 1064.866 | 288.652 | 2.146341 | 1126.032 | 0 | 0 | 0 | 0 | 78.45388 |
| 1367.655 | 450.3869 | 2.146341 | 1456.281 | 0 | 0 | 0 | 0 | 73.35724 |
| 1540.03 | 787.3347 | 2.146341 | 1751.857 | 0 | 0 | 0 | 0 | 163.8302 |
| 895.8937 | 351.5489 | 0 | 985.7027 | 0 | 0 | 0 | 0 | 72.68521 |
| 882.2852 | 117.9317 | 0 | 901.4939 | 0 | 0 | 0 | 0 | 21.70338 |
| 920.8426 | 420.0616 | 3.219512 | 1025.69 | 0 | 0 | 0 | 0 | 82.24902 |
| 1223.632 | 514.407 | 0 | 1348.081 | 0 | 0 | 0 | 0 | 100.0326 |
| 741.6639 | 242.6024 | 1.073171 | 787.2088 | 0 | 0 | 0 | 0 | 45.5704 |
| 1399.409 | 418.9384 | 2.146341 | 1481.928 | 0 | 0 | 0 | 0 | 102.75 |
| 1567.247 | 606.506 | 2.146341 | 1749.594 | 0 | 0 | 0 | 0 | 126.9107 |
| 1348.377 | 464.988 | 2.146341 | 1471.198 | 0 | 0 | 0 | 0 | 98.06735 |
| 1386.934 | 509.9143 | 1.073171 | 1547.021 | 0 | 0 | 0 | 0 | 98.06735 |
| 1071.67 | 511.0375 | 2.146341 | 1233.543 | 0 | 0 | 0 | 0 | 101.5286 |
| 1103.423 | 495.3133 | 1.073171 | 1266.362 | 0 | 0 | 0 | 0 | 96.91362 |
| 844.376 | 478.601 | 1.087805 | 963.8615 | 0 | 0 | 0 | 0 | 18.89505 |
| 1042.185 | 405.4605 | 3.219512 | 1176.958 | 0 | 0 | 0 | 0 | 74.99268 |
| 1225.9 | 223.5087 | 0 | 1279.871 | 0 | 0 | 0 | 0 | 46.8336 |
| 1202.085 | 207.7845 | 1.073171 | 1252.518 | 0 | 0 | 0 | 0 | 38.83762 |
| 1374.46 | 381.8742 | 2.146341 | 1344.135 | 0 | 0 | 0 | 369.5508 | 7.866667 |
| 625.8851 | 278.4384 | 0 | 659.0379 | 0 | 0 | 0 | 234.8868 | 2.266667 |
| 724.8888 | 269.4926 | 1.087805 | 750.7596 | 0 | 0 | 0 | 233.7736 | 1.133333 |
| 900.1366 | 308.6305 | 1.087805 | 884.379 | 0 | 0 | 0 | 297.2264 | 1.133333 |
| 1107.96 | 318.9773 | 2.146341 | 1056.875 | 0 | 0 | 0 | 330.1222 | 1.1 |
| 199.5915 | 43.80321 | 0 | 197.0319 | 0 | 0 | 0 | 43.41509 | 2.266667 |
| 1304.149 | 393.1058 | 0 | 1311.282 | 0 | 0 | 0 | 372.9245 | 2.266667 |
| 1137.973 | 452.8818 | 4.35122 | 1132.367 | 0 | 0 | 0 | 444.1698 | 3.4 |
| 463.8234 | 80.86747 | 2.146341 | 440.0902 | 0 | 0 | 0 | 83.37557 | 1.1 |


| 868.6766 | 341.4404 | 1.073171 | 876.4524 | 0 | 0 | 0 | 328.3962 | 1.133333 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1069.695 | 432.7537 | 1.087805 | 1078.014 | 0 | 0 | 0 | 407.434 | 5.666667 |
| 623.6092 | 280.6749 | 0 | 637.5229 | 0 | 0 | 0 | 252.6981 | 1.133333 |
| 1036.578 | 436.8187 | 2.17561 | 1016.866 | 0 | 0 | 0 | 444.1698 | 0 |
| 569.2894 | 101.0843 | 0 | 547.6434 | 0 | 0 | 0 | 98.02262 | 2.2 |
| 694.0341 | 208.9076 | 0 | 697.5384 | 0 | 0 | 0 | 195.9245 | 4.533333 |
| 1207.755 | 351.5489 | 3.219512 | 1227.355 | 0 | 0 | 0 | 149.1698 | 51.19335 |
| 655.4766 | 180.8287 | 0 | 612.3948 | 0 | 0 | 0 | 191.5385 | 3.3 |
| 954.7593 | 413.7438 | 2.17561 | 946.6592 | 0 | 0 | 0 | 405.2075 | 4.533333 |
| 642.9547 | 317.5764 | 0 | 635.2582 | 0 | 0 | 0 | 313.9245 | 2.266667 |
| 936.7192 | 202.1687 | 3.219512 | 897.74 | 0 | 0 | 0 | 202.8054 | 1.1 |
| 766.6128 | 370.6426 | 2.146341 | 756.4215 | 0 | 0 | 0 | 365.1321 | 1.133333 |
| 591.746 | 346.6502 | 2.17561 | 630.8202 | 0 | 74.92579 | 0 | 0 | 55.61953 |
| 978.6788 | 423.4311 | 1.073171 | 972.7037 | 0 | 0 | 0 | 416.3396 | 4.533333 |
| 1227.034 | 506.5449 | 0 | 1158.447 | 0 | 458.3696 | 0 | 0 | 15.77465 |
| 1376.728 | 379.6279 | 1.073171 | 1437.512 | 0 | 0 | 0 | 0 | 63.35398 |
| 768.8809 | 302.1299 | 4.292683 | 847.9332 | 0 | 0 | 0 | 0 | 57.79661 |
| 518.9157 | 270.6108 | 1.087805 | 609.452 | 0 | 0 | 0 | 0 | 56.68514 |
| 763.5799 | 175.5616 | 1.087805 | 765.4804 | 0 | 0 | 0 | 159.1887 | 2.266667 |
| 749.6022 | 531.2544 | 2.146341 | 865.0239 | 0 | 0 | 0 | 0 | 91.38264 |
| 941.2554 | 436.909 | 1.073171 | 1000.352 | 0 | 0 | 0 | 0 | 110.6104 |
| 1349.511 | 377.3815 | 2.146341 | 1443.986 | 0 | 0 | 0 | 0 | 71.96383 |
| 889.0894 | 633.4619 | 1.073171 | 1063.33 | 0 | 0 | 0 | 0 | 124.5088 |
| 1083.011 | 617.7376 | 4.292683 | 1249.099 | 0 | 0 | 0 | 0 | 118.7974 |
| 1549.102 | 496.4364 | 1.073171 | 1674.902 | 0 | 0 | 0 | 0 | 93.45242 |
| 910.6362 | 362.7805 | 0 | 1032.558 | 0 | 0 | 0 | 0 | 58.25643 |
| 824.449 | 568.3186 | 0 | 948.2212 | 0 | 0 | 0 | 0 | 105.09 |
| 819.9128 | 313.3615 | 0 | 883.2589 | 0 | 0 | 0 | 0 | 70.82154 |
| 1092.083 | 712.083 | 3.219512 | 1306.083 | 0 | 0 | 0 | 0 | 131.3625 |
| 526.1958 | 367.2731 | 0 | 621.1304 | 0 | 0 | 0 | 0 | 74.24839 |
| 1028.577 | 1124.283 | 5.365854 | 1058.166 | 0 | 0 | 0 | 1115.073 | 6.428571 |
| 753.0043 | 572.8113 | 4.292683 | 926.5671 | 0 | 0 | 0 | 0 | 119.9397 |
| 984.349 | 610.9987 | 3.219512 | 1123.733 | 0 | 0 | 0 | 0 | 116.5129 |
| 745.066 | 634.585 | 2.146341 | 759.5917 | 0 | 0 | 0 | 638.8201 | 0 |
| 865.2745 | 186.4445 | 0 | 912.1428 | 0 | 0 | 0 | 0 | 42.68814 |
| 1829.861 | 903.5271 | 1.087805 | 1874.956 | 0 | 0 | 0 | 886.1052 | 4.285714 |
| 1207.755 | 622.2303 | 1.073171 | 1378.399 | 0 | 0 | 0 | 0 | 122.2958 |
| 865.2745 | 243.7256 | 3.219512 | 901.6478 | 0 | 0 | 0 | 0 | 56.38961 |
| 1348.377 | 340.3173 | 0 | 1414.614 | 0 | 0 | 0 | 0 | 78.45388 |
| 1124.97 | 426.8006 | 2.146341 | 1211.175 | 0 | 0 | 0 | 0 | 75.58018 |
| 1284.87 | 678.3882 | 3.219512 | 1429.783 | 0 | 0 | 0 | 0 | 136.7112 |
| 1385.8 | 415.569 | 0 | 1506.669 | 0 | 0 | 0 | 0 | 74.24839 |
| 1518.056 | 462.9458 | 1.087805 | 1545.495 | 0 | 0 | 0 | 449.9216 | 3.214286 |
| 978.6568 | 701.1281 | 0 | 1006.688 | 0 | 0 | 0 | 686.9033 | 2.142857 |
| 271.0362 | 154.996 | 0 | 320.2685 | 0 | 0 | 0 | 0 | 32.30454 |
| 1703.546 | 628.4433 | 2.17561 | 1874.787 | 0 | 0 | 0 | 0 | 149.6435 |
| 791.5617 | 213.4003 | 3.219512 | 740.0565 | 0 | 210.4533 | 0 | 0 | 15.77465 |


| 902.4126 | 373.4877 | 2.17561 | 1009.858 | 0 | 0 | 0 | 0 | 71.92167 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1504.875 | 486.328 | 1.073171 | 1429.501 | 0 | 446.2492 | 0 | 0 | 28.16901 |
| 913.7923 | 475.2463 | 0 | 1025.607 | 0 | 0 | 0 | 0 | 96.92175 |
| 1998.183 | 567.1955 | 5.365854 | 1885.007 | 0 | 556.4342 | 0 | 0 | 25.91549 |
| 1226.735 | 395.8522 | 2.17561 | 1294.221 | 0 | 0 | 0 | 0 | 68.49421 |
| 931.049 | 324.5931 | 2.146341 | 879.52 | 0 | 310.7217 | 0 | 0 | 10.14085 |
| 851.2038 | 405.9163 | 1.087805 | 948.117 | 0 | 0 | 0 | 0 | 84.37894 |
| 687.2298 | 293.1446 | 0 | 639.9576 | 0 | 280.9717 | 0 | 0 | 7.887324 |
| 1296.211 | 382.9973 | 1.073171 | 1231.553 | 0 | 355.8975 | 0 | 0 | 18.02817 |
| 1239.253 | 467.4187 | 0 | 1157.322 | 0 | 428.6196 | 0 | 0 | 12.39437 |
| 786.3393 | 278.4384 | 2.17561 | 749.0541 | 0 | 247.9162 | 0 | 0 | 18.02817 |
| 876.2392 | 362.3054 | 1.087805 | 822.16 | 0 | 333.8605 | 0 | 0 | 20.28169 |
| 1268.84 | 554.6404 | 5.439024 | 1441.163 | 0 | 0 | 0 | 0 | 124.1229 |
| 1441.812 | 389.1429 | 4.35122 | 1294.536 | 0 | 439.6381 | 0 | 0 | 19.15493 |
| 685.0597 | 203.5172 | 1.087805 | 599.4682 | 0 | 233.5922 | 0 | 0 | 6.760563 |
| 1343.84 | 484.0817 | 1.073171 | 1477.105 | 0 | 0 | 0 | 0 | 88.16205 |
| 881.9291 | 613.9064 | 0 | 1064.351 | 0 | 0 | 0 | 0 | 120.6428 |
| 1413.362 | 549.0493 | 3.263415 | 1597.685 | 0 | 0 | 0 | 0 | 109.0425 |
| 1215.355 | 611.67 | 0 | 1395.946 | 0 | 0 | 0 | 0 | 121.8028 |
| 850.0658 | 280.6749 | 4.35122 | 955.3648 | 0 | 0 | 0 | 0 | 73.0817 |
| 1241.529 | 801.7685 | 0 | 1473.627 | 0 | 0 | 0 | 0 | 158.9237 |
| 1614.784 | 587.069 | 2.17561 | 1824.932 | 0 | 0 | 0 | 0 | 116.0027 |
| 853.4797 | 272.8473 | 3.263415 | 928.698 | 0 | 0 | 0 | 0 | 82.36192 |
| 491.6043 | 196.8079 | 3.263415 | 537.9724 | 0 | 0 | 0 | 0 | 29.00068 |
| 1711.511 | 774.931 | 10.87805 | 1923.584 | 0 | 0 | 0 | 0 | 163.0566 |
| 422.188 | 156.5517 | 0 | 470.7258 | 0 | 0 | 0 | 0 | 32.48076 |
| 1156.902 | 1371.684 | 1.131148 | 937.3492 | 0 | 0 | 0 | 1506.242 | 2.344828 |
| 584.3178 | 569.2488 | 1.131148 | 505.6753 | 0 | 0 | 0 | 609.9102 | 2.344828 |
| 513.918 | 505.2369 | 0 | 435.0377 | 0 | 0 | 0 | 549.2561 | 4.689655 |
| 1207.389 | 749.2118 | 1.087805 | 1256.072 | 0 | 0 | 0 | 722.3933 | 0 |
| 773.8216 | 530.0394 | 3.263415 | 793.9106 | 0 | 0 | 0 | 528.9155 | 2.142857 |
| 826.1684 | 294.0936 | 0 | 911.651 | 0 | 0 | 0 | 0 | 55.87254 |
| 1062.867 | 597.133 | 1.087805 | 1107.357 | 0 | 0 | 0 | 574.7091 | 3.214286 |
| 776.7437 | 877.8777 | 0 | 696.2845 | 0 | 0 | 0 | 906.4411 | 2.344828 |
| 1482.779 | 911.3547 | 2.17561 | 1529.479 | 0 | 0 | 0 | 891.8294 | 5.357143 |
| 1019.624 | 670.936 | 3.263415 | 1219.333 | 0 | 0 | 0 | 0 | 112.8853 |
| 1060.591 | 602.7241 | 0 | 1092.485 | 0 | 0 | 0 | 589.592 | 2.142857 |
| 1059.453 | 502.0837 | 7.614634 | 1181.728 | 0 | 0 | 0 | 0 | 164.1969 |
| 757.9704 | 642.4053 | 2.262295 | 753.8719 | 0 | 0 | 0 | 626.2268 | 3.214286 |
| 1134.609 | 960.1787 | 3.393443 | 1145.107 | 0 | 0 | 0 | 917.0159 | 3.214286 |
| 1117.489 | 648.5714 | 3.263415 | 1158.835 | 0 | 0 | 0 | 621.6475 | 3.214286 |
| 520.958 | 520.0968 | 2.262295 | 451.8562 | 0 | 0 | 0 | 555.9955 | 2.344828 |
| 772.6837 | 628.4433 | 1.087805 | 941.2796 | 0 | 0 | 0 | 0 | 175.5994 |
| 1219.907 | 543.4581 | 1.087805 | 1176.609 | 0 | 0 | 0 | 603.8345 | 2.25 |
| 957.0353 | 318.6946 | 1.087805 | 1041.162 | 0 | 0 | 0 | 0 | 62.64146 |
| 1165.116 | 1195.651 | 2.262295 | 1142.819 | 0 | 0 | 0 | 1180.329 | 2.142857 |
| 1243.804 | 544.5764 | 2.17561 | 1239.56 | 0 | 0 | 0 | 569.5257 | 3.375 |


| 856.5301 | 488.0908 | 1.131148 | 784.0244 | 0 | 0 | 0 | 537.5042 | 1.125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1043.521 | 446.1724 | 0 | 1135.927 | 0 | 0 | 0 | 0 | 87.9009 |
| 1533.541 | 1415.121 | 3.393443 | 1328.659 | 0 | 0 | 0 | 1530.953 | 4.689655 |
| 975.0363 | 791.0044 | 1.131148 | 955.2095 | 0 | 0 | 0 | 783.0697 | 1.071429 |
| 867.1354 | 611.67 | 1.087805 | 759.0735 | 0 | 0 | 0 | 707.6306 | 1.172414 |
| 1071.971 | 441.6995 | 0 | 1024.805 | 0 | 0 | 0 | 474.0002 | 1.172414 |
| 1449.061 | 628.6884 | 2.262295 | 1379.196 | 0 | 0 | 0 | 670.1648 | 2.25 |
| 1314.128 | 863.0178 | 1.131148 | 1224.68 | 0 | 0 | 0 | 918.3317 | 7.875 |
| 458.7716 | 371.4977 | 0 | 430.355 | 0 | 0 | 0 | 392.2637 | 0 |
| 384.8519 | 224.0417 | 0 | 346.802 | 0 | 0 | 0 | 253.885 | 0 |
| 871.7833 | 577.2503 | 1.131148 | 755.4104 | 0 | 0 | 0 | 674.7393 | 0 |
| 895.2499 | 496.0923 | 0 | 879.8636 | 0 | 0 | 0 | 438.9034 | 0 |
| 1305.255 | 517.7389 | 4.35122 | 1456.974 | 0 | 0 | 0 | 0 | 101.5997 |
| 1295.355 | 716.7048 | 0 | 1143.417 | 0 | 0 | 0 | 839.4215 | 0 |
| 1388.048 | 991.0416 | 2.262295 | 1276.186 | 0 | 0 | 0 | 1075.008 | 4.5 |
| 887.0366 | 598.9686 | 1.131148 | 795.47 | 0 | 0 | 0 | 669.0212 | 1.125 |
| 760.3171 | 866.447 | 0 | 630.1319 | 0 | 0 | 0 | 945.7539 | 1.172414 |
| 1555.834 | 1136.211 | 2.262295 | 1416.967 | 0 | 0 | 0 | 1241.978 | 2.25 |
| 745.0638 | 385.2146 | 2.262295 | 684.4476 | 0 | 0 | 0 | 420.8544 | 9 |
| 1546.505 | 613.9064 | 5.439024 | 1475.54 | 0 | 0 | 0 | 666.0714 | 3.517241 |
| 1436.122 | 629.5616 | 1.087805 | 1353.326 | 0 | 0 | 0 | 690.7823 | 2.344828 |
| 1040.743 | 523.526 | 2.262295 | 904.2033 | 0 | 0 | 0 | 636.9997 | 2.25 |
| 1051.303 | 877.8777 | 2.262295 | 930.6219 | 0 | 0 | 0 | 932.2753 | 1.172414 |
| 605.4377 | 726.9924 | 0 | 489.978 | 0 | 0 | 0 | 807.5975 | 1.172414 |
| 713.5091 | 233.7094 | 1.087805 | 687.3147 | 0 | 0 | 0 | 253.8484 | 2.344828 |
| 619.5176 | 366.9254 | 1.131148 | 555.0094 | 0 | 0 | 0 | 397.621 | 1.172414 |
| 1432.708 | 585.9507 | 1.087805 | 1580.711 | 0 | 0 | 0 | 0 | 108.4492 |
| 669.9708 | 339.4918 | 0 | 639.2933 | 0 | 0 | 0 | 317.1077 | 3.1875 |
| 1030.183 | 685.8419 | 1.131148 | 951.1303 | 0 | 0 | 0 | 747.9314 | 0 |
| 231.1458 | 217.1833 | 0 | 264.2877 | 0 | 0 | 0 | 0 | 43.05752 |
| 849.4901 | 504.0938 | 0 | 748.543 | 0 | 0 | 0 | 585.5365 | 0 |
| 944.5297 | 426.3651 | 1.131148 | 904.3661 | 0 | 0 | 0 | 400.4993 | 2.125 |
| 578.4511 | 205.7526 | 1.131148 | 606.4222 | 0 | 0 | 0 | 0 | 51.37066 |
| 249.2161 | 147.6059 | 0 | 234.3373 | 0 | 0 | 0 | 160.6209 | 0 |
| 180.4804 | 494.0771 | 2.083333 | 172.7693 | 0 | 12.32967 | 0 | 491.3627 | 1 |
| 345.9619 | 1013.559 | 1.2 | 344.4311 | 0 | 24.65934 | 0 | 1029.931 | 1 |
| 265.2181 | 389.8913 | 2.083333 | 254.724 | 0 | 8.967033 | 0 | 392.661 | 2 |
| 190.9119 | 434.3824 | 1.2 | 170.2606 | 3.333333 | 31.77019 | 0 | 415.7218 | 3 |
| 162.8725 | 444.6694 | 0 | 144.5069 | 22.06909 | 0 | 0 | 432.6787 | 0 |
| 310.3382 | 520.9291 | 1.041667 | 275.8769 | 34.68 | 0 | 0 | 516.6313 | 1.066667 |
| 735.1275 | 886.1165 | 2.083333 | 668.892 | 97.73455 | 0 | 0 | 841.6784 | 2.133333 |
| 564.5515 | 799.116 | 3.125 | 522.1955 | 49.39273 | 0 | 0 | 782.4811 | 2.133333 |
| 707.6152 | 791.5974 | 1.041667 | 621.8177 | 115.6 | 0 | 0 | 750.1917 | 2.133333 |
| 223.6095 | 638.9829 | 0 | 198.102 | 4.444444 | 40.99379 | 0 | 604.3073 | 3 |
| 465.5074 | 843.1533 | 1.041667 | 387.6374 | 12.22222 | 92.23602 | 0 | 769.9709 | 3 |
| 568.5167 | 854.0756 | 3.6 | 534.2378 | 86.17455 | 0 | 0 | 838.4495 | 2.133333 |
| 548.0441 | 844.2274 | 0 | 454.3211 | 105.0909 | 0 | 0 | 830.9153 | 0 |


| 616.2745 | 764.7454 | 1.041667 | 544.0905 | 65.15636 | 0 | 0 | 757.7259 | 1.066667 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 556.848 | 1114.896 | 2.083333 | 513.4375 | 89.32727 | 0 | 0 | 1059.094 | 2.133333 |
| 259.7157 | 493.003 | 4.166667 | 229.8974 | 52.54545 | 0 | 0 | 469.2734 | 0 |
| 585.4608 | 665.93 | 1.041667 | 489.353 | 116.6509 | 0 | 0 | 642.5601 | 1.066667 |
| 463.3064 | 872.1535 | 1.041667 | 427.4933 | 0 | 21.2967 | 0 | 887.2422 | 1 |
| 457.8039 | 818.4495 | 1.041667 | 443.3736 | 32.57818 | 0 | 0 | 794.3206 | 2.133333 |
| 753.8358 | 1349.045 | 2.083333 | 706.5822 | 0 | 34.74725 | 0 | 1366.804 | 2 |
| 331.4232 | 745.3151 | 1.25 | 336.8804 | 0 | 0 | 0 | 734.79 | 2 |
| 485.2579 | 783.7554 | 1.25 | 516.4755 | 0 | 0 | 0 | 749.8296 | 1 |
| 426.4388 | 618.2485 | 0 | 438.3907 | 0 | 0 | 0 | 608.028 | 2 |
| 299.7514 | 719.6882 | 0 | 326.8409 | 0 | 0 | 0 | 682.1516 | 2 |
| 277.1287 | 755.9929 | 2.5 | 274.4125 | 0 | 0 | 0 | 755.2009 | 2 |
| 976.059 | 1037.971 | 0 | 911.9397 | 0 | 0 | 0 | 1116.604 | 2 |
| 649.9691 | 811.9001 | 4 | 627.9381 | 0 | 0 | 0 | 790.6321 | 1 |
| 670.9715 | 771.6855 | 2 | 659.4653 | 0 | 0 | 0 | 761.3408 | 5 |
| 729.5571 | 1218.394 | 2 | 669.4264 | 0 | 0 | 0 | 1296.702 | 1 |
| 1116.443 | 1164.05 | 1 | 962.2305 | 0 | 0 | 0 | 1332.721 | 3 |
| 335.8251 | 917.3346 | 1 | 0 | 0 | 0 | 0 | 989.9556 | 47.21053 |
| 541.8264 | 1717.384 | 2 | 570.6189 | 0 | 0 | 0 | 1683.531 | 2.1 |
| 224.241 | 736.1715 | 2 | 244.3991 | 0 | 0 | 0 | 718.5031 | 2.1 |
| 241.4078 | 653.4438 | 0 | 250.7748 | 0 | 0 | 0 | 638.4353 | 1.05 |
| 48.28156 | 114.1432 | 0 | 54.19285 | 0 | 0 | 0 | 112.727 | 1.05 |
| 186.6887 | 445.0539 | 0 | 159.3907 | 0 | 0 | 0 | 447.9509 | 5.155263 |
| 101.9277 | 386.4115 | 0 | 121.137 | 0 | 0 | 0 | 364.5191 | 1.05 |
| 82.61511 | 330.9106 | 0 | 95.63444 | 0 | 0 | 0 | 318.1641 | 1.05 |
| 314.3666 | 432.4876 | 1 | 354.9101 | 0 | 0 | 0 | 384.5361 | 1.05 |
| 178.1053 | 202.1068 | 0 | 181.7054 | 0 | 0 | 0 | 194.9019 | 1.05 |
| 128.7508 | 627.2642 | 1 | 153.0151 | 0 | 0 | 0 | 606.8296 | 3.15 |
| 130.8967 | 328.8163 | 2 | 153.0151 | 0 | 0 | 0 | 308.6824 | 1.05 |
| 129.8237 | 346.6184 | 0 | 139.2012 | 0 | 0 | 0 | 337.1275 | 0 |
| 145.9176 | 401.0721 | 0 | 167.8916 | 0 | 0 | 0 | 383.4826 | 0 |
| 177.0324 | 606.3204 | 0 | 200.8323 | 0 | 0 | 0 | 578.3844 | 2.1 |
| 140.553 | 309.9669 | 0 | 156.2029 | 0 | 0 | 0 | 293.9331 | 1.05 |
| 174.8865 | 538.2534 | 0 | 189.1437 | 0 | 0 | 0 | 526.7618 | 0 |
| 289.6894 | 757.1152 | 1 | 314.5311 | 0 | 0 | 0 | 734.3059 | 0 |
| 234.9703 | 671.2459 | 0 | 0 | 0 | 0 | 0 | 734.3822 | 19.5 |
| 134.1154 | 566.5274 | 0 | 0 | 0 | 0 | 0 | 590.4266 | 4.105263 |
| 349.7731 | 640.8776 | 1 | 333.658 | 0 | 0 | 0 | 619.1569 | 4.128947 |
| 295.054 | 419.9214 | 1 | 301.7798 | 0 | 0 | 0 | 414.0348 | 0 |
| 283.2518 | 389.553 | 0 | 287.9659 | 0 | 0 | 0 | 379.2685 | 1.05 |
| 212.2389 | 829.2185 | 0 | 209.1611 | 0 | 0 | 0 | 831.2034 | 2.060606 |
| 241.6581 | 791.669 | 1.1 | 241.013 | 0 | 0 | 0 | 786.1886 | 4.121212 |
| 478.0628 | 940.824 | 4.4 | 460.7914 | 0 | 0 | 0 | 961.0134 | 3.090909 |
| 217.4923 | 534.0376 | 0 | 228.2723 | 0 | 0 | 0 | 520.2872 | 3.090909 |
| 132.3866 | 578.8884 | 1.1 | 130.593 | 0 | 0 | 0 | 569.4894 | 3.090909 |
| 321.5104 | 795.8412 | 1.1 | 316.396 | 0 | 0 | 0 | 797.704 | 2.060606 |
| 411.8695 | 981.5027 | 1.1 | 404.5197 | 0 | 0 | 0 | 986.138 | 2.060606 |


| 371.9434 | 881.3706 | 1.1 | 360.9887 | 0 | 0 | 0 | 889.8273 | 4.121212 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 160.7552 | 511.0907 | 0 | 152.696 | 0 | 0 | 0 | 506.5467 | 1 |
| 563.1685 | 777.0664 | 2.2 | 555.7303 | 0 | 0 | 0 | 760.858 | 5 |
| 491.7218 | 1086.85 | 0 | 494.7668 | 0 | 0 | 0 | 1081.402 | 1.030303 |
| 436.0353 | 838.6059 | 0 | 444.3774 | 0 | 0 | 0 | 819.9795 | 1 |
| 181.7689 | 410.9586 | 1.1 | 194.4151 | 0 | 0 | 0 | 389.1781 | 0 |
| 384.5516 | 752.0334 | 0 | 418.6611 | 0 | 0 | 0 | 703.4342 | 1 |
| 402.4133 | 756.2056 | 3.3 | 414.5465 | 0 | 0 | 0 | 728.4082 | 2 |
| 447.5929 | 840.692 | 0 | 460.7914 | 0 | 0 | 0 | 830.1565 | 3.090909 |
| 489.6204 | 944.9962 | 2.2 | 502.199 | 0 | 0 | 0 | 929.6078 | 3.090909 |
| 501.1779 | 953.3405 | 0 | 507.5076 | 0 | 0 | 0 | 937.9826 | 3.090909 |
| 272.1281 | 492.3159 | 0 | 285.6557 | 0 | 0 | 0 | 469.1785 | 3 |
| 420.275 | 591.4049 | 1.1 | 440.4292 | 0 | 0 | 0 | 557.4089 | 1 |
| 655.629 | 1141.088 | 2.2 | 656.4888 | 0 | 0 | 0 | 1120.008 | 3 |
| 15.26255 | 53.05535 | 0 | 15.16508 | 0 | 0 | 0 | 53.11874 | 0 |
| 63.23055 | 253.6046 | 0 | 79.07503 | 0 | 0 | 0 | 252.8452 | 1 |
| 276.9062 | 841.4578 | 0 | 320.633 | 0 | 0 | 0 | 823.3404 | 0 |
| 354.3091 | 1175.706 | 2 | 365.045 | 0 | 0 | 0 | 1185.61 | 0 |
| 57.77964 | 196.3048 | 0 | 58.49386 | 0 | 0 | 0 | 200.7888 | 0 |
| 23.984 | 148.555 | 1 | 29.24693 | 0 | 0 | 0 | 144.483 | 0 |
| 148.2647 | 323.6376 | 0 | 148.4011 | 0 | 0 | 0 | 327.2114 | 1 |
| 304.1607 | 823.419 | 2 | 320.633 | 0 | 0 | 0 | 824.4028 | 1 |
| 255.1025 | 421.2595 | 0 | 251.307 | 0 | 0 | 0 | 429.1994 | 2 |
| 275.0257 | 663.6159 | 0 | 260.371 | 0 | 0 | 0 | 677.9443 | 0 |
| 235.584 | 540.1038 | 0 | 221.9556 | 0 | 0 | 0 | 556.5839 | 0 |
| 169.4926 | 407.1713 | 1 | 167.5338 | 0 | 0 | 0 | 405.9296 | 1.125 |
| 425.3305 | 699.2042 | 2 | 400.1604 | 0 | 0 | 0 | 719.7927 | 1.125 |
| 496.7519 | 972.3962 | 1 | 512.2053 | 0 | 0 | 0 | 951.0051 | 1.125 |
| 359.239 | 735.8391 | 0 | 350.007 | 0 | 0 | 0 | 739.6707 | 0 |
| 454.1122 | 951.4619 | 0 | 423.6365 | 0 | 0 | 0 | 979.2528 | 1.125 |
| 458.3762 | 841.5571 | 0 | 472.7228 | 0 | 0 | 0 | 828.5985 | 3.375 |
| 430.6604 | 723.2785 | 0 | 423.6365 | 0 | 0 | 0 | 722.9313 | 0 |
| 434.9244 | 1192.206 | 0 | 405.4959 | 0 | 0 | 0 | 1223.02 | 1.125 |
| 363.503 | 743.1661 | 1 | 354.2753 | 0 | 0 | 0 | 753.2714 | 0 |
| 276.4384 | 402.9052 | 3 | 274.8959 | 0 | 0 | 0 | 391.7001 | 2 |
| 408.6952 | 703.7553 | 1 | 403.8199 | 0 | 0 | 0 | 686.7878 | 1 |
| 177.7878 | 162.6504 | 0 | 174.74 | 0 | 0 | 0 | 156.47 | 0 |
| 653.6955 | 830.2612 | 0 | 627.5724 | 0 | 0 | 0 | 821.205 | 4 |
| 395.6863 | 631.4662 | 2 | 421.6012 | 0 | 0 | 0 | 615.5211 | 3.428571 |
| 151.7701 | 293.4086 | 0 | 145.9718 | 0 | 0 | 0 | 289.8371 | 0 |
| 410.8633 | 588.9433 | 0 | 433.6783 | 0 | 0 | 0 | 576.9841 | 0 |
| 461.8147 | 1210.842 | 1 | 466.6159 | 0 | 0 | 0 | 1210.703 | 2.285714 |
| 538.7838 | 1153.436 | 1 | 535.7849 | 0 | 0 | 0 | 1164.673 | 2.285714 |
| 315.465 | 730.3322 | 0 | 306.3196 | 0 | 0 | 0 | 746.1186 | 0 |
| 59.04324 | 156.5186 | 0 | 0 | 0 | 0 | 0 | 172.4902 | 9.556701 |
| 25.76432 | 105.7558 | 0 | 0 | 0 | 0 | 0 | 106.8804 | 1.061856 |
| 61.19027 | 154.4035 | 0 | 0 | 0 | 0 | 0 | 160.8498 | 3.185567 |


| 54.74919 | 98.35292 | 0 | 0 | 0 | 0 | 0 | 108.9969 | 4.247423 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 25.76432 | 127.9646 | 0 | 0 | 0 | 0 | 0 | 124.8702 | 2.123711 |
| 31.13189 | 123.7343 | 0 | 0 | 0 | 0 | 0 | 130.1613 | 1.061856 |
| 9.661622 | 89.89246 | 0 | 0 | 0 | 0 | 0 | 84.65777 | 1.061856 |
| 39.72 | 123.7343 | 0 | 0 | 0 | 0 | 0 | 126.9867 | 4.247423 |
| 81.58703 | 241.1233 | 0 | 0 | 0 | 0 | 0 | 261.3809 | 5.309278 |
| 207.1881 | 638.7652 | 0 | 0 | 0 | 0 | 0 | 705.8341 | 15.92784 |
| 83.73405 | 379.6634 | 0 | 0 | 0 | 0 | 0 | 420.1142 | 13.80412 |
| 95.5427 | 478.0164 | 1 | 0 | 0 | 0 | 0 | 483.6075 | 12.74227 |
| 69.77838 | 169.2093 | 0 | 0 | 0 | 0 | 0 | 203.1786 | 3.185567 |
| 92.32216 | 433.5989 | 0 | 0 | 0 | 0 | 0 | 457.1519 | 19.1134 |
| 55.8227 | 170.2669 | 1 | 0 | 0 | 0 | 0 | 178.8395 | 6.371134 |
| 205.8976 | 428.5677 | 1 | 192.387 | 0 | 0 | 0 | 448.2578 | 0 |
| 261.1648 | 522.4855 | 1 | 244.5597 | 0 | 0 | 0 | 548.7108 | 0 |
| 507.1582 | 994.2338 | 1 | 473.9024 | 0 | 0 | 0 | 1036.934 | 2 |
| 480.0664 | 993.1543 | 0 | 421.7297 | 0 | 0 | 0 | 1059.617 | 1 |
| 682.713 | 1161.559 | 0 | 605.4212 | 0 | 0 | 0 | 1246.481 | 0 |
| 184 | 102.0831 | 0 | 239.1011 | 0 | 0 | 0 | 0 | 12 |
| 48 | 75.06107 | 0 | 90.03807 | 0 | 0 | 0 | 0 | 5 |
| 152 | 37.03013 | 1 | 171.0723 | 0 | 0 | 0 | 0 | 3 |
| 262 | 104.0847 | 0 | 322.1362 | 0 | 0 | 0 | 0 | 8 |
| 179 | 268.2182 | 0 | 322.1362 | 0 | 0 | 0 | 0 | 12 |
| 486 | 269.2191 | 1 | 637.2695 | 0 | 0 | 0 | 0 | 27 |
| 63 | 143.1164 | 0 | 162.0685 | 0 | 0 | 0 | 0 | 4 |
| 207 | 136.1107 | 0 | 300.1269 | 0 | 0 | 0 | 0 | 7 |
| 57 | 94.07655 | 0 | 121.0512 | 0 | 0 | 0 | 0 | 5 |
| 219.1408 | 277.1521 | 0 | 196.1326 | 0 | 0 | 0 | 291.8578 | 0 |
| 92.26979 | 170.0706 | 0 | 90.2 | 0 | 0 | 0 | 174.2748 | 0 |
| 219.1408 | 288.7001 | 0 | 200.3279 | 0 | 0 | 0 | 295.0073 | 2.148148 |
| 98.56092 | 283.451 | 0 | 93.34651 | 0 | 0 | 0 | 282.4092 | 0 |
| 115.3372 | 239.3586 | 0 | 118.5186 | 0 | 0 | 0 | 228.8669 | 0 |
| 244.3053 | 289.7499 | 0 | 225.5 | 0 | 0 | 0 | 314.9545 | 0 |
| 147.8414 | 67.18839 | 0 | 139.4953 | 0 | 0 | 0 | 76.63892 | 0 |
| 125.8224 | 275.0525 | 0 | 122.714 | 0 | 0 | 0 | 267.7113 | 2.148148 |
| 386.904 | 281.3514 | 0 | 336.6767 | 0 | 0 | 0 | 314.9545 | 2.148148 |
| 307.2165 | 356.9383 | 0 | 251.7209 | 0 | 0 | 0 | 406.2913 | 3.222222 |
| 170.9088 | 487.1158 | 0 | 149.9837 | 0 | 0 | 0 | 499.7278 | 0 |
| 252.6934 | 616.2435 | 0 | 229.6953 | 0 | 0 | 0 | 627.8092 | 3.222222 |
| 80.73607 | 353.7888 | 0 | 77.61395 | 0 | 0 | 0 | 352.749 | 1.074074 |
| 162.5207 | 350.6394 | 1 | 155.2279 | 0 | 0 | 0 | 347.4998 | 1.074074 |
| 332.381 | 446.1729 | 0 | 311.5047 | 0 | 0 | 0 | 453.5344 | 3.222222 |
| 74.44495 | 157.4728 | 0 | 75.51628 | 0 | 0 | 0 | 157.4772 | 0 |
| 183.4911 | 487.1158 | 0 | 156.2767 | 0 | 0 | 0 | 509.1764 | 1.074074 |
| 65.00826 | 402.0805 | 3 | 68.17442 | 0 | 0 | 0 | 395.7928 | 4.296296 |
| 71.29939 | 251.9565 | 0 | 67.12558 | 0 | 0 | 0 | 255.1131 | 1.074074 |
| 582.9773 | 282.4012 | 2 | 542.2488 | 0 | 0 | 0 | 319.1539 | 4.296296 |
| 598.5073 | 490.2727 | 1.09434 | 618.8455 | 0 | 0 | 0 | 467.9617 | 3.18 |
|  |  |  |  |  |  |  |  | 0 |


| 538.1269 | 688.2675 | 1.09434 | 544.2858 | 0 | 0 | 0 | 674.1999 | 4.24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 603.8039 | 363.5142 | 0 | 596.4776 | 0 | 0 | 0 | 361.1785 | 1.06 |
| 272.2414 | 480.8444 | 2.188679 | 269.4801 | 0 | 0 | 0 | 483.6651 | 1.06 |
| 418.4255 | 614.9361 | 1.09434 | 430.316 | 0 | 0 | 0 | 605.1049 | 3.18 |
| 372.8754 | 1108.352 | 3.283019 | 358.9517 | 0 | 0 | 0 | 1113.895 | 2.12 |
| 307.1985 | 512.2721 | 0 | 290.7828 | 0 | 0 | 0 | 525.5409 | 0 |
| 373.9347 | 859.0248 | 1.09434 | 378.1242 | 0 | 0 | 0 | 855.3126 | 0 |
| 447.0267 | 546.8426 | 2.188679 | 443.0976 | 0 | 0 | 0 | 553.807 | 1.06 |
| 328.3846 | 720.7428 | 4.377358 | 335.5186 | 0 | 0 | 0 | 712.935 | 4.24 |
| 91.10023 | 208.4707 | 0 | 85.21109 | 0 | 0 | 0 | 210.4257 | 2.12 |
| 118.6422 | 313.2298 | 1.09434 | 120.3607 | 0 | 0 | 0 | 308.8338 | 0 |
| 432.1964 | 1044.448 | 0 | 381.481 | 0 | 0 | 0 | 1079.463 | 0 |
| 423.722 | 922.9279 | 3.283019 | 372.0228 | 0 | 0 | 0 | 963.0191 | 9.209302 |
| 1128.16 | 1786.143 | 4.377358 | 1161.001 | 0 | 0 | 0 | 1739.938 | 10.6 |
| 528.5932 | 903.0237 | 3.283019 | 533.6344 | 0 | 0 | 0 | 894.0477 | 4.24 |
| 288.131 | 1220.444 | 2.188679 | 262.728 | 0 | 0 | 0 | 1230.524 | 6.139535 |
| 507.4071 | 1213.111 | 3.283019 | 479.2158 | 0 | 0 | 0 | 1237.868 | 5.116279 |
| 305.0798 | 1353.488 | 0 | 279.5426 | 0 | 0 | 0 | 1373.194 | 1.023256 |
| 313.5543 | 578.2704 | 2.188679 | 281.6444 | 0 | 0 | 0 | 614.7377 | 0 |
| 85.80371 | 195.8996 | 0 | 83.02204 | 0 | 0 | 0 | 195.1215 | 1.023256 |
| 478.8059 | 980.5454 | 1.09434 | 434.0266 | 0 | 0 | 0 | 1008.128 | 2.046512 |
| 391.9429 | 706.0765 | 2.188679 | 375.1755 | 0 | 0 | 0 | 714.3965 | 3.069767 |
| 199.1493 | 762.6464 | 1.09434 | 187.0623 | 0 | 0 | 0 | 767.8975 | 1.023256 |
| 166.3109 | 576.1752 | 1.09434 | 147.1277 | 0 | 0 | 0 | 585.3645 | 2.046512 |
| 343.2148 | 811.8832 | 0 | 314.2226 | 0 | 0 | 0 | 830.84 | 2.046512 |
| 358.0451 | 894.6429 | 1.09434 | 336.2918 | 0 | 0 | 0 | 903.2238 | 2.046512 |
| 610.1597 | 1463.485 | 4.377358 | 552.7796 | 0 | 0 | 0 | 1517.961 | 6.139535 |
| 448.086 | 1049.686 | 2.188679 | 411.9574 | 0 | 0 | 0 | 1078.413 | 2.046512 |
| 378.1719 | 515.4149 | 0 | 374.1246 | 0 | 0 | 0 | 512.9807 | 1.023256 |
| 292.3682 | 727.0283 | 1.09434 | 259.5752 | 0 | 0 | 0 | 745.8677 | 0 |
| 401.4766 | 958.546 | 1.09434 | 399.427 | 0 | 0 | 0 | 948.4862 | 3.18 |
| 471.3907 | 758.4561 | 0 | 452.6839 | 0 | 0 | 0 | 770.5141 | 1.06 |
| 429.0185 | 942.8321 | 1.09434 | 426.0554 | 0 | 0 | 0 | 944.2986 | 4.24 |
| 529.6525 | 925.0231 | 3.283019 | 531.5041 | 0 | 0 | 0 | 917.0793 | 4.24 |
| 255.2925 | 529.0336 | 2.188679 | 249.2424 | 0 | 0 | 0 | 530.7754 | 3.18 |
| 1093.882 | 946.911 | 5.754717 | 1124.114 | 0 | 0 | 0 | 922.4396 | 3.125 |
| 1166.17 | 388.9668 | 4.603774 | 1173.127 | 0 | 0 | 0 | 382.2145 | 4.166667 |
| 1117.269 | 1221.101 | 2.301887 | 1161.407 | 0 | 0 | 0 | 1170.132 | 4.166667 |
| 836.6233 | 216.8012 | 2.301887 | 843.938 | 0 | 0 | 0 | 198.221 | 2 |
| 981.1986 | 669.533 | 5.754717 | 1017.861 | 0 | 0 | 0 | 634.6007 | 4.041667 |
| 907.8479 | 623.8347 | 4.603774 | 914.2083 | 0 | 0 | 0 | 619.2303 | 6.25 |
| 1160.855 | 1167.963 | 5.754717 | 1146.402 | 0 | 0 | 0 | 1183.997 | 3 |
| 235.9979 | 392.155 | 1.150943 | 249.3295 | 0 | 0 | 0 | 382.2145 | 1.041667 |
| 310.4117 | 222.1149 | 0 | 323.6153 | 0 | 0 | 0 | 213.1408 | 0 |
| 1222.512 | 869.3302 | 2.301887 | 1247.713 | 0 | 0 | 0 | 834.8932 | 6.25 |
| 720.7504 | 720.545 | 2.301887 | 727.6057 | 0 | 0 | 0 | 712.9561 | 1 |
| 350.8077 | 348.5823 | 0 | 364.4047 | 0 | 0 | 0 | 335.2385 | 1.041667 |


| 339.1141 | 342.2058 | 0 | 320.6419 | 0 | 0 | 0 | 365.7043 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1073.684 | 1229.603 | 3.45283 | 1033.242 | 0 | 0 | 0 | 1258.597 | 7 |
| 727.1288 | 522.8734 | 2.301887 | 705.3968 | 0 | 0 | 0 | 538.1806 | 2 |
| 1100.351 | 44.04487 | 2.285714 | 1018.817 | 0 | 98.21405 | 0 | 0 | 9.568175 |
| 1377.718 | 102.0241 | 2.301887 | 1337.071 | 0 | 103.4382 | 0 | 0 | 6.282353 |
| 903.5957 | 381.5275 | 0 | 896.4965 | 0 | 159.859 | 0 | 190.0396 | 5.235294 |
| 204.1063 | 142.4086 | 0 | 212.0367 | 0 | 0 | 0 | 134.5224 | 1.041667 |
| 206.2324 | 341.143 | 0 | 215.2332 | 0 | 0 | 0 | 318.1562 | 0 |
| 1390.414 | 40.89881 | 0 | 1391.678 | 0 | 0 | 0 | 0 | 10.75988 |
| 1258.656 | 388.9668 | 2.301887 | 1252.128 | 0 | 297.7767 | 0 | 0 | 12.56471 |
| 1141.338 | 44.04487 | 0 | 1018.272 | 0 | 148.3659 | 0 | 0 | 2.094118 |
| 825.0002 | 125.8425 | 2.285714 | 805.3889 | 0 | 128.5141 | 0 | 0 | 4.188235 |
| 735.6332 | 156.2244 | 1.150943 | 719.3968 | 0 | 140.0073 | 0 | 0 | 4.188235 |
| 502.3568 | 32.50931 | 2.285714 | 496.0273 | 0 | 34.4794 | 0 | 0 | 2.094118 |
| 355.06 | 134.9694 | 0 | 348.1629 | 0 | 111.7968 | 0 | 0 | 4.188235 |
| 753.7051 | 146.6596 | 0 | 723.5916 | 0 | 144.1866 | 0 | 0 | 1.047059 |
| 584.6796 | 274.1897 | 0 | 580.9706 | 0 | 243.4455 | 0 | 0 | 6.282353 |
| 1557.516 | 51.38569 | 0 | 1506.958 | 0 | 81.49677 | 0 | 0 | 4.188235 |
| 322.1053 | 281.629 | 0 | 322.485 | 0 | 15.67246 | 0 | 259.4361 | 1.047059 |
| 266.8265 | 170.0401 | 1.150943 | 262.1157 | 0 | 0 | 0 | 175.0927 | 1.041667 |
| 38.26994 | 48.88654 | 0 | 43.68594 | 0 | 0 | 0 | 43.77317 | 0 |
| 186.0344 | 32.94528 | 0 | 177.2275 | 0 | 26.12076 | 0 | 0 | 3.141176 |
| 1660.51 | 106.9661 | 0 | 1655 | 0 | 0 | 0 | 0 | 23 |
| 127.5665 | 73.32981 | 0 | 128.9268 | 0 | 0 | 0 | 70.46413 | 2.083333 |
| 1063.054 | 208.2992 | 2.301887 | 1050.781 | 0 | 169.2625 | 0 | 0 | 4.188235 |
| 1050.297 | 689.7253 | 0 | 1062.316 | 0 | 550.6256 | 0 | 0 | 13.61176 |
| 321.5924 | 4.19475 | 1.142857 | 300.9721 | 0 | 20.89661 | 0 | 0 | 0 |
| 577.2382 | 583.4502 | 0 | 593.988 | 0 | 0 | 0 | 568.533 | 1.111111 |
| 685.6697 | 885.2714 | 1.150943 | 635.5974 | 0 | 0 | 0 | 934.6225 | 2 |
| 903.5957 | 737.5491 | 4.603774 | 905.6842 | 0 | 0 | 0 | 745.2116 | 5.208333 |
| 425.2215 | 513.3086 | 2.301887 | 429.372 | 0 | 0 | 0 | 504.0781 | 0 |
| 845.1277 | 1074.441 | 6.90566 | 850.5564 | 0 | 0 | 0 | 1069.559 | 3.333333 |
| 785.5967 | 681.2233 | 3.45283 | 806.5917 | 0 | 0 | 0 | 659.8005 | 6.25 |
| 411.4018 | 472.9241 | 0 | 403.9904 | 0 | 0 | 0 | 477.4355 | 1 |
| 772.8401 | 961.7895 | 2.301887 | 751.3787 | 0 | 0 | 0 | 987.2855 | 0 |
| 846.1908 | 816.1926 | 1.150943 | 837.6202 | 0 | 0 | 0 | 823.7927 | 3.333333 |
| 798.3534 | 1080.818 | 2.301887 | 777.2511 | 0 | 0 | 0 | 1101.203 | 2.222222 |
| 1141.72 | 978.7935 | 4.603774 | 1129.763 | 0 | 0 | 0 | 991.5047 | 7.777778 |
| 600.6254 | 421.9121 | 1.150943 | 599.6401 | 0 | 0 | 0 | 417.756 | 3 |
| 1142.783 | 1124.39 | 4.603774 | 1159.276 | 0 | 0 | 0 | 1108.209 | 5.208333 |
| 794.1012 | 793.8749 | 2.301887 | 787.887 | 0 | 0 | 0 | 792.8839 | 4 |
| 1068.369 | 388.9668 | 1.150943 | 1064.969 | 0 | 0 | 0 | 383.6535 | 4 |
| 909.974 | 766.2433 | 1.150943 | 885.1831 | 0 | 0 | 0 | 782.2268 | 2 |
| 752.6421 | 475.0496 | 0 | 757.2175 | 0 | 0 | 0 | 461.4499 | 4 |
| 527.2747 | 790.6866 | 2.301887 | 519.145 | 0 | 0 | 0 | 795.3789 | 5.125 |
| 554.9141 | 538.8147 | 3.45283 | 549.6655 | 0 | 0 | 0 | 548.4163 | 1 |
| 847.2538 | 1209.41 | 2.301887 | 868.3913 | 0 | 0 | 0 | 1186.146 | 2.083333 |


| 790.912 | 716.294 | 1.150943 | 810.8538 | 0 | 0 | 0 | 686.4915 | 3.125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 512.3919 | 644.027 | 2.301887 | 506.1177 | 0 | 0 | 0 | 648.0565 | 2.083333 |
| 719.6874 | 632.3367 | 3.45283 | 730.9404 | 0 | 0 | 0 | 617.095 | 4.166667 |
| 764.3357 | 830.0084 | 0 | 775.6919 | 0 | 0 | 0 | 814.6081 | 2.083333 |
| 355.06 | 716.294 | 0 | 358.0116 | 0 | 0 | 0 | 706.7766 | 2.083333 |
| 675.0391 | 562.1952 | 0 | 655.6912 | 0 | 0 | 0 | 578.6773 | 0 |
| 890.839 | 801.3141 | 3.45283 | 871.4347 | 0 | 0 | 0 | 811.0008 | 2 |
| 885.5238 | 940.5345 | 2.301887 | 903.5532 | 0 | 0 | 0 | 916.0337 | 4.166667 |
| 638.8953 | 663.1565 | 4.603774 | 595.1714 | 0 | 0 | 0 | 699.8824 | 4 |
| 474.122 | 349.645 | 2.301887 | 471.6746 | 0 | 0 | 0 | 348.4853 | 1 |
| 346.5555 | 363.4608 | 1.150943 | 316.2123 | 0 | 0 | 0 | 388.982 | 1 |
| 875.9563 | 1489.977 | 1.150943 | 777.3113 | 0 | 0 | 0 | 1575.111 | 3 |
| 587.8687 | 441.0416 | 1.150943 | 560.4587 | 0 | 0 | 0 | 462.2874 | 4.166667 |
| 727.1288 | 764.1178 | 0 | 738.4425 | 0 | 0 | 0 | 753.1216 | 2.222222 |
| 281.6561 | 829.5118 | 2.285714 | 340.8221 | 0 | 634.212 | 0 | 0 | 29.31765 |
| 544.3951 | 98.57662 | 0 | 534.8286 | 0 | 95.07956 | 0 | 0 | 1.047059 |
| 532.8345 | 658.5757 | 1.142857 | 534.8286 | 0 | 531.8187 | 0 | 0 | 16.75294 |
| 589.5862 | 256.9284 | 1.142857 | 414.23 | 0 | 400.17 | 0 | 0 | 6.282353 |
| 757.7391 | 672.2087 | 0 | 868.7139 | 0 | 0 | 0 | 219.4724 | 82.85106 |
| 851.2741 | 263.2206 | 1.142857 | 956.9763 | 0 | 0 | 0 | 0 | 44.1155 |
| 76.71977 | 348.1642 | 0 | 93.33283 | 0 | 270.6111 | 0 | 0 | 11.51765 |
| 810.2869 | 164.6439 | 1.142857 | 765.5389 | 0 | 189.1143 | 0 | 0 | 19.89412 |
| 709.3951 | 249.5876 | 1.142857 | 703.6666 | 0 | 223.5937 | 0 | 0 | 5.235294 |
| 869.1404 | 298.8759 | 0 | 964.362 | 0 | 0 | 0 | 0 | 66.71125 |
| 1821.306 | 243.2955 | 1.142857 | 1893.906 | 0 | 0 | 0 | 0 | 48.41945 |
| 332.102 | 205.5427 | 0 | 341.8708 | 0 | 168.2177 | 0 | 0 | 1.047059 |
| 1294.777 | 145.7676 | 0 | 1222.765 | 0 | 187.0246 | 0 | 0 | 8.376471 |
| 2467.644 | 244.3442 | 2.285714 | 2571.28 | 0 | 0 | 0 | 0 | 47.34347 |
| 345.7644 | 643.8941 | 1.142857 | 354.8682 | 0 | 0 | 0 | 619.0779 | 4.8 |
| 772.4524 | 357.6024 | 1.142857 | 891.5601 | 0 | 0 | 0 | 0 | 48.41945 |
| 278.5033 | 345.0182 | 1.142857 | 282.8353 | 0 | 0 | 0 | 332.3144 | 1.2 |
| 543.3441 | 675.3547 | 1.142857 | 556.1367 | 0 | 0 | 0 | 650.1353 | 0 |
| 146.0659 | 156.5776 | 0 | 159.486 | 0 | 0 | 0 | 137.4524 | 0 |
| 95.98614 | 445.7241 | 0 | 104.2793 | 0 | 0 | 0 | 426.8258 | 2 |
| 197.1889 | 789.1509 | 2 | 215.7151 | 0 | 0 | 0 | 746.17 | 0 |
| 127.286 | 226.5155 | 0 | 0 | 0 | 0 | 0 | 256.8573 | 5.137931 |
| 246.2253 | 412.3209 | 0 | 244.3408 | 0 | 0 | 0 | 394.788 | 0 |
| 474.714 | 172.2353 | 0 | 0 | 0 | 0 | 0 | 273.5484 | 37.05118 |
| 202.4055 | 553.2407 | 0 | 211.6257 | 0 | 0 | 0 | 521.9056 | 0 |
| 249.0774 | 216.0225 | 0 | 0 | 0 | 0 | 0 | 284.2274 | 12.33103 |
| 356.5631 | 434.1526 | 0 | 0 | 0 | 0 | 0 | 570.4332 | 0 |
| 513.6673 | 511.0777 | 2 | 0 | 0 | 0 | 0 | 701.7484 | 26.05263 |
| 197.4016 | 249.7431 | 0 | 0 | 0 | 0 | 0 | 320.019 | 0 |
| 103.2894 | 369.5231 | 0 | 0 | 0 | 0 | 0 | 391.6022 | 6.165517 |
| 124.156 | 318.3744 | 10 | 0 | 0 | 0 | 0 | 353.7052 | 13.35862 |
| 230.5754 | 615.8718 | 0 | 0 | 0 | 0 | 0 | 695.8308 | 25.68966 |
| 193.2675 | 291.8938 | 0 | 0 | 0 | 0 | 0 | 354.7579 | 18.49655 |


| 159.6291 | 199.3754 | 0 | 162.5531 | 0 | 0 | 0 | 180.8584 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 127.286 | 425.891 | 0 | 0 | 0 | 0 | 0 | 363.1794 | 15.41379 |
| 132.5026 | 693.1167 | 0 | 0 | 0 | 0 | 0 | 707.4104 | 13.35862 |
| 78.24957 | 229.6471 | 0 | 0 | 0 | 0 | 0 | 237.9089 | 0 |
| 115.7505 | 239.4285 | 0 | 0 | 0 | 0 | 0 | 269.4897 | 6.165517 |
| 195.1023 | 507.3113 | 1 | 0 | 0 | 0 | 0 | 564.1301 | 21.88421 |
| 116.8527 | 165.9722 | 0 | 0 | 0 | 0 | 0 | 211.1548 | 7.294737 |
| 180.8653 | 549.0133 | 0 | 0 | 0 | 0 | 0 | 594.5952 | 18.75789 |
| 141.8925 | 471.8204 | 0 | 0 | 0 | 0 | 0 | 507.4019 | 20.84211 |
| 123 | 238 | 0 | 124 | 0 | 0 | 17 | 220 | 0 |
| 23 | 60 | 0 | 27 | 0 | 0 | 3 | 54 | 0 |
| 64 | 121 | 0 | 63 | 0 | 0 | 2 | 119 | 0 |
| 38 | 81 | 0 | 43 | 0 | 0 | 0 | 76 | 0 |
| 49 | 167 | 1 | 56 | 0 | 0 | 6 | 156 | 0 |
| 15 | 55 | 0 | 16 | 0 | 0 | 0 | 56 | 0 |
| 608.8104 | 1175.024 | 1 | 593.1558 | 0 | 0 | 0 | 1189.532 | 1.3 |
| 537.5555 | 881.5311 | 0 | 527.0163 | 0 | 0 | 0 | 893.9894 | 0 |
| 653.8686 | 1123.479 | 1 | 646.6973 | 0 | 0 | 0 | 1130.634 | 2.6 |
| 718.8364 | 955.1674 | 1 | 700.2388 | 0 | 0 | 0 | 972.8709 | 2.6 |
| 706.262 | 595.4017 | 0 | 694.9896 | 0 | 0 | 0 | 601.6023 | 1.3 |
| 799.5221 | 450.2331 | 1 | 778.9763 | 0 | 0 | 0 | 468.0298 | 1.3 |
| 140.4141 | 373.441 | 0 | 134.3787 | 0 | 0 | 0 | 376.5273 | 0 |
| 304.9291 | 695.3366 | 0 | 310.7506 | 0 | 0 | 0 | 677.3285 | 1.3 |
| 406.5722 | 545.9602 | 0 | 398.9366 | 0 | 0 | 0 | 549.0147 | 1.3 |
| 141.462 | 434.4539 | 0 | 140.6777 | 0 | 0 | 0 | 432.2702 | 0 |
| 165.5629 | 129.3894 | 0 | 172.2064 | 0 | 0 | 0 | 83.08843 | 8 |
| 152.9885 | 230.3763 | 0 | 162.6241 | 0 | 0 | 0 | 187.2119 | 5 |
| 211.669 | 509.1421 | 1 | 195.269 | 0 | 0 | 0 | 515.3586 | 0 |
| 99.54731 | 305.0645 | 1 | 107.083 | 0 | 0 | 0 | 295.5424 | 1.3 |
| 1020.064 | 1185.152 | 2.086957 | 1052.081 | 0 | 0 | 0 | 1116.705 | 7 |
| 704.9774 | 689.3801 | 0 | 659.7084 | 0 | 0 | 0 | 686.9637 | 4.125 |
| 1126.604 | 1786.121 | 5.217391 | 1028.174 | 0 | 0 | 0 | 1791.323 | 4.125 |
| 316.1979 | 253.5033 | 0 | 350.3255 | 0 | 0 | 0 | 281.4098 | 1 |
| 363.2274 | 221.4397 | 0 | 406.687 | 0 | 0 | 0 | 235.6248 | 1 |
| 1135.671 | 731.9068 | 2.086957 | 1067.889 | 0 | 0 | 0 | 729.3554 | 6.1875 |
| 827.385 | 905.3709 | 2.086957 | 778.8531 | 0 | 0 | 0 | 892.4006 | 2.0625 |
| 1066.533 | 1442.55 | 1.043478 | 973.0148 | 0 | 0 | 0 | 1446.754 | 2.0625 |
| 1088.068 | 1428.002 | 0 | 979.6339 | 0 | 0 | 0 | 1441.319 | 0 |
| 345.6883 | 268.5896 | 0 | 333.1638 | 0 | 0 | 0 | 260.8723 | 0 |
| 277.684 | 565.1574 | 2.086957 | 250.4244 | 0 | 0 | 0 | 561.9624 | 2.0625 |
| 1069.934 | 761.004 | 0 | 1025.968 | 0 | 0 | 0 | 744.573 | 1.03125 |
| 870.4544 | 1181.794 | 2.086957 | 840.6318 | 0 | 0 | 0 | 1148.925 | 4.125 |
| 1374.819 | 1579.083 | 4.173913 | 1232.265 | 0 | 0 | 0 | 1626.104 | 5.15625 |
| 825.1182 | 1163.888 | 3.130435 | 751.2733 | 0 | 0 | 0 | 1180.447 | 2.0625 |
| 556.3483 | 225.4476 | 0 | 571.351 | 0 | 0 | 0 | 289.2267 | 0 |
| 795.498 | 1301.584 | 1 | 985.7738 | 0 | 0 | 0 | 1333.346 | 4 |
| 200.1253 | 82.16313 | 0 | 212.1845 | 0 | 0 | 0 | 98.27007 | 0 |
|  |  |  |  |  |  |  |  | 0 |


| 963.6032 | 937.8621 | 1 | 1141.597 | 0 | 0 | 0 | 970.417 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 260.4633 | 186.7677 | 0 | 259.6085 | 0 | 0 | 0 | 187.9827 | 0 |
| 188.7568 | 333.2105 | 0 | 193.1234 | 0 | 0 | 0 | 326.0491 | 2 |
| 198.2474 | 303.4975 | 0 | 185.7362 | 0 | 0 | 0 | 318.6147 | 0 |
| 245.7002 | 288.6409 | 2 | 240.6128 | 0 | 0 | 0 | 294.1876 | 0 |
| 112.8323 | 344.8835 | 0 | 112.9191 | 0 | 0 | 0 | 345.1659 | 0 |
| 461.6636 | 874.8233 | 2 | 471.1063 | 0 | 0 | 0 | 865.705 | 0 |
| 239.8945 | 388.331 | 0 | 225.4504 | 0 | 0 | 0 | 402.6284 | 0 |
| 611.9975 | 1248.053 | 1 | 595.5294 | 0 | 0 | 0 | 1255.38 | 2 |
| 674.9032 | 907.1843 | 0 | 666.7803 | 0 | 0 | 0 | 912.1206 | 1 |
| 588.5412 | 1118.609 | 5 | 572.1336 | 0 | 0 | 0 | 1130.166 | 5 |
| 388.6549 | 780.0496 | 3 | 339.5974 | 0 | 0 | 0 | 829.9303 | 4 |
| 141.329 | 296.0241 | 0 | 139.4026 | 0 | 0 | 0 | 292.0697 | 2 |
| 326.3038 | 446.6329 | 0 | 304.7384 | 0 | 0 | 0 | 464.3309 | 1.111111 |
| 281.6189 | 825.7516 | 3 | 273.5365 | 0 | 0 | 0 | 831.8394 | 2.222222 |
| 332.5389 | 845.4865 | 0 | 314.099 | 0 | 0 | 0 | 855.7847 | 3.333333 |
| 465.5545 | 807.0553 | 1 | 431.6261 | 0 | 0 | 0 | 837.0449 | 3.333333 |
| 365.665 | 623.4858 | 0 | 372.2394 | 0 | 0 | 0 | 606.2784 | 3.2 |
| 405.3154 | 355.0253 | 2.666667 | 415.3176 | 0 | 0 | 0 | 340.8268 | 1.6 |
| 234.5983 | 535.8252 | 0 | 244.1095 | 0 | 0 | 0 | 522.1641 | 0 |
| 126.6611 | 254.2156 | 0 | 129.2345 | 0 | 0 | 0 | 247.9733 | 0 |
| 459.284 | 292.5671 | 0 | 455.082 | 0 | 0 | 0 | 293.8538 | 0 |
| 374.4762 | 753.8809 | 1.333333 | 391.0171 | 0 | 0 | 0 | 731.9036 | 3.2 |
| 85.99109 | 242.3395 | 0 | 71.2381 | 0 | 0 | 0 | 264.0031 | 0 |
| 72.19005 | 263.3213 | 0 | 72.28571 | 0 | 0 | 0 | 266.1067 | 0 |
| 132.7023 | 518.2498 | 0 | 137.2381 | 0 | 0 | 0 | 520.6435 | 1 |
| 39.27988 | 86.02527 | 0 | 40.85714 | 0 | 0 | 0 | 88.35162 | 0 |
| 88.11433 | 442.7154 | 1 | 105.8095 | 0 | 0 | 0 | 452.2762 | 1 |
| 198.5226 | 624.2077 | 2 | 201.1429 | 0 | 0 | 0 | 648.9637 | 1 |
| 187.9065 | 668.2695 | 2 | 212.6667 | 0 | 0 | 0 | 654.2227 | 4 |
| 105.1002 | 432.2245 | 0 | 107.9048 | 0 | 0 | 0 | 448.0689 | 1 |
| 79.62138 | 224.505 | 0 | 89.04762 | 0 | 0 | 0 | 228.2417 | 0 |
| 37.15664 | 155.2651 | 0 | 47.14286 | 0 | 0 | 0 | 150.4081 | 0 |
| 44.58797 | 236.0449 | 1 | 46.09524 | 0 | 0 | 0 | 244.0188 | 2 |
| 101.9154 | 378.721 | 1 | 103.7143 | 0 | 0 | 0 | 382.857 | 0 |
| 94.48404 | 155.2651 | 0 | 93.2381 | 0 | 0 | 0 | 164.0816 | 0 |
| 109.3467 | 475.2372 | 0 | 118.381 | 0 | 0 | 0 | 472.2605 | 0 |
| 12.73942 | 73.43621 | 0 | 15.71429 | 0 | 0 | 0 | 74.67816 | 0 |
| 40.3415 | 89.17254 | 1 | 33.52381 | 0 | 0 | 0 | 97.81787 | 0 |
| 754.5164 | 561.5705 | 3.608108 | 678.2302 | 0 | 0 | 0 | 661.3058 | 3.6 |
| 733.7999 | 490.6927 | 0 | 734.9841 | 0 | 0 | 0 | 493.4374 | 2.326531 |
| 602.9589 | 332.5806 | 1.202703 | 589.273 | 0 | 0 | 0 | 346.7705 | 1.163265 |
| 671.6504 | 387.102 | 1.202703 | 633.8094 | 0 | 0 | 0 | 431.0901 | 2.4 |
| 409.9684 | 134.1227 | 1.202703 | 377.1347 | 0 | 0 | 0 | 170.5429 | 1.163265 |
| 875.5443 | 387.102 | 2.405405 | 865.4175 | 0 | 0 | 0 | 389.2392 | 2.266667 |
| 1396.728 | 793.8318 | 1.202703 | 1420.684 | 0 | 0 | 0 | 758.3473 | 5.816327 |
| 819.9369 | 499.4161 | 0 | 763.912 | 0 | 0 | 0 | 560.5176 | 5.816327 |


| 556.0742 | 368.5647 | 0 | 579.6303 | 0 | 0 | 0 | 337.6749 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 870.0926 | 594.2834 | 2.405405 | 846.4102 | 0 | 0 | 0 | 618.5022 | 3.489796 |
| 512.4605 | 381.6499 | 0 | 466.9604 | 0 | 0 | 0 | 435.6041 | 0 |
| 553.8935 | 330.3998 | 0 | 530.3457 | 0 | 0 | 0 | 361.5509 | 0 |
| 780.6846 | 334.7615 | 0 | 678.1996 | 0 | 0 | 0 | 442.2745 | 2.326531 |
| 544.0804 | 453.6182 | 0 | 579.2784 | 0 | 0 | 0 | 410.8078 | 0 |
| 586.6038 | 443.8043 | 1.202703 | 577.3074 | 0 | 0 | 0 | 451.3866 | 1.133333 |
| 885.3574 | 493.964 | 1.202703 | 907.0281 | 0 | 0 | 0 | 462.6994 | 0 |
| 1029.282 | 585.56 | 3.608108 | 1034.978 | 0 | 0 | 0 | 582.1197 | 6.979592 |
| 310.7473 | 220.2665 | 1.202703 | 328.9214 | 0 | 0 | 0 | 198.9667 | 1.163265 |
| 1023.831 | 811.2786 | 1.202703 | 1058.381 | 0 | 0 | 0 | 762.1567 | 0 |
| 978.0364 | 526.6768 | 0 | 978.8935 | 0 | 0 | 0 | 513.5098 | 0 |
| 816.6658 | 584.4695 | 2.405405 | 836.2516 | 0 | 0 | 0 | 558.9149 | 3 |
| 1006.385 | 626.9962 | 0 | 1031.159 | 0 | 0 | 0 | 590.266 | 0 |
| 580.0617 | 272.6071 | 0 | 572.9586 | 0 | 0 | 0 | 269.3056 | 2.266667 |
| 735.9806 | 411.0915 | 0 | 736.0397 | 0 | 0 | 0 | 408.8647 | 2.266667 |
| 817.7562 | 943.2204 | 3.608108 | 860.1146 | 0 | 0 | 0 | 891.9116 | 1.107143 |
| 636.7595 | 858.167 | 3.608108 | 683.0322 | 0 | 0 | 0 | 804.8696 | 2.214286 |
| 586.6038 | 792.7413 | 2.405405 | 606.0398 | 0 | 0 | 0 | 759.7368 | 5.535714 |
| 279.1274 | 410.001 | 0 | 281.7798 | 0 | 0 | 0 | 411.915 | 0 |
| 388.1616 | 323.8572 | 0 | 381.1673 | 0 | 0 | 0 | 330.4131 | 0 |
| 360.9031 | 366.3839 | 1.202703 | 348.4022 | 0 | 0 | 0 | 388.7861 | 0 |
| 272.5854 | 287.8731 | 0 | 265.3973 | 0 | 0 | 0 | 292.9663 | 0 |
| 684.7345 | 915.9597 | 1.202703 | 721.5284 | 0 | 0 | 0 | 868.2706 | 4.428571 |
| 534.2674 | 823.2733 | 2.405405 | 558.7445 | 0 | 0 | 0 | 787.6762 | 0 |
| 915.8869 | 445.9852 | 0 | 899.9479 | 0 | 0 | 0 | 464.7811 | 1.1 |
| 1186.292 | 676.0655 | 0 | 1144.261 | 0 | 0 | 0 | 708.3214 | 4.653061 |
| 822.1175 | 467.7937 | 0 | 747.8409 | 0 | 0 | 0 | 543.4633 | 4.653061 |
| 199.5325 | 305.3199 | 0 | 226.5775 | 0 | 0 | 0 | 272.9464 | 0 |
| 853.7375 | 463.432 | 0 | 846.4316 | 0 | 0 | 0 | 471.3894 | 1.1 |
| 562.6163 | 719.6826 | 0 | 561.3753 | 0 | 0 | 0 | 726.9089 | 1.1 |
| 826.4789 | 569.2035 | 0 | 820.6965 | 0 | 0 | 0 | 575.298 | 5.816327 |
| 942.0551 | 338.0328 | 1.202703 | 884.9808 | 0 | 0 | 0 | 401.3442 | 3.489796 |
| 573.5197 | 250.7985 | 0 | 562.4674 | 0 | 0 | 0 | 264.3305 | 2.2 |
| 782.8653 | 935.5874 | 1.202703 | 820.5186 | 0 | 0 | 0 | 896.21 | 0 |
| 629.1271 | 855.9862 | 0 | 673.1332 | 0 | 0 | 0 | 807.0188 | 0 |
| 791.588 | 894.1512 | 0 | 817.2189 | 0 | 0 | 0 | 860.7484 | 4.428571 |
| 491.7441 | 410.001 | 0 | 477.2782 | 0 | 0 | 0 | 431.7398 | 0 |
| 637.8498 | 447.0756 | 1.202703 | 642.1958 | 0 | 0 | 0 | 448.2605 | 0 |
| 618.2237 | 962.8481 | 0 | 661.0344 | 0 | 0 | 0 | 903.7321 | 2.214286 |
| 527.7253 | 742.5816 | 1.202703 | 584.042 | 0 | 0 | 0 | 678.0677 | 2.214286 |
| 38.16196 | 42.5267 | 0 | 40.69596 | 0 | 0 | 0 | 38.68532 | 0 |
| 473.2082 | 314.0433 | 0 | 468.5408 | 0 | 0 | 0 | 321.6021 | 0 |
| 911.5256 | 1092.609 | 2.405405 | 970.1037 | 0 | 0 | 0 | 1024.086 | 5.535714 |
| 635.6691 | 764.3902 | 0 | 625.8133 | 0 | 0 | 0 | 780.8764 | 2.2 |
| 80.68528 | 105.7715 | 0 | 74.79258 | 0 | 0 | 0 | 110.683 | 1.107143 |
| 610.5913 | 817.8212 | 1.202703 | 585.403 | 0 | 0 | 0 | 854.6686 | 0 |


| 878.8153 | 636.8101 | 3.608108 | 849.7081 | 0 | 0 | 0 | 687.2593 | 1.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 910.4352 | 440.533 | 0 | 930.5287 | 0 | 0 | 0 | 432.8412 | 1.1 |
| 455.7628 | 350.0275 | 0 | 430.3149 | 0 | 0 | 0 | 374.4682 | 1.1 |
| 923.5193 | 665.1612 | 4.810811 | 890.1184 | 0 | 0 | 0 | 704.8814 | 6.6 |
| 838.4727 | 774.2041 | 3.608108 | 826.7725 | 0 | 0 | 0 | 798.4984 | 2.2 |
| 504.8281 | 282.4209 | 0 | 493.6607 | 0 | 0 | 0 | 299.5746 | 0 |
| 467.7565 | 363.1126 | 0 | 467.4536 | 0 | 0 | 0 | 358.9138 | 1.107143 |
| 838.4727 | 621.5441 | 0 | 839.2167 | 0 | 0 | 0 | 613.5922 | 1.107143 |
| 984.5784 | 488.5119 | 1.202703 | 990.598 | 0 | 0 | 0 | 490.1128 | 2.2 |
| 452.4918 | 477.6076 | 0 | 470.7533 | 0 | 0 | 0 | 458.8509 | 0 |
| 828.6596 | 611.7302 | 1.202703 | 807.7955 | 0 | 0 | 0 | 630.1968 | 0 |
| 915.8869 | 575.7461 | 1.202703 | 867.5919 | 0 | 0 | 0 | 617.1131 | 1.133333 |
| 467.7565 | 115.5854 | 0 | 446.776 | 0 | 0 | 0 | 131.8865 | 0 |
| 417.6008 | 141.7557 | 1.202703 | 413.5625 | 0 | 0 | 0 | 139.8452 | 1.163265 |
| 1029.282 | 726.2252 | 1.202703 | 1003.493 | 0 | 0 | 0 | 742.4983 | 3.4 |
| 1097.974 | 637.9005 | 1.202703 | 1077.423 | 0 | 0 | 0 | 658.5448 | 1.133333 |
| 1082.709 | 575.7461 | 2.405405 | 1062.202 | 0 | 0 | 0 | 587.6749 | 3.4 |
| 828.6596 | 574.6557 | 0 | 829.5396 | 0 | 0 | 0 | 574.5912 | 2.266667 |
| 361.9934 | 297.6869 | 0 | 352.2554 | 0 | 0 | 0 | 309.6469 | 0 |
| 455.7628 | 437.2617 | 0 | 419.6622 | 0 | 0 | 0 | 460.1091 | 0 |
| 807.9431 | 319.4955 | 3.608108 | 788.2257 | 0 | 0 | 0 | 337.9948 | 5.666667 |
| 874.4539 | 368.5647 | 1.202703 | 857.807 | 0 | 0 | 0 | 377.2458 | 1.133333 |
| 211.5263 | 135.2131 | 0 | 202.4956 | 0 | 0 | 0 | 146.6669 | 0 |
| 788.317 | 437.2617 | 0 | 777.6309 | 0 | 0 | 0 | 417.7481 | 3 |
| 707.6317 | 399.0967 | 2.405405 | 713.556 | 0 | 0 | 0 | 394.5225 | 4.653061 |
| 994.3915 | 330.3998 | 0 | 989.9786 | 0 | 0 | 0 | 327.4423 | 1.163265 |
| 911.5256 | 592.1025 | 1.202703 | 901.3691 | 0 | 0 | 0 | 565.2519 | 3 |
| 723.9868 | 259.5219 | 0 | 725.3414 | 0 | 0 | 0 | 258.0882 | 0 |
| 758.8777 | 471.065 | 2.405405 | 772.0083 | 0 | 0 | 0 | 448.6454 | 1 |
| 887.538 | 388.1925 | 0 | 883.9094 | 0 | 0 | 0 | 391.1117 | 1.163265 |
| 612.772 | 344.5753 | 1.202703 | 632.1292 | 0 | 0 | 0 | 326.3054 | 0 |
| 1045.638 | 746.9434 | 1.202703 | 967.615 | 0 | 0 | 0 | 818.8197 | 2.266667 |
| 910.4352 | 568.1131 | 0 | 896.9465 | 0 | 0 | 0 | 574.5912 | 0 |
| 646.5726 | 341.304 | 0 | 620.7957 | 0 | 0 | 0 | 363.0719 | 1.133333 |
| 763.2391 | 801.4648 | 0 | 663.1968 | 0 | 0 | 0 | 901.683 | 1.133333 |
| 935.5131 | 674.9751 | 2.405405 | 877.3768 | 0 | 0 | 0 | 728.3243 | 2.266667 |
| 998.7529 | 813.4595 | 1.202703 | 944.7837 | 0 | 0 | 0 | 852.6192 | 1.133333 |
| 730.5289 | 488.5119 | 1.202703 | 727.3421 | 0 | 0 | 0 | 492.8183 | 0 |
| 661.8373 | 503.7779 | 1.202703 | 628.4062 | 0 | 0 | 0 | 537.5208 | 0 |
| 771.9618 | 516.863 | 1.202703 | 720.8188 | 0 | 0 | 0 | 569.1397 | 0 |
| 575.7004 | 401.2776 | 0 | 558.0988 | 0 | 0 | 0 | 420.7261 | 0 |
| 610.413 | 835.3645 | 0 | 636.1522 | 0 | 0 | 0 | 807.9484 | 0 |
| 275.2843 | 416.614 | 1 | 296.871 | 0 | 0 | 0 | 395.4245 | 1.142857 |
| 254.6108 | 490.3227 | 1 | 266.4227 | 0 | 0 | 0 | 477.7155 | 4.571429 |
| 282.9009 | 432.6376 | 0 | 295.7836 | 0 | 0 | 0 | 416.7988 | 1.142857 |
| 748.5992 | 629.194 | 1 | 755.7705 | 0 | 0 | 0 | 618.7858 | 2.285714 |
| 152.3312 | 199.7611 | 1 | 163.1159 | 0 | 0 | 0 | 188.0938 | 0 |


| 391.7089 | 844.9787 | 2 | 395.828 | 0 | 0 | 0 | 844.2847 | 1.142857 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 179.5332 | 221.1259 | 0 | 183.7773 | 0 | 0 | 0 | 221.224 | 0 |
| 201.2949 | 213.6482 | 0 | 204.4386 | 0 | 0 | 0 | 210.5368 | 0 |
| 177.3571 | 408.0681 | 1 | 197.914 | 0 | 0 | 0 | 394.3557 | 0 |
| 129.4816 | 395.2492 | 1 | 135.93 | 0 | 0 | 0 | 384.7373 | 0 |
| 150.1551 | 530.9158 | 0 | 164.2034 | 0 | 0 | 0 | 517.2579 | 2.285714 |
| 242.6419 | 620.6481 | 1 | 251.1986 | 0 | 0 | 0 | 607.03 | 2.285714 |
| 300.3102 | 660.173 | 0 | 308.8329 | 0 | 0 | 0 | 650.8473 | 0 |
| 239.3777 | 474.299 | 1 | 245.7614 | 0 | 0 | 0 | 465.9596 | 1.142857 |
| 99.90652 | 303.5786 | 0 | 0 | 0 | 0 | 0 | 362.1607 | 18.33333 |
| 144.8083 | 301.4849 | 0 | 62.32328 | 0 | 0 | 0 | 265.5137 | 14.13333 |
| 56.12726 | 238.6756 | 1 | 154.1681 | 0 | 0 | 0 | 43.54425 | 14.15556 |
| 104.3967 | 174.8194 | 0 | 15.30747 | 0 | 0 | 0 | 212.411 | 4.888889 |
| 38.16654 | 171.6789 | 0 | 0 | 0 | 0 | 0 | 187.9837 | 4.888889 |
| 98.78397 | 254.3779 | 0 | 0 | 0 | 0 | 0 | 302.6857 | 6.111111 |
| 141.4407 | 128.7592 | 0 | 0 | 0 | 0 | 0 | 194.3561 | 6.111111 |
| 226.7541 | 106.7759 | 0 | 53.57615 | 0 | 0 | 0 | 155.06 | 25 |
| 322.1705 | 207.2709 | 0 | 429.7026 | 0 | 0 | 0 | 0 | 23.95556 |
| 95.41634 | 124.5719 | 1 | 0 | 0 | 0 | 0 | 175.2391 | 3.666667 |
| 101.0291 | 179.0067 | 0 | 45.92241 | 0 | 0 | 0 | 189.0458 | 4.755556 |
| 266.1181 | 302.9027 | 1 | 274.8378 | 0 | 0 | 0 | 297.4039 | 0 |
| 324.7726 | 478.2675 | 1 | 345.1703 | 0 | 0 | 0 | 455.1666 | 0 |
| 109.7058 | 300.7771 | 0 | 119.0242 | 0 | 0 | 0 | 283.5464 | 2 |
| 13.03435 | 41.44985 | 0 | 14.0665 | 0 | 0 | 0 | 41.57259 | 0 |
| 344.3242 | 545.2249 | 1 | 328.9397 | 0 | 0 | 0 | 557.4991 | 3 |
| 196.6015 | 318.845 | 1 | 191.5208 | 0 | 0 | 0 | 320.8552 | 1 |
| 223.7564 | 680.2026 | 0 | 219.6538 | 0 | 0 | 0 | 687.5468 | 0 |
| 179.2224 | 299.7143 | 0 | 168.798 | 0 | 0 | 0 | 309.1295 | 0 |
| 81.46471 | 179.616 | 1 | 78.98881 | 0 | 0 | 0 | 182.2798 | 0 |
| 282.8464 | 613.4471 | 0 | 272.8193 | 0 | 0 | 0 | 623.4274 | 0 |
| 491.7536 | 942.4467 | 0 | 488.5097 | 0 | 0 | 0 | 943.7204 | 0 |
| 516.4 | 1068.106 | 3 | 496.671 | 0 | 0 | 0 | 1087.852 | 2 |
| 148.0556 | 165.7359 | 0 | 0 | 0 | 0 | 0 | 209.3519 | 0 |
| 34.33174 | 95.61689 | 0 | 0 | 0 | 0 | 0 | 110.5208 | 0 |
| 246.7593 | 265.6025 | 0 | 0 | 0 | 0 | 0 | 356.0046 | 0 |
| 149.1285 | 163.6111 | 0 | 0 | 0 | 0 | 0 | 210.4146 | 0 |
| 75.10067 | 54.1829 | 0 | 0 | 0 | 0 | 0 | 77.57711 | 0 |
| 169.5129 | 52.05808 | 0 | 0 | 0 | 0 | 0 | 116.897 | 0 |
| 159.8571 | 481.2717 | 0 | 0 | 0 | 0 | 0 | 535.6009 | 0 |
| 166.2943 | 214.6068 | 0 | 0 | 0 | 0 | 0 | 284.8036 | 0 |
| 493.5187 | 259.228 | 0 | 0 | 0 | 0 | 0 | 439.9579 | 0 |
| 83.6836 | 52.05808 | 0 | 0 | 0 | 0 | 0 | 79.70251 | 0 |
| 365.8476 | 545.0163 | 0 | 0 | 0 | 0 | 0 | 681.1908 | 0 |
| 141.6184 | 258.1656 | 0 | 0 | 0 | 0 | 0 | 301.8068 | 0 |
| 36.47747 | 174.2352 | 0 | 0 | 0 | 0 | 0 | 192.3487 | 0 |
| 55.78907 | 126.4268 | 0 | 0 | 0 | 0 | 0 | 149.8407 | 0 |
| 82.61074 | 128.5516 | 0 | 0 | 0 | 0 | 0 | 145.5899 | 0 |
|  |  |  |  |  |  |  |  | 0 |


| 145.9099 | 264.5401 | 0 | 0 | 0 | 0 | 0 | 309.2457 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 141.6184 | 233.7302 | 0 | 0 | 0 | 0 | 0 | 283.7409 | 0 |
| 53.64334 | 92.42966 | 0 | 0 | 0 | 0 | 0 | 110.5208 | 0 |
| 149.1285 | 364.4066 | 0 | 0 | 0 | 0 | 0 | 411.265 | 0 |
| 148.0556 | 218.8564 | 0 | 0 | 0 | 0 | 0 | 272.0512 | 0 |
| 18.23873 | 105.1786 | 0 | 0 | 0 | 0 | 0 | 107.3327 | 0 |
| 46.13327 | 196.5458 | 0 | 0 | 0 | 0 | 0 | 208.2892 | 0 |
| 245.6865 | 645.9452 | 0 | 0 | 0 | 0 | 0 | 710.9464 | 0 |
| 116.4099 | 218.7728 | 0 | 114.0582 | 0 | 0 | 0 | 224.5161 | 0 |
| 192.566 | 373.5146 | 0 | 174.8893 | 0 | 0 | 0 | 398.7834 | 1 |
| 268.722 | 722.4839 | 0 | 267.2221 | 0 | 0 | 0 | 719.5207 | 1 |
| 306.8 | 416.2019 | 0 | 312.8454 | 0 | 0 | 0 | 419.0968 | 1 |
| 307.8879 | 399.127 | 2 | 315.018 | 0 | 0 | 0 | 392.3687 | 3 |
| 341.6142 | 617.8998 | 0 | 326.9669 | 0 | 0 | 0 | 629.7143 | 0 |
| 875.0177 | 704.8492 | 2.210526 | 871.5683 | 0 | 0 | 0 | 694.0783 | 1.125 |
| 960.4895 | 315.3548 | 1.105263 | 991.3377 | 0 | 0 | 0 | 302.0674 | 0 |
| 1443.405 | 701.7166 | 0 | 1490.201 | 0 | 0 | 0 | 677.2155 | 4 |
| 77.99303 | 92.93568 | 1.105263 | 87.07603 | 0 | 0 | 0 | 88.97899 | 0 |
| 747.8783 | 825.9789 | 1.105263 | 768.4477 | 0 | 0 | 0 | 777.4235 | 4.5 |
| 410.2647 | 608.7809 | 1.105263 | 384.7657 | 0 | 0 | 0 | 617.4626 | 5 |
| 867.5389 | 1011.85 | 1.105263 | 813.8862 | 0 | 0 | 0 | 1053.178 | 3 |
| 295.9461 | 756.0161 | 1.105263 | 295.5581 | 0 | 0 | 0 | 733.6325 | 1.125 |
| 410.2647 | 836.4211 | 0 | 373.0312 | 0 | 0 | 0 | 872.7823 | 0 |
| 122.8657 | 315.3548 | 0 | 127.5405 | 0 | 0 | 0 | 304.0931 | 0 |
| 410.2647 | 723.6452 | 1.105263 | 413.6968 | 0 | 0 | 0 | 709.2524 | 3.25 |
| 321.5877 | 534.6412 | 0 | 291.4306 | 0 | 0 | 0 | 565.1709 | 0 |
| 315.1773 | 888.6322 | 0 | 304.1476 | 0 | 0 | 0 | 897.8083 | 0 |
| 239.3211 | 616.0905 | 0 | 235.264 | 0 | 0 | 0 | 620.4538 | 2 |
| 145.3021 | 405.1578 | 0 | 148.3647 | 0 | 0 | 0 | 395.2025 | 0 |
| 497.8733 | 795.6965 | 0 | 474.767 | 0 | 0 | 0 | 814.3883 | 1 |
| 724.3736 | 608.7809 | 1.105263 | 720.6593 | 0 | 0 | 0 | 593.3251 | 2 |
| 379.2812 | 582.6754 | 0 | 403.3579 | 0 | 0 | 0 | 562.689 | 2 |
| 621.8074 | 260.0111 | 1.105263 | 614.1967 | 0 | 0 | 0 | 253.7996 | 3 |
| 1201.947 | 494.9608 | 2.210526 | 1239.71 | 0 | 0 | 0 | 473.7689 | 3 |
| 1039.551 | 410.3789 | 1.105263 | 1082.715 | 0 | 0 | 0 | 382.6187 | 4 |
| 192.3116 | 122.1739 | 2.210526 | 198.9127 | 0 | 0 | 0 | 119.7671 | 1 |
| 1372.891 | 666.2131 | 1.105263 | 1422.723 | 0 | 0 | 0 | 642.866 | 2 |
| 728.6472 | 228.6844 | 2.210526 | 752.6425 | 0 | 0 | 0 | 211.9771 | 3 |
| 695.718 | 649.2599 | 1 | 688.3664 | 0 | 0 | 35.61905 | 632.0907 | 1 |
| 309.9205 | 366.6532 | 0 | 290.6286 | 12.72727 | 33.66667 | 0 | 324.7704 | 0 |
| 201.9826 | 198.5601 | 0 | 187.7418 | 4.242424 | 20.40404 | 0 | 179.9683 | 0 |
| 383.6602 | 430.7388 | 3 | 383.9692 | 6.363636 | 23.46465 | 0 | 387.8628 | 2 |
| 51.29718 | 84.04659 | 0 | 47.73098 | 3.181818 | 5.10101 | 0 | 76.53826 | 0 |
| 376.1793 | 583.0732 | 0 | 390.8976 | 0 | 0 | 26.19048 | 554.4096 | 0 |
| 30.99205 | 58.83261 | 0 | 35.43852 | 0 | 0 | 2.095238 | 53.20629 | 0 |
| 270.3789 | 229.027 | 0 | 260.9293 | 8.484848 | 18.36364 | 0 | 206.8602 | 0 |
| 635.8713 | 556.8087 | 0 | 658.2974 | 0 | 0 | 24.09524 | 519.2934 | 1 |


| 107.3598 | 345.8244 | 0 | 111.6672 | 0 | 0 | 0 | 338.4613 | 0 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- | ---: |
| 293.6606 | 914.1884 | 0 | 259.1523 | 0 | 0 | 0 | 940.1702 | 1 |
| 423.1239 | 835.8294 | 1 | 392.9423 | 0 | 0 | 0 | 860.778 | 1 |
| 154.7244 | 542.2443 | 0 | 145.3781 | 0 | 0 | 0 | 550.5219 | 0 |
| 329.4473 | 449.2583 | 0 | 304.4512 | 0 | 0 | 0 | 471.1297 | 1 |
| 297.8708 | 618.5137 | 0 | 287.5958 | 0 | 0 | 0 | 617.3784 | 0 |
| 427.3341 | 845.2324 | 0 | 402.4234 | 0 | 0 | 0 | 866.0012 | 0 |
| 153.6719 | 314.4808 | 1 | 136.9504 | 0 | 0 | 0 | 326.9703 | 4 |
| 228.4027 | 390.7502 | 0 | 220.1741 | 0 | 0 | 0 | 392.7822 | 4 |
| 208.4043 | 645.6782 | 0 | 202.2652 | 0 | 0 | 0 | 650.8067 | 0 |
| 509.5781 | 587.7306 | 1 | 478.5838 | 0 | 0 | 0 | 627.7906 | 3 |
| 532.4927 | 272.8749 | 1 | 524.3709 | 0 | 0 | 0 | 285.6613 | 1 |
| 477.934 | 219.8466 | 0 | 461.1411 | 0 | 0 | 0 | 246.9088 | 1 |
| 388.4578 | 502.6644 | 0 | 345.5833 | 0 | 0 | 0 | 551.3928 | 0 |
| 341.5373 | 483.8835 | 1 | 330.3209 | 0 | 0 | 0 | 498.2465 | 1 |
| 294.3582 | 547.7898 | 0 | 276.5924 | 0 | 0 | 0 | 564.7803 | 0 |
| 327.3087 | 707.8304 | 1 | 313.9104 | 0 | 0 | 0 | 723.9946 | 1 |
| 341.5873 | 192.2635 | 0 | 336.9598 | 0 | 0 | 0 | 197.9421 | 0 |
| 192.2115 | 66.59406 | 0 | 190.9805 | 0 | 0 | 0 | 58.09169 | 1 |
| 412.9801 | 958.0952 | 5 | 418.1814 | 0 | 0 | 0 | 947.7552 | 5 |
| 363.5543 | 890.427 | 0 | 375.3754 | 0 | 0 | 0 | 886.4362 | 0 |
| 169.6975 | 322.9836 | 0 | 0 | 0 | 0 | 0 | 389.9138 | 17.62162 |
| 132.8067 | 250.7373 | 2.5 | 0 | 0 | 0 | 0 | 283.9589 | 9.912162 |
| 188.6699 | 365.4815 | 0 | 0 | 0 | 0 | 0 | 437.5934 | 19.82432 |
| 74.83553 | 236.9255 | 0 | 0 | 0 | 0 | 0 | 252.1725 | 16.52027 |
| 278.2617 | 169.9914 | 0 | 0 | 0 | 0 | 0 | 267.0062 | 31.93919 |
| 120.1585 | 207.177 | 0 | 0 | 0 | 0 | 0 | 251.1129 | 9.912162 |
| 329.9088 | 101.9948 | 0 | 0 | 0 | 0 | 0 | 223.5647 | 13.21622 |
| 116.9964 | 293.2351 | 0 | 0 | 0 | 0 | 0 | 340.115 | 9.912162 |
| 344.6651 | 518.4737 | 2.5 | 0 | 0 | 0 | 0 | 650.5626 | 34.14189 |
| 458.7057 | 779.5366 | 4 | 468.4016 | 0 | 0 | 0 | 772.1449 | 1.25 |
| 474.8194 | 624.8917 | 0 | 490.9622 | 0 | 0 | 0 | 599.622 | 1.25 |
| 319.0529 | 694.3241 | 2 | 327.6662 | 0 | 0 | 0 | 683.7795 | 1.25 |
| 229.89 | 643.8278 | 1 | 239.5724 | 0 | 0 | 0 | 631.1811 | 2.5 |
| 586.5417 | 689.064 | 0 | 620.9544 | 0 | 0 | 0 | 657.4803 | 2.5 |
| 139.6528 | 278.7816 | 3 | 141.8096 | 0 | 0 | 0 | 277.7197 | 0 |
| 254.5978 | 801.6287 | 0 | 256.7614 | 0 | 0 | 0 | 786.8724 | 0 |
| 398.5475 | 564.9273 | 2 | 395.3481 | 0 | 0 | 0 | 556.4913 | 1.25 |
| 560.7596 | 766.9125 | 0 | 559.7184 | 0 | 0 | 0 | 760.5732 | 0 |
| 599.4327 | 973.1057 | 2 | 618.8057 | 0 | 0 | 0 | 954.1354 | 0 |
| 444.7514 | 880.6635 | 0 | 0 | 0 | 0 | 0 | 997.4662 | 54.89691 |
| 444.7514 | 1018.662 | 0 | 0 | 0 | 0 | 0 | 1137.999 | 58.19072 |
| 340.427 | 1113.47 | 5.416667 | 0 | 0 | 0 | 0 | 1158.075 | 42.81959 |
| 239.3971 | 855.3813 | 3.25 | 0 | 0 | 0 | 0 | 878.0661 | 30.74227 |
| 253.673 | 1021.822 | 4.333333 | 0 | 0 | 0 | 0 | 1089.394 | 26.35052 |
| 89.72093 | 250.687 | 0 | 86.4166 | 0 | 0 | 0 | 250.7492 | 0 |
| 54.47342 | 280.0562 | 0 | 61.87855 | 0 | 0 | 0 | 272.7815 | 0 |


| 70.49502 | 238.1002 | 0 | 69.34666 | 0 | 0 | 0 | 233.9626 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43.79236 | 180.4108 | 0 | 48.00922 | 0 | 0 | 0 | 178.3572 | 0 |
| 143.1262 | 504.5208 | 0 | 142.9608 | 0 | 0 | 0 | 502.5475 | 1 |
| 105.7425 | 327.2567 | 0 | 117.3559 | 0 | 0 | 0 | 317.8954 | 0 |
| 160.2159 | 445.7824 | 0 | 167.4988 | 0 | 0 | 0 | 432.2538 | 3 |
| 55.54153 | 361.8704 | 0 | 61.87855 | 0 | 0 | 0 | 350.4194 | 0 |
| 139.9219 | 317.8166 | 1.333333 | 151.4958 | 0 | 0 | 0 | 307.4038 | 0 |
| 163.4203 | 453.1247 | 1.333333 | 188.8363 | 0 | 0 | 0 | 432.2538 | 0 |
| 52.33721 | 201.3888 | 1.333333 | 60.81168 | 0 | 0 | 0 | 196.1929 | 0 |
| 86.51661 | 307.3276 | 0 | 99.21906 | 0 | 0 | 0 | 292.7156 | 1 |
| 120.696 | 421.6577 | 0 | 132.2921 | 0 | 0 | 0 | 415.4673 | 0 |
| 220.1214 | 1325.143 | 1 | 0 | 0 | 0 | 0 | 1370.25 | 25.95918 |
| 171.2055 | 454.9309 | 0 | 0 | 0 | 0 | 0 | 497.031 | 20.55102 |
| 149.9378 | 496.6677 | 1 | 0 | 0 | 0 | 0 | 526.4536 | 18.38776 |
| 118.0361 | 251.4641 | 0 | 0 | 0 | 0 | 0 | 278.4635 | 8.653061 |
| 133.9869 | 493.5375 | 0 | 0 | 0 | 0 | 0 | 521.1996 | 10.81633 |
| 47.85248 | 110.6025 | 0 | 0 | 0 | 0 | 0 | 116.6394 | 5.408163 |
| 101.0219 | 317.1996 | 0 | 0 | 0 | 0 | 0 | 338.3594 | 4.326531 |
| 82.9443 | 393.3692 | 1 | 0 | 0 | 0 | 0 | 416.119 | 9.734694 |
| 240.3258 | 902.5579 | 2 | 0 | 0 | 0 | 0 | 959.3855 | 20.55102 |
| 317.9531 | 212.8576 | 0 | 0 | 0 | 0 | 0 | 295.2764 | 21.63265 |
| 278.6078 | 229.5523 | 0 | 0 | 0 | 0 | 0 | 308.9368 | 4.326531 |
| 476.398 | 134.6011 | 0 | 0 | 0 | 0 | 0 | 239.4494 | 17.37573 |
| 161.635 | 124.1669 | 0 | 0 | 0 | 0 | 0 | 166.0273 | 8.653061 |
| 135.0503 | 186.7721 | 1 | 0 | 0 | 0 | 0 | 222.7708 | 4.326531 |
| 101.0219 | 526.9269 | 0 | 0 | 0 | 0 | 0 | 546.9389 | 7.815068 |
| 256.2766 | 879.6027 | 1 | 0 | 0 | 0 | 0 | 951.2738 | 16.74658 |
| 338.1575 | 859.7777 | 0 | 0 | 0 | 0 | 0 | 974.0961 | 20.09589 |
| 256.2766 | 659.4412 | 0 | 0 | 0 | 0 | 0 | 700.8873 | 22.71429 |
| 274.3542 | 729.3503 | 0 | 0 | 0 | 0 | 0 | 781.7994 | 22.71429 |
| 138.2405 | 381.8916 | 0 | 0 | 0 | 0 | 0 | 408.7634 | 3.244898 |
| 164.8252 | 529.0137 | 0 | 0 | 0 | 0 | 0 | 579.8932 | 14.5137 |
| 195.6635 | 369.3705 | 0 | 0 | 0 | 0 | 0 | 398.2553 | 14.06122 |
| 180.776 | 440.3231 | 1 | 0 | 0 | 0 | 0 | 467.6085 | 10.81633 |
| 272.2274 | 311.9825 | 0 | 0 | 0 | 0 | 0 | 374.4928 | 25.67808 |
| 66.99347 | 234.7694 | 0 | 0 | 0 | 0 | 0 | 252.1933 | 5.408163 |
| 129.7334 | 775.2607 | 0 | 0 | 0 | 0 | 0 | 791.5179 | 26.79452 |
| 55.2962 | 115.8196 | 0 | 0 | 0 | 0 | 0 | 137.971 | 6.69863 |
| 366.869 | 977.6841 | 1 | 0 | 0 | 0 | 0 | 1092.357 | 42.42466 |
| 104.2121 | 489.3638 | 0 | 0 | 0 | 0 | 0 | 508.5899 | 7.571429 |
| 327.3565 | 1039.218 | 2.133333 | 274.0875 | 0 | 0 | 0 | 1083.514 | 3.346154 |
| 297.4023 | 756.7529 | 4.266667 | 280.5114 | 0 | 0 | 0 | 775.7452 | 0 |
| 156.1897 | 565.9837 | 0 | 142.397 | 0 | 0 | 0 | 572.3229 | 3.346154 |
| 196.8418 | 812.6135 | 1.066667 | 184.1525 | 0 | 0 | 0 | 814.7433 | 4.461538 |
| 292.0533 | 962.2777 | 1.066667 | 278.3701 | 0 | 0 | 0 | 970.7356 | 2.230769 |
| 278.146 | 730.4036 | 3.2 | 233.4026 | 0 | 0 | 0 | 766.2592 | 5.576923 |
| 235.3543 | 680.8668 | 0 | 199.1417 | 0 | 0 | 0 | 712.5051 | 2.230769 |


| 359.4503 | 1272.146 | 2.133333 | 309.4191 | 0 | 0 | 0 | 1301.692 | 4.461538 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 150.8407 | 451.1006 | 0 | 140.2557 | 0 | 0 | 0 | 452.1667 | 0 |
| 371.218 | 557.5519 | 1.066667 | 334.0442 | 0 | 0 | 0 | 584.9709 | 2.230769 |
| 226.796 | 332.0016 | 0 | 202.3537 | 0 | 0 | 0 | 349.9286 | 1.115385 |
| 97.35111 | 314.0841 | 1.066667 | 88.86431 | 0 | 0 | 0 | 320.4165 | 0 |
| 357.9891 | 345.4069 | 3.6 | 342.9565 | 0 | 0 | 0 | 350.2989 | 1 |
| 419.238 | 482.7115 | 1.8 | 407.3268 | 0 | 0 | 0 | 489.9886 | 1 |
| 257.6677 | 264.955 | 0 | 252.2049 | 0 | 0 | 0 | 270.7832 | 0 |
| 171.0744 | 119.0688 | 0 | 175.1716 | 0 | 0 | 0 | 121.4226 | 0 |
| 284.068 | 318.5896 | 0 | 272.2547 | 0 | 0 | 0 | 312.6901 | 1 |
| 155.2342 | 273.5365 | 0 | 137.1826 | 0 | 0 | 0 | 277.2304 | 0 |
| 92.92932 | 170.5581 | 0 | 92.86207 | 0 | 0 | 0 | 169.7768 | 1 |
| 448.8064 | 390.46 | 0 | 423.1556 | 0 | 0 | 0 | 399.7276 | 0 |
| 385.4455 | 330.3892 | 3.6 | 357.73 | 0 | 0 | 0 | 354.597 | 2 |
| 236.5474 | 93.32423 | 0 | 232.1552 | 0 | 0 | 0 | 93.48468 | 0 |
| 242.3169 | 497.0071 | 0 | 250.7043 | 0 | 0 | 0 | 491.0577 | 0 |
| 439.4013 | 1344.154 | 1.5 | 444.48 | 0 | 0 | 0 | 1350.409 | 2.8 |
| 492.1725 | 649.1955 | 3 | 504.6928 | 0 | 0 | 0 | 645.8476 | 0 |
| 424.3238 | 310.7624 | 1.5 | 458.2358 | 0 | 0 | 0 | 100.3802 | 23.60976 |
| 86.15711 | 328.8548 | 0 | 89.77183 | 0 | 0 | 0 | 331.9977 | 0 |
| 568.6369 | 1041.906 | 0 | 586.8012 | 0 | 0 | 0 | 1030.154 | 2.8 |
| 355.3981 | 753.4925 | 0 | 364.5612 | 0 | 0 | 0 | 747.2617 | 1.4 |
| 159.3907 | 320.3407 | 0 | 157.6481 | 0 | 0 | 0 | 320.255 | 0 |
| 737.7203 | 684.3159 | 0 | 922.3528 | 0 | 0 | 0 | 92.87395 | 59.02439 |
| 552.4825 | 247.9714 | 0 | 560.7519 | 0 | 0 | 0 | 133.7638 | 5.365854 |
| 344.7929 | 889.0882 | 5.546875 | 324.5356 | 0 | 0 | 0 | 931.2311 | 4.296296 |
| 344.7929 | 994.8784 | 1.109375 | 1035.422 | 0 | 0 | 0 | 981.5025 | 3 |
| 700.8168 | 756.2877 | 2.21875 | 649.7118 | 0 | 0 | 0 | 797.625 | 3.333333 |
| 569.4136 | 873.3322 | 0 | 569.9442 | 0 | 0 | 0 | 887.8118 | 4.296296 |
| 700.8168 | 873.3322 | 4.4375 | 962.2456 | 0 | 0 | 0 | 1019.25 | 10 |
| 636.7999 | 246.4688 | 0 | 629.5016 | 0 | 0 | 0 | 236.0017 | 2 |
| 1057.964 | 943.1088 | 3.328125 | 1164.578 | 0 | 0 | 0 | 968.2687 | 4 |
| 1057.964 | 246.4688 | 1.109375 | 1136.359 | 0 | 0 | 0 | 857.9876 | 5 |
| 636.7999 | 246.4688 | 2.21875 | 859.5953 | 0 | 0 | 0 | 594.4155 | 3 |
| 677.0723 | 611.1897 | 3.169981 | 600.4234 | 0 | 0 | 0 | 639 | 8.888889 |
| 1205.09 | 849.6982 | 4.4375 | 1135.274 | 0 | 0 | 0 | 1086.27 | 2 |
| 919.4934 | 801.3865 | 2.060606 | 791.9763 | 0 | 0 | 0 | 843.75 | 5.555556 |
| 880.5227 | 340.8598 | 0 | 859.5228 | 0 | 20.17087 | 0 | 338.5686 | 2.357143 |
| 771.5723 | 984.7496 | 0 | 755.7208 | 0 | 0 | 0 | 1028.353 | 0 |
| 837.8355 | 840.6948 | 3.328125 | 831.4075 | 0 | 0 | 0 | 878.6708 | 1.074074 |
| 666.0006 | 483.9341 | 1.109375 | 629.6604 | 0 | 0 | 0 | 490.365 | 7.333333 |
| 788.4937 | 828.4657 | 1.030303 | 761.4546 | 0 | 0 | 0 | 819.2549 | 1.074074 |
| 585.1371 | 707.8943 | 3.328125 | 575.678 | 0 | 0 | 0 | 733.5588 | 5.37037 |
| 1229.799 | 754.0368 | 1.109375 | 1161.968 | 0 | 30.78711 | 0 | 776.914 | 2.357143 |
| 494.1657 | 702.2671 | 2.21875 | 454.7798 | 0 | 11.67787 | 0 | 723.1018 | 3.535714 |
| 389.717 | 734.9046 | 0 | 366.9373 | 0 | 19.10924 | 0 | 732.0705 | 2.357143 |
| 716.561 | 827.3926 | 1.166667 | 680.966 | 0 | 4.246499 | 0 | 880.2672 | 2.252646 |


| 657.4715 | 662.7725 | 4.121212 | 626.1878 | 0 | 0 | 0 | 639 | 3.333333 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1084.769 | 623.0995 | 5.151515 | 970.087 | 0 | 0 | 0 | 645.75 | 6.666667 |
| 634.5537 | 285.8587 | 2.21875 | 617.1218 | 0 | 11.67787 | 0 | 286.9985 | 1.178571 |
| 357.147 | 621.2363 | 2.21875 | 345.1775 | 0 | 0 | 0 | 647.8626 | 1.074074 |
| 839.4907 | 369.1704 | 2.333333 | 833.9483 | 0 | 19.10924 | 0 | 353.1427 | 1.178571 |
| 669.8182 | 240.074 | 0 | 740.2864 | 0 | 0 | 0 | 0 | 49.81283 |
| 1435.008 | 266.1198 | 1.166667 | 1477.263 | 0 | 0 | 0 | 0 | 59.7754 |
| 525.6521 | 194.777 | 0 | 567.0748 | 0 | 0 | 0 | 0 | 39.85027 |
| 76.37106 | 69.77654 | 1.109375 | 74.08198 | 0 | 0 | 0 | 71.5428 | 1.25 |
| 828.8506 | 631.3652 | 6.65625 | 779.4637 | 0 | 30.78711 | 0 | 643.5046 | 3.535714 |
| 925.4376 | 734.9046 | 1.109375 | 875.0898 | 0 | 24.41737 | 0 | 746.6447 | 0 |
| 749.1103 | 630.2397 | 5.546875 | 707.1882 | 0 | 19.10924 | 0 | 643.5046 | 2.357143 |
| 508.766 | 445.6695 | 1.109375 | 478.1304 | 0 | 25.47899 | 0 | 442.8298 | 1.178571 |
| 615.4609 | 524.4495 | 0 | 581.54 | 0 | 16.98599 | 0 | 533.6379 | 2.357143 |
| 858.0513 | 365.7641 | 1.109375 | 828.3887 | 0 | 16.98599 | 0 | 365.4747 | 3.535714 |
| 1395.085 | 431.4537 | 2.333333 | 1406.452 | 0 | 0 | 0 | 414.494 | 5 |
| 1003.902 | 415.208 | 0 | 1093.771 | 0 | 0 | 0 | 57.9156 | 105.3035 |
| 683.9702 | 321.8724 | 1.109375 | 746.906 | 0 | 0 | 0 | 0 | 73.05882 |
| 725.5251 | 410.7813 | 1.109375 | 698.2927 | 0 | 19.10924 | 0 | 414.8026 | 1.178571 |
| 659.8323 | 974.3223 | 2.060606 | 765.1849 | 0 | 0 | 0 | 938.4058 | 4.444444 |
| 668.0949 | 1002.327 | 1.030303 | 644.7575 | 0 | 0 | 0 | 1052.601 | 4.285714 |
| 662.193 | 533.2519 | 2.060606 | 607.4364 | 0 | 0 | 0 | 565.118 | 1.111111 |
| 816.4965 | 312.869 | 0 | 768.4523 | 0 | 0 | 0 | 344.25 | 12.22222 |
| 1006.301 | 487.3104 | 1.109375 | 957.7649 | 0 | 0 | 0 | 532.125 | 5.555556 |
| 432.019 | 513.4154 | 3.090909 | 484.2287 | 0 | 0 | 0 | 507.0228 | 3.333333 |
| 1021.028 | 1332.546 | 3.090909 | 938.7216 | 0 | 0 | 0 | 1298.25 | 3.333333 |
| 490.7964 | 443.4187 | 2.21875 | 458.3034 | 0 | 0 | 0 | 469.9394 | 2.222222 |
| 894.7278 | 620.7658 | 2.060606 | 804.2985 | 0 | 0 | 0 | 635.625 | 8.888889 |
| 827.4462 | 942.8173 | 2.060606 | 825.8691 | 0 | 0 | 0 | 982.3483 | 4.285714 |
| 831.0968 | 239.7162 | 0 | 787.4956 | 0 | 0 | 0 | 276.75 | 4.444444 |
| 401.3291 | 658.1051 | 0 | 382.7493 | 0 | 0 | 0 | 698.9557 | 0 |
| 854.5949 | 1004.66 | 3.090909 | 913.5581 | 0 | 0 | 0 | 1005.423 | 8.650794 |
| 876.021 | 517.6969 | 3.328125 | 877.2783 | 0 | 0 | 0 | 539.3142 | 1.074074 |
| 598.8441 | 317.0789 | 0 | 644.3029 | 0 | 0 | 0 | 0 | 71.95187 |
| 792.914 | 296.6952 | 1.166667 | 815.3527 | 0 | 0 | 0 | 300.5077 | 5.37037 |
| 678.69 | 469.9562 | 3.5 | 660.5389 | 0 | 0 | 0 | 517.6045 | 2.148148 |
| 919.822 | 604.3549 | 1.109375 | 893.333 | 0 | 0 | 0 | 653.5757 | 3.222222 |
| 1125.605 | 644.3496 | 5.833333 | 1139.86 | 0 | 0 | 0 | 670.7149 | 4.362052 |
| 771.8435 | 463.1616 | 0 | 783.2432 | 0 | 0 | 0 | 478.7556 | 4.296296 |
| 671.6161 | 290.3605 | 1.109375 | 684.6211 | 0 | 0 | 0 | 301.6503 | 1.074074 |
| 828.8506 | 908.2205 | 1.109375 | 806.1786 | 0 | 0 | 0 | 957.5113 | 4.296296 |
| 486.3165 | 633.6012 | 1.030303 | 458.1589 | 0 | 0 | 0 | 603 | 1.111111 |
| 928.8069 | 576.2192 | 1.109375 | 938.057 | 0 | 0 | 0 | 597.5876 | 2.148148 |
| 1074.593 | 237.8092 | 1.166667 | 1123.117 | 0 | 0 | 0 | 0 | 54.24064 |
| 796.2409 | 680.5871 | 3.5 | 816.4995 | 0 | 0 | 0 | 694.7099 | 4.296296 |
| 1072.375 | 599.0526 | 1.166667 | 1076.816 | 0 | 0 | 0 | 630.7234 | 4.296296 |
| 787.3691 | 178.9231 | 0 | 798.7591 | 0 | 0 | 0 | 0 | 39.85027 |


| 1396.194 | 486.9426 | 1.166667 | 1374.347 | 0 | 36.09524 | 0 | 473.0992 | 1.178571 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 696.4335 | 165.334 | 2.333333 | 729.2538 | 0 | 0 | 0 | 0 | 34.31551 |
| 728.5937 | 255.9279 | 2.333333 | 789.933 | 0 | 0 | 0 | 0 | 43.17112 |
| 806.2216 | 377.0974 | 3.5 | 872.2593 | 0 | 5.308123 | 0 | 28.0272 | 90.77005 |
| 762.9718 | 358.9786 | 3.5 | 849.509 | 0 | 0 | 0 | 0 | 80.80749 |
| 988.0928 | 346.5219 | 4.666667 | 1011.45 | 0 | 0 | 0 | 361.0663 | 4.296296 |
| 906.029 | 311.4167 | 1.166667 | 899.5523 | 0 | 23.35574 | 0 | 299.3305 | 3.535714 |
| 1186.683 | 455.2347 | 1.166667 | 1174.373 | 0 | 26.54062 | 0 | 435.0037 | 1.074074 |
| 981.439 | 345.3895 | 1.166667 | 1076.78 | 0 | 0 | 0 | 0 | 84.12834 |
| 714.1771 | 223.0876 | 0 | 707.1882 | 0 | 18.04762 | 0 | 218.6122 | 0 |
| 855.0163 | 476.7507 | 4.666667 | 853.6013 | 0 | 0 | 0 | 474.6808 | 1.25 |
| 937.0802 | 285.371 | 2.333333 | 1012.791 | 0 | 0 | 0 | 0 | 42.06417 |
| 507.9085 | 125.6991 | 1.166667 | 530.6673 | 0 | 0 | 0 | 0 | 32.1016 |
| 958.1506 | 170.9961 | 1.166667 | 969.6999 | 0 | 0 | 0 | 155.5772 | 3.75 |
| 486.8381 | 296.6952 | 1.166667 | 494.2484 | 0 | 0 | 0 | 290.7136 | 1.25 |
| 980.33 | 428.0565 | 0 | 996.2367 | 0 | 0 | 0 | 408.816 | 1.25 |
| 658.7285 | 229.8822 | 2.333333 | 708.2919 | 0 | 0 | 0 | 0 | 47.59893 |
| 1142.24 | 217.4255 | 0 | 1145.506 | 0 | 0 | 0 | 215.764 | 0 |
| 1148.894 | 211.7634 | 3.5 | 1156.931 | 0 | 0 | 0 | 158.984 | 19.24733 |
| 929.3174 | 151.7449 | 1.166667 | 948.6916 | 0 | 0 | 0 | 132.8652 | 1.25 |
| 945.9519 | 286.5034 | 1.166667 | 994.0359 | 0 | 0 | 0 | 0 | 69.73797 |
| 974.7852 | 471.0886 | 0 | 989.6025 | 0 | 0 | 0 | 457.6468 | 0 |
| 144.7168 | 344.7368 | 0 | 188.5467 | 0 | 0 | 0 | 305.1227 | 0 |
| 571.4186 | 850.2807 | 1.133333 | 689.9402 | 0 | 0 | 0 | 739.716 | 4 |
| 192.601 | 602.2384 | 0 | 202.387 | 0 | 0 | 0 | 595.5362 | 0 |
| 216.0111 | 686.3205 | 0 | 213.9821 | 0 | 0 | 0 | 691.6245 | 0 |
| 60.65337 | 116.664 | 1.133333 | 61.13774 | 0 | 0 | 0 | 121.4303 | 0 |
| 410.7404 | 944.8731 | 1.133333 | 381.5839 | 0 | 0 | 0 | 971.442 | 1 |
| 301.1387 | 1000.578 | 0 | 308.851 | 0 | 0 | 0 | 987.2808 | 1 |
| 51.07652 | 216.5115 | 0 | 43.21806 | 0 | 0 | 0 | 223.854 | 0 |
| 175.5755 | 551.7891 | 0 | 180.2509 | 0 | 0 | 0 | 542.7404 | 0 |
| 479.9065 | 1251.773 | 5.666667 | 472.2364 | 0 | 0 | 0 | 1253.371 | 0 |
| 118.1145 | 499.2377 | 1.133333 | 107.5181 | 0 | 0 | 0 | 511.063 | 1 |
| 532.0471 | 1276.998 | 6.8 | 552.3479 | 0 | 0 | 0 | 1261.819 | 4 |
| 331.8319 | 372.6823 | 1.333333 | 287.9719 | 40.84615 | 0 | 0 | 377.7408 | 1 |
| 220.104 | 424.0868 | 0 | 204.73 | 30.37278 | 0 | 0 | 409.9346 | 0 |
| 346.3565 | 318.0651 | 0 | 305.9701 | 36.6568 | 0 | 0 | 319.7919 | 1 |
| 260.326 | 330.9162 | 1.333333 | 233.9771 | 38.75148 | 0 | 0 | 319.7919 | 1 |
| 77.09226 | 190.6249 | 1.333333 | 70.86807 | 11.52071 | 0 | 0 | 187.7973 | 0 |
| 193.2893 | 190.6249 | 0 | 175.4828 | 18.85207 | 0 | 0 | 189.9435 | 0 |
| 299.2275 | 180.4163 | 0 | 274.7368 | 0 | 0 | 0 | 203.8636 | 1 |
| 131.8275 | 327.2667 | 0 | 105.2632 | 0 | 0 | 0 | 355.4545 | 0 |
| 148.5675 | 298.9456 | 1 | 124.2105 | 0 | 0 | 0 | 324.0909 | 1 |
| 139.1513 | 345.0986 | 0 | 113.6842 | 0 | 0 | 0 | 362.7727 | 0 |
| 118.2263 | 370.2729 | 0 | 102.1053 | 0 | 0 | 0 | 386.8182 | 0 |
| 92.68243 | 314.4825 | 0 | 101.3129 | 0 | 0 | 0 | 305.7767 | 1.04 |
| 83.09459 | 289.4074 | 0 | 95.98069 | 0 | 0 | 0 | 274.2533 | 3.12 |


| 285.5045 | 678.0702 | 0 | 289.0085 | 0 | 0 | 0 | 675.6509 | 2.08 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 361.1419 | 437.7679 | 1 | 377.5138 | 0 | 0 | 0 | 423.2759 | 1.074074 |
| 583.7928 | 1021.807 | 1 | 635.5344 | 0 | 0 | 0 | 974.2734 | 2.148148 |
| 462.3468 | 1097.032 | 2 | 502.2989 | 0 | 0 | 0 | 1064.439 | 0 |
| 121.4459 | 390.7523 | 0 | 137.5723 | 0 | 0 | 0 | 379.3312 | 0 |
| 232.2387 | 516.1274 | 1 | 243.1511 | 0 | 0 | 0 | 507.5262 | 1.04 |
| 291.8391 | 592.5878 | 2.214286 | 317.2385 | 0 | 0 | 0 | 558.3864 | 2.148148 |
| 268.4067 | 335.3077 | 0 | 279.1699 | 0 | 0 | 0 | 319.8319 | 0 |
| 499.5347 | 1051.263 | 3.321429 | 534.0181 | 0 | 0 | 0 | 1016.495 | 1.074074 |
| 485.7838 | 797.1765 | 2 | 520.2711 | 0 | 0 | 0 | 766.3299 | 0 |
| 502.7301 | 1269.53 | 1.107143 | 524.501 | 0 | 0 | 0 | 1221.272 | 3.222222 |
| 206.6306 | 304.7293 | 0 | 206.205 | 0 | 0 | 0 | 299.7764 | 1.074074 |
| 129.9685 | 265.3772 | 1 | 138.6388 | 0 | 0 | 0 | 258.4916 | 0 |
| 544.2692 | 1249.496 | 1.107143 | 556.688 | 0 | 0 | 0 | 1226.259 | 3.12 |
| 319.5318 | 566.2271 | 1.107143 | 354.2497 | 0 | 0 | 0 | 527.7754 | 2.148148 |
| 686.9934 | 1177.795 | 0 | 677.1971 | 0 | 0 | 0 | 1176.872 | 1.04 |
| 761.5508 | 1188.339 | 3.321429 | 757.181 | 0 | 0 | 0 | 1172.669 | 4.16 |
| 330.1829 | 482.9274 | 0 | 367.9967 | 0 | 0 | 0 | 443.3313 | 0 |
| 99.05486 | 264.6611 | 0 | 104.6887 | 0 | 0 | 0 | 255.4433 | 0 |
| 265.2114 | 636.8737 | 0 | 306.6639 | 0 | 0 | 0 | 587.9418 | 1.074074 |
| 379.1778 | 685.3773 | 1.107143 | 413.4675 | 0 | 0 | 0 | 644.9415 | 1.074074 |
| 582.613 | 1330.686 | 1.107143 | 650.3389 | 0 | 0 | 0 | 1248.717 | 3.222222 |
| 360.0059 | 914.1879 | 0 | 387.031 | 0 | 0 | 0 | 873.9961 | 0 |
| 371.722 | 624.2206 | 2.214286 | 374.3247 | 0 | 0 | 0 | 618.9088 | 0 |
| 326.9876 | 508.2336 | 1.107143 | 339.1318 | 0 | 0 | 0 | 491.7645 | 0 |
| 416.4565 | 696.976 | 8.857143 | 425.5144 | 0 | 0 | 0 | 684.0571 | 10.4 |
| 360.0059 | 395.41 | 1.107143 | 366.9392 | 0 | 0 | 0 | 377.8872 | 2.148148 |
| 222.6072 | 507.1792 | 0 | 228.4117 | 0 | 0 | 0 | 496.1089 | 3.222222 |
| 346.1595 | 436.5326 | 2.214286 | 366.9392 | 0 | 0 | 0 | 411.6648 | 3.222222 |
| 594.3292 | 919.46 | 1.107143 | 640.8218 | 0 | 0 | 0 | 865.5517 | 2.148148 |
| 349.9178 | 436.0683 | 3 | 0 | 0 | 320.0221 | 0 | 457.5425 | 6.888889 |
| 182.0445 | 365.326 | 0 | 0 | 0 | 173.0732 | 0 | 365.6113 | 1.148148 |
| 81.75649 | 205.8918 | 0 | 0 | 0 | 78.37277 | 0 | 208.166 | 1.148148 |
| 100.288 | 231.2324 | 0 | 0 | 0 | 90.34638 | 0 | 233.5263 | 5.740741 |
| 204.9363 | 297.7512 | 1 | 0 | 0 | 200.286 | 0 | 304.3239 | 0 |
| 389.1609 | 582.8322 | 2 | 0 | 0 | 359.2085 | 0 | 604.4211 | 3.444444 |
| 141.7113 | 121.4234 | 0 | 0 | 0 | 125.1787 | 0 | 135.2551 | 1.148148 |
| 152.6121 | 291.4161 | 0 | 0 | 0 | 125.1787 | 0 | 311.7206 | 2.296296 |
| 128.6302 | 274.5224 | 0 | 0 | 0 | 103.4085 | 0 | 296.9271 | 0 |
| 59.95476 | 180.5513 | 0 | 0 | 0 | 55.51404 | 0 | 182.8057 | 0 |
| 138.441 | 377.9963 | 0 | 0 | 0 | 156.7455 | 0 | 355.0445 | 3.444444 |
| 206.0264 | 477.2467 | 0 | 0 | 0 | 182.8698 | 0 | 496.6397 | 3.444444 |
| 47.96381 | 165.7693 | 0 | 0 | 0 | 45.71745 | 0 | 170.1255 | 0 |
| 30.52242 | 185.8306 | 0 | 0 | 0 | 29.38979 | 0 | 187.0324 | 1.148148 |
| 199.4858 | 279.8017 | 0 | 0 | 0 | 179.6043 | 0 | 288.4737 | 1.148148 |
| 138.441 | 206.9477 | 0 | 0 | 0 | 133.8868 | 0 | 208.166 | 0 |
| 219.1074 | 404.3926 | 0 | 0 | 0 | 199.1974 | 0 | 414.2186 | 0 |


| 335.7994 | 885.9133 | 1 | 346.0656 | 0 | 0 | 0 | 881.5189 | 0 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | ---: | ---: |
| 156.136 | 421.6156 | 1 | 147.1043 | 0 | 0 | 0 | 422.1358 | 4 |
| 104.8036 | 561.1131 | 0 | 97.36402 | 0 | 0 | 0 | 568.021 | 0 |
| 36.36045 | 227.9847 | 0 | 28.57422 | 0 | 0 | 0 | 235.8994 | 2 |
| 97.31766 | 458.0515 | 0 | 0 | 0 | 0 | 0 | 481.0275 | 10.31707 |
| 89.83169 | 395.59 | 2 | 0 | 0 | 0 | 0 | 396.0183 | 14.90244 |
| 112.2896 | 468.4618 | 2 | 0 | 0 | 0 | 0 | 478.9541 | 21.78049 |
| 82.34571 | 289.4053 | 2 | 85.72267 | 0 | 0 | 0 | 289.701 | 1 |
| 196.7742 | 620.4516 | 0 | 183.0867 | 0 | 0 | 0 | 632.169 | 0 |
| 413.8674 | 879.6672 | 0 | 404.2723 | 0 | 0 | 0 | 881.5189 | 2 |
| 197.8436 | 429.9438 | 0 | 196.8446 | 0 | 0 | 0 | 429.3783 | 0 |
| 211.7461 | 713.103 | 2 | 215.8941 | 0 | 0 | 0 | 706.6636 | 1 |
| 358.2573 | 860.9287 | 0 | 359.8236 | 0 | 0 | 0 | 857.722 | 1 |
| 143.3029 | 444.5182 | 0 | 139.6962 | 0 | 0 | 0 | 441.7941 | 1 |
| 227.7875 | 695.4055 | 0 | 259.2275 | 0 | 0 | 0 | 677.6606 | 0 |
| 136.8864 | 404.9592 | 0 | 129.1132 | 0 | 0 | 0 | 414.8933 | 0 |
| 176.4551 | 589.2208 | 1 | 199.8212 | 0 | 0 | 0 | 578.4393 | 2.111111 |
| 505.838 | 670.4209 | 0 | 509.814 | 0 | 0 | 0 | 671.3273 | 1.055556 |
| 89.83169 | 263.3796 | 0 | 86.31063 | 0 | 0 | 0 | 260.5818 | 0 |
| 618.1276 | 941.0877 | 1 | 626.4664 | 0 | 0 | 0 | 948.936 | 2.111111 |
| 691.9179 | 1190.934 | 0 | 729.9829 | 0 | 0 | 0 | 1175.628 | 7.388889 |
| 190.3576 | 741.2107 | 0 | 219.2632 | 0 | 0 | 0 | 727.2713 | 0 |
| 45.98527 | 97.85647 | 0 | 48.60515 | 0 | 0 | 0 | 98.16579 | 0 |
| 243.8289 | 591.3029 | 0 | 260.3076 | 0 | 0 | 0 | 582.6615 | 1.055556 |
| 144.3724 | 782.8517 | 2 | 174.9785 | 0 | 0 | 0 | 766.3265 | 5.277778 |
| 225.6486 | 628.7798 | 1 | 224.1971 | 0 | 0 | 0 | 617.9805 | 1 |
| 196.7742 | 1028.534 | 0 | 196.8303 | 0 | 0 | 0 | 1013.488 | 4 |
| 291.953 | 842.1902 | 2 | 283.141 | 0 | 0 | 0 | 833.2436 | 2 |
| 83.41514 | 451.8054 | 0 | 90.52091 | 0 | 0 | 0 | 436.7062 | 0 |
| 418.1451 | 642.3132 | 1 | 416.972 | 0 | 0 | 0 | 632.169 | 1 |
| 83.77256 | 415.0847 | 0 | 0 | 0 | 0 | 0 | 420.4118 | 6.424779 |
| 101.8855 | 295.2881 | 0 | 0 | 0 | 0 | 0 | 303.1613 | 14.99115 |
| 84.90462 | 218.5763 | 0 | 0 | 0 | 0 | 0 | 229.2195 | 2.141593 |
| 210.5635 | 609.4915 | 1 | 0 | 0 | 0 | 0 | 628.5051 | 12.84956 |
| 38.4901 | 107.1864 | 1 | 0 | 0 | 0 | 0 | 116.1942 | 4.283186 |
| 33.96185 | 114.5424 | 0 | 0 | 0 | 0 | 0 | 115.1379 | 3.212389 |
| 65.65957 | 195.4576 | 1 | 0 | 0 | 0 | 0 | 194.3613 | 5.353982 |
| 101.8855 | 324.7119 | 0 | 78.75661 | 0 | 0 | 0 | 314.2928 | 3.212389 |
| 76.98019 | 188.1017 | 0 | 0 | 0 | 0 | 0 | 196.4739 | 10.70796 |
| 27.16948 | 42.0339 | 0 | 27.86772 | 0 | 0 | 0 | 44.0087 | 0 |
| 99.62142 | 505.4576 | 2 | 122.3757 | 0 | 0 | 0 | 488.287 | 2 |
| 72.45194 | 177.5932 | 0 | 0 | 0 | 0 | 0 | 192.2486 | 3.212389 |
| 277.3551 | 844.8814 | 2 | 0 | 0 | 0 | 0 | 869.3441 | 35.33628 |
| 130.1871 | 480.2373 | 0 | 0 | 0 | 0 | 0 | 478.5089 | 9.637168 |
| 138.1115 | 565.3559 | 0 | 0 | 0 | 0 | 0 | 559.8449 | 9.637168 |
| 86.09945 | 345.3041 | 1 | 90.56875 | 0 | 0 | 0 | 336.9413 | 1.066667 |
| 109.4845 | 436.118 | 0 | 98.99375 | 0 | 0 | 0 | 447.136 | 1.066667 |
|  |  |  |  |  |  |  |  | 0 |


| 62.71442 | 291.4493 | 0 | 67.4 | 0 | 0 | 0 | 287.1418 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 99.91788 | 468.8533 | 1 | 109.525 | 0 | 0 | 0 | 461.9699 | 2.133333 |
| 26.57391 | 126.7171 | 0 | 34.75313 | 0 | 0 | 0 | 115.4925 | 0 |
| 53.14781 | 337.9123 | 1 | 66.34688 | 0 | 0 | 0 | 323.167 | 2.133333 |
| 62.71442 | 257.6581 | 0 | 70.55938 | 0 | 0 | 0 | 250.0571 | 0 |
| 69.09215 | 222.8109 | 3 | 83.19688 | 0 | 0 | 0 | 214.0319 | 0 |
| 20.19617 | 67.58245 | 0 | 23.16875 | 0 | 0 | 0 | 66.75253 | 0 |
| 221.0949 | 870.1241 | 2 | 251.6969 | 0 | 0 | 0 | 840.2342 | 2.133333 |
| 75.46989 | 161.5643 | 0 | 68.45313 | 0 | 0 | 0 | 166.3515 | 0 |
| 53.14781 | 186.9077 | 0 | 75.825 | 0 | 0 | 0 | 171.6494 | 0 |
| 20.19617 | 130.941 | 0 | 31.59375 | 0 | 0 | 0 | 119.7307 | 0 |
| 43.5812 | 289.3374 | 2 | 68.45313 | 0 | 0 | 0 | 262.7719 | 3.2 |
| 30.82573 | 198.5234 | 0 | 60.02813 | 0 | 0 | 0 | 171.6494 | 2.133333 |
| 94.6031 | 409.7186 | 1 | 111.6313 | 0 | 0 | 0 | 396.2769 | 2.133333 |
| 36.14051 | 84.47806 | 0 | 35.80625 | 0 | 0 | 0 | 82.64599 | 0 |
| 205.3073 | 475.8346 | 0 | 0 | 0 | 0 | 0 | 509.985 | 40.3877 |
| 390.1914 | 1176.021 | 0 | 0 | 0 | 0 | 0 | 1265.557 | 44.75393 |
| 233.2549 | 836.8845 | 0 | 0 | 0 | 0 | 0 | 886.2035 | 60.03577 |
| 220.356 | 696.0124 | 1.111111 | 0 | 0 | 0 | 0 | 746.1667 | 49.12017 |
| 236.4797 | 785.7532 | 1.111111 | 0 | 0 | 0 | 0 | 816.1851 | 70.95136 |
| 182.7343 | 864.0154 | 1.111111 | 0 | 0 | 0 | 0 | 887.2486 | 39.29614 |
| 147.2623 | 423.6597 | 1.111111 | 0 | 0 | 0 | 0 | 446.2369 | 41.47926 |
| 668.5925 | 1474.461 | 2.222222 | 0 | 0 | 0 | 0 | 1665.812 | 142.9943 |
| 34.39704 | 68.87079 | 0 | 0 | 0 | 0 | 0 | 77.3338 | 7.640916 |
| 357.9442 | 1101.933 | 1.111111 | 0 | 0 | 0 | 0 | 1171.503 | 77.50072 |
| 234.3298 | 713.7519 | 1.111111 | 0 | 0 | 0 | 0 | 758.7073 | 21.83119 |
| 576.1504 | 1122.803 | 1.111111 | 0 | 0 | 0 | 0 | 1254.062 | 167.0086 |
| 239.507 | 768.3392 | 0 | 0 | 0 | 132.5383 | 0 | 856.9758 | 21.25 |
| 133.4096 | 601.7114 | 0 | 0 | 0 | 6.413146 | 0 | 659.4423 | 11.26065 |
| 94.54225 | 200.5705 | 0 | 0 | 0 | 43.82316 | 0 | 238.2207 | 2.02381 |
| 178.5798 | 797.1391 | 0 | 0 | 0 | 0 | 0 | 888.7304 | 7.184211 |
| 39.91784 | 241.7131 | 0 | 0 | 0 | 0 | 0 | 254.0699 | 4.105263 |
| 204.8415 | 476.2263 | 0 | 0 | 0 | 109.0235 | 0 | 531.0981 | 11.13095 |
| 107.1479 | 220.1132 | 0 | 0 | 0 | 51.30516 | 0 | 258.8459 | 8.095238 |
| 116.6021 | 587.3115 | 0 | 0 | 0 | 86.57746 | 0 | 606.38 | 5.059524 |
| 198.5387 | 345.5984 | 0 | 0 | 0 | 94.05947 | 0 | 402.1908 | 17.20238 |
| 169.1256 | 485.4834 | 0 | 0 | 0 | 87.64632 | 0 | 515.6292 | 9.107143 |
| 89.28991 | 283.8844 | 0 | 0 | 0 | 0 | 0 | 338.417 | 6.157895 |
| 86.1385 | 636.6827 | 0 | 0 | 0 | 0 | 0 | 663.462 | 8.210526 |
| 122.9049 | 330.1699 | 1 | 0 | 0 | 71.61346 | 0 | 347.5341 | 9.107143 |
| 9.454225 | 74.05679 | 0 | 0 | 0 | 0 | 0 | 72.00362 | 4.105263 |
| 78.07956 | 373.8021 | 0 | 83.01254 | 0 | 0 | 0 | 368.9355 | 1.333333 |
| 241.5261 | 380.0149 | 0 | 241.5878 | 0 | 0 | 0 | 380.3033 | 1.333333 |
| 352.9196 | 259.9012 | 0 | 484.0271 | 0 | 0 | 0 | 0 | 29.48792 |
| 79.12062 | 124.2556 | 1 | 140.0589 | 0 | 0 | 0 | 0 | 0 |
| 252.9778 | 259.9012 | 1 | 371.774 | 0 | 0 | 0 | 0 | 33.70048 |
| 172.8161 | 292.0006 | 0 | 269.6844 | 0 | 0 | 0 | 87.84179 | 22.11594 |


| 185.3088 | 164.6386 | 0 | 272.9089 | 0 | 0 | 0 | 0 | 16.85024 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 224.8691 | 552.9372 | 1 | 216.0455 | 0 | 0 | 0 | 563.2209 | 1.333333 |
| 150.9538 | 180.1706 | 0 | 192.7929 | 0 | 0 | 0 | 95.07582 | 8.425121 |
| 290.4559 | 416.2561 | 0 | 485.057 | 0 | 0 | 0 | 0 | 54.76329 |
| 44.76561 | 230.9082 | 1 | 40.44201 | 0 | 0 | 0 | 235.6227 | 0 |
| 193.6373 | 119.0782 | 0 | 216.2674 | 0 | 0 | 0 | 0 | 22.11594 |
| 166.5697 | 325.1354 | 0 | 322.3415 | 0 | 0 | 0 | 0 | 30.54106 |
| 280.3394 | 766.0632 | 2.363636 | 280.0376 | 0 | 0 | 0 | 758.5873 | 2 |
| 314.0236 | 769.3093 | 4.727273 | 327.0751 | 0 | 0 | 0 | 746.7847 | 6 |
| 594.3948 | 824.4978 | 0 | 528.3582 | 0 | 0 | 0 | 888.322 | 3.195652 |
| 579.3655 | 832.1403 | 2.285714 | 543.5472 | 0 | 0 | 0 | 867.7138 | 0 |
| 499.83 | 729.2749 | 0 | 377.6351 | 5.443038 | 223.3941 | 0 | 621.2136 | 1.1 |
| 447.6738 | 801.7696 | 4.727273 | 351.1811 | 13.06329 | 171.7606 | 0 | 714.4753 | 3.3 |
| 402.0372 | 858.0341 | 4.727273 | 302.1081 | 4.35443 | 200.2117 | 0 | 754.5631 | 2.2 |
| 738.8791 | 764.9812 | 1.181818 | 703.0311 | 0 | 0 | 0 | 798.2967 | 4.26087 |
| 615.0082 | 853.7061 | 3.545455 | 523.2162 | 19.59494 | 149.6319 | 0 | 778.4142 | 1.1 |
| 807.3341 | 815.8357 | 2.363636 | 688.5 | 11.97468 | 180.1906 | 0 | 740.4693 | 0 |
| 831.239 | 1282.182 | 2.363636 | 653.473 | 16.32911 | 276.0814 | 0 | 1163.285 | 2.2 |
| 767.7682 | 833.2238 | 0 | 685.6723 | 0 | 0 | 0 | 896.9992 | 3.195652 |
| 849.1203 | 766.9306 | 2.285714 | 816.9482 | 0 | 0 | 0 | 792.8735 | 2.130435 |
| 931.1231 | 1053.178 | 3.428571 | 831.0522 | 0 | 0 | 0 | 1143.213 | 5.326087 |
| 272.7333 | 651.3702 | 0 | 280.2759 | 0 | 0 | 0 | 654.3038 | 0 |
| 224.9235 | 617.8278 | 0 | 227.6115 | 0 | 0 | 0 | 616.3242 | 1 |
| 226.0101 | 713.0447 | 1.181818 | 200.711 | 0 | 0 | 0 | 735.3875 | 2.130435 |
| 565.0252 | 826.6558 | 3.545455 | 496.8954 | 0 | 0 | 0 | 890.4913 | 5.326087 |
| 509.6093 | 1056.042 | 10.63636 | 483.8763 | 0 | 0 | 0 | 1086.812 | 1.065217 |
| 773.6499 | 829.9018 | 4.727273 | 717.1351 | 0 | 0 | 0 | 879.6449 | 5.326087 |
| 1042.037 | 981.3833 | 1.181818 | 988.3662 | 0 | 0 | 0 | 1038.003 | 3.195652 |
| 432.4616 | 542.0871 | 2.363636 | 405.7618 | 0 | 0 | 0 | 566.1833 | 4.26087 |
| 639.2623 | 645.7755 | 0 | 566.3306 | 0 | 0 | 0 | 709.3561 | 4.26087 |
| 726.7255 | 767.6813 | 1.181818 | 620.1959 | 15.24051 | 92.72964 | 0 | 759.1076 | 5.36087 |
| 385.9707 | 334.4978 | 1.181818 | 368.8743 | 0 | 0 | 0 | 351.4241 | 0 |
| 1074.455 | 1108.606 | 0 | 998.1306 | 0 | 0 | 0 | 1175.752 | 1.065217 |
| 755.5698 | 1672.761 | 4.190476 | 666.7631 | 25.98684 | 112.2059 | 0 | 1625.666 | 0 |
| 654.6146 | 785.6267 | 2.095238 | 616.541 | 10.39474 | 67.94118 | 0 | 739.7573 | 0 |
| 579.1639 | 868.1017 | 0 | 530.7199 | 9.355263 | 74.11765 | 0 | 829.838 | 0 |
| 783.1996 | 1028.822 | 1.047619 | 709.6644 | 13.51316 | 102.9412 | 0 | 979.2776 | 2 |
| 597.2296 | 766.594 | 2.095238 | 609.3513 | 0 | 0 | 0 | 744.9688 | 2.153846 |
| 870.3399 | 922.0276 | 3.142857 | 881.8169 | 0 | 0 | 0 | 898.8096 | 3.230769 |
| 369.8147 | 849.069 | 1.047619 | 383.3527 | 0 | 0 | 0 | 832.4262 | 0 |
| 795.9519 | 1104.953 | 1.047619 | 782.5465 | 0 | 0 | 0 | 1102.174 | 2.153846 |
| 684.3698 | 334.1293 | 0 | 688.8566 | 0 | 0 | 0 | 324.0762 | 2.210526 |
| 981.9219 | 690.4633 | 0 | 1023.33 | 0 | 0 | 0 | 637.491 | 4.307692 |
| 399.57 | 637.5948 | 0 | 403.9632 | 0 | 0 | 0 | 630.1586 | 3.315789 |
| 351.7491 | 285.4902 | 1.047619 | 347.572 | 0 | 0 | 0 | 290.1099 | 3.315789 |
| 367.6894 | 182.9252 | 0 | 371.0083 | 0 | 0 | 0 | 181.1044 | 0 |
| 1190.208 | 698.9223 | 3.142857 | 1192.755 | 0 | 0 | 0 | 696.8812 | 5.526316 |


| 717.3131 | 1133.502 | 3.142857 | 695.242 | 0 | 0 | 0 | 1152.29 | 3.315789 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 531.343 | 773.9956 | 0 | 514.5216 | 0 | 0 | 0 | 789.0221 | 2.210526 |
| 820.3936 | 1193.772 | 0 | 797.2958 | 0 | 0 | 0 | 1221.131 | 1.105263 |
| 649.3012 | 785.6267 | 3.142857 | 622.9538 | 0 | 0 | 0 | 809.1448 | 4.421053 |
| 571.7251 | 720.0697 | 4.190476 | 553.1579 | 2.078947 | 5.147059 | 0 | 726.5842 | 4.315789 |
| 785.325 | 578.382 | 0 | 783.476 | 0 | 0 | 0 | 575.0859 | 1.105263 |
| 548.346 | 918.8555 | 2.095238 | 521.963 | 0 | 0 | 0 | 950.0038 | 1.105263 |
| 777.8862 | 880.7901 | 1.047619 | 759.0256 | 0 | 0 | 0 | 903.4038 | 1.105263 |
| 572.7878 | 1148.305 | 1.047619 | 535.7828 | 0 | 0 | 0 | 1189.358 | 5.526316 |
| 490.961 | 228.3922 | 2.095238 | 492.1973 | 0 | 0 | 0 | 223.468 | 2.210526 |
| 891.5936 | 968.5519 | 2.095238 | 847.5921 | 4.157895 | 44.26471 | 0 | 946.2854 | 2.076923 |
| 783.1996 | 569.923 | 1.047619 | 746.4194 | 8.315789 | 47.35294 | 0 | 535.3942 | 2.076923 |
| 1041.432 | 1112.354 | 5.238095 | 974.1323 | 5.197368 | 71.02941 | 0 | 1086.089 | 8.210526 |
| 255 | 381 | 0 | 241 | 0 | 0 | 0 | 389 | 1 |
| 384 | 210 | 0 | 380 | 0 | 0 | 0 | 208 | 0 |
| 166 | 165 | 0 | 207 | 0 | 0 | 0 | 0 | 20 |
| 153 | 117 | 0 | 155 | 0 | 0 | 0 | 114 | 0 |
| 322 | 223 | 0 | 317 | 0 | 0 | 0 | 222 | 0 |
| 197 | 183 | 1 | 191 | 0 | 0 | 0 | 185 | 2 |
| 156 | 31 | 0 | 156 | 0 | 0 | 0 | 28 | 0 |
| 367.752 | 126.5805 | 0 | 388.2977 | 0 | 0 | 0 | 12.47458 | 11.28947 |
| 292.1298 | 130.7307 | 0 | 345.8226 | 0 | 0 | 0 | 0 | 13.34211 |
| 60.08343 | 42.53935 | 0 | 90.84294 | 0 | 0 | 0 | 0 | 1.026316 |
| 143.993 | 279.0996 | 0 | 281.8196 | 0 | 0 | 0 | 0 | 16.42105 |
| 19.6825 | 108.9422 | 0 | 25.09166 | 0 | 0 | 0 | 100.8362 | 0 |
| 280.7346 | 181.5704 | 0 | 305.9241 | 0 | 0 | 0 | 94.59887 | 7.157895 |
| 54.90382 | 13.48809 | 0 | 56.77684 | 0 | 0 | 0 | 0 | 1.026316 |
| 235.1541 | 151.4816 | 0 | 328.2734 | 0 | 0 | 0 | 0 | 6.157895 |
| 103.5921 | 65.36534 | 0 | 146.5875 | 0 | 0 | 0 | 0 | 4.105263 |
| 142.9571 | 225.1473 | 0 | 171.3316 | 0 | 0 | 0 | 160.0904 | 6.131579 |
| 87.01738 | 112.0549 | 0 | 135.2321 | 0 | 0 | 0 | 0 | 13.34211 |
| 16.23748 | 134.9942 | 0 | 25.4336 | 0 | 0 | 0 | 121.9542 | 1.111111 |
| 41.13494 | 204.061 | 0 | 41.3296 | 0 | 0 | 0 | 201.8553 | 1.111111 |
| 31.39246 | 97.32141 | 0 | 31.792 | 0 | 0 | 0 | 96.72232 | 0 |
| 42.21744 | 187.3175 | 0 | 27.55307 | 0 | 0 | 0 | 201.8553 | 0 |
| 30.30996 | 71.15974 | 0 | 24.37387 | 0 | 0 | 0 | 74.6444 | 0 |
| 8.659988 | 41.85867 | 0 | 12.7168 | 0 | 0 | 0 | 37.84786 | 0 |
| 10.82499 | 77.43854 | 0 | 16.95573 | 0 | 0 | 0 | 71.49041 | 0 |
| 31.39246 | 205.1075 | 0 | 33.91147 | 0 | 0 | 0 | 203.9579 | 0 |
| 37.88745 | 194.6428 | 0 | 38.1504 | 0 | 0 | 0 | 195.5473 | 0 |
| 18.40247 | 89.99614 | 0 | 22.2544 | 0 | 0 | 0 | 86.20902 | 0 |
| 16.23748 | 78.485 | 0 | 16.95573 | 0 | 0 | 0 | 76.74706 | 2.222222 |
| 34.63995 | 293.0107 | 0 | 43.44907 | 0 | 0 | 0 | 288.0643 | 0 |
| 23.81497 | 92.08907 | 1.2 | 19.0752 | 0 | 0 | 0 | 96.72232 | 0 |
| 368.0495 | 1105.069 | 2.4 | 388.9221 | 0 | 0 | 0 | 1082.869 | 11.11111 |
| 57.37242 | 284.6389 | 0 | 67.82293 | 0 | 0 | 0 | 277.551 | 1.111111 |
| 176.4473 | 974.2605 | 7.2 | 179.0949 | 0 | 0 | 0 | 966.1718 | 0 |


| 51.95993 | 176.8529 | 0 | 66.7632 | 0 | 0 | 0 | 162.9561 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81.18739 | 410.215 | 0 | 100.6747 | 0 | 0 | 0 | 391.0946 | 0 |
| 47.62994 | 287.7783 | 0 | 52.98667 | 0 | 0 | 0 | 284.9103 | 1.111111 |
| 253.3047 | 1007.747 | 0 | 243.7387 | 0 | 0 | 0 | 1008.225 | 4.444444 |
| 25.97996 | 111.9719 | 0 | 28.6128 | 0 | 0 | 0 | 106.1843 | 0 |
| 75.7749 | 323.3582 | 1.2 | 80.53973 | 0 | 0 | 0 | 312.2449 | 2.222222 |
| 87.68238 | 578.6961 | 0 | 103.8539 | 0 | 0 | 0 | 564.564 | 1.111111 |
| 268.4596 | 1101.929 | 0 | 320.0395 | 0 | 0 | 0 | 1036.611 | 4.444444 |
| 238.2299 | 402.1434 | 0 | 5.341615 | 0 | 0 | 0 | 449.0135 | 32.88889 |
| 381.3816 | 969.3223 | 0 | 0 | 0 | 0 | 0 | 1055.067 | 61.66667 |
| 386.7231 | 777.1291 | 0 | 351.2994 | 64.575 | 0 | 0 | 733.4129 | 3 |
| 407.0207 | 723.8581 | 5 | 378.1571 | 63.55 | 0 | 0 | 693.599 | 2 |
| 326.8985 | 464.8151 | 0 | 317.2919 | 0 | 0 | 0 | 461.1943 | 5 |
| 291.6447 | 726.9917 | 0 | 291.6522 | 0 | 0 | 0 | 716.3676 | 1 |
| 402.7475 | 1018.415 | 3 | 384.603 | 56.375 | 0 | 0 | 976.4869 | 2 |
| 242.5031 | 491.9728 | 1 | 245.7143 | 0 | 0 | 0 | 484.2017 | 1 |
| 458.2989 | 728.0362 | 1 | 403.9406 | 61.5 | 0 | 0 | 700.747 | 5.055556 |
| 132.4687 | 348.8725 | 0 | 0 | 0 | 0 | 0 | 381.199 | 17.47222 |
| 142.0833 | 268.4438 | 0 | 0 | 0 | 0 | 0 | 293.7107 | 33.91667 |
| 525.2252 | 930.8071 | 2.222222 | 0 | 0 | 0 | 0 | 1102.866 | 64.94382 |
| 285.4013 | 510.4764 | 1.111111 | 0 | 0 | 0 | 0 | 598.0032 | 44.37828 |
| 95.4955 | 376.306 | 0 | 0 | 0 | 0 | 0 | 422.7785 | 10.90498 |
| 139.9877 | 624.7309 | 1.111111 | 0 | 0 | 0 | 0 | 648.8071 | 22.73034 |
| 53.17363 | 254.7141 | 0 | 0 | 0 | 0 | 0 | 286.7359 | 8.723982 |
| 217.0352 | 602.7186 | 0 | 0 | 0 | 0 | 0 | 677.3842 | 23.81273 |
| 334.2342 | 1032.483 | 0 | 0 | 0 | 0 | 0 | 1140.665 | 51.25339 |
| 447.0925 | 839.6132 | 1.111111 | 0 | 0 | 0 | 0 | 952.5715 | 71.4382 |
| 220.2907 | 664.5627 | 1.111111 | 0 | 0 | 0 | 0 | 760.7921 | 25.08145 |
| 291.9124 | 832.2757 | 2.222222 | 0 | 0 | 0 | 0 | 950.2052 | 45.8009 |
| 258.2719 | 1169.798 | 0 | 0 | 0 | 0 | 0 | 1239.034 | 31.62443 |
| 252.846 | 483.223 | 0 | 0 | 0 | 0 | 0 | 597.5409 | 21.80995 |
| 19.53317 | 97.48317 | 0 | 0 | 0 | 0 | 0 | 100.4622 | 4.361991 |
| 155.1802 | 926.6143 | 0 | 0 | 0 | 0 | 0 | 958.922 | 14.07116 |
| 35.81081 | 185.5325 | 0 | 0 | 0 | 0 | 0 | 186.2807 | 6.494382 |
| 155.1802 | 669.8038 | 0 | 0 | 0 | 0 | 0 | 707.0198 | 27.05993 |
| 166.0319 | 791.3957 | 1.111111 | 0 | 0 | 0 | 0 | 832.9993 | 15.26697 |
| 103.0917 | 375.2578 | 0 | 0 | 0 | 0 | 0 | 383.1454 | 14.07116 |
| 219.2056 | 874.204 | 0 | 0 | 0 | 0 | 0 | 940.7869 | 26.17195 |
| 428.5633 | 233.8089 | 1 | 396.3617 | 0 | 0 | 0 | 268.4829 | 0 |
| 218.079 | 192.2914 | 0 | 198.7238 | 0 | 0 | 0 | 208.4563 | 0 |
| 394.9292 | 416.2673 | 2 | 363.784 | 0 | 0 | 0 | 450.7457 | 0 |
| 156.2357 | 262.2156 | 0 | 157.4587 | 0 | 0 | 0 | 260.8432 | 0 |
| 265.8177 | 322.3067 | 0 | 239.9888 | 0 | 0 | 0 | 343.7891 | 1.166667 |
| 210.4842 | 220.6981 | 0 | 194.3801 | 0 | 0 | 0 | 236.8325 | 0 |
| 275.5825 | 678.4829 | 3 | 273.6524 | 0 | 0 | 0 | 675.5729 | 5.833333 |
| 425.3084 | 612.929 | 2 | 412.6505 | 0 | 0 | 0 | 624.2774 | 0 |
| 152.633 | 328.4884 | 0 | 152.7778 | 0 | 0 | 0 | 333.1116 | 0 |


| 89.21508 | 248.9816 | 0 | 97.22222 | 0 | 0 | 0 | 245.6171 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61.26819 | 252.1201 | 0 | 69.44444 | 0 | 0 | 0 | 258.2669 | 1 |
| 235.3988 | 686.2687 | 2 | 0 | 0 | 0 | 0 | 731.0039 | 11.64706 |
| 98.88901 | 360.9188 | 1 | 0 | 0 | 0 | 0 | 372.812 | 9.529412 |
| 380.5077 | 982.3267 | 0 | 379.2735 | 0 | 0 | 0 | 998.2808 | 4 |
| 33.3213 | 178.8902 | 0 | 49.1453 | 0 | 0 | 0 | 166.5558 | 2 |
| 316.0149 | 747.9911 | 1 | 299.1453 | 0 | 0 | 0 | 777.9633 | 0 |
| 234.324 | 921.6505 | 2 | 246.7949 | 0 | 0 | 0 | 921.3278 | 6 |
| 185.9543 | 728.1144 | 2 | 206.1966 | 0 | 0 | 0 | 717.8767 | 1 |
| 151.5582 | 760.5448 | 2 | 0 | 0 | 0 | 0 | 760.2441 | 23.29412 |
| 84.91556 | 242.7048 | 0 | 0 | 0 | 0 | 0 | 257.94 | 9.529412 |
| 43.5832 | 285.9775 | 0 | 0 | 0 | 37.94332 | 0 | 273.9789 | 0 |
| 218.979 | 963.6199 | 1 | 0 | 0 | 192.8785 | 0 | 964.1153 | 3.321429 |
| 428.391 | 933.5715 | 3 | 0 | 0 | 286.6829 | 0 | 979.6823 | 18.82143 |
| 502.8013 | 1020.608 | 2 | 0 | 0 | 359.4076 | 0 | 1077.235 | 15.5 |
| 138.1906 | 602.0034 | 4 | 0 | 0 | 123.3158 | 0 | 599.8478 | 4.428571 |
| 155.1987 | 564.702 | 1 | 0 | 0 | 129.6397 | 0 | 565.6005 | 4.428571 |
| 103.1115 | 370.9418 | 0 | 0 | 0 | 91.69636 | 0 | 365.3053 | 0 |
| 117.9935 | 597.8588 | 4 | 0 | 0 | 95.91228 | 0 | 590.5077 | 7.75 |
| 54.21325 | 288.0498 | 1 | 0 | 0 | 59.02294 | 0 | 277.0923 | 2.214286 |
| 115.8675 | 484.9184 | 0 | 0 | 0 | 103.2901 | 0 | 478.4254 | 2.214286 |
| 95.67044 | 336.7489 | 0 | 0 | 0 | 82.21053 | 0 | 335.2091 | 3.321429 |
| 705.341 | 686.7379 | 2.1 | 661.6237 | 0 | 0 | 0 | 730.5648 | 2.4 |
| 768.1089 | 874.0301 | 3.15 | 757.357 | 0 | 0 | 0 | 877.7365 | 0 |
| 1206.42 | 649.7028 | 2.1 | 1170.074 | 0 | 0 | 0 | 671.2726 | 3.6 |
| 957.4765 | 1214.754 | 3.15 | 927.1228 | 0 | 0 | 0 | 1212.149 | 2 |
| 524.4843 | 624.3072 | 0 | 537.2929 | 0 | 0 | 0 | 614.688 | 2 |
| 543.6339 | 1624.257 | 2.1 | 511.6415 | 0 | 0 | 0 | 1648.535 | 3.6 |
| 636.1899 | 1002.066 | 0 | 607.3748 | 0 | 0 | 0 | 1018.556 | 3.6 |
| 780.8753 | 814.7738 | 0 | 769.9971 | 0 | 0 | 0 | 814.364 | 1.2 |
| 675.5529 | 1380.883 | 3.15 | 696.5787 | 0 | 0 | 0 | 1351.961 | 7 |
| 620.232 | 1354.429 | 1.05 | 561.6356 | 0 | 0 | 0 | 1402.896 | 4.8 |
| 392.5654 | 597.8535 | 1.05 | 362.723 | 0 | 0 | 0 | 624.6858 | 4.8 |
| 847.8986 | 1442.255 | 2.1 | 800.3095 | 0 | 0 | 0 | 1457.303 | 8 |
| 953.221 | 1090.95 | 1.05 | 913.2693 | 0 | 0 | 0 | 1105.287 | 2 |
| 1040.266 | 420.5346 | 1.217391 | 1176.786 | 0 | 0 | 0 | 0 | 62.20588 |
| 946.6308 | 567.8341 | 1.217391 | 1068.017 | 0 | 0 | 0 | 0 | 94.46078 |
| 1568.963 | 649.9171 | 1.217391 | 1732.201 | 0 | 0 | 0 | 0 | 87.54902 |
| 1345.152 | 353.0691 | 2.434783 | 1417.466 | 0 | 0 | 0 | 0 | 56.44608 |
| 1824.748 | 527.3548 | 0 | 1965.938 | 0 | 0 | 0 | 0 | 77.18137 |
| 1928.66 | 350.8203 | 2.434783 | 2008.752 | 0 | 0 | 0 | 0 | 82.94118 |
| 2298.634 | 465.5115 | 6.086957 | 2375.557 | 0 | 0 | 0 | 0 | 131.3235 |
| 2256.384 | 474.5069 | 6.086957 | 2363.986 | 0 | 0 | 0 | 0 | 93.30882 |
| 1138.469 | 455.3917 | 3.652174 | 1272.827 | 0 | 0 | 0 | 0 | 71.42157 |
| 1382.835 | 303.5945 | 2.434783 | 1468.379 | 0 | 0 | 0 | 0 | 66.81373 |
| 598.3529 | 211.3917 | 0 | 661.8698 | 0 | 0 | 0 | 0 | 32.2549 |
| 1509.585 | 446.3963 | 1.217391 | 1603.761 | 0 | 0 | 0 | 0 | 69.11765 |


| 1366.848 | 619.5576 | 3.652174 | 1527.392 | 0 | 0 | 0 | 0 | 104.8284 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1540.416 | 371.0599 | 1.217391 | 1644.26 | 0 | 0 | 0 | 0 | 51.83824 |
| 1314.321 | 513.8618 | 1.217391 | 1456.808 | 0 | 0 | 0 | 0 | 93.30882 |
| 1608.93 | 583.576 | 4.869565 | 1667.685 | 0 | 0 | 0 | 0 | 93.13681 |
| 1213.834 | 385.6774 | 2.434783 | 1275.354 | 0 | 0 | 0 | 0 | 68.99023 |
| 1556.403 | 581.3272 | 0 | 1640.859 | 0 | 0 | 0 | 0 | 89.6873 |
| 1451.348 | 320.4608 | 4.869565 | 1506.729 | 0 | 0 | 0 | 0 | 60.94137 |
| 1643.187 | 407.0415 | 1.217391 | 1726.926 | 0 | 0 | 0 | 0 | 45.99349 |
| 746.7992 | 263.1152 | 1.217391 | 796.9566 | 0 | 0 | 0 | 0 | 39.09446 |
| 1131.618 | 206.894 | 2.434783 | 1161.343 | 0 | 0 | 0 | 0 | 34.49511 |
| 1429.652 | 250.7465 | 1.217391 | 1439.664 | 0 | 0 | 0 | 0 | 32.19544 |
| 1942.363 | 308.0922 | 0 | 1956.065 | 0 | 0 | 0 | 0 | 56.34202 |
| 1316.605 | 255.2442 | 0 | 1335.713 | 0 | 0 | 0 | 0 | 47.14332 |
| 1450.206 | 250.7465 | 1.217391 | 1465.372 | 0 | 0 | 0 | 0 | 32.19544 |
| 1274.355 | 328.3318 | 1.217391 | 1318.946 | 0 | 0 | 0 | 0 | 35.64495 |
| 1516.436 | 595.9447 | 1.217391 | 1655.389 | 0 | 0 | 0 | 0 | 70.14007 |
| 203.3435 | 482.8865 | 0 | 0 | 0 | 0 | 0 | 572.9774 | 11.86275 |
| 368.8305 | 763.684 | 2 | 0 | 0 | 0 | 0 | 911.4089 | 33.43137 |
| 247.6897 | 348.8696 | 0 | 0 | 0 | 0 | 0 | 448.743 | 20.4902 |
| 386.1363 | 1413.56 | 2 | 0 | 0 | 0 | 0 | 1521.871 | 44.21569 |
| 262 | 652 | 1 | 0 | 0 | 190 | 0 | 712 | 1 |
| 223 | 483 | 0 | 0 | 0 | 187 | 0 | 504 | 1 |
| 1945.545 | 372.9907 | 5.294118 | 2040.474 | 0 | 0 | 0 | 0 | 45.03597 |
| 1890.555 | 311.0068 | 3.176471 | 1968.937 | 0 | 0 | 0 | 0 | 33.77698 |
| 1562.815 | 180.5144 | 3.176471 | 1601.343 | 0 | 0 | 0 | 0 | 38.28058 |
| 2118.213 | 548.0679 | 0 | 2310.116 | 0 | 0 | 0 | 0 | 52.91727 |
| 1525.421 | 184.8642 | 1.058824 | 1580.432 | 0 | 0 | 0 | 0 | 22.51799 |
| 1911.451 | 419.7504 | 2.117647 | 2038.273 | 0 | 0 | 0 | 0 | 45.03597 |
| 900.7355 | 139.1919 | 0 | 932.1909 | 0 | 0 | 0 | 0 | 19.14029 |
| 750.063 | 116.3557 | 3.176471 | 796.8196 | 0 | 0 | 0 | 0 | 15.76259 |
| 1082.202 | 289.2581 | 0 | 1164.413 | 0 | 0 | 0 | 0 | 40.53237 |
| 444.4613 | 833.1657 | 0 | 0 | 0 | 0 | 0 | 1012.406 | 41.71588 |
| 245.9845 | 931.2472 | 1.045455 | 235.3493 | 0 | 0 | 0 | 928.4852 | 1.055556 |
| 1547.309 | 88.56261 | 1.033333 | 1523.623 | 73.12122 | 0 | 0 | 0 | 3.030612 |
| 340.0337 | 686.6207 | 0 | 0 | 0 | 0 | 0 | 838.0306 | 34.88571 |
| 1122.007 | 106.2751 | 1.033333 | 1130.296 | 74.1511 | 0 | 0 | 0 | 2.020408 |
| 1270.04 | 960.7771 | 0 | 0 | 0 | 0 | 0 | 1446.177 | 174.4286 |
| 619.7121 | 902.7719 | 0 | 0 | 0 | 0 | 0 | 1118.698 | 63.10864 |
| 683.187 | 564.7169 | 0 | 823.9155 | 351.1878 | 0 | 0 | 0 | 9.091837 |
| 794.9628 | 1480.715 | 2.090909 | 802.9563 | 0 | 0 | 0 | 1446.416 | 8.444444 |
| 270.3632 | 293.8195 | 0 | 336.3976 | 171.9894 | 0 | 0 | 0 | 6.061224 |
| 389.9469 | 471.9866 | 1.033333 | 397.2184 | 0 | 0 | 0 | 465.2953 | 3.166667 |
| 1040.898 | 154.2031 | 0 | 1035.07 | 125.6449 | 0 | 0 | 0 | 3.030612 |
| 519.9292 | 535.5433 | 1.033333 | 558.0227 | 0 | 0 | 0 | 509.5089 | 0 |
| 161.5263 | 232.0208 | 0 | 161.8692 | 0 | 0 | 0 | 230.5422 | 0 |
| 659.2703 | 401.1365 | 1.033333 | 0 | 0 | 0 | 0 | 565.1371 | 35.29805 |
| 384.2848 | 988.1977 | 0 | 0 | 0 | 0 | 0 | 1114.488 | 37.43733 |


| 250.2074 | 672.8604 | 1.045455 | 227.8948 | 0 | 0 | 0 | 673.7308 | 3.166667 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 563.6033 | 270.8974 | 0 | 605.5158 | 189.4973 | 0 | 0 | 0 | 5.05102 |
| 332.5542 | 631.7294 | 0 | 0 | 0 | 0 | 0 | 759.6611 | 42.28571 |
| 639.7074 | 858.3625 | 2.090909 | 0 | 0 | 0 | 0 | 1084.633 | 80.34286 |
| 582.3207 | 713.7104 | 0 | 0 | 0 | 0 | 0 | 977.0057 | 62.37143 |
| 306.7582 | 416.7652 | 0 | 361.2393 | 286.3056 | 0 | 0 | 0 | 8.081633 |
| 693.613 | 573.7242 | 1.045455 | 0 | 0 | 0 | 0 | 849.2843 | 77.01393 |
| 615.5962 | 383.424 | 2.066667 | 626.2171 | 295.5745 | 0 | 0 | 0 | 9.091837 |
| 319.2365 | 283.4003 | 2.066667 | 329.1522 | 229.6624 | 0 | 0 | 0 | 4.040816 |
| 361.8707 | 164.6223 | 2.066667 | 382.9758 | 119.4657 | 0 | 0 | 0 | 3.030612 |
| 650.9514 | 888.7518 | 2.066667 | 0 | 0 | 0 | 0 | 1175.542 | 75.05714 |
| 50.67492 | 131.83 | 0 | 53.82362 | 99.89801 | 0 | 0 | 0 | 0 |
| 307.7981 | 677.2435 | 1.033333 | 396.4317 | 435.6377 | 0 | 0 | 0 | 15.15306 |
| 540.7264 | 28.13165 | 0 | 537.2012 | 19.56765 | 0 | 0 | 0 | 2.020408 |
| 1113.688 | 170.8737 | 3.1 | 1112.7 | 135.9437 | 0 | 0 | 0 | 9.091837 |
| 1386.131 | 59.38904 | 1.033333 | 1349.731 | 70.03159 | 0 | 0 | 0 | 1.010204 |
| 255.8052 | 402.1784 | 2.066667 | 0 | 0 | 0 | 0 | 503.0457 | 26.74095 |
| 460.2972 | 1340.448 | 0 | 0 | 0 | 0 | 0 | 1516.504 | 49.20334 |
| 567.7627 | 255.2687 | 3.1 | 594.1949 | 0 | 0 | 0 | 38.66226 | 37.90746 |
| 684.1115 | 1207.563 | 1.045455 | 0 | 0 | 0 | 0 | 1487.037 | 74.87465 |
| 394.8421 | 680.2428 | 1.045455 | 0 | 0 | 0 | 0 | 848.2319 | 44.92479 |
| 349.3924 | 797.0635 | 0 | 0 | 0 | 0 | 0 | 944.613 | 34.88571 |
| 191.0867 | 343.8127 | 1.045455 | 189.5573 | 0 | 0 | 0 | 342.1289 | 1.055556 |
| 854.7637 | 634.525 | 0 | 0 | 0 | 0 | 0 | 991.3579 | 86.64067 |
| 1166.579 | 804.6904 | 1.045455 | 0 | 0 | 0 | 0 | 1282.124 | 134.2571 |
| 637.4332 | 433.4358 | 0 | 0 | 0 | 0 | 0 | 731.4158 | 77.01393 |
| 278.7121 | 816.2914 | 0 | 0 | 0 | 0 | 0 | 921.8997 | 19.25348 |
| 533.4474 | 388.6336 | 0 | 0 | 0 | 0 | 0 | 617.5512 | 57.08571 |
| 348.3901 | 156.0867 | 0 | 348.8185 | 110.1968 | 0 | 0 | 0 | 2.020408 |
| 525.7523 | 609.582 | 0 | 0 | 0 | 0 | 0 | 853.4939 | 42.78552 |
| 211.1455 | 495.6808 | 0 | 206.5962 | 0 | 0 | 0 | 497.9292 | 0 |
| 1384.059 | 110.7372 | 1.045455 | 1339.38 | 74.1511 | 0 | 0 | 0 | 9.091837 |
| 1124.35 | 1240.257 | 2.090909 | 1120 | 0 | 0 | 0 | 1293 | 4 |
| 812.9102 | 538.9211 | 2.090909 | 808.281 | 0 | 0 | 0 | 538.9846 | 0 |
| 377.9505 | 1116.864 | 1.045455 | 0 | 0 | 0 | 0 | 1272.348 | 42.78552 |
| 819.2446 | 479.8612 | 2.090909 | 824.2549 | 0 | 0 | 0 | 458.9791 | 2.111111 |
| 479.3748 | 362.5857 | 0 | 0 | 0 | 0 | 0 | 570.3991 | 60.96936 |
| 841.2455 | 335.496 | 0 | 935.8051 | 0 | 0 | 0 | 0 | 42.49254 |
| 787.1729 | 183.3767 | 1.033333 | 782.5127 | 136.9736 | 0 | 0 | 0 | 8.081633 |
| 662.3898 | 358.4181 | 0 | 0 | 0 | 0 | 0 | 653.5385 | 69.52646 |
| 689.4262 | 461.5675 | 6.2 | 0 | 0 | 0 | 0 | 779.8261 | 72.73538 |
| 371.6161 | 134.9939 | 1.045455 | 0 | 0 | 0 | 0 | 291.5139 | 37.43733 |
| 485.6347 | 460.8777 | 1.045455 | 0 | 0 | 0 | 0 | 664.0624 | 55.62117 |
| 533.1424 | 1072.569 | 1.045455 | 0 | 0 | 0 | 0 | 1296.553 | 41.71588 |
| 318.8297 | 782.5429 | 0 | 0 | 0 | 0 | 0 | 925.0569 | 25.67131 |
| 460.2972 | 880.6245 | 0 | 0 | 0 | 0 | 0 | 1079.759 | 45.99443 |
| 217.4799 | 643.3304 | 0 | 0 | 0 | 0 | 0 | 721.9443 | 23.53203 |


| 239.844 | 452.3662 | 1 | 206.3271 | 0 | 0 | 0 | 480.2833 | 1.125 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 205.4269 | 614.7254 | 0 | 212.6756 | 0 | 0 | 0 | 606.2593 | 2.25 |
| 280.7143 | 744.6127 | 1 | 250.7668 | 0 | 0 | 0 | 772.7275 | 2.25 |
| 338.7931 | 884.5775 | 0 | 303.6711 | 0 | 0 | 0 | 911.0761 | 2.25 |
| 245.2217 | 1119.718 | 0 | 210.5594 | 0 | 0 | 0 | 1159.654 | 1.125 |
| 74.54545 | 129.2112 | 0 | 0 | 0 | 0 | 0 | 162.2953 | 4 |
| 105.4286 | 148.6954 | 0 | 0 | 0 | 0 | 0 | 190.3848 | 17 |
| 122.4675 | 91.2682 | 0 | 0 | 0 | 0 | 0 | 144.6093 | 10 |
| 103.2987 | 257.3968 | 1 | 0 | 0 | 0 | 0 | 301.7028 | 9 |
| 86.25974 | 218.4284 | 0 | 0 | 0 | 0 | 0 | 258.0079 | 5 |
| 216.8633 | 38.32772 | 1.142857 | 0 | 0 | 0 | 0 | 103.9076 | 6.228814 |
| 209.5999 | 135.2117 | 0 | 0 | 0 | 0 | 0 | 225.8401 | 7.266949 |
| 463.8177 | 219.3198 | 1.142857 | 0 | 0 | 0 | 0 | 340.3505 | 13.49576 |
| 593.5206 | 637.7307 | 1.142857 | 0 | 0 | 0 | 0 | 888.5163 | 35.29661 |
| 253.1801 | 37.26306 | 0 | 0 | 0 | 0 | 0 | 107.0885 | 8.305085 |
| 457.5919 | 84.10806 | 1.142857 | 0 | 0 | 0 | 0 | 233.262 | 16.61017 |
| 336.19 | 189.5093 | 0 | 0 | 0 | 0 | 0 | 267.1911 | 7.266949 |
| 273.9326 | 216.1258 | 0 | 0 | 0 | 0 | 0 | 300.0598 | 8.305085 |
| 351.7543 | 332.1736 | 1.142857 | 0 | 0 | 0 | 0 | 463.3433 | 11.41949 |
| 660.9661 | 343.8849 | 0 | 0 | 0 | 0 | 0 | 542.8644 | 21.80085 |
| 648.5146 | 492.9371 | 0 | 0 | 0 | 0 | 0 | 763.4031 | 28.02966 |
| 532.3008 | 363.0487 | 0 | 0 | 0 | 0 | 0 | 549.2261 | 29.0678 |
| 123.4772 | 3.193977 | 0 | 0 | 0 | 0 | 0 | 41.351 | 3.114407 |
| 379.7702 | 427.9929 | 1.142857 | 0 | 0 | 0 | 0 | 553.4672 | 23.87712 |
| 364.2058 | 614.3082 | 1.142857 | 0 | 0 | 0 | 0 | 744.318 | 17.64831 |
| 229.3148 | 672.8645 | 0 | 0 | 0 | 0 | 0 | 717.8109 | 7.266949 |
| 167.3817 | 91.32558 | 0 | 233.4313 | 0 | 0 | 0 | 0 | 5.285714 |
| 149.7078 | 8.595349 | 0 | 153.1563 | 0 | 0 | 0 | 0 | 0 |
| 98.76557 | 149.3442 | 0 | 165.8313 | 0 | 0 | 0 | 0 | 12.68571 |
| 129.9547 | 174.0558 | 2 | 233.4313 | 0 | 0 | 0 | 0 | 9.514286 |
| 132.034 | 4.297674 | 0 | 135.2 | 0 | 0 | 0 | 0 | 2.114286 |
| 123.7169 | 200.9163 | 0 | 269.3438 | 0 | 0 | 0 | 0 | 6.342857 |
| 116.4394 | 64.46512 | 0 | 161.6063 | 0 | 0 | 0 | 0 | 1.057143 |
| 792.1545 | 408.9831 | 3.5 | 917.3131 | 0 | 0 | 0 | 0 | 68.68633 |
| 797.7886 | 512.3402 | 2.333333 | 1012.867 | 0 | 0 | 0 | 0 | 70.93834 |
| 1129.074 | 634.5906 | 0 | 1399.577 | 0 | 0 | 0 | 0 | 75.44236 |
| 1022.026 | 542.3472 | 0 | 1248.94 | 0 | 0 | 0 | 0 | 83.3244 |
| 823.7054 | 403.4263 | 0 | 982.5142 | 0 | 0 | 0 | 0 | 56.30027 |
| 775.2522 | 392.3126 | 1.166667 | 948.7895 | 0 | 0 | 0 | 0 | 65.30831 |
| 1646.436 | 447.7957 | 0 | 1541.451 | 0 | 417.9648 | 0 | 0 | 12.88889 |
| 1245.881 | 361.2372 | 5 | 1188.039 | 0 | 301.3503 | 0 | 0 | 15.03704 |
| 1768.683 | 523.9671 | 0 | 1687.51 | 0 | 460.6849 | 0 | 0 | 30.07407 |
| 189.5567 | 456.939 | 0 | 200.784 | 0 | 0 | 0 | 442.9223 | 0 |
| 195.8058 | 301.7317 | 1 | 235.1548 | 0 | 0 | 0 | 203.6796 | 22 |
| 347.8677 | 29.30488 | 0 | 340.249 | 0 | 0 | 0 | 0 | 4.4 |
| 245.7987 | 29.30488 | 0 | 253.112 | 0 | 0 | 0 | 0 | 6.6 |
| 265.5876 | 9.768293 | 0 | 268.6722 | 0 | 0 | 0 | 0 | 0 |
| 2 |  |  |  |  |  |  |  |  |


| 235.3835 | 240.9512 | 0 | 236.028 | 0 | 0 | 0 | 241.3981 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1080.664 | 791.7425 | 3 | 946.8088 | 29.25373 | 187.7212 | 0 | 687.7676 | 7 |
| 1362.951 | 701.9684 | 2 | 1337.464 | 4.179104 | 32.32976 | 0 | 686.173 | 4 |
| 942.7526 | 701.9684 | 3 | 829.7995 | 29.25373 | 144.9625 | 0 | 632.5296 | 0 |
| 777.9056 | 209.8334 | 0 | 785.7884 | 0 | 0 | 0 | 213.75 | 0 |
| 399.7271 | 165.4872 | 0 | 356.1392 | 7.313433 | 23.9866 | 0 | 172.7798 | 2 |
| 165.2198 | 402.3462 | 1 | 0 | 0 | 0 | 0 | 463.1126 | 11.45833 |
| 99.13187 | 254.9934 | 10 | 0 | 0 | 0 | 0 | 301.3907 | 6.25 |
| 123.6484 | 293.6604 | 0 | 0 | 0 | 0 | 0 | 345.4967 | 7.291667 |
| 1064.646 | 162.3985 | 1.034483 | 1095.29 | 0 | 0 | 0 | 0 | 11.41884 |
| 1297.893 | 69.74809 | 1.034483 | 1253.982 | 0 | 0 | 0 | 0 | 10.38076 |
| 643.7634 | 105.1426 | 0 | 636.8445 | 0 | 0 | 0 | 0 | 15.57114 |
| 1524.921 | 218.6134 | 1.034483 | 1564.107 | 0 | 0 | 0 | 0 | 24.91383 |
| 741.209 | 206.1212 | 1.034483 | 802.7974 | 0 | 0 | 0 | 0 | 28.02806 |
| 950.6135 | 488.2366 | 1.034483 | 1102.55 | 0 | 0 | 0 | 0 | 60.20842 |
| 1132.028 | 206.1212 | 0 | 1176.192 | 0 | 0 | 0 | 0 | 17.64729 |
| 1401.559 | 173.8497 | 1.034483 | 1428.233 | 0 | 0 | 0 | 0 | 25.9519 |
| 1487.601 | 94.73248 | 20.68966 | 1442.754 | 0 | 0 | 0 | 0 | 11.41884 |
| 219.681 | 146.6497 | 0 | 230.4545 | 0 | 0 | 0 | 132.4206 | 0 |
| 313.0701 | 250.8849 | 1.034483 | 384.8034 | 0 | 0 | 0 | 0 | 26.98998 |
| 1335.213 | 420.5706 | 3.103448 | 1448.977 | 0 | 0 | 0 | 0 | 56.05611 |
| 471.6785 | 377.8889 | 5.172414 | 586.0214 | 0 | 0 | 0 | 0 | 43.5992 |
| 526.6212 | 138.4552 | 0 | 565.2773 | 0 | 0 | 0 | 0 | 13.49499 |
| 771.272 | 220.6954 | 1.034483 | 866.067 | 0 | 0 | 0 | 0 | 20.76152 |
| 1577.79 | 155.1114 | 1.034483 | 1564.107 | 0 | 0 | 0 | 0 | 17.64729 |
| 794.3917 | 780.0514 | 1 | 750.8021 | 0 | 0 | 0 | 803.9077 | 3 |
| 839.1608 | 652.123 | 1 | 816.4973 | 0 | 0 | 0 | 652.7188 | 3 |
| 650.714 | 400.4264 | 5 | 616.2834 | 0 | 0 | 0 | 417.0727 | 1 |
| 845.9113 | 386.217 | 16.55172 | 962.5271 | 0 | 0 | 0 | 0 | 50.86573 |
| 861.0248 | 1308.406 | 1 | 849.8663 | 0 | 0 | 0 | 1301.267 | 1 |
| 1362.166 | 803.6645 | 2.068966 | 1668.864 | 0 | 0 | 0 | 0 | 76.81764 |
| 741.2934 | 517.9541 | 0 | 724.7326 | 0 | 0 | 0 | 516.1275 | 5 |
| 1636.88 | 434.1038 | 2.068966 | 1614.225 | 0 | 0 | 0 | 428.5422 | 3 |
| 1784.085 | 533.0003 | 0 | 1946.444 | 0 | 0 | 0 | 0 | 50.10526 |
| 1087.994 | 1040.069 | 3 | 1064.679 | 0 | 0 | 0 | 1042.682 | 5 |
| 1032.509 | 594.4203 | 0 | 1229.661 | 0 | 0 | 0 | 0 | 53.17293 |
| 292.4177 | 83.27372 | 0 | 323.6083 | 0 | 0 | 0 | 0 | 6.228457 |
| 719.4392 | 309.1818 | 1.034483 | 822.8952 | 0 | 0 | 0 | 0 | 32.7218 |
| 380.4527 | 377.8889 | 0 | 352.4599 | 0 | 0 | 0 | 397.2618 | 1 |
| 955.1199 | 507.6457 | 4.25 | 977.5175 | 0 | 0 | 0 | 486.8421 | 5.666667 |
| 568.6491 | 237.7581 | 4.25 | 584.6144 | 0 | 0 | 0 | 221.4864 | 1.133333 |
| 867.7164 | 464.8064 | 2.125 | 861.648 | 0 | 0 | 0 | 463.3025 | 1.133333 |
| 743.456 | 563.3367 | 0 | 747.8851 | 0 | 0 | 0 | 555.321 | 3.4 |
| 543.3758 | 258.1068 | 2.125 | 531.9465 | 0 | 0 | 0 | 266.4257 | 1.133333 |
| 860.345 | 619.0278 | 1.0625 | 860.5946 | 0 | 0 | 0 | 616.31 | 0 |
| 964.5973 | 592.2533 | 1.0625 | 961.7171 | 0 | 0 | 0 | 588.4905 | 3.4 |
| 927.7405 | 529.0653 | 2.125 | 949.0768 | 0 | 0 | 0 | 501.8219 | 1.133333 |


| 268.1663 | 354.0911 | 0 | 261.5416 | 0 | 0 | 0 | 358.9226 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 389.6792 | 79.64358 | 2.666667 | 403.3152 | 0 | 0 | 0 | 0 | 17.71429 |
| 259.7861 | 787.8257 | 1.333333 | 248.0494 | 0 | 0 | 0 | 805.4136 | 2.333333 |
| 564.6158 | 626.386 | 1.333333 | 561.4841 | 0 | 0 | 0 | 631.3578 | 1.166667 |
| 287.0218 | 541.3611 | 0 | 243.8979 | 0 | 0 | 0 | 584.8708 | 3.5 |
| 512.2396 | 103.3214 | 2.666667 | 520.6432 | 0 | 0 | 0 | 0 | 12.17857 |
| 363.4911 | 273.3712 | 0 | 353.0687 | 0 | 0 | 0 | 272.4352 | 1.107143 |
| 1102 | 631 | 2 | 0 | 0 | 1030 | 0 | 675 | 12 |
| 819.7663 | 951.9857 | 2.083333 | 808.6426 | 0 | 0 | 0 | 941.6739 | 3.375 |
| 832.4431 | 1244.025 | 0 | 848.863 | 0 | 0 | 0 | 1226.777 | 1.125 |
| 668.7011 | 855.3321 | 1.041667 | 681.6307 | 0 | 0 | 0 | 842.8242 | 2.25 |
| 357.0632 | 245.2714 | 0 | 357.7503 | 0 | 0 | 0 | 238.2799 | 1.125 |
| 511.2975 | 434.4214 | 0 | 519.6905 | 0 | 0 | 0 | 422.4526 | 0 |
| 1095.487 | 322.1786 | 2.083333 | 0 | 0 | 0 | 0 | 556.7269 | 82.06579 |
| 935.9703 | 204.7393 | 5.208333 | 0 | 0 | 0 | 0 | 430.4372 | 69.27632 |
| 329.5968 | 94.575 | 0 | 0 | 0 | 0 | 0 | 164.1766 | 5.328947 |
| 178.5316 | 167.325 | 0 | 0 | 0 | 0 | 0 | 216.7972 | 12.78947 |
| 340.1608 | 281.6464 | 1.041667 | 0 | 0 | 0 | 0 | 388.3407 | 36.23684 |
| 62.32759 | 1279.361 | 1.041667 | 65.62283 | 0 | 0 | 0 | 1265.277 | 1.125 |
| 292.6228 | 439.6179 | 4.166667 | 0 | 0 | 0 | 0 | 532.5214 | 37.30263 |
| 271.4948 | 473.9143 | 1.041667 | 265.6666 | 0 | 0 | 0 | 472.3978 | 1.125 |
| 466.9287 | 1029.932 | 1.041667 | 460.4182 | 0 | 0 | 0 | 1023.875 | 2.25 |
| 620.1067 | 1386.407 | 2.083333 | 634.0012 | 0 | 0 | 0 | 1353.721 | 2.25 |
| 336.9916 | 460.4036 | 1.041667 | 328.1141 | 0 | 0 | 0 | 457.8304 | 1.125 |
| 575.7379 | 861.5679 | 2.083333 | 549.3266 | 0 | 0 | 0 | 875.0804 | 0 |
| 688.7727 | 907.2964 | 1.041667 | 693.2734 | 0 | 0 | 0 | 893.8099 | 2.25 |
| 824.9812 | 418.9122 | 1.25 | 781.2902 | 0 | 0 | 0 | 459.9057 | 3.6 |
| 1000.557 | 716.1677 | 0 | 960.8971 | 0 | 0 | 0 | 751.2176 | 1.2 |
| 1002.808 | 773.5529 | 2.5 | 941.8139 | 0 | 0 | 0 | 828.0597 | 6 |
| 845.24 | 756.3373 | 2.5 | 762.2069 | 0 | 0 | 0 | 841.8225 | 1.2 |
| 822.7302 | 546.3074 | 1.25 | 779.0451 | 0 | 0 | 0 | 588.3582 | 3.6 |
| 714.6836 | 813.7226 | 2.5 | 629.7468 | 0 | 0 | 0 | 910.6363 | 2.4 |
| 770.4801 | 364.0698 | 0 | 744.1906 | 0 | 0 | 0 | 379.4528 | 6 |
| 534.7362 | 337.0581 | 1 | 502.6449 | 0 | 0 | 0 | 368.8798 | 1 |
| 634.7836 | 409.8721 | 1 | 606.1645 | 0 | 0 | 0 | 434.6673 | 3 |
| 387.7633 | 18.19586 | 1 | 0 | 0 | 0 | 0 | 156.1875 | 34.35246 |
| 428.8578 | 336.0883 | 2 | 0 | 0 | 0 | 0 | 477.0625 | 60.37705 |
| 278.178 | 133.7931 | 2 | 0 | 0 | 0 | 0 | 248.625 | 41.63934 |
| 434.1263 | 255.8124 | 0 | 0 | 0 | 0 | 0 | 422.875 | 62.45902 |
| 401.4615 | 800.6179 | 2 | 0 | 0 | 0 | 0 | 922.25 | 35.39344 |
| 188.6131 | 7.492414 | 0 | 0 | 0 | 0 | 0 | 68 | 19.77869 |
| 1234.288 | 331.0275 | 2.04878 | 1222.455 | 0 | 0 | 18.43703 | 226.5536 | 15.84906 |
| 1134.966 | 266.4875 | 0 | 1181.443 | 0 | 0 | 11.26707 | 106.0021 | 23.24528 |
| 945.6326 | 548.5896 | 3.073171 | 924.973 | 0 | 0 | 36.87405 | 491.559 | 10.56604 |
| 857.6908 | 233.1766 | 1.02439 | 837.1832 | 0 | 0 | 0 | 247.1954 | 0 |
| 227.614 | 155.1041 | 1.02439 | 215.8842 | 0 | 0 | 14.33991 | 151.7286 | 1.115385 |
| 1294.296 | 530.8932 | 3.073171 | 1314.986 | 0 | 0 | 11.26707 | 418.4123 | 21.07765 |


| 1146.347 | 603.7608 | 1.02439 | 1122.094 | 0 | 0 | 0 | 615.381 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 976.6708 | 285.2249 | 0 | 985.5296 | 0 | 0 | 8.194234 | 272.9419 | 3.115385 |
| 564.8965 | 306.0443 | 0 | 566.7245 | 0 | 0 | 0 | 301.4324 | 2 |
| 1063.578 | 307.0853 | 3.073171 | 1047.769 | 0 | 0 | 0 | 316.0346 | 4 |
| 193.4719 | 68.70382 | 0 | 193.0373 | 0 | 0 | 0 | 69.88225 | 1 |
| 539.0313 | 644.3586 | 2.04878 | 513.1161 | 0 | 0 | 27.65554 | 650.5622 | 1.115385 |
| 1013.917 | 995.1644 | 1.02439 | 935.4982 | 0 | 0 | 50.18968 | 1035.08 | 2.230769 |
| 545.2389 | 391.4036 | 0 | 508.9444 | 0 | 0 | 28.67982 | 403.2239 | 1.115385 |
| 605.2462 | 988.9186 | 0 | 564.2191 | 0 | 0 | 49.1654 | 986.2357 | 0 |
| 405.5667 | 604.8018 | 0 | 376.4937 | 0 | 0 | 10.24279 | 621.4636 | 2.230769 |
| 705.6033 | 603.7608 | 0 | 635.1376 | 0 | 0 | 33.80121 | 642.2483 | 2.230769 |
| 1055.301 | 1027.434 | 0 | 953.2278 | 0 | 0 | 35.84977 | 1094.316 | 1.115385 |
| 835.964 | 488.2135 | 0 | 1008.251 | 0 | 0 | 7.169954 | 92.61309 | 47.60595 |
| 371.4246 | 539.2209 | 2.04878 | 323.3048 | 0 | 0 | 13.31563 | 580.9334 | 1.115385 |
| 240.0293 | 390.3626 | 1.02439 | 211.7125 | 0 | 0 | 21.50986 | 399.0669 | 0 |
| 404.5321 | 341.4372 | 1.02439 | 384.8371 | 0 | 0 | 22.53414 | 342.9481 | 1.115385 |
| 454.1933 | 528.8112 | 1.02439 | 406.7383 | 0 | 0 | 20.48558 | 554.9524 | 2.230769 |
| 649.7344 | 738.0456 | 1.02439 | 578.82 | 0 | 0 | 29.7041 | 767.996 | 1.115385 |
| 1291.192 | 928.5425 | 2.04878 | 1292.421 | 0 | 0 | 0 | 918.8994 | 3 |
| 1069.786 | 448.6568 | 3.073171 | 1052.175 | 0 | 0 | 56.33536 | 413.6162 | 5.576923 |
| 673.5304 | 175.9234 | 0 | 713.7445 | 0 | 0 | 0 | 0 | 24.30189 |
| 466.6086 | 149.8992 | 0 | 517.027 | 0 | 0 | 0 | 0 | 16.90566 |
| 444.8818 | 8.327736 | 0 | 431.5425 | 0 | 0 | 0 | 0 | 1.056604 |
| 254.5138 | 49.96641 | 0 | 265.7231 | 0 | 0 | 0 | 0 | 10.56604 |
| 115.8762 | 6.245802 | 0 | 111.2329 | 0 | 0 | 0 | 0 | 1.056604 |
| 347.6286 | 6.245802 | 2.04878 | 339.8783 | 0 | 0 | 0 | 0 | 3.169811 |
| 355.9055 | 5.204835 | 1.02439 | 347.0879 | 0 | 0 | 0 | 0 | 0 |
| 435.5704 | 11.45064 | 0 | 411.9737 | 0 | 0 | 0 | 0 | 1.056604 |
| 561.7927 | 24.98321 | 1.02439 | 537.6257 | 0 | 0 | 0 | 0 | 5.283019 |
| 976.6708 | 268.5695 | 0 | 1047.443 | 0 | 0 | 0 | 0 | 43.32075 |
| 136.5684 | 4.163868 | 0 | 127.7119 | 0 | 0 | 0 | 0 | 2.113208 |
| 814.2372 | 26.02417 | 0 | 787.8998 | 0 | 0 | 0 | 0 | 7.396226 |
| 411.7744 | 271.6924 | 2.04878 | 385.88 | 0 | 0 | 15.36419 | 283.7116 | 1.115385 |
| 518.3391 | 436.1652 | 0 | 489.1289 | 0 | 0 | 23.55842 | 441.6756 | 0 |
| 733.5377 | 353.9288 | 2.04878 | 854.8455 | 0 | 0 | 0 | 0 | 35.92453 |
| 244.1677 | 7.286769 | 1.02439 | 235.855 | 0 | 0 | 0 | 0 | 3.169811 |
| 524.5467 | 69.74479 | 1.02439 | 543.8053 | 0 | 0 | 0 | 0 | 6.339623 |
| 846.3101 | 708.8985 | 1.02439 | 1129.838 | 0 | 0 | 0 | 0 | 60.22642 |
| 996.3284 | 1043.049 | 2.04878 | 893.7814 | 0 | 0 | 129.0592 | 1015.334 | 2.230769 |
| 1044.215 | 547.2569 | 3.0625 | 1131.732 | 0 | 0 | 277.795 | 106.4285 | 17.36369 |
| 364.248 | 320.2701 | 0 | 369.8638 | 0 | 0 | 0 | 299.6531 | 1.052632 |
| 524.5171 | 470.0068 | 0 | 534.0169 | 0 | 0 | 0 | 431.9138 | 3.157895 |
| 518.4165 | 62.42331 | 0 | 535.645 | 0 | 0 | 31.33026 | 0 | 6.386917 |
| 839.8518 | 575.0304 | 1.052632 | 1060.528 | 0 | 0 | 178.5825 | 0 | 23.33741 |
| 973.2913 | 534.7326 | 3.0625 | 1161.9 | 0 | 0 | 101.3012 | 0 | 40.44032 |
| 472.5626 | 231.264 | 0 | 530.4958 | 0 | 0 | 133.6758 | 0 | 5.479551 |
| 937.823 | 84.76192 | 2.041667 | 919.0606 | 0 | 0 | 98.16814 | 0 | 3.269663 |


| 600.8743 | 523.2218 | 0 | 765.3611 | 0 | 0 | 297.6375 | 0 | 5.449438 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 959.7299 | 338.0013 | 2.041667 | 1006.889 | 0 | 0 | 240.1987 | 0 | 4.359551 |
| 1121.423 | 583.9155 | 3.0625 | 1369.064 | 0 | 0 | 0 | 0 | 54.88 |
| 733.3588 | 27.20753 | 0 | 696.3531 | 0 | 0 | 40.72934 | 0 | 6.539326 |
| 1233.044 | 407.0665 | 2.041667 | 1410.124 | 0 | 0 | 0 | 0 | 45.55446 |
| 1160.021 | 344.2799 | 2.041667 | 1222.277 | 0 | 0 | 239.1543 | 0 | 7.629213 |
| 651.4835 | 454.4092 | 0 | 653.4953 | 0 | 0 | 0 | 429.8472 | 2.105263 |
| 575.5118 | 262.0392 | 2.105263 | 583.8861 | 0 | 0 | 0 | 242.8224 | 1.052632 |
| 1116.208 | 830.8762 | 0 | 1255.736 | 0 | 0 | 586.9202 | 0 | 15.25843 |
| 936.7798 | 106.7372 | 1.020833 | 921.1518 | 0 | 0 | 97.1238 | 0 | 1.089888 |
| 515.3332 | 106.7372 | 0 | 570.7157 | 0 | 0 | 0 | 0 | 4.081633 |
| 1302.938 | 47.08996 | 4.083333 | 1271.703 | 0 | 0 | 0 | 0 | 10.20408 |
| 487.1672 | 111.9695 | 1.020833 | 534.529 | 0 | 0 | 0 | 0 | 10.20408 |
| 826.2022 | 152.7808 | 0 | 831.2323 | 0 | 0 | 120.0993 | 0 | 3.269663 |
| 649.904 | 69.06527 | 3.0625 | 645.1199 | 0 | 0 | 62.66052 | 0 | 1.089888 |
| 1412.472 | 320.2117 | 2.041667 | 1428.256 | 0 | 0 | 261.0855 | 0 | 5.449438 |
| 1455.243 | 64.8795 | 1.020833 | 1441.848 | 0 | 0 | 61.61618 | 0 | 5.449438 |
| 1193.403 | 492.8749 | 4.083333 | 1386.467 | 0 | 0 | 0 | 0 | 74.4898 |
| 497.5991 | 18.83598 | 0 | 485.1469 | 0 | 0 | 26.10855 | 0 | 0 |
| 881.491 | 15.69665 | 1.020833 | 862.5996 | 0 | 0 | 19.8425 | 0 | 2.179775 |
| 365.1146 | 9.417992 | 0 | 364.3106 | 0 | 0 | 10.44342 | 0 | 2.179775 |
| 799.0794 | 27.20753 | 0 | 768.1916 | 0 | 0 | 0 | 0 | 7.142857 |
| 992.0686 | 32.43975 | 0 | 948.0911 | 0 | 0 | 0 | 0 | 5.102041 |
| 474.5631 | 331.7083 | 1.052632 | 479.3373 | 0 | 0 | 0 | 319.2299 | 1.1 |
| 650.9472 | 461.4816 | 1.020833 | 817.8191 | 0 | 0 | 0 | 0 | 34.69388 |
| 518.4628 | 334.8619 | 1.020833 | 667.9028 | 0 | 0 | 0 | 0 | 34.69388 |
| 214.896 | 6.278661 | 1.020833 | 210.1606 | 0 | 0 | 10.44342 | 0 | 1.089888 |
| 933.6502 | 131.8519 | 1.020833 | 971.871 | 0 | 0 | 0 | 0 | 12.2449 |
| 1312.326 | 230.2176 | 0 | 1375.094 | 0 | 0 | 0 | 0 | 25.5102 |
| 854.3682 | 31.39331 | 10.20833 | 838.5513 | 0 | 0 | 49.08407 | 0 | 4.359551 |
| 596.7016 | 278.354 | 0 | 697.8861 | 0 | 0 | 0 | 0 | 31.63265 |
| 712.8853 | 623.9028 | 2.105263 | 693.6414 | 0 | 0 | 0 | 629.04 | 3.3 |
| 820.0783 | 696.6915 | 1.052632 | 765.0761 | 0 | 0 | 0 | 742.0788 | 3.3 |
| 689.9897 | 430.4929 | 0 | 646.0182 | 0 | 0 | 0 | 458.4351 | 1.1 |
| 366.3294 | 387.8596 | 0 | 339.5737 | 0 | 0 | 0 | 404.009 | 0 |
| 882.5208 | 460.6482 | 2.105263 | 890.3744 | 0 | 0 | 0 | 432.9471 | 4.210526 |
| 630.6694 | 514.7198 | 5.263158 | 648.3006 | 0 | 0 | 0 | 482.5448 | 5.263158 |
| 505.7843 | 673.815 | 0 | 464.8433 | 0 | 0 | 0 | 707.5392 | 0 |
| 600.4888 | 723.7273 | 1.052632 | 587.007 | 0 | 0 | 0 | 725.3323 | 2.2 |
| 574.4711 | 589.5882 | 3.157895 | 620.2491 | 0 | 0 | 0 | 522.843 | 1.052632 |
| 370.4922 | 383.7002 | 1.052632 | 337.5031 | 0 | 0 | 0 | 411.3356 | 0 |
| 310 | 536 | 1 | 295 | 0 | 0 | 0 | 558 | 2 |
| 677.1635 | 88.61178 | 0 | 679.0745 | 0 | 0 | 0 | 0 | 10.2375 |
| 1385.981 | 135.8714 | 1 | 1387.723 | 0 | 0 | 0 | 0 | 14.7875 |
| 1348.674 | 356.8101 | 1 | 1424.123 | 0 | 0 | 0 | 0 | 31.85 |
| 902.131 | 183.131 | 0 | 938.4196 | 0 | 0 | 0 | 0 | 9.1 |
| 813.9528 | 85.06731 | 1 | 808.747 | 0 | 0 | 0 | 0 | 11.375 |


| 833.1711 | 27.17428 | 0 | 790.5474 | 0 | 0 | 0 | 0 | 5.6875 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | ---: | ---: |
| 1168.927 | 106.3341 | 3 | 1161.365 | 0 | 0 | 0 | 0 | 7.9625 |
| 352.7365 | 1122.117 | 3 | 271.3085 | 0 | 0 | 0 | 1198.675 | 4 |
| 374.4434 | 1208.27 | 2 | 274.5512 | 0 | 0 | 0 | 1296.7 | 2.666667 |
| 442.82 | 1297.614 | 1 | 309.1403 | 0 | 0 | 0 | 1425.624 | 1.333333 |
| 709.6591 | 341.2376 | 2 | 841.3086 | 0 | 0 | 0 | 0 | 37.925 |
| 564.3828 | 19.70673 | 0 | 558.4369 | 0 | 0 | 0 | 0 | 2.05 |
| 516.3058 | 142.0959 | 1 | 585.0863 | 0 | 0 | 0 | 0 | 29.5 |
| 794.3166 | 133.7983 | 0 | 828.1494 | 0 | 0 | 0 | 0 | 24.43707 |
| 339.6748 | 226.1088 | 1 | 458.8912 | 0 | 0 | 0 | 0 | 27.46552 |
| 672.0336 | 23.85552 | 0 | 652.3795 | 0 | 0 | 0 | 0 | 4.1 |
| 426.4226 | 19.70673 | 2 | 420.6543 | 0 | 0 | 0 | 0 | 1.025 |
| 774.4586 | 26.9671 | 0 | 766.1545 | 0 | 0 | 0 | 0 | 7.175 |
| 519.4412 | 190.8441 | 0 | 607.4958 | 0 | 0 | 0 | 0 | 23.575 |
| 572.744 | 293.5266 | 0 | 718.1394 | 0 | 0 | 0 | 0 | 30.75 |
| 286.372 | 209.5137 | 1 | 368.4639 | 0 | 0 | 0 | 0 | 31.775 |
| 505.8542 | 193.9557 | 1 | 589.7511 | 0 | 0 | 0 | 0 | 18.45 |
| 544.5249 | 15.55794 | 0 | 525.035 | 0 | 0 | 0 | 0 | 2.05 |
| 407.6098 | 324.6425 | 2 | 590.301 | 0 | 0 | 0 | 0 | 42.72414 |
| 283.2366 | 467.7755 | 3 | 571.5281 | 0 | 0 | 0 | 0 | 24.41379 |
| 440.0096 | 254.1131 | 0 | 569.4423 | 0 | 0 | 0 | 0 | 28.48276 |
| 557.0667 | 411.7669 | 0 | 814.5319 | 0 | 0 | 0 | 0 | 29.5 |
| 1010.663 | 19.70673 | 0 | 998.9235 | 0 | 0 | 0 | 0 | 5.125 |
| 936.4574 | 29.0415 | 1 | 917.5065 | 0 | 0 | 0 | 0 | 4.1 |
| 1425.589 | 41.48785 | 1 | 1407.052 | 0 | 0 | 0 | 0 | 6.15 |
| 189.1728 | 444.9572 | 0 | 416.4791 | 0 | 0 | 0 | 0 | 45.1 |
| 232.024 | 454.292 | 1 | 469.3206 | 0 | 0 | 0 | 0 | 53.91379 |
| 718.0204 | 453.2548 | 1 | 924.8132 | 0 | 0 | 0 | 0 | 42.025 |
| 316.6815 | 478.1475 | 2 | 591.8387 | 0 | 0 | 0 | 0 | 59.45 |
| 194.3985 | 471.9243 | 1 | 449.8809 | 0 | 0 | 0 | 0 | 26.65 |
| 414.9259 | 572.5324 | 1 | 693.088 | 0 | 0 | 0 | 0 | 36.9 |
| 482.8609 | 629.5782 | 0 | 827.0471 | 0 | 0 | 0 | 0 | 64.08621 |
| 1113.088 | 949.0346 | 2 | 1597.776 | 0 | 0 | 0 | 0 | 81.37931 |
| 997.0763 | 462.5896 | 0 | 1198.332 | 0 | 0 | 0 | 0 | 67.13793 |
| 1238.507 | 162.8398 | 2 | 1277.62 | 0 | 0 | 0 | 0 | 22.55 |
| 1375.422 | 458.4408 | 3 | 1568.574 | 0 | 0 | 0 | 0 | 61.03448 |
| 890.9113 | 509.9381 | 2 | 921.0523 | 0 | 0 | 0 | 480.9615 | 3.5 |
| 618.5991 | 623.2577 | 2 | 675.2959 | 0 | 0 | 0 | 574.6279 | 2.333333 |
| 557.4896 | 698.8041 | 1 | 649.6518 | 0 | 0 | 0 | 010.4106 | 1.166667 |
| 854.8004 | 669.8494 | 1.087719 | 732.6361 | 0 | 0 | 0 | 805.0248 | 3.681818 |
| 421.1149 | 414.9696 | 0 | 334.4643 | 0 | 0 | 0 | 498.2479 | 1.227273 |
| 632.7199 | 689.8607 | 0 | 510.7217 | 0 | 0 | 0 | 820.8926 | 0 |
| 728.0469 | 454.9921 | 1.087719 | 650.8782 | 0 | 0 | 0 | 531.0413 | 2.454545 |
| 465.112 | 912.0906 | 0 | 316.4138 | 0 | 0 | 0 | 1064.198 | 2.454545 |
| 694.5253 | 410.7567 | 1.087719 | 637.0749 | 0 | 0 | 0 | 477.0909 | 0 |
| 627.4821 | 340.1908 | 2.175439 | 589.2942 | 0 | 0 | 0 | 379.7686 | 3.681818 |
| 1162.78 | 259.0927 | 0 | 1158.414 | 0 | 0 | 0 | 275.0413 | 1.227273 |
|  |  |  |  |  |  |  |  |  |


| 1361.814 | 350.7231 | 2.175439 | 1322.992 | 0 | 0 | 0 | 405.157 | 2.454545 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1323.055 | 361.2553 | 3.263158 | 1445.352 | 0 | 0 | 0 | 0 | 34.13808 |
| 1138.686 | 310.7006 | 1.087719 | 1246.643 | 0 | 0 | 0 | 0 | 30.93764 |
| 690.3351 | 121.1206 | 1.087719 | 718.4928 | 0 | 0 | 0 | 0 | 22.40312 |
| 1220.395 | 348.6166 | 4.350877 | 1205.133 | 0 | 0 | 0 | 380.8264 | 3.681818 |
| 1075.833 | 279.1039 | 0 | 1171.342 | 0 | 0 | 0 | 0 | 32.00445 |
| 1519.994 | 73.72557 | 1.087719 | 1497.644 | 0 | 0 | 0 | 0 | 26.67038 |
| 1417.334 | 133.7592 | 1.087719 | 1468.361 | 0 | 0 | 0 | 0 | 19.20267 |
| 500.7286 | 30.54345 | 1.087719 | 466 | 0 | 54 | 0 | 0 | 0 |
| 702.9057 | 110.5884 | 0 | 712.2177 | 0 | 0 | 0 | 0 | 13.8686 |
| 584.5326 | 37.91601 | 0 | 561.6166 | 0 | 0 | 0 | 0 | 5.334076 |
| 853.7528 | 25.27734 | 0 | 806.3434 | 0 | 0 | 0 | 0 | 13.8686 |
| 839.0871 | 84.25779 | 1.087719 | 820.9852 | 0 | 0 | 0 | 0 | 10.66815 |
| 670.4317 | 55.82079 | 2.175439 | 675.6133 | 0 | 0 | 0 | 0 | 8.534521 |
| 894.6072 | 214.8574 | 1.087719 | 982.0447 | 0 | 0 | 0 | 0 | 14.93541 |
| 937.5568 | 246.454 | 2.175439 | 1008.191 | 0 | 0 | 0 | 0 | 33.07127 |
| 522.7272 | 297.0087 | 1.087719 | 625.4129 | 0 | 0 | 0 | 0 | 13.8686 |
| 207.4148 | 8.425779 | 1.087719 | 194.5264 | 0 | 0 | 0 | 0 | 6.400891 |
| 1430.953 | 533.9838 | 2.175439 | 1586.347 | 57.4846 | 0 | 233.178 | 0 | 11.85938 |
| 1192.111 | 323.3393 | 1.087719 | 1216.652 | 57.4846 | 0 | 189.0632 | 0 | 3.234375 |
| 1366.004 | 908.9309 | 0 | 1308.127 | 0 | 0 | 0 | 971.1074 | 0 |
| 797.1851 | 358.0956 | 1.087719 | 828.1589 | 50.16838 | 0 | 207.9696 | 0 | 4.3125 |
| 763.6636 | 241.1879 | 0 | 755.0554 | 49.1232 | 0 | 147.0492 | 0 | 1.078125 |
| 872.6087 | 421.289 | 1.087719 | 843.0624 | 0 | 0 | 0 | 458.0496 | 4.909091 |
| 852.7053 | 541.3563 | 0 | 786.7875 | 0 | 0 | 0 | 613.5537 | 1.227273 |
| 1368.1 | 193.7929 | 3.263158 | 1276.179 | 83.61396 | 0 | 163.8548 | 0 | 4.3125 |
| 1292.676 | 142.185 | 0 | 1278.268 | 61.6653 | 0 | 78.77635 | 0 | 2.15625 |
| 1543.04 | 188.5268 | 2.175439 | 1448.495 | 91.97536 | 0 | 144.9485 | 0 | 10.78125 |
| 666.2415 | 82.15135 | 0 | 608.0371 | 51.21355 | 0 | 58.81967 | 0 | 8.557141 |
| 687.1924 | 119.0141 | 1.087719 | 654.7991 | 72.11704 | 0 | 64.07143 | 0 | 2.15625 |
| 759.4734 | 57.92723 | 1.087719 | 671.5084 | 105.5626 | 0 | 32.56089 | 0 | 1.078125 |
| 1008.79 | 83.20457 | 3.263158 | 902.3068 | 88.83984 | 0 | 70.37354 | 0 | 3.234375 |
| 426.3526 | 16.85156 | 0 | 399.5113 | 0 | 0 | 0 | 0 | 2.13363 |
| 757.3783 | 36.86278 | 2.175439 | 709.0802 | 0 | 0 | 0 | 0 | 5.334076 |
| 539.488 | 26.33056 | 1.087719 | 510.3704 | 0 | 0 | 0 | 0 | 11.73497 |
| 912.4156 | 32.64989 | 0 | 849.2229 | 0 | 0 | 0 | 0 | 7.467706 |
| 940.6994 | 176.9414 | 0 | 999.824 | 0 | 0 | 0 | 0 | 26.67038 |
| 1031.836 | 83.20457 | 0 | 958.701 | 53.3039 | 0 | 76.67564 | 0 | 5.390625 |
| 515.3943 | 18.958 | 1.087719 | 498.1486 | 15.67762 | 0 | 11.55386 | 0 | 3.234375 |
| 497.586 | 21.06445 | 1.087719 | 457.0325 | 0 | 0 | 0 | 0 | 13.8686 |
| 631.6723 | 41.07567 | 0 | 598.2211 | 0 | 0 | 0 | 0 | 11.73497 |
| 787.7572 | 53.71434 | 1.087719 | 770.2172 | 0 | 0 | 0 | 0 | 24.29268 |
| 789.8523 | 84.25779 | 1.087719 | 780.5974 | 0 | 0 | 0 | 0 | 16.19512 |
| 1151.257 | 96.89646 | 0 | 1112.775 | 0 | 0 | 0 | 0 | 13.8686 |
| 1725.314 | 250.6669 | 3.263158 | 1750.738 | 0 | 0 | 0 | 0 | 55.47439 |
| 1117.735 | 191.6865 | 0 | 1148.333 | 0 | 0 | 0 | 0 | 38.40535 |
| 600.2458 | 30.54345 | 0 | 581.6955 | 15.67762 | 0 | 21.00703 | 0 | 3.234375 |


| 777.2817 | 85.31101 | 1.087719 | 796.1679 | 0 | 0 | 0 | 0 | 12.14634 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 643.1954 | 60.03368 | 0 | 642.267 | 18.81314 | 0 | 22.05738 | 0 | 2.15625 |
| 651.5758 | 64.24657 | 0 | 630.7793 | 25.08419 | 0 | 34.66159 | 0 | 1.078125 |
| 1140.781 | 141.1318 | 1.087719 | 1163.63 | 0 | 0 | 0 | 0 | 15.18293 |
| 641.1003 | 49.50145 | 0 | 638.3875 | 0 | 0 | 0 | 0 | 15.18293 |
| 323.6928 | 31.59667 | 1.087719 | 323.7444 | 5.225873 | 0 | 15.75527 | 0 | 2.15625 |
| 783.567 | 88.47068 | 0 | 765.4987 | 33.44559 | 0 | 49.36651 | 0 | 2.15625 |
| 785.6621 | 63.19334 | 0 | 757.1441 | 20.90349 | 0 | 46.21546 | 0 | 0 |
| 970.0308 | 102.1626 | 0 | 954.5237 | 22.99384 | 0 | 56.71897 | 0 | 1.078125 |
| 722.8091 | 91.63035 | 0 | 719.5479 | 29.26489 | 0 | 49.36651 | 0 | 1.078125 |
| 832.8018 | 41.07567 | 2.175439 | 830.2476 | 8.361396 | 0 | 19.95667 | 0 | 1.078125 |
| 934.7894 | 197.1687 | 0 | 1006.051 | 0 | 0 | 0 | 0 | 21.15139 |
| 772.8157 | 392.2399 | 0 | 969.1797 | 0 | 0 | 0 | 0 | 26.43923 |
| 448.8683 | 669.1151 | 1.115385 | 773.8532 | 0 | 0 | 0 | 26.46505 | 37.01493 |
| 568.4959 | 453.0686 | 13.38462 | 781.6645 | 0 | 0 | 0 | 0 | 26.43923 |
| 385.3492 | 627.1644 | 2.230769 | 537.537 | 0 | 0 | 0 | 349.3386 | 12.63326 |
| 459.4548 | 405.8739 | 1.115385 | 665.7843 | 0 | 0 | 0 | 0 | 26.43923 |
| 310.1849 | 385.9473 | 1.115385 | 419.9292 | 0 | 0 | 0 | 195.8414 | 15.80597 |
| 684.9476 | 44.04833 | 1.115385 | 694.2276 | 0 | 0 | 0 | 0 | 7.402985 |
| 727.2937 | 246.4609 | 0 | 862.7806 | 0 | 0 | 0 | 0 | 26.43923 |
| 870.2117 | 392.2399 | 4.461538 | 1019.746 | 0 | 0 | 0 | 0 | 54.9936 |
| 975.0182 | 621.9205 | 1.115385 | 1265.856 | 0 | 0 | 0 | 13.76183 | 32.78465 |
| 655.3054 | 756.163 | 0 | 946.5164 | 0 | 0 | 0 | 173.6107 | 42.30277 |
| 370.5281 | 718.4073 | 0 | 449.515 | 0 | 0 | 0 | 608.6961 | 11.46055 |
| 756.9359 | 740.4315 | 1.115385 | 1120.877 | 0 | 0 | 0 | 0 | 32.78465 |
| 775.9917 | 636.6033 | 1.115385 | 935.2991 | 0 | 0 | 0 | 308.0532 | 24.32409 |
| 749.5254 | 909.2834 | 1.115385 | 857.1024 | 0 | 0 | 0 | 816.1821 | 0 |
| 715.6485 | 507.6046 | 0 | 969.9694 | 0 | 0 | 0 | 37.05107 | 38.07249 |
| 919.9683 | 300.9969 | 0 | 1040.815 | 0 | 0 | 0 | 0 | 21.15139 |
| 670.1265 | 440.4833 | 0 | 888.0635 | 0 | 0 | 0 | 0 | 29.61194 |
| 490.1557 | 60.82865 | 0 | 514.0866 | 0 | 0 | 0 | 0 | 5.287846 |
| 1252.385 | 84.95036 | 0 | 1264.147 | 0 | 0 | 0 | 0 | 8.460554 |
| 471.0045 | 663.2474 | 0 | 461.6796 | 0 | 0 | 0 | 667.6344 | 5 |
| 166.9925 | 281.5069 | 2.2 | 175.9287 | 0 | 0 | 0 | 269.1902 | 1 |
| 160.5697 | 442.5203 | 0 | 167.3988 | 0 | 0 | 0 | 431.5589 | 2 |
| 268.6867 | 613.1306 | 3.3 | 294.2808 | 0 | 0 | 0 | 578.9726 | 6 |
| 445.3133 | 634.4569 | 1.1 | 476.6069 | 0 | 0 | 0 | 598.2005 | 1 |
| 209.8111 | 300.7006 | 0 | 216.4456 | 0 | 0 | 0 | 300.1684 | 1 |
| 249.4183 | 520.3613 | 0 | 256.9626 | 0 | 0 | 0 | 515.9479 | 0 |
| 100.6237 | 193.0028 | 0 | 110.8884 | 0 | 0 | 0 | 178.3919 | 0 |
| 333.985 | 809.3324 | 2.2 | 334.7977 | 0 | 0 | 0 | 804.366 | 4 |
| 449.5952 | 783.7408 | 2.2 | 467.0108 | 0 | 0 | 0 | 760.5692 | 4 |
| 672.0993 | 675.0696 | 3 | 685.8325 | 0 | 0 | 45.09292 | 630.2849 | 2 |
| 747.616 | 867.7945 | 0 | 777.0622 | 0 | 0 | 48.23894 | 802.863 | 0 |
| 801.5566 | 730.4381 | 4 | 821.0671 | 0 | 0 | 60.82301 | 662.4423 | 4 |
| 702.306 | 710.2073 | 0 | 768.4759 | 0 | 0 | 51.38496 | 593.8399 | 2 |
| 1032.422 | 550.4905 | 1 | 1106.562 | 0 | 0 | 31.46018 | 470.5699 | 0 |


| 668.2286 | 251.9072 | 0 | 762.5973 | 0 | 0 | 0 | 0 | 15.04255 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 806.117 | 1417.242 | 3.25 | 0 | 0 | 0 | 0 | 1908.496 | 82.28571 |
| 669.2893 | 616.0083 | 0 | 16.5782 | 0 | 0 | 0 | 930.87 | 72.81073 |
| 323.5075 | 809.7016 | 1.083333 | 0 | 0 | 0 | 0 | 1014.818 | 22.15385 |
| 386.0876 | 675.2806 | 1.083333 | 0 | 0 | 0 | 0 | 910.6799 | 21.0989 |
| 972.6439 | 479.4704 | 1.083333 | 0 | 0 | 0 | 0 | 976.5634 | 101.2747 |
| 714.8985 | 356.6921 | 2.166667 | 0 | 0 | 0 | 0 | 732.1569 | 78.06593 |
| 296.4967 | 116.2714 | 0 | 268.6268 | 66.5858 | 0 | 0 | 48.8813 | 3.20989 |
| 1179.766 | 137.3884 | 2.083333 | 968.7825 | 108.4704 | 0 | 0 | 92.44942 | 28.57363 |
| 922.7919 | 456.1848 | 1.083333 | 0 | 0 | 0 | 0 | 904.3041 | 90.72527 |
| 388.209 | 224.3879 | 0 | 476.6233 | 0 | 0 | 0 | 0 | 23.6383 |
| 341.6158 | 400.1411 | 2 | 0 | 0 | 0 | 0 | 595.0767 | 24.26374 |
| 217.0012 | 626.3989 | 0 | 204.9762 | 0 | 0 | 0 | 622.2827 | 0 |
| 485.5671 | 30.3772 | 0 | 473.603 | 26.84911 | 0 | 0 | 0 | 2.2 |
| 903.1048 | 52.4511 | 0 | 893.265 | 40.81065 | 0 | 0 | 0 | 2.2 |
| 142.877 | 179.1208 | 0 | 135.5832 | 0 | 0 | 0 | 176.4527 | 0 |
| 609.1074 | 918.6486 | 0 | 0 | 0 | 0 | 0 | 1247.536 | 46.41758 |
| 531.7604 | 812.8521 | 0 | 512.4406 | 0 | 0 | 0 | 811.2646 | 0 |
| 435.8398 | 1075.292 | 0 | 0 | 0 | 0 | 0 | 1288.979 | 26.37363 |
| 696.1227 | 546.7897 | 0 | 139.1681 | 9.66568 | 0 | 0 | 840.5459 | 40.13297 |
| 186.7341 | 115.3474 | 0 | 187.7151 | 97.73077 | 0 | 0 | 0 | 1.1 |
| 196.5902 | 217.8779 | 1 | 0 | 0 | 0 | 0 | 323.0417 | 13.71429 |
| 421.0901 | 447.7174 | 0 | 0 | 0 | 0 | 0 | 643.958 | 49.58242 |
| 468.8207 | 21.16867 | 1.083333 | 476.8395 | 12.88757 | 0 | 0 | 0 | 1.1 |
| 868.6972 | 705.9751 | 0 | 0 | 0 | 0 | 0 | 1113.644 | 72.79121 |
| 1038.406 | 429.724 | 0 | 1168.763 | 0 | 0 | 0 | 0 | 44.05319 |
| 1199.629 | 173.5831 | 1.083333 | 1159.438 | 0 | 0 | 0 | 0 | 17.19149 |
| 705.7636 | 1237.819 | 3.151515 | 666.8127 | 0 | 0 | 0 | 1290.551 | 0 |
| 649.5992 | 651.932 | 1.050505 | 661.3826 | 0 | 0 | 0 | 650.6527 | 2 |
| 413.285 | 529.4284 | 1.050505 | 399.8694 | 0 | 0 | 0 | 534.419 | 0 |
| 566.9422 | 949.1362 | 1.050505 | 550.6092 | 0 | 0 | 0 | 973.2904 | 2 |
| 773.5847 | 428.2298 | 1.050505 | 776.4995 | 0 | 0 | 0 | 418.7583 | 2.333333 |
| 660.1963 | 1058.857 | 1.050505 | 649.4365 | 0 | 0 | 0 | 1075.459 | 0 |
| 404.8073 | 735.0213 | 0 | 392.5612 | 0 | 0 | 0 | 742.3024 | 2.111111 |
| 718.48 | 740.3476 | 0 | 738.4896 | 0 | 0 | 0 | 718.4066 | 0 |
| 527.7331 | 1046.074 | 1.050505 | 518.0288 | 0 | 0 | 0 | 1065.78 | 1 |
| 555.2855 | 1290.016 | 2.10101 | 490.8784 | 0 | 0 | 0 | 1366.908 | 3 |
| 899.6896 | 1076.966 | 2.10101 | 830.8009 | 0 | 0 | 0 | 1163.647 | 4 |
| 728.0174 | 562.4511 | 2.10101 | 755.8659 | 0 | 0 | 0 | 533.4277 | 3 |
| 811.7341 | 889.4823 | 1.050505 | 804.1414 | 0 | 0 | 0 | 868.895 | 5.104167 |
| 678.2112 | 766.9788 | 1.050505 | 712.4253 | 0 | 0 | 0 | 737.7649 | 3 |
| 411.1656 | 423.9688 | 1.050505 | 380.7629 | 0 | 0 | 0 | 459.6233 | 1.055556 |
| 779.9429 | 830.8937 | 1.050505 | 793.6571 | 0 | 0 | 0 | 792.8799 | 1.020833 |
| 517.1361 | 660.4539 | 1.050505 | 473.0041 | 0 | 0 | 0 | 712.0925 | 1.055556 |
| 758.7488 | 1060.987 | 2.10101 | 682.1556 | 0 | 0 | 0 | 1141.506 | 2.111111 |
| 346.5236 | 509.1887 | 0 | 333.5698 | 0 | 0 | 0 | 520.0433 | 1.055556 |
| 540.4496 | 602.9305 | 0 | 507.3264 | 0 | 0 | 0 | 641.9621 | 0 |


| 951.6151 | 252.4638 | 1.050505 | 1033.001 | 0 | 0 | 0 | 0 | 27.69948 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 488.524 | 708.3901 | 2.10101 | 486.4688 | 0 | 0 | 0 | 690.4706 | 2.041667 |
| 571.181 | 827.6979 | 1.050505 | 576.6333 | 0 | 0 | 0 | 802.3818 | 3.0625 |
| 506.539 | 547.5376 | 0 | 501.1468 | 0 | 0 | 0 | 535.2731 | 2.041667 |
| 915.5852 | 1027.965 | 1.050505 | 905.8385 | 0 | 0 | 0 | 1005.089 | 4.083333 |
| 628.4051 | 791.4795 | 1.050505 | 599.6987 | 0 | 0 | 0 | 806.6048 | 2.041667 |
| 686.6889 | 950.2015 | 2.10101 | 680.4273 | 0 | 0 | 0 | 940.6871 | 6.125 |
| 522.4346 | 659.3887 | 0 | 532.147 | 0 | 0 | 0 | 644.2 | 0 |
| 710.0024 | 426.0993 | 0 | 700.3004 | 0 | 0 | 0 | 416.4856 | 3.12 |
| 469.4493 | 878.8298 | 0 | 458.7917 | 0 | 0 | 0 | 874.7159 | 1.166667 |
| 773.5847 | 1531.827 | 0 | 723.7277 | 0 | 0 | 0 | 1565.561 | 1.166667 |
| 188.6275 | 568.8426 | 0 | 137.8529 | 0 | 0 | 0 | 623.886 | 1.166667 |
| 174.8513 | 670.0412 | 0 | 122.7752 | 0 | 0 | 0 | 728.0442 | 2.333333 |
| 118.687 | 350.4667 | 0 | 99.08177 | 0 | 0 | 0 | 364.5535 | 2.333333 |
| 592.3751 | 1166.447 | 2.10101 | 541.6221 | 0 | 0 | 0 | 1187.834 | 2.08 |
| 964.3316 | 629.5617 | 1.050505 | 946.432 | 0 | 0 | 0 | 613.3969 | 1.102041 |
| 510.7778 | 446.339 | 1.050505 | 481.5847 | 0 | 0 | 0 | 479.044 | 1.055556 |
| 740.7338 | 1264.45 | 2.10101 | 653.1961 | 0 | 0 | 0 | 1354.055 | 2.111111 |
| 814.9132 | 784.0227 | 0 | 812.5288 | 0 | 0 | 0 | 764.3742 | 3.0625 |
| 490.6434 | 514.5149 | 1.050505 | 507.4373 | 0 | 0 | 0 | 481.4291 | 3.0625 |
| 1351.124 | 415.4468 | 3.151515 | 1457.009 | 0 | 0 | 0 | 0 | 47.19171 |
| 764.0473 | 632.7575 | 2.10101 | 774.7855 | 0 | 0 | 0 | 606.0094 | 2.041667 |
| 744.9727 | 434.6213 | 0 | 698.3077 | 0 | 0 | 0 | 461.3673 | 4.408163 |
| 797.9579 | 874.5689 | 1.050505 | 755.8893 | 0 | 0 | 0 | 891.0619 | 4.408163 |
| 824.4505 | 352.5972 | 1.050505 | 781.0158 | 0 | 0 | 0 | 367.4047 | 4.408163 |
| 703.6442 | 361.1192 | 0 | 675.9697 | 0 | 0 | 0 | 382.4868 | 2.08 |
| 684.5695 | 1252.732 | 1.050505 | 666.8127 | 0 | 0 | 0 | 1277.645 | 2 |
| 652.7783 | 956.593 | 2.10101 | 646.1784 | 0 | 0 | 0 | 974.3659 | 1 |
| 609.3304 | 1030.095 | 1.050505 | 609.254 | 0 | 0 | 0 | 1038.893 | 2 |
| 502.3002 | 194.9404 | 0 | 507.2556 | 0 | 0 | 0 | 188.1224 | 1.166667 |
| 555.2855 | 739.2823 | 1.050505 | 546.5017 | 0 | 0 | 0 | 720.0287 | 7.714286 |
| 910.2866 | 986.4199 | 2.10101 | 901.6448 | 0 | 0 | 0 | 975.5273 | 2.041667 |
| 559.5243 | 705.1944 | 2.10101 | 530.5027 | 0 | 0 | 0 | 721.0878 | 3.0625 |
| 579.6587 | 501.7319 | 0 | 565.3465 | 0 | 0 | 0 | 501.4862 | 1.102041 |
| 770.4056 | 350.4667 | 1.050505 | 773.2924 | 0 | 0 | 0 | 331.4885 | 4.16 |
| 310.4936 | 441.0128 | 1.050505 | 325.8043 | 0 | 0 | 0 | 425.8818 | 2 |
| 400.5685 | 498.5362 | 2.10101 | 583.0116 | 0 | 0 | 0 | 0 | 48.21762 |
| 744.9727 | 659.3887 | 2.10101 | 709.824 | 0 | 0 | 0 | 678.854 | 1.102041 |
| 459.912 | 476.166 | 0 | 429.0287 | 0 | 0 | 0 | 503.8594 | 1.055556 |
| 592.3751 | 1050.335 | 6.30303 | 561.7213 | 0 | 0 | 0 | 1069.9 | 5.2 |
| 957.9734 | 134.2213 | 2.10101 | 986.2352 | 0 | 0 | 0 | 0 | 17.44041 |
| 740.7338 | 844.7419 | 3.151515 | 685.4904 | 0 | 0 | 0 | 881.8445 | 7.28 |
| 730.1368 | 909.722 | 1.050505 | 718.3429 | 0 | 0 | 0 | 917.2294 | 4.666667 |
| 1055.466 | 931.027 | 0 | 1013.436 | 0 | 0 | 0 | 925.902 | 7.714286 |
| 696.2262 | 626.366 | 3.151515 | 658.524 | 0 | 0 | 0 | 651.4042 | 2.204082 |
| 487.4643 | 800.0015 | 0 | 453.82 | 0 | 0 | 0 | 822.3465 | 3.12 |
| 360.2997 | 249.2681 | 0 | 362.7287 | 0 | 0 | 0 | 250.582 | 0 |


| 610.3901 | 801.0667 | 0 | 576.8629 | 0 | 0 | 0 | 809.7683 | 2.204082 |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | ---: | ---: |
| 840.3461 | 322.7702 | 0 | 914.5279 | 0 | 0 | 0 | 0 | 36.93264 |
| 595.5542 | 603.9958 | 0 | 609.5683 | 0 | 0 | 0 | 586.6867 | 3.5 |
| 438.7179 | 325.966 | 0 | 426.1038 | 0 | 0 | 0 | 328.3415 | 2.204082 |
| 554.2257 | 817.0454 | 3.151515 | 561.1044 | 0 | 0 | 0 | 802.4429 | 1.166667 |
| 760.8682 | 346.2057 | 0 | 737.0444 | 0 | 0 | 0 | 352.624 | 0 |
| 677.1515 | 341.9447 | 1.050505 | 655.8705 | 0 | 0 | 0 | 358.0501 | 2.08 |
| 659.1365 | 1129.163 | 1.050505 | 641.8344 | 0 | 0 | 0 | 1158.269 | 1 |
| 662.3157 | 270.5731 | 0 | 656.3136 | 0 | 0 | 0 | 260.7741 | 3.0625 |
| 594.4945 | 565.6468 | 0 | 596.6305 | 0 | 0 | 0 | 547.1686 | 2.08 |
| 619.9275 | 569.9078 | 1.050505 | 559.0649 | 0 | 0 | 0 | 609.1738 | 5.510204 |
| 768.2862 | 302.5305 | 1.050505 | 764.3013 | 0 | 0 | 0 | 290.3355 | 1.020833 |
| 730.1368 | 350.4667 | 1.050505 | 724.6311 | 0 | 0 | 0 | 342.1132 | 4.16 |
| 838.2267 | 559.2554 | 1.050505 | 844.1687 | 0 | 0 | 0 | 540.7938 | 9.36 |
| 501.2405 | 614.6483 | 1.050505 | 481.3243 | 0 | 0 | 0 | 631.1032 | 1.04 |
| 574.3601 | 821.3064 | 1.050505 | 533.1592 | 0 | 0 | 0 | 845.7207 | 1.04 |
| 761.9279 | 485.7532 | 1.050505 | 766.3981 | 0 | 0 | 0 | 461.3695 | 3.0625 |
| 678.2112 | 945.9405 | 1.050505 | 651.639 | 0 | 0 | 0 | 947.7172 | 2.08 |
| 724.8383 | 861.7859 | 0 | 654.2687 | 0 | 0 | 0 | 933.2727 | 4.222222 |
| 613.5692 | 706.2596 | 0 | 577.9098 | 0 | 0 | 0 | 725.3075 | 1.102041 |
| 497.0017 | 608.2568 | 3.151515 | 462.2829 | 0 | 0 | 0 | 632.1656 | 1.04 |
| 667.6142 | 736.0866 | 1.050505 | 647.0077 | 0 | 0 | 0 | 730.5863 | 3.306122 |
| 374.0759 | 556.0596 | 1.050505 | 366.8195 | 0 | 0 | 0 | 559.9636 | 2.111111 |
| 794.7788 | 456.9915 | 0 | 781.076 | 0 | 0 | 0 | 450.8119 | 3.0625 |
| 417.5238 | 725.4341 | 0 | 409.7224 | 0 | 0 | 0 | 728.2764 | 1.055556 |
| 920.8837 | 159.7872 | 1.050505 | 959.2151 | 0 | 0 | 0 | 0 | 20.51813 |
| 311.5533 | 405.8596 | 1.050505 | 326.8903 | 0 | 0 | 0 | 391.4671 | 1 |
| 358.1803 | 368.5759 | 1.050505 | 351.208 | 0 | 0 | 0 | 363.3624 | 2.08 |
| 472.6285 | 327.0312 | 2.10101 | 487.6204 | 0 | 0 | 0 | 310.8077 | 2 |
| 809.6147 | 378.1631 | 1.050505 | 777.875 | 0 | 0 | 0 | 392.7429 | 3.306122 |
| 444.0164 | 268.4426 | 1.050505 | 442.8548 | 0 | 0 | 0 | 256.5498 | 2.204082 |
| 394.1225 | 393.8465 | 1 | 401.9083 | 0 | 0 | 32.44444 | 358.1602 | 0 |
| 775.6999 | 931.4782 | 4 | 805.9044 | 0 | 0 | 40.55556 | 877.1271 | 2 |
| 536.2993 | 635.5724 | 1 | 541.7932 | 0 | 0 | 34.47222 | 598.326 | 1 |
| 871.8783 | 1270.103 | 1 | 936.3941 | 0 | 0 | 38.52778 | 1190.387 | 1 |
| 1774.663 | 835.52 | 0 | 1813.588 | 0 | 0 | 0 | 791.8189 | 1.333333 |
| 1881.337 | 760.48 | 2 | 1921.412 | 0 | 0 | 0 | 711.1811 | 2.666667 |
| 854.3461 | 836.299 | 0 | 783.9205 | 0 | 0 | 0 | 876.0169 | 3 |
| 567.0534 | 628.302 | 1 | 547.6705 | 0 | 0 | 0 | 639.4599 | 3 |
| 632.6895 | 376.119 | 1 | 635.7273 | 0 | 0 | 0 | 360.7764 | 1 |
| 533.6973 | 528.0754 | 1 | 513.3068 | 0 | 0 | 0 | 539.0042 | 2 |
| 245.3286 | 250.0275 | 0 | 243.767 | 0 | 0 | 0 | 249.519 | 0 |
| 493.8852 | 668.177 | 0 | 488.608 | 0 | 0 | 0 | 663.2236 | 0 |

LocalityCoc LocalityNar PrecinctNa GE18SLLD GE18SLLR GE18SLLW GE18USRD GE18USRL GE18USRR GE18USRU

| 1 ACCOMACI 101 - CHINI | 0 | 0 | 0 | 533.4371 | 0 | 1038.923 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ACCOMACI 201 - ATLA | 0 | 0 | 0 | 170.9293 | 0 | 482.1288 | 2 |
| 1 ACCOMACl 202 - GREE | 0 | 0 | 0 | 307.4433 | 0 | 595.1944 | 1 |
| 1 ACCOMACI 301 - NEW | 0 | 0 | 0 | 582.7657 | 0 | 489.5954 | 0 |
| 1 ACCOMACI 401 - BLOX | 0 | 0 | 0 | 118.1592 | 0 | 285.864 | 0 |
| 1 ACCOMACI 402 - PARK | 0 | 0 | 0 | 242.0543 | 0 | 418.1294 | 1 |
| 1 ACCOMACI 403 - SAXIS | 0 | 0 | 0 | 39.004 | 0 | 130.1321 | 0 |
| 1 ACCOMACI 501 - MAPF | 0 | 0 | 0 | 330.3869 | 0 | 214.398 | 0 |
| 1 ACCOMACI 502 - RUE | 0 | 0 | 0 | 351.036 | 0 | 115.1989 | 0 |
| 1 ACCOMACI 601 - ACCC | 0 | 0 | 0 | 466.9009 | 0 | 568.5279 | 0 |
| 1 ACCOMACI 602 - TANG | 0 | 0 | 0 | 16.06047 | 0 | 200.5314 | 2 |
| 1 ACCOMACI 701 - NAN[ | 0 | 0 | 0 | 819.0841 | 0 | 885.3249 | 1 |
| 1 ACCOMACI 801 - BOBT | 0 | 0 | 0 | 221.4051 | 0 | 359.4633 | 0 |
| 1 ACCOMACI 802 - MELF | 0 | 0 | 0 | 395.7759 | 0 | 347.73 | 1 |
| 1 ACCOMACI $803-\mathrm{WACI}$ | 0 | 0 | 0 | 158.3104 | 0 | 334.9302 | 0 |
| 1 ACCOMACI 901 - PAIN ${ }^{-}$ | 0 | 0 | 0 | 976.2473 | 0 | 558.928 | 3 |
| 3 ALBEMARL 101 - WOO | 0 | 0 | 0 | 1388.344 | 0 | 739.8762 | 7.726415 |
| 3 ALBEMARL 103 - BRAN | 0 | 0 | 0 | 596.9427 | 0 | 209.9943 | 2.207547 |
| 3 ALBEMARL 104 - AGNC | 0 | 0 | 0 | 1240.239 | 0 | 424.3408 | 2.207547 |
| 3 ALBEMARL 105 - DUNL | 0 | 0 | 0 | 1807.787 | 0 | 632.1589 | 3.311321 |
| 3 ALBEMARL 106 - NORT | 0 | 0 | 0 | 1485.573 | 0 | 990.1284 | 4.415094 |
| 3 ALBEMARL 201 - JACK | 0 | 0 | 0 | 1561.322 | 0 | 958.5749 | 3.311321 |
| 3 ALBEMARL 202 - UNIV | 0 | 0 | 0 | 2130 | 0 | 476.5673 | 3.311321 |
| 3 ALBEMARL 203 - GEOR | 0 | 0 | 0 | 1513.838 | 0 | 392.7872 | 4.415094 |
| 3 ALBEMARL 301 - IVY | 0 | 0 | 0 | 1958.153 | 0 | 997.7448 | 5.518868 |
| 3 ALBEMARL 302 - RED - | 0 | 0 | 0 | 1309.204 | 0 | 787.7505 | 0 |
| 3 ALBEMARL 304 - EAST | 0 | 0 | 0 | 457.8822 | 0 | 268.7491 | 2.207547 |
| 3 ALBEMARL 305-COUN | 0 | 0 | 0 | 1292.245 | 0 | 577.7563 | 2.207547 |
| 3 ALBEMARL 306 - PORT | 0 | 0 | 0 | 678.344 | 0 | 389.5231 | 4.415094 |
| 3 ALBEMARL 307 - YELLC | 0 | 0 | 0 | 299.6019 | 0 | 205.6421 | 0 |
| 3 ALBEMARL 401 - SCOT | 0 | 0 | 0 | 509.8886 | 0 | 569.0518 | 0 |
| 3 ALBEMARL 402 - MON | 0 | 0 | 0 | 513.2803 | 0 | 503.7686 | 4.415094 |
| 3 ALBEMARL 405 - MOU | 0 | 0 | 0 | 1635.94 | 0 | 604.9576 | 8.830189 |
| 3 ALBEMARL 406 - STON | 0 | 0 | 0 | 1094.395 | 0 | 1104.374 | 8.830189 |
| 3 ALBEMARL 407 - BISCL | 0 | 0 | 0 | 1065 | 0 | 320.9757 | 2.207547 |
| 3 ALBEMARL 501 - KESW | 0 | 0 | 0 | 631.9905 | 0 | 411.2841 | 6.622642 |
| 3 ALBEMARL 502-STON | 0 | 0 | 0 | 590.1593 | 0 | 546.2027 | 3.311321 |
| 3 ALBEMARL 503 - HOLL | 0 | 0 | 0 | 1120.398 | 0 | 609.3098 | 3.311321 |
| 3 ALBEMARL 504 - FREE | 0 | 0 | 0 | 1162.229 | 0 | 491.8001 | 2.207547 |
| 3 ALBEMARL 506 - BAKE | 0 | 0 | 0 | 1339.729 | 0 | 1027.122 | 3.311321 |
| 3 ALBEMARL 507 - PANT | 0 | 0 | 0 | 1018.647 | 0 | 511.385 | 1.103774 |
| 3 ALBEMARL 601 - CROZ | 0 | 0 | 0 | 1464.092 | 0 | 886.7634 | 6.622642 |
| 3 ALBEMARL 602 - FREE | 0 | 0 | 0 | 557.3727 | 0 | 460.2465 | 1.103774 |
| 3 ALBEMARL 603 - EARL' | 0 | 0 | 0 | 1247.022 | 0 | 1114.167 | 8.830189 |
| 3 ALBEMARL 604 - BROV | 0 | 0 | 0 | 1189.363 | 0 | 714.851 | 5.518868 |
| 3 ALBEMARL 606 - MECF | 0 | 0 | 0 | 1550.016 | 0 | 879.147 | 5.518868 |


| 5 ALLEGHAN 101 - ARRI7 | 0 | 0 | 0 | 136.525 | 0 | 362.481 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 103 - DAM | 0 | 0 | 0 | 46.225 | 0 | 143.5257 | 0 |
| 5 ALLEGHAN 201 - HUM | 0 | 0 | 0 | 91.375 | 0 | 242.0032 | 0 |
| 5 ALLEGHAN 202 - DOLL | 0 | 0 | 0 | 126.85 | 0 | 288.0991 | 1 |
| 5 ALLEGHAN 301 - CALL/ | 0 | 0 | 0 | 56.975 | 0 | 237.8127 | 0 |
| 5 ALLEGHAN 302 -GRIFF | 0 | 0 | 0 | 170.925 | 0 | 377.1479 | 0 |
| 5 ALLEGHAN 401 - LOW | 0 | 0 | 0 | 136.525 | 0 | 253.5272 | 0 |
| 5 ALLEGHAN 402 -JACK | 0 | 0 | 0 | 158.025 | 0 | 348.8618 | 0 |
| 5 ALLEGHAN 501 -IRON | 0 | 0 | 0 | 93.525 | 0 | 146.6686 | 1 |
| 5 ALLEGHAN 502 - PETEI | 0 | 0 | 0 | 164.475 | 0 | 470.3872 | 0 |
| 5 ALLEGHAN 601 - DISTF | 0 | 0 | 0 | 399.9 | 0 | 419.0532 | 0 |
| 5 ALLEGHAN 701 - DISTF | 0 | 0 | 0 | 310.675 | 0 | 273.4322 | 0 |
| 7 AMELIA CC 101 - NUM | 0 | 0 | 0 | 322.1069 | 10.2 | 658.5959 | 0 |
| 7 AMELIA CC 201 - NUM | 0 | 0 | 0 | 454.9345 | 12.24 | 783.1659 | 1.333333 |
| 7 AMELIA CC 301 - NUM | 0 | 0 | 0 | 317.6793 | 12.24 | 829.7442 | 0 |
| 7 AMELIA CC 401 - NUM | 0 | 0 | 0 | 313.2517 | 9.18 | 786.4155 | 2.666667 |
| 7 AMELIA CC501-NUM | 0 | 0 | 0 | 518.0276 | 7.14 | 821.0785 | 0 |
| 9 AMHERST (101-WRIG | 0 | 0 | 0 | 501.4811 | 0 | 355.3973 | 1 |
| 9 AMHERST ( 102 - NEW | 0 | 0 | 0 | 375.5681 | 0 | 758.2513 | 0 |
| 9 AMHERST ( 103 -COOL | 0 | 0 | 0 | 130.2548 | 0 | 435.5463 | 1 |
| 9 AMHERST ( 201 - COUF | 0 | 0 | 0 | 686.0088 | 0 | 1105.212 | 3 |
| 9 AMHERST ( 202 - TEMF | 0 | 0 | 0 | 185.6131 | 0 | 499.8764 | 0 |
| 9 AMHERST ( 301 - MON | 0 | 0 | 0 | 200.8095 | 0 | 548.3876 | 0 |
| 9 AMHERST ( 302 -ELON | 0 | 0 | 0 | 448.2937 | 0 | 1381.515 | 0 |
| 9 AMHERST ( 303 - PLEA! | 0 | 0 | 0 | 113.973 | 0 | 318.4866 | 0 |
| 9 AMHERST ( 401 - AMEI | 0 | 0 | 0 | 628.4795 | 0 | 1328.785 | 0 |
| 9 AMHERST ( 402 -LONC | 0 | 0 | 0 | 140.0239 | 0 | 339.5785 | 0 |
| 9 AMHERST ( 501 - MADI | 0 | 0 | 0 | 806.4945 | 0 | 1254.964 | 3 |
| 11 APPOMATר101-VERA | 0 | 0 | 0 | 106.6436 | 0 | 389.1858 | 1 |
| 11 APPOMAT7102-PAMF | 0 | 0 | 0 | 247.7579 | 0 | 621.6454 | 3 |
| 11 APPOMAT7201-CHAP | 0 | 0 | 0 | 142.1915 | 0 | 197.7484 | 0 |
| 11 APPOMAT1202-SPOU | 0 | 0 | 0 | 196.0519 | 0 | 889.868 | 2 |
| 11 APPOMAT1301-US 41 | 0 | 0 | 0 | 158.3496 | 0 | 520.6675 | 1 |
| 11 APPOMAT1302-STON | 0 | 0 | 0 | 211.1328 | 0 | 600.6083 | 0 |
| 11 APPOMAT7401-COUF | 0 | 0 | 0 | 304.8499 | 0 | 830.9642 | 3 |
| 11 APPOMAT7501-OAKV | 0 | 0 | 0 | 253.1439 | 0 | 622.6972 | 0 |
| 11 APPOMAT7502-AGEE | 0 | 0 | 0 | 123.8789 | 0 | 235.6152 | 1 |
| 13 ARLINGTOI 001 - ARLIA | 0 | 0 | 0 | 1635.763 | 0 | 282.864 | 1.19171 |
| 13 ARLINGTOI 002 - ASHT | 0 | 0 | 0 | 1832.965 | 0 | 410.3846 | 5.958549 |
| 13 ARLINGTOI 003 - AURC | 0 | 0 | 0 | 992.3292 | 0 | 367.4913 | 1.19171 |
| 13 ARLINGTOI 004 - BALLS | 0 | 0 | 0 | 1722.987 | 0 | 490.3748 | 9.533679 |
| 13 ARLINGTOI 005 - BARC | 0 | 0 | 0 | 1454.995 | 0 | 355.8985 | 8.341969 |
| 13 ARLINGTOI 006 - CRYS ${ }^{-}$ | 0 | 0 | 0 | 1346.281 | 0 | 396.4733 | 2.38342 |
| 13 ARLINGTOI 007 - CHER | 0 | 0 | 0 | 1685.064 | 0 | 460.2336 | 4.766839 |
| 13 ARLINGTOI 008 - HUM | 0 | 0 | 0 | 1941.679 | 0 | 568.0465 | 9.533679 |
| 13 ARLINGTOI 009 - COLU | 0 | 0 | 0 | 2387.911 | 0 | 536.746 | 8.341969 |
| 13 ARLINGTOI 010 - WILSI | 0 | 0 | 0 | 2031.431 | 0 | 543.7016 | 3.57513 |


| 13 ARLINGTOI011-EAST | 0 | 0 | 0 | 1211.021 | 0 | 357.0578 | 5.958549 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 ARLINGTOI012-FAIRL | 0 | 0 | 0 | 1757.118 | 0 | 468.3485 | 3.57513 |
| 13 ARLINGTOI013-GLEN | 0 | 0 | 0 | 1160.456 | 0 | 304.8903 | 2.38342 |
| 13 ARLINGTOI 014 - CLAR | 0 | 0 | 0 | 1310.886 | 0 | 366.332 | 1.19171 |
| 13 ARLINGTOIO15-LYON | 0 | 0 | 0 | 930.3877 | 0 | 238.8114 | 1.19171 |
| 13 ARLINGTOIO16-LYON | 0 | 0 | 0 | 1691.384 | 0 | 431.2516 | 5.958549 |
| 13 ARLINGTOI017-OVER | 0 | 0 | 0 | 1769.759 | 0 | 510.0826 | 5.958549 |
| 13 ARLINGTOI018-PARK | 0 | 0 | 0 | 2487.776 | 0 | 626.0104 | 3.57513 |
| 13 ARLINGTOIO19-ROSS | 0 | 0 | 0 | 1920.189 | 0 | 457.915 | 5.958549 |
| 13 ARLINGTOIO20-THRIF | 0 | 0 | 0 | 1443.618 | 0 | 542.5424 | 5.958549 |
| 13 ARLINGTOIO21-VIRGI | 0 | 0 | 0 | 852.0126 | 0 | 279.3861 | 3.57513 |
| 13 ARLINGTOIO22-ABINI | 0 | 0 | 0 | 1917.66 | 0 | 478.782 | 11.9171 |
| 13 ARLINGTOI 023 - WEST | 0 | 0 | 0 | 1643.348 | 0 | 412.7032 | 7.150259 |
| 13 ARLINGTOIO24-WOO | 0 | 0 | 0 | 2180.596 | 0 | 483.4192 | 5.958549 |
| 13 ARLINGTOI 025 - ARLIN | 0 | 0 | 0 | 1666.102 | 0 | 452.1186 | 5.958549 |
| 13 ARLINGTOI 026 - FILLN | 0 | 0 | 0 | 2232.425 | 0 | 486.897 | 10.72539 |
| 13 ARLINGTOI 027 - JEFFE | 0 | 0 | 0 | 1810.211 | 0 | 430.0923 | 3.57513 |
| 13 ARLINGTOIO28-WAKI | 0 | 0 | 0 | 2028.902 | 0 | 397.6325 | 5.958549 |
| 13 ARLINGTOI 029 - DOM | 0 | 0 | 0 | 1709.082 | 0 | 432.4109 | 4.766839 |
| 13 ARLINGTOI030-GLEB | 0 | 0 | 0 | 1825.38 | 0 | 313.0052 | 5.958549 |
| 13 ARLINGTOIO31-LEXIN | 0 | 0 | 0 | 1824.116 | 0 | 455.5965 | 0 |
| 13 ARLINGTOI032-OAKR | 0 | 0 | 0 | 693.9984 | 0 | 270.1119 | 1.19171 |
| 13 ARLINGTOI033-ROCK | 0 | 0 | 0 | 1631.971 | 0 | 591.2321 | 2.38342 |
| 13 ARLINGTOI 034 - YORK | 0 | 0 | 0 | 1510.616 | 0 | 453.2779 | 0 |
| 13 ARLINGTOI 035 - MADI | 0 | 0 | 0 | 1618.066 | 0 | 783.6723 | 4.766839 |
| 13 ARLINGTOI 036 -MARS | 0 | 0 | 0 | 1781.136 | 0 | 547.1795 | 2.38342 |
| 13 ARLINGTOIO37-NOTT | 0 | 0 | 0 | 1552.332 | 0 | 461.3929 | 3.57513 |
| 13 ARLINGTOI 038 - ARLIN | 0 | 0 | 0 | 1687.592 | 0 | 270.1119 | 3.57513 |
| 13 ARLINGTOI 039 - ASHL | 0 | 0 | 0 | 969.5752 | 0 | 259.6784 | 1.19171 |
| 13 ARLINGTOI 040 - VIRGI | 0 | 0 | 0 | 2046.6 | 0 | 615.5769 | 9.533679 |
| 13 ARLINGTOIO41-NAVY | 0 | 0 | 0 | 1616.801 | 0 | 412.7032 | 1.19171 |
| 13 ARLINGTOI 042 -SHIRL | 0 | 0 | 0 | 1476.485 | 0 | 297.9346 | 2.38342 |
| 13 ARLINGTOIO43-CAMI | 0 | 0 | 0 | 1442.354 | 0 | 176.2103 | 5.958549 |
| 13 ARLINGTOI 044 - DAW: | 0 | 0 | 0 | 1334.904 | 0 | 313.0052 | 0 |
| 13 ARLINGTOI 045 - BUCK | 0 | 0 | 0 | 1365.243 | 0 | 302.5717 | 0 |
| 13 ARLINGTOI 046 - CENT | 0 | 0 | 0 | 1985.923 | 0 | 523.9939 | 3.57513 |
| 13 ARLINGTOI 047 - FOUR | 0 | 0 | 0 | 1438.561 | 0 | 243.4485 | 1.19171 |
| 13 ARLINGTOI 048 - AUSA | 0 | 0 | 0 | 1267.906 | 0 | 395.314 | 4.766839 |
| 13 ARLINGTOIO49-MON | 0 | 0 | 0 | 1002.442 | 0 | 259.6784 | 0 |
| 13 ARLINGTOI050-CRYS | 0 | 0 | 0 | 1437.297 | 0 | 432.4109 | 5.958549 |
| 13 ARLINGTOI051-TAYL( | 0 | 0 | 0 | 475.3067 | 0 | 149.5469 | 0 |
| 13 ARLINGTOI052-GUNS | 0 | 0 | 0 | 1343.753 | 0 | 304.8903 | 5.958549 |
| 13 ARLINGTOI053-MET । | 0 | 0 | 0 | 1570.029 | 0 | 439.3666 | 2.38342 |
| 13 ARLINGTOI 054 -GARF | 0 | 0 | 0 | 853.2767 | 0 | 205.1923 | 5.958549 |
| 15 AUGUSTA (101-JOLIV | 0 | 0 | 0 | 311.509 | 0 | 550.8892 | 0 |
| 15 AUGUSTA (102-STUA | 0 | 0 | 0 | 335.1408 | 0 | 618.302 | 0 |
| 15 AUGUSTA (103-VERO | 0 | 0 | 0 | 443.6318 | 0 | 1094.405 | 1.037037 |


| 15 AUGUSTA ( 201 - CRIM | 0 | 0 | 0 | 416.7776 | 0 | 1151.285 | 1.037037 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA (202-NEW | 0 | 0 | 0 | 232.0205 | 0 | 789.9941 | 2.074074 |
| 15 AUGUSTA ( 203 - WEYE | 0 | 0 | 0 | 469.4119 | 0 | 1109.152 | 2.074074 |
| 15 AUGUSTA (301-FORT | 0 | 0 | 0 | 715.3966 | 0 | 1688.481 | 2.074074 |
| 15 AUGUSTA (302-NORT | 0 | 0 | 0 | 139.642 | 0 | 494.0096 | 2.074074 |
| 15 AUGUSTA (303-MOU | 0 | 0 | 0 | 138.5678 | 0 | 646.7418 | 0 |
| 15 AUGUSTA (304-CHUR | 0 | 0 | 0 | 186.9054 | 0 | 569.8491 | 1.037037 |
| 15 AUGUSTA (401-BUFF, | 0 | 0 | 0 | 211.6113 | 0 | 625.6753 | 1.037037 |
| 15 AUGUSTA (402-CHUR | 0 | 0 | 0 | 210.5371 | 0 | 652.0085 | 3.111111 |
| 15 AUGUSTA (403-CRAIC | 0 | 0 | 0 | 106.3427 | 0 | 452.9299 | 0 |
| 15 AUGUSTA (404-DEER | 0 | 0 | 0 | 54.78263 | 0 | 223.305 | 0 |
| 15 AUGUSTA (405-CEDA | 0 | 0 | 0 | 382.4042 | 0 | 726.7946 | 2.074074 |
| 15 AUGUSTA (501-GREE | 0 | 0 | 0 | 337.2891 | 0 | 1088.085 | 2.074074 |
| 15 AUGUSTA (502-MIDC | 0 | 0 | 0 | 180.4604 | 0 | 548.7826 | 0 |
| 15 AUGUSTA (503-SPOT | 0 | 0 | 0 | 149.3095 | 0 | 575.1157 | 1.037037 |
| 15 AUGUSTA ( 504 - WHIT | 0 | 0 | 0 | 351.2533 | 0 | 1137.591 | 1.037037 |
| 15 AUGUSTA (601-SHER. | 0 | 0 | 0 | 279.284 | 0 | 728.9012 | 0 |
| 15 AUGUSTA ( 602 -RIDG | 0 | 0 | 0 | 561.7905 | 0 | 1638.974 | 1.037037 |
| 15 AUGUSTA (603-LYND | 0 | 0 | 0 | 487.6728 | 0 | 1081.765 | 1.037037 |
| 15 AUGUSTA (801-DOOI | 0 | 0 | 0 | 302.9157 | 0 | 837.3937 | 0 |
| 15 AUGUSTA ( 802 - FISHE | 0 | 0 | 0 | 697.1358 | 0 | 1386.176 | 2.074074 |
| 15 AUGUSTA (803-WILSI | 0 | 0 | 0 | 669.2074 | 0 | 995.3926 | 2.074074 |
| 17 BATH COUI 101 - WARI | 0 | 0 | 0 | 124.6653 | 0 | 185.2045 | 1 |
| 17 BATH COUI 102 - MOU | 0 | 0 | 0 | 8.748441 | 0 | 50.79896 | 2 |
| 17 BATH COUI 201 -HOT | 0 | 0 | 0 | 103.8877 | 0 | 159.805 | 3 |
| 17 BATH COUI 301 - FAIR\ | 0 | 0 | 0 | 55.77131 | 0 | 225.4204 | 0 |
| 17 BATH COUI302-BURN | 0 | 0 | 0 | 14.21622 | 0 | 51.85727 | 0 |
| 17 BATH COUI 401 - MILLE | 0 | 0 | 0 | 108.262 | 0 | 281.5109 | 0 |
| 17 BATH COUI 501 - HEAL | 0 | 0 | 0 | 110.4491 | 0 | 261.403 | 1 |
| 19 BEDFORD ( 101 -GOOI | 0 | 0 | 0 | 331.6667 | 0 | 1184.454 | 4.216216 |
| 19 BEDFORD (102-HARC | 0 | 0 | 0 | 166.9316 | 0 | 490.3384 | 1.054054 |
| 19 BEDFORD ( $103-\mathrm{CHAN}$ | 0 | 0 | 0 | 276.755 | 0 | 842.7028 | 2.108108 |
| 19 BEDFORD (104-STEW | 0 | 0 | 0 | 233.9238 | 0 | 741.8757 | 4.216216 |
| 19 BEDFORD ( 201 - BEDF | 0 | 0 | 0 | 154.851 | 0 | 439.3942 | 0 |
| 19 BEDFORD ( 202 - STAU | 0 | 0 | 0 | 187.798 | 0 | 579.4909 | 1.054054 |
| 19 BEDFORD ( 203 - MON | 0 | 0 | 0 | 433.8024 | 0 | 1151.552 | 1.054054 |
| 19 BEDFORD ( 204 - Quak | 0 | 0 | 0 | 140.574 | 0 | 399.0633 | 3.162162 |
| 19 BEDFORD ( $205-$ SAUN | 0 | 0 | 0 | 331.6667 | 0 | 949.898 | 0 |
| 19 BEDFORD ( 301 -NEW | 0 | 0 | 0 | 343.4627 | 0 | 1293.916 | 1.090909 |
| 19 BEDFORD ( 302 - BEDF | 0 | 0 | 0 | 253.6921 | 0 | 806.6173 | 3.162162 |
| 19 BEDFORD ( 303 - BETH | 0 | 0 | 0 | 168.0298 | 0 | 514.7492 | 0 |
| 19 BEDFORD ( 304 - RIVEF | 0 | 0 | 0 | 186.1346 | 0 | 537.4563 | 1.090909 |
| 19 BEDFORD ( 305 - HUDL | 0 | 0 | 0 | 113.1181 | 0 | 434.0875 | 0 |
| 19 BEDFORD ( 306 -FORE | 0 | 0 | 0 | 172.8393 | 0 | 765.981 | 1.090909 |
| 19 BEDFORD ( 401 -FORE | 0 | 0 | 0 | 422.1267 | 0 | 1334.119 | 0 |
| 19 BEDFORD ( 402 -THON | 0 | 0 | 0 | 298.0369 | 0 | 695.0961 | 0 |
| 19 BEDFORD ( 403 -KNIGI | 0 | 0 | 0 | 594.966 | 0 | 1487.527 | 0 |


| 19 BEDFORD ( 404 - FORE | 0 | 0 | 0 | 347.8944 | 0 | 1200.813 | 1.090909 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD ( 502 - BIG IS | 0 | 0 | 0 | 110.7944 | 0 | 287.7719 | 0 |
| 19 BEDFORD (503-SEDA | 0 | 0 | 0 | 146.2486 | 0 | 408.3822 | 0 |
| 19 BEDFORD (504-SUCK | 0 | 0 | 0 | 187.2425 | 0 | 655.9506 | 0 |
| 19 BEDFORD (505-BOO) | 0 | 0 | 0 | 536.2449 | 0 | 1059.043 | 1.090909 |
| 19 BEDFORD (506-BOO) | 0 | 0 | 0 | 589.4262 | 0 | 1693.834 | 4.363636 |
| 19 BEDFORD (601-MON | 0 | 0 | 0 | 262.5827 | 0 | 750.1113 | 2.181818 |
| 19 BEDFORD (602-SHAD | 0 | 0 | 0 | 256.9868 | 0 | 808.74 | 1.054054 |
| 19 BEDFORD (603-THAX | 0 | 0 | 0 | 68.09051 | 0 | 236.6785 | 1.054054 |
| 19 BEDFORD (604-BEDF | 0 | 0 | 0 | 490.9106 | 0 | 997.6583 | 3.162162 |
| 19 BEDFORD (701-GOOI | 0 | 0 | 0 | 332.7649 | 0 | 1320.305 | 4.216216 |
| 19 BEDFORD ( 702 -LIBER | 0 | 0 | 0 | 221.8433 | 0 | 632.5578 | 6.324324 |
| 19 BEDFORD ( 703 -THAX | 0 | 0 | 0 | 150.4581 | 0 | 507.3198 | 1.054054 |
| 19 BEDFORD ( 704 - BEDF | 0 | 0 | 0 | 661.1369 | 0 | 1012.517 | 2.108108 |
| 21 BLAND COI 101 - BAST | 0 | 0 | 0 | 64.88223 | 0 | 267.6676 | 0 |
| 21 BLAND COI 102 - CERE: | 0 | 0 | 0 | 69.20771 | 0 | 256.1662 | 0 |
| 21 BLAND COI 201 - DAVI! | 0 | 0 | 0 | 20.54604 | 0 | 76.32708 | 0 |
| 21 BLAND COI 202 - SEDD | 0 | 0 | 0 | 134.0899 | 0 | 462.1448 | 0 |
| 21 BLAND COI 301 - HOLL | 0 | 0 | 0 | 50.82441 | 0 | 246.756 | 1 |
| 21 BLAND COI 302 - MEC | 0 | 0 | 0 | 21.62741 | 0 | 140.1072 | 0 |
| 21 BLAND COI 401 - ROCK | 0 | 0 | 0 | 143.8223 | 0 | 500.8311 | 0 |
| 23 BOTETOUR 101-DALE' | 0 | 0 | 0 | 538.643 | 0 | 1117.843 | 1 |
| 23 BOTETOUR 102-GREE | 0 | 0 | 0 | 445.0606 | 0 | 1406.831 | 3 |
| 23 Botetour 201 - blue | 0 | 0 | 0 | 421.1209 | 0 | 1205.704 | 0 |
| 23 BOTETOUR 202 -RAINI | 0 | 0 | 0 | 443.9724 | 0 | 1245.929 | 1 |
| 23 BOTETOUR 301 - BUCH | 0 | 0 | 0 | 348.2136 | 0 | 1027.865 | 2 |
| 23 BOTETOUR 302 - MILL | 0 | 0 | 0 | 372.1533 | 0 | 978.1128 | 1 |
| 23 BOTETOUR 403-EAGL | 0 | 0 | 0 | 233.956 | 0 | 680.6564 | 1 |
| 23 BOTETOUR 406-FINC/ | 0 | 0 | 0 | 562.5827 | 0 | 1383.543 | 0 |
| 23 BOTETOUR 501 -TROU | 0 | 0 | 0 | 244.8377 | 0 | 692.3006 | 0 |
| 23 BOTETOUR $502-\mathrm{CLOV}$ | 0 | 0 | 0 | 647.4597 | 0 | 1522.215 | 4 |
| 25 BRUNSWIC 101-BROC | 0 | 0 | 0 | 176.6747 | 0 | 139.7057 | 0 |
| 25 BRUNSWIC 102-ROCK | 0 | 0 | 0 | 204.6841 | 0 | 286.0116 | 1.142857 |
| 25 BRUNSWIC 103-TILLN | 0 | 0 | 0 | 226.2298 | 0 | 345.414 | 0 |
| 25 BRUNSWIC 201 - DRON | 0 | 0 | 0 | 94.80106 | 0 | 99.00402 | 1.142857 |
| 25 BRUNSWIC 202 -EDGE | 0 | 0 | 0 | 421.2183 | 0 | 151.8062 | 0 |
| 25 BRUNSWIC 203 -FITZH | 0 | 0 | 0 | 325.34 | 0 | 157.3064 | 0 |
| 25 BRUNSWIC 301 -ALBEI | 0 | 0 | 0 | 80.79636 | 0 | 74.80304 | 0 |
| 25 BRUNSWIC 302 - DANI | 0 | 0 | 0 | 293.0215 | 0 | 290.4118 | 0 |
| 25 BRUNSWIC $303-$ ELMC | 0 | 0 | 0 | 144.3562 | 0 | 135.3055 | 1.142857 |
| 25 BRUNSWIC 304 -SEYM | 0 | 0 | 0 | 147.588 | 0 | 115.5047 | 0 |
| 25 BRUNSWIC 401-STUR | 0 | 0 | 0 | 580.6565 | 0 | 332.2135 | 1.142857 |
| 25 BRUNSWIC 402 - KING | 0 | 0 | 0 | 242.3891 | 0 | 97.90397 | 1.142857 |
| 25 BRUNSWIC 501 -TOTA | 0 | 0 | 0 | 728.2445 | 0 | 237.6096 | 2.285714 |
| 27 BUCHANA 102-BLAC | 0 | 0 | 0 | 55.23857 | 0 | 220.1466 | 0 |
| 27 BUCHANA 103 -HURL | 0 | 0 | 0 | 87.93078 | 0 | 446.8322 | 0 |
| 27 BUCHANA 201 -GRAS | 0 | 0 | 0 | 36.07417 | 0 | 46.86288 |  |


| 27 BUCHANAP 202 - BULL | 0 | 0 | 0 | 102.5859 | 0 | 260.4704 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANAP 203 -ROCK | 0 | 0 | 0 | 96.94932 | 0 | 273.5485 | 2 |
| 27 BUCHANA 301 - SLATE | 0 | 0 | 0 | 127.3869 | 0 | 319.3215 | 2 |
| 27 BUCHANA 302 - NORT | 0 | 0 | 0 | 113.8591 | 0 | 307.3333 | 2 |
| 27 BUCHANAT 403 - SOUT | 0 | 0 | 0 | 204.0445 | 0 | 446.8322 | 0 |
| 27 BUCHANA「 404 - OAKV | 0 | 0 | 0 | 14.65513 | 0 | 46.86288 | 0 |
| 27 BUCHANA 501 - PRAT | 0 | 0 | 0 | 151.0606 | 0 | 232.1348 | 0 |
| 27 BUCHANAP 502 -FOX | 0 | 0 | 0 | 77.78492 | 0 | 54.49173 | 0 |
| 27 BUCHANAP 503 -VANS | 0 | 0 | 0 | 111.6044 | 0 | 296.435 | 0 |
| 27 BUCHANAR 601 -COUN | 0 | 0 | 0 | 99.20396 | 0 | 156.9362 | 0 |
| 27 BUCHANAT 602-GAR[ | 0 | 0 | 0 | 121.7503 | 0 | 276.818 | 0 |
| 27 BUCHANAT 603 -HURF | 0 | 0 | 0 | 135.2781 | 0 | 125.331 | 0 |
| 27 BUCHANAP 701 -Whit | 0 | 0 | 0 | 188.2621 | 0 | 330.2199 | 0 |
| 27 BUCHANAP 702 -CONT | 0 | 0 | 0 | 100.3313 | 0 | 308.4232 | 0 |
| 29 BUCKINGH. 101 -NEW | 0 | 0 | 0 | 396.2297 | 0 | 432.6604 | 1.142857 |
| 29 BUCKINGH. 102 - GEOI | 0 | 0 | 0 | 91.52046 | 0 | 142.0835 | 1.142857 |
| 29 BUCKINGH. 201 -WHIT | 0 | 0 | 0 | 258.4107 | 0 | 298.055 | 0 |
| 29 BUCKINGH. 301 -CURL | 0 | 0 | 0 | 265.9477 | 0 | 370.6992 | 1.142857 |
| 29 BUCKINGH. 302 - NEW | 0 | 0 | 0 | 128.1286 | 0 | 319.4209 | 0 |
| 29 BUCKINGH. 401 - MAYS | 0 | 0 | 0 | 394.0763 | 0 | 557.6512 | 2.285714 |
| 29 BUCKINGH. 501 -WRIG | 0 | 0 | 0 | 133.5122 | 0 | 291.6452 | 1.142857 |
| 29 BUCKINGH. 502 -GLEN | 0 | 0 | 0 | 318.7065 | 0 | 273.4841 | 0 |
| 29 BUCKINGH. 601 -SLATE | 0 | 0 | 0 | 485.5968 | 0 | 357.8796 | 1.142857 |
| 29 BUCKINGH.701-GOLL | 0 | 0 | 0 | 264.871 | 0 | 319.4209 | 0 |
| 31 CAMPBELL 101 - BROC | 0 | 0 | 0 | 505.5275 | 0 | 1345.261 | 3 |
| 31 CAMPBELL 102 - NEW | 0 | 0 | 0 | 430.8716 | 0 | 1369.265 | 5 |
| 31 CAMPBELL 201 -WALk | 0 | 0 | 0 | 387.1445 | 0 | 982.0722 | 8 |
| 31 CAMPBELL 202 - BEDF | 0 | 0 | 0 | 453.2683 | 0 | 1466.325 | 1 |
| 31 CAMPBELL 301 - EVIN( | 0 | 0 | 0 | 178.1078 | 0 | 483.2087 | 2 |
| 31 CAMPBELL 302 - OTTE | 0 | 0 | 0 | 152.5115 | 0 | 463.3794 | 0 |
| 31 CAMPBELL 303 -ALTA' | 0 | 0 | 0 | 634.5757 | 0 | 1043.647 | 5 |
| 31 CAMPBELL 401 -THRE | 0 | 0 | 0 | 236.7661 | 0 | 902.755 | 5 |
| 31 CAMPBELL 402 - COUF | 0 | 0 | 0 | 476.7317 | 0 | 1568.602 | 2 |
| 31 CAMPBELL 501 - SPRIN | 0 | 0 | 0 | 459.6674 | 0 | 1412.055 | 3 |
| 31 CAMPBELL 502 - YELLC | 0 | 0 | 0 | 371.1468 | 0 | 769.1681 | 5 |
| 31 CAMPBELL 601 - KING! | 0 | 0 | 0 | 372.2133 | 0 | 799.4339 | 2 |
| 31 CAMPBELL 602 -CONC | 0 | 0 | 0 | 490.5963 | 0 | 1306.647 | 4 |
| 31 CAMPBELL 701 - BROC | 0 | 0 | 0 | 314.6216 | 0 | 627.2321 | 1 |
| 31 CAMPBELL 702 -GLAD | 0 | 0 | 0 | 413.8073 | 0 | 873.5329 | 3 |
| 31 CAMPBELL 703 -MORI | 0 | 0 | 0 | 167.4427 | 0 | 416.4153 | 0 |
| 33 CAROLINE 101-BOW | 0 | 0 | 0 | 357.1366 | 0 | 725.2326 | 0 |
| 33 CAROLINE 102 -SPAR | 0 | 0 | 0 | 305.3464 | 0 | 517.8698 | 1.2 |
| 33 CAROLINE 201 - NORT | 0 | 0 | 0 | 506.0335 | 0 | 427.6186 | 0 |
| 33 CAROLINE 202 - SOUT | 0 | 0 | 0 | 520.06 | 0 | 640.3535 | 0 |
| 33 CAROLINE 301 -PORT | 0 | 0 | 0 | 196.3712 | 0 | 281.4977 | 0 |
| 33 CAROLINE 302 - WOO | 0 | 0 | 0 | 551.3499 | 0 | 666.1395 | 0 |
| 33 CAROLINE 401 - DAW | 0 | 0 | 0 | 937.6185 | 0 | 559.7721 | 0 |


| 33 CAROLINE 402 - CARN | 0 | 0 | 0 | 318.294 | 0 | 197.693 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 CAROLINE 501 - WEST | 0 | 0 | 0 | 664.641 | 0 | 392.1628 | 2.4 |
| 33 CAROLINE 502 - MILFI | 0 | 0 | 0 | 338.7943 | 0 | 450.1814 | 2.4 |
| 33 CAROLINE 601 - CHILE | 0 | 0 | 0 | 540.5603 | 0 | 527.5395 | 0 |
| 33 CAROLINE 602 - LAKE | 0 | 0 | 0 | 338.7943 | 0 | 388.9395 | 0 |
| 35 CARROLL C 101 - MT B | 0 | 0 | 0 | 101.2644 | 0 | 319.205 | 0 |
| 35 CARROLL C 102 - ST PA | 0 | 0 | 0 | 114.1917 | 0 | 506.2888 | 0 |
| 35 CARROLL C $103-$ LAME | 0 | 0 | 0 | 66.79139 | 0 | 277.9832 | 0 |
| 35 CARROLL C $105-$ FANC | 0 | 0 | 0 | 151.8965 | 0 | 427.016 | 0 |
| 35 CARROLL C 201 - HILLS | 0 | 0 | 0 | 332.8796 | 0 | 886.7981 | 0 |
| 35 CARROLL C 202 -LAUR | 0 | 0 | 0 | 108.8053 | 0 | 313.9202 | 0 |
| 35 CARROLL C 203 -GLAD | 0 | 0 | 0 | 163.7466 | 0 | 459.7821 | 1 |
| 35 CARROLL C 301 - HILLS | 0 | 0 | 0 | 322.1068 | 0 | 967.1279 | 2 |
| 35 CARROLL C 302 -SYLV t | 0 | 0 | 0 | 115.269 | 0 | 378.3954 | 1 |
| 35 CARROLL C $303-$ DUGS | 0 | 0 | 0 | 70.02323 | 0 | 229.3626 | 0 |
| 35 CARROLL C 401 - OAKL | 0 | 0 | 0 | 246.6972 | 0 | 726.1386 | 1 |
| 35 CARROLL C 402 - WOO | 0 | 0 | 0 | 274.7065 | 0 | 721.9107 | 1 |
| 35 CARROLL C 406 - WOO | 0 | 0 | 0 | 46.32306 | 0 | 126.8364 | 0 |
| 35 CARROLL C 501 -VAUG | 0 | 0 | 0 | 68.94595 | 0 | 281.1541 | 0 |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 0 | 0 | 0 | 174.5194 | 0 | 685.9737 | 2 |
| 35 CARROLL C $503-$ WOO | 0 | 0 | 0 | 96.95524 | 0 | 343.5154 | 0 |
| 35 CARROLL C 504 -LAUR | 0 | 0 | 0 | 95.87796 | 0 | 400.5918 | 0 |
| 36 CHARLES C 101 - PREC | 0 | 0 | 0 | 629.0071 | 11 | 478.3827 | 0 |
| 36 CHARLES C 201 - PREC | 0 | 0 | 0 | 746.663 | 7 | 313.4232 | 2 |
| 36 CHARLES C 301 - PREC | 0 | 0 | 0 | 709.3299 | 8 | 432.1941 | 1 |
| 37 CHARLOTTI 101 - COUN | 0 | 0 | 0 | 308.2523 | 0 | 438.8017 | 0 |
| 37 CHARLOTTI 201 -RED ( | 0 | 0 | 0 | 288.5766 | 0 | 421.1667 | 1 |
| 37 CHARLOTTI302-DRAK | 0 | 0 | 0 | 212.0601 | 0 | 359.9626 | 2 |
| 37 CHARLOTT/401-KEYSI | 0 | 0 | 0 | 266.7147 | 0 | 455.3994 | 0 |
| 37 CHARLOTTI501-CULLI | 0 | 0 | 0 | 237.2012 | 0 | 385.8966 | 3 |
| 37 CHARLOTTI 602 -PHEN | 0 | 0 | 0 | 239.3874 | 0 | 489.6322 | 1 |
| 37 CHARLOTTI 702 - BACC | 0 | 0 | 0 | 267.8078 | 0 | 337.1408 | 0 |
| 41 CHESTERFII 101 - BELLI | 0 | 0 | 0 | 664.4144 | 19.75325 | 536.7014 | 2.294118 |
| 41 CHESTERFII 102 - SOUT | 0 | 0 | 0 | 972.5803 | 29.62987 | 944.6378 | 3.441176 |
| 41 CHESTERFII 103 - ENON | 0 | 0 | 0 | 1132.127 | 30.72727 | 1377.461 | 1.147059 |
| 41 CHESTERFII 104 - NORT | 0 | 0 | 0 | 913.5698 | 27.43506 | 1359.066 | 1.147059 |
| 41 CHESTERFII 105 - DREV | 0 | 0 | 0 | 882.4544 | 27.80096 | 517.4353 | 3.109756 |
| 41 CHESTERFII 106 - HARR | 0 | 0 | 0 | 1638.088 | 32.92208 | 1203.25 | 2.294118 |
| 41 CHESTERFII 107 - WELL | 0 | 0 | 0 | 1042.519 | 30.72727 | 865.6474 | 2.294118 |
| 41 CHESTERFII 108 - ECOF | 0 | 0 | 0 | 1127.756 | 29.62987 | 1670.7 | 2.294118 |
| 41 CHESTERFII 109 - ELIZA | 0 | 0 | 0 | 1595.469 | 46.09091 | 1460.78 | 1.147059 |
| 41 CHESTERFII 110 - DUTC | 0 | 0 | 0 | 668.7856 | 13.16883 | 737.9644 | 0 |
| 41 CHESTERFII 111 -IRON | 0 | 0 | 0 | 1664.314 | 35.11688 | 1606.858 | 3.441176 |
| 41 CHESTERFII112-CARV | 0 | 0 | 0 | 991.1577 | 29.62987 | 807.2162 | 1.147059 |
| 41 CHESTERFII 201 -GATE | 0 | 0 | 0 | 744.1879 | 27.43506 | 832.1036 | 4.588235 |
| 41 CHESTERFII 202 -BEUL | 0 | 0 | 0 | 1632.759 | 40.63217 | 746.6924 | 2.073171 |
| 41 CHESTERFII 203 - BIRD | 0 | 0 | 0 | 275.3823 | 13.16883 | 325.6998 | 2.294118 |


| 41 CHESTERFII204-JACO | 0 | 0 | 0 | 823.4785 | 16.03901 | 562.4297 | 1.036585 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII 205 - FALLI | 0 | 0 | 0 | 1617.469 | 20.31608 | 640.6342 | 1.036585 |
| 41 CHESTERFII 206 - BELM | 0 | 0 | 0 | 1146.754 | 12.83121 | 174.621 | 0 |
| 41 CHESTERFII 207 - CHIPF | 0 | 0 | 0 | 549.3497 | 12.83121 | 184.2627 | 0 |
| 41 CHESTERFII 208 - MEAL | 0 | 0 | 0 | 1476.582 | 18.17755 | 483.1539 | 1.036585 |
| 41 CHESTERFII 209 - SALEI | 0 | 0 | 0 | 1234.849 | 38.40909 | 1103.7 | 6.882353 |
| 41 CHESTERFII210-FIVE I | 0 | 0 | 0 | 1926.547 | 35.28583 | 906.3153 | 2.073171 |
| 41 CHESTERFII211-NASH | 0 | 0 | 0 | 1091.694 | 27.43506 | 1867.634 | 1.147059 |
| 41 CHESTERFII212-ST. Ll | 0 | 0 | 0 | 617.0628 | 10.69268 | 632.0638 | 0 |
| 41 CHESTERFII213-SOUT | 0 | 0 | 0 | 2716.168 | 37.42436 | 563.501 | 2.073171 |
| 41 CHESTERFII214-HOPk | 0 | 0 | 0 | 241.3644 | 6.415605 | 38.56661 | 1.036585 |
| 41 CHESTERFII 215 - Nortr | 0 | 0 | 0 | 629.0764 | 10.69268 | 205.6886 | 0 |
| 41 CHESTERFII301-ETTRI | 0 | 0 | 0 | 2032.584 | 18.65584 | 387.3772 | 1.147059 |
| 41 CHESTERFII302-DEER | 0 | 0 | 0 | 383.3434 | 12.83121 | 534.576 | 0 |
| 41 CHESTERFII303-MATC | 0 | 0 | 0 | 1315.715 | 19.75325 | 1206.496 | 2.294118 |
| 41 CHESTERFII304-WINF | 0 | 0 | 0 | 785.7138 | 28.53247 | 1851.403 | 0 |
| 41 CHESTERFII305-BEAC | 0 | 0 | 0 | 213.0934 | 8.779221 | 663.3023 | 0 |
| 41 CHESTERFII306-WINT | 0 | 0 | 0 | 759.0419 | 27.80096 | 1822.272 | 3.109756 |
| 41 CHESTERFII307-COSB | 0 | 0 | 0 | 1590.165 | 37.42436 | 1560.876 | 2.073171 |
| 41 CHESTERFII308-SOUT | 0 | 0 | 0 | 493.6502 | 12.83121 | 326.7449 | 1.036585 |
| 41 CHESTERFII309-SKINC | 0 | 0 | 0 | 1655.694 | 49.18631 | 2289.357 | 1.036585 |
| 41 CHESTERFII310-TOM/ | 0 | 0 | 0 | 1069.211 | 19.24682 | 1270.555 | 0 |
| 41 CHESTERFII313-WOO | 0 | 0 | 0 | 1462.384 | 28.87022 | 1695.859 | 5.182927 |
| 41 CHESTERFII315-BAILE | 0 | 0 | 0 | 784.1612 | 31.00876 | 1534.094 | 3.109756 |
| 41 CHESTERFII316-SPRIN | 0 | 0 | 0 | 1018.973 | 38.49363 | 1099.148 | 0 |
| 41 CHESTERFII317-BIRK[ | 0 | 0 | 0 | 1304.023 | 18.17755 | 1498.741 | 0 |
| 41 CHESTERFII318-WEST | 0 | 0 | 0 | 354.9476 | 7.484873 | 441.3734 | 1.036585 |
| 41 CHESTERFII 401 - HARB | 0 | 0 | 0 | 766.6869 | 21.38535 | 763.8331 | 0 |
| 41 CHESTERFII 402 - GENI ${ }^{-}$ | 0 | 0 | 0 | 1760.54 | 43.83997 | 1395.897 | 1.036585 |
| 41 CHESTERFII403-BRAN | 0 | 0 | 0 | 1262.521 | 26.73169 | 1222.347 | 1.036585 |
| 41 CHESTERFII404-PROV | 0 | 0 | 0 | 1174.058 | 31.00876 | 820.6117 | 3.109756 |
| 41 CHESTERFII405-LA PR | 0 | 0 | 0 | 1198.085 | 29.93949 | 1075.58 | 2.073171 |
| 41 CHESTERFII406-SMOI | 0 | 0 | 0 | 921.7717 | 18.17755 | 1044.512 | 0 |
| 41 CHESTERFII 407 - MON | 0 | 0 | 0 | 605.0492 | 12.83121 | 731.6942 | 1.036585 |
| 41 CHESTERFII 408 - REAN | 0 | 0 | 0 | 1949.482 | 41.70143 | 966.3078 | 3.109756 |
| 41 CHESTERFII 409 - MAN | 0 | 0 | 0 | 697.8817 | 14.96975 | 494.9381 | 1.036585 |
| 41 CHESTERFII410-WAG: | 0 | 0 | 0 | 733.9225 | 14.96975 | 593.4972 | 1.036585 |
| 41 CHESTERFII411-SWIF | 0 | 0 | 0 | 1159.86 | 21.38535 | 1102.362 | 3.109756 |
| 41 CHESTERFII413-SHEN | 0 | 0 | 0 | 1147.846 | 26.73169 | 825.9682 | 2.073171 |
| 41 CHESTERFII414-CREN | 0 | 0 | 0 | 1559.585 | 43.83997 | 1458.032 | 6.219512 |
| 41 CHESTERFII415-EVER | 0 | 0 | 0 | 1204.638 | 40.63217 | 1124.859 | 1.036585 |
| 41 CHESTERFII416-EVER | 0 | 0 | 0 | 690.2366 | 8.55414 | 503.5085 | 1.036585 |
| 41 CHESTERFII417-EDGE | 0 | 0 | 0 | 631.2607 | 10.69268 | 572.0713 | 1.036585 |
| 41 CHESTERFII501-HUGI | 0 | 0 | 0 | 915.2188 | 24.59315 | 674.9156 | 2.073171 |
| 41 CHESTERFII502-CRES | 0 | 0 | 0 | 667.3015 | 18.17755 | 538.8612 | 3.109756 |
| 41 CHESTERFII503-MIDL | 0 | 0 | 0 | 1063.751 | 23.52389 | 1177.353 | 5.182927 |
| 41 CHESTERFII504-ROBII | 0 | 0 | 0 | 1622.93 | 27.80096 | 1794.419 | 1.036585 |


| 41 CHESTERFII505-BON, | 0 | 0 | 0 | 1368.46 | 25.66242 | 1033.799 | 4.146341 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII506-GREE | 0 | 0 | 0 | 1267.982 | 25.66242 | 950.2383 | 1.036585 |
| 41 CHESTERFII507-SALIS | 0 | 0 | 0 | 1329.142 | 35.28583 | 1726.927 | 1.036585 |
| 41 CHESTERFII508-BELG | 0 | 0 | 0 | 1103.068 | 23.52389 | 904.1727 | 2.073171 |
| 41 CHESTERFII509-CRAN | 0 | 0 | 0 | 964.3654 | 24.59315 | 552.788 | 0 |
| 41 CHESTERFII510-SYCAI | 0 | 0 | 0 | 1132.556 | 32.07803 | 1249.13 | 1.036585 |
| 41 CHESTERFII511-BLAC | 0 | 0 | 0 | 731.7382 | 20.31608 | 884.8894 | 1.036585 |
| 41 CHESTERFII513-BEAU | 0 | 0 | 0 | 785.2534 | 20.31608 | 232.4709 | 0 |
| 41 CHESTERFII514-WATr | 0 | 0 | 0 | 1277.811 | 34.21656 | 1386.255 | 3.109756 |
| 41 CHESTERFII515-DAVI! | 0 | 0 | 0 | 1495.149 | 21.38535 | 324.6023 | 0 |
| 41 CHESTERFII516-POCC | 0 | 0 | 0 | 946.8911 | 12.83121 | 238.8987 | 0 |
| 41 CHESTERFII517-ROSE | 0 | 0 | 0 | 490.3738 | 8.55414 | 650.2758 | 0 |
| 41 CHESTERFII518-MIDL | 0 | 0 | 0 | 1136.925 | 24.59315 | 1533.023 | 2.073171 |
| 43 CLARKE CO 101 - RUSS | 0 | 0 | 0 | 517.0581 | 0 | 979.5367 | 0 |
| 43 CLARKE CO 201 - BERR | 0 | 0 | 0 | 643.1699 | 0 | 618.8289 | 1.1 |
| 43 CLARKE CO 301 - MILLI | 0 | 0 | 0 | 476.9317 | 0 | 617.7258 | 4.4 |
| 43 CLARKE CO 302 - PINE | 0 | 0 | 0 | 197.1929 | 0 | 280.1828 | 2.2 |
| 43 CLARKE CO 401 - WHIT | 0 | 0 | 0 | 600.7505 | 0 | 836.136 | 0 |
| 43 CLARKE CO 501 - BUCK | 0 | 0 | 0 | 427.6334 | 0 | 585.7365 | 2.2 |
| 43 CLARKE CO 502 - BLUE | 0 | 0 | 0 | 174.2635 | 0 | 233.8533 | 1.1 |
| 45 CRAIG COU 101 - COUF | 80 | 300 | 1 | 79 | 0 | 302 | 0 |
| 45 CRAIG COU 201 - AMM | 90 | 402 | 0 | 98 | 0 | 398 | 0 |
| 45 CRAIG COU 301 - GIVEI | 92 | 188 | 0 | 100 | 0 | 184 | 0 |
| 45 CRAIG COU 303 - MAR | 77 | 160 | 0 | 77 | 0 | 159 | 0 |
| 45 CRAIG COU 401 - BARB | 49 | 149 | 0 | 50 | 0 | 148 | 0 |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 13 | 25 | 0 | 11 | 0 | 28 | 0 |
| 45 CRAIG COU403-CRAIC | 41 | 151 | 0 | 42 | 0 | 151 | 0 |
| 45 CRAIG COU 501 - CRAIC | 77 | 291 | 0 | 72 | 0 | 300 | 0 |
| 47 CULPEPER 101-WEST | 0 | 0 | 0 | 1293.65 | 45.55385 | 1069.616 | 0 |
| 47 CULPEPER 201 - EAST | 0 | 0 | 0 | 1226.33 | 39.04615 | 839.4185 | 1 |
| 47 CULPEPER 302 - EGGE | 0 | 0 | 0 | 360.1574 | 19.52308 | 804.0858 | 0 |
| 47 CULPEPER 303 - CARD | 0 | 0 | 0 | 322.0099 | 15.18462 | 599.5846 | 1 |
| 47 CULPEPER 304 - WILL | 0 | 0 | 0 | 236.739 | 9.761538 | 209.8546 | 2 |
| 47 CULPEPER 401 - ELDO | 0 | 0 | 0 | 453.2823 | 16.26923 | 807.2979 | 2 |
| 47 CULPEPER 402 - BROV | 0 | 0 | 0 | 760.7064 | 26.03077 | 1271.976 | 0 |
| 47 CULPEPER 501 - JEFFE | 0 | 0 | 0 | 615.9702 | 31.45385 | 1106.02 | 0 |
| 47 CULPEPER 502 - RIXEY | 0 | 0 | 0 | 525.0894 | 17.35385 | 1052.485 | 0 |
| 47 CULPEPER 601 - MITC | 0 | 0 | 0 | 113.3206 | 1.084615 | 177.734 | 0 |
| 47 CULPEPER 602 - PEAR | 0 | 0 | 0 | 746.1206 | 20.60769 | 1081.394 | 3 |
| 47 CULPEPER 603 - SOUT | 0 | 0 | 0 | 287.2284 | 11.93077 | 264.4597 | 2 |
| 47 CULPEPER 702 - BRAN | 0 | 0 | 0 | 587.9206 | 11.93077 | 1112.444 | 2 |
| 47 CULPEPER 703 - LIGNI | 0 | 0 | 0 | 264.7887 | 13.01538 | 539.6262 | 0 |
| 47 CULPEPER - 704 - RICH/ | 0 | 0 | 0 | 116.6865 | 3.253846 | 303.0044 | 0 |
| 49 CUMBERLA 101 - PREC | 0 | 0 | 0 | 379.467 | 0 | 529.4424 | 2 |
| 49 CUMBERLA 201 - PREC | 0 | 0 | 0 | 286.2265 | 0 | 582.7063 | 0 |
| 49 CUMBERLA 301 - PREC | 0 | 0 | 0 | 479.2126 | 0 | 324.9093 | 0 |
| 49 CUMBERLA 401 - PREC | 0 | 0 | 0 | 308.9945 | 0 | 526.2466 |  |


| 49 CUMBERLA 501 - PREC | 0 | 0 | 0 | 336.0993 | 0 | 386.6954 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 DICKENSOP 101 - SOUT | 0 | 0 | 0 | 337.4483 | 0 | 613.48 | 1.333333 |
| 51 DICKENSOP 201 - NORf | 0 | 0 | 0 | 103.1092 | 0 | 180.4353 | 0 |
| 51 DICKENSOP 202 - FRYIN | 0 | 0 | 0 | 42.18103 | 0 | 92.95151 | 0 |
| 51 DICKENSOP 203 -CLINC | 0 | 0 | 0 | 179.2694 | 0 | 260.2642 | 0 |
| 51 DICKENSOP 301 - WEST | 0 | 0 | 0 | 24.6056 | 0 | 152.0031 | 0 |
| 51 DICKENSOP 302 - HERA | 0 | 0 | 0 | 63.27155 | 0 | 217.6159 | 0 |
| 51 DICKENSOP 303-RIDGI | 0 | 0 | 0 | 124.1997 | 0 | 344.4674 | 0 |
| 51 DICKENSOP 401 - HAYS | 0 | 0 | 0 | 384.3161 | 0 | 392.5834 | 1.333333 |
| 51 DICKENSOP 501 -TARP | 0 | 0 | 0 | 108.9677 | 0 | 138.8805 | 0 |
| 51 DICKENSOP 502 - NORT | 0 | 0 | 0 | 263.6315 | 0 | 471.3188 | 1.333333 |
| 53 DINWIDDIE 101 - WHIT | 0 | 0 | 0 | 107.637 | 4.246914 | 334.5229 | 0 |
| 53 DINWIDDIE 102-ROCK | 0 | 0 | 0 | 185.3131 | 1.061728 | 470.8889 | 1 |
| 53 DINWIDDIE 103-CHUR | 0 | 0 | 0 | 205.287 | 4.246914 | 846.9608 | 0 |
| 53 DINWIDDIE 201-ROHC | 0 | 0 | 0 | 378.3938 | 7.432099 | 210.9412 | 0 |
| 53 DINWIDDIE 202 - SUTH | 0 | 0 | 0 | 639.1638 | 9.555556 | 897.0327 | 1 |
| 53 DINWIDDIE 301 - REAN | 0 | 0 | 0 | 160.9006 | 6.37037 | 301.4967 | 0 |
| 53 DINWIDDIE 302 - NEW | 0 | 0 | 0 | 282.9631 | 5.308642 | 469.8235 | 1 |
| 53 DINWIDDIE 303-LITTL | 0 | 0 | 0 | 553.72 | 11.67901 | 498.5882 | 1 |
| 53 DINWIDDIE 401 - DIN | 0 | 0 | 0 | 448.3024 | 13.80247 | 636.0196 | 1 |
| 53 DINWIDDIE 402 - MCKE | 0 | 0 | 0 | 272.9762 | 8.493827 | 338.7843 | 0 |
| 53 DINWIDDIE 403 - CHER | 0 | 0 | 0 | 255.2217 | 1.061728 | 193.8954 | 0 |
| 53 DINWIDDIE 501-EDGE | 0 | 0 | 0 | 162.0103 | 1.061728 | 49.00654 | 0 |
| 53 DINWIDDIE 502-CHES | 0 | 0 | 0 | 1104.111 | 11.67901 | 457.0392 | 1 |
| 57 ESSEX COU 101 - GREA | 0 | 0 | 0 | 506.7226 | 0 | 488.5074 | 0 |
| 57 ESSEX COU 201 - NORT | 0 | 0 | 0 | 654.6546 | 0 | 386.4148 | 0 |
| 57 ESSEX COU 301 - SOUT | 0 | 0 | 0 | 448.2121 | 0 | 795.8828 | 2 |
| 57 ESSEX COU 401 - CENT | 0 | 0 | 0 | 503.4107 | 0 | 642.1951 | 0 |
| 59 FAIRFAX C ( 104 - CHAP | 0 | 0 | 0 | 1141.448 | 24.63238 | 595.0865 | 1.167665 |
| 59 FAIRFAX CC 105 - FAIR | 0 | 0 | 0 | 2264.986 | 60.4613 | 1003.705 | 3.502994 |
| 59 FAIRFAX C( 106 - HERI7 | 0 | 0 | 0 | 1667.994 | 36.94857 | 542.1388 | 2.335329 |
| 59 FAIRFAX C( 108 - KING: | 0 | 0 | 0 | 1140.254 | 43.6665 | 576.6699 | 1.167665 |
| 59 FAIRFAX CC 109 - LITTL | 0 | 0 | 0 | 686.5402 | 22.39308 | 333.801 | 1.167665 |
| 59 FAIRFAX C ( 110 - NORT | 0 | 0 | 0 | 1887.687 | 43.6665 | 910.4709 | 4.670659 |
| 59 FAIRFAX C 1113 - CANT | 0 | 0 | 0 | 1933.058 | 35.82892 | 897.8095 | 8.173653 |
| 59 FAIRFAX CC 114 - OLDE | 0 | 0 | 0 | 884.7413 | 36.94857 | 453.5089 | 2.335329 |
| 59 FAIRFAX C ( 115 - RAVE | 0 | 0 | 0 | 823.8482 | 31.35031 | 441.9985 | 4.670659 |
| 59 FAIRFAX C( 116 - WAKI | 0 | 0 | 0 | 1210.699 | 29.111 | 501.8525 | 2.335329 |
| 59 FAIRFAX C 117 - WOO | 0 | 0 | 0 | 1260.846 | 38.06823 | 639.977 | 8.173653 |
| 59 FAIRFAX C 118 - LAKE | 0 | 0 | 0 | 2021.413 | 61.58096 | 732.06 | 9.341317 |
| 59 FAIRFAX C 119 - LAUR | 0 | 0 | 0 | 1898.433 | 50.38442 | 898.9605 | 5.838323 |
| 59 FAIRFAX C ( 120 - SIDEE | 0 | 0 | 0 | 1374.274 | 31.35031 | 879.3929 | 2.335329 |
| 59 FAIRFAX C 121 - VILLA | 0 | 0 | 0 | 876.3834 | 39.18788 | 456.962 | 4.670659 |
| 59 FAIRFAX C ( 123 - ROBII | 0 | 0 | 0 | 1922.312 | 51.50407 | 872.4867 | 4.670659 |
| 59 FAIRFAX C( 125 - SIGN, | 0 | 0 | 0 | 1460.241 | 41.42719 | 694.0758 | 5.838323 |
| 59 FAIRFAX C( 126 - BON | 0 | 0 | 0 | 1211.893 | 43.6665 | 461.5662 | 4.670659 |
| 59 FAIRFAX CC 127 - BURK | 0 | 0 | 0 | 2196.929 | 61.58096 | 871.3356 | 5.838323 |


| 59 FAIRFAX CC 128 - CARD | 0 | 0 | 0 | 1134.284 | 25.75204 | 453.5089 | 2.335329 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 129 - KEEN | 0 | 0 | 0 | 865.6376 | 22.39308 | 366.03 | 0 |
| 59 FAIRFAX C 130 -TERR, | 0 | 0 | 0 | 1167.715 | 26.87169 | 576.6699 | 2.335329 |
| 59 FAIRFAX C 131 - EAGL | 0 | 0 | 0 | 1571.281 | 45.9058 | 706.7372 | 3.502994 |
| 59 FAIRFAX CC 132 - MON | 0 | 0 | 0 | 1896.045 | 43.6665 | 634.2218 | 3.502994 |
| 59 FAIRFAX C 133 - DANE | 0 | 0 | 0 | 398.7903 | 7.837576 | 125.4631 | 0 |
| 59 FAIRFAX CC 134 - UNIV | 0 | 0 | 0 | 1672.77 | 58.222 | 268.1918 | 3.502994 |
| 59 FAIRFAX C 201 - Arms | 0 | 0 | 0 | 1905.597 | 61.58096 | 766.5912 | 5.838323 |
| 59 FAIRFAX CC 202 - FLINT | 0 | 0 | 0 | 1374.274 | 34.70927 | 773.4974 | 4.670659 |
| 59 FAIRFAX CC 203 - FLOR | 0 | 0 | 0 | 1814.854 | 31.35031 | 844.8617 | 3.502994 |
| 59 FAIRFAX CC 204 - MADI | 0 | 0 | 0 | 465.6533 | 11.19654 | 139.2756 | 0 |
| 59 FAIRFAX CC 208 -REST( | 0 | 0 | 0 | 1906.791 | 52.62373 | 532.9305 | 4.670659 |
| 59 FAIRFAX CC 209 - REST( | 0 | 0 | 0 | 1764.707 | 52.62373 | 441.9985 | 3.502994 |
| 59 FAIRFAX C 213 - VIENI | 0 | 0 | 0 | 1930.67 | 49.26477 | 869.0335 | 3.502994 |
| 59 FAIRFAX CC 214 - VIENI | 0 | 0 | 0 | 1533.074 | 30.23065 | 694.0758 | 5.838323 |
| 59 FAIRFAX CC 216 - VIENI | 0 | 0 | 0 | 804.7445 | 27.99134 | 315.3844 | 2.335329 |
| 59 FAIRFAX C 218 - VIENI | 0 | 0 | 0 | 1179.655 | 24.63238 | 407.4674 | 3.502994 |
| 59 FAIRFAX CC 219 - WEST | 0 | 0 | 0 | 1665.606 | 40.30754 | 787.3099 | 2.335329 |
| 59 FAIRFAX CC 220 - DOG | 0 | 0 | 0 | 2177.825 | 52.62373 | 641.1281 | 3.502994 |
| 59 FAIRFAX CC 221 - HUN7 | 0 | 0 | 0 | 1467.405 | 32.46996 | 543.2898 | 3.502994 |
| 59 FAIRFAX CC 222 -REST( | 0 | 0 | 0 | 1322.933 | 36.94857 | 265.8897 | 1.167665 |
| 59 FAIRFAX CC 223 -GLAD | 0 | 0 | 0 | 2060.814 | 62.70061 | 639.977 | 7.005988 |
| 59 FAIRFAX CC 224 - SOUT | 0 | 0 | 0 | 2614.823 | 68.29888 | 695.2268 | 9.341317 |
| 59 FAIRFAX CC 225 - HUG | 0 | 0 | 0 | 2147.975 | 57.10234 | 492.6442 | 4.670659 |
| 59 FAIRFAX CC 226 - WOLI | 0 | 0 | 0 | 1659.636 | 30.23065 | 855.2211 | 7.005988 |
| 59 FAIRFAX CC 227 - SUNR | 0 | 0 | 0 | 833.4001 | 32.46996 | 441.9985 | 2.335329 |
| 59 FAIRFAX C 2229 - FOX ${ }^{\text {r }}$ | 0 | 0 | 0 | 2267.441 | 0 | 1334.41 | 10.16883 |
| 59 FAIRFAX CC 233 - NORT | 0 | 0 | 0 | 1591.579 | 30.23065 | 810.3306 | 10.50898 |
| 59 FAIRFAX CC 234 - ALDR | 0 | 0 | 0 | 1486.509 | 26.87169 | 546.743 | 2.335329 |
| 59 FAIRFAX C 235 - FRYIN | 0 | 0 | 0 | 1540.238 | 22.39308 | 455.811 | 1.167665 |
| 59 FAIRFAX C 236 - STUA | 0 | 0 | 0 | 727.1356 | 19.03411 | 288.9105 | 1.167665 |
| 59 FAIRFAX C 237 - MCN, | 0 | 0 | 0 | 1715.753 | 55.98269 | 439.6964 | 7.005988 |
| 59 FAIRFAX C 238 - CAMI | 0 | 0 | 0 | 1572.475 | 43.6665 | 712.4924 | 3.502994 |
| 59 FAIRFAX C $240-\mathrm{COLV}$ | 0 | 0 | 0 | 1074.454 | 0 | 766.2713 | 5.649351 |
| 59 FAIRFAX CC 301 - CHAII | 0 | 0 | 0 | 1297.502 | 0 | 856.9826 | 1.12987 |
| 59 FAIRFAX C( 302 - CHES | 0 | 0 | 0 | 1166.746 | 0 | 688.4403 | 1.134545 |
| 59 FAIRFAX C( $303-\mathrm{CHUR}$ | 0 | 0 | 0 | 720.1262 | 0 | 392.6842 | 0 |
| 59 FAIRFAX CC 304 - COOF | 0 | 0 | 0 | 797.8743 | 0 | 582.4617 | 2.25974 |
| 59 FAIRFAX C 305 - EL NII | 0 | 0 | 0 | 1064.149 | 0 | 468.6022 | 2.269091 |
| 59 FAIRFAX C 306 -GREA | 0 | 0 | 0 | 806.7962 | 0 | 719.7221 | 1.12987 |
| 59 FAIRFAX CC 307 - HAYC | 0 | 0 | 0 | 1182.255 | 0 | 541.4959 | 3.403636 |
| 59 FAIRFAX C 309 - KENN | 0 | 0 | 0 | 1421.134 | 0 | 1021.695 | 3.38961 |
| 59 FAIRFAX CC 310 - KIRBY | 0 | 0 | 0 | 962.7446 | 0 | 430.4198 | 2.269091 |
| 59 FAIRFAX C 311 - LANG | 0 | 0 | 0 | 746.8919 | 0 | 649.3016 | 1.12987 |
| 59 FAIRFAX CC 312 -LONE | 0 | 0 | 0 | 1150.044 | 0 | 598.191 | 4.538182 |
| 59 FAIRFAX C 314 - MCLE | 0 | 0 | 0 | 1036.217 | 0 | 614.6881 | 5.649351 |
| 59 FAIRFAX CC 315 - PIMN | 0 | 0 | 0 | 1538.96 | 0 | 717.3664 | 4.538182 |


| 59 FAIRFAX CC 316 - SALO | 0 | 0 | 0 | 386.5294 | 0 | 236.0367 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 317 - WEST | 0 | 0 | 0 | 1104.711 | 0 | 504.4705 | 3.403636 |
| 59 FAIRFAX CC 318 - WEST | 0 | 0 | 0 | 660.9176 | 0 | 335.5423 | 0 |
| 59 FAIRFAX C( 319 - HERN | 0 | 0 | 0 | 1884.105 | 71.65784 | 814.9348 | 5.838323 |
| 59 FAIRFAX C( $320-$ HERN | 0 | 0 | 0 | 2126.484 | 88.45265 | 699.831 | 1.167665 |
| 59 FAIRFAX CC 321 - CLEAI | 0 | 0 | 0 | 2055.865 | 0 | 1127.923 | 9.038961 |
| 59 FAIRFAX CC 322 - FORE | 0 | 0 | 0 | 1166.222 | 0 | 1068.244 | 4.519481 |
| 59 FAIRFAX C( 323 - SHOL | 0 | 0 | 0 | 1091.023 | 0 | 646.9144 | 0 |
| 59 FAIRFAX C( 324 - HERN | 0 | 0 | 0 | 1830.376 | 67.17923 | 561.7064 | 0 |
| 59 FAIRFAX CC 325 - HUTC | 0 | 0 | 0 | 1262.04 | 24.63238 | 268.1918 | 1.167665 |
| 59 FAIRFAX C( 327 - SUGA | 0 | 0 | 0 | 1721.93 | 0 | 1032.437 | 4.519481 |
| 59 FAIRFAX CC 328 - HICKC | 0 | 0 | 0 | 1331.915 | 0 | 989.4687 | 4.519481 |
| 59 FAIRFAX CC 329 - SENEI | 0 | 0 | 0 | 1399.466 | 0 | 1099.277 | 3.38961 |
| 59 FAIRFAX CC 331 - SPRIN | 0 | 0 | 0 | 899.8391 | 0 | 594.3974 | 1.12987 |
| 59 FAIRFAX CC 332 - COAT | 0 | 0 | 0 | 1855.449 | 49.26477 | 473.0765 | 4.670659 |
| 59 FAIRFAX CC $333-$ SALO | 0 | 0 | 0 | 763.5149 | 0 | 389.9233 | 3.403636 |
| 59 FAIRFAX CC 401 - BUSH | 0 | 0 | 0 | 1614.118 | 0 | 726.6227 | 3.403636 |
| 59 FAIRFAX CC 402 - CAMI | 0 | 0 | 0 | 631.0928 | 0 | 225.6233 | 0 |
| 59 FAIRFAX CC 403 - FORE | 0 | 0 | 0 | 657.3386 | 0 | 259.1775 | 0 |
| 59 FAIRFAX CC 404 - FRAN | 0 | 0 | 0 | 1837.208 | 0 | 636.3734 | 4.538182 |
| 59 FAIRFAX CC 405 -GRO\} | 0 | 0 | 0 | 1056.991 | 0 | 277.6902 | 3.403636 |
| 59 FAIRFAX CC 406 - HAYF | 0 | 0 | 0 | 1072.5 | 0 | 661.8283 | 1.134545 |
| 59 FAIRFAX CC 408 - MOU | 0 | 0 | 0 | 1374.327 | 0 | 317.0297 | 2.269091 |
| 59 FAIRFAX CC 409 - PION | 0 | 0 | 0 | 1861.068 | 0 | 617.8607 | 2.269091 |
| 59 FAIRFAX CC410-ROSE | 0 | 0 | 0 | 2121.14 | 0 | 1017.04 | 10.21091 |
| 59 FAIRFAX CC 411 - VIRGI | 0 | 0 | 0 | 1188.22 | 0 | 441.9903 | 4.538182 |
| 59 FAIRFAX CC 413 - FAIRF | 0 | 0 | 0 | 1360.011 | 0 | 196.6972 | 1.134545 |
| 59 FAIRFAX CC 415 - CRES | 0 | 0 | 0 | 1197.764 | 0 | 578.5213 | 4.538182 |
| 59 FAIRFAX CC 417 - GARF | 0 | 0 | 0 | 1692.856 | 0 | 696.5396 | 9.076364 |
| 59 FAIRFAX CC 418 - LYNB | 0 | 0 | 0 | 1039.096 | 0 | 349.4268 | 3.403636 |
| 59 FAIRFAX CC 419 - LANE | 0 | 0 | 0 | 1892.085 | 0 | 544.967 | 4.538182 |
| 59 FAIRFAX CC 420 - VILLA | 0 | 0 | 0 | 2108.017 | 0 | 747.4495 | 9.076364 |
| 59 FAIRFAX CC 421 - KING: | 0 | 0 | 0 | 1789.488 | 0 | 630.5882 | 6.807273 |
| 59 FAIRFAX CC 422 - VAN I | 0 | 0 | 0 | 1956.507 | 0 | 629.4311 | 7.941818 |
| 59 FAIRFAX CC423-CLERI | 0 | 0 | 0 | 1375.52 | 0 | 628.2741 | 0 |
| 59 FAIRFAX C( 424 - HUN7 | 0 | 0 | 0 | 1369.555 | 0 | 607.4473 | 7.941818 |
| 59 FAIRFAX CC 426 - GREE | 0 | 0 | 0 | 1004.14 | 3.358961 | 496.0973 | 0 |
| 59 FAIRFAX CC 427 - ISLAN | 0 | 0 | 0 | 1389.836 | 0 | 536.8677 | 3.403636 |
| 59 FAIRFAX CC 428 - PINE | 0 | 0 | 0 | 1703.593 | 0 | 271.905 | 3.403636 |
| 59 FAIRFAX CC 429 - HYBL. | 0 | 0 | 0 | 1668.996 | 0 | 269.5909 | 5.672727 |
| 59 FAIRFAX CC 501 - BAILE | 0 | 0 | 0 | 1827.664 | 0 | 460.5029 | 0 |
| 59 FAIRFAX CC502-BARC | 0 | 0 | 0 | 674.6003 | 21.27342 | 269.3428 | 3.502994 |
| 59 FAIRFAX CC503-BELVI | 0 | 0 | 0 | 878.7714 | 24.63238 | 286.6084 | 1.167665 |
| 59 FAIRFAX CC504-BRIST | 0 | 0 | 0 | 1264.428 | 19.03411 | 380.9935 | 2.335329 |
| 59 FAIRFAX CC 505 - GLEN | 0 | 0 | 0 | 1447.099 | 0 | 440.8332 | 4.538182 |
| 59 FAIRFAX CC506-HOLM | 0 | 0 | 0 | 283.9321 | 0 | 92.5634 | 4.538182 |
| 59 FAIRFAX CC507-LINCC | 0 | 0 | 0 | 1701.207 | 0 | 517.198 | 5.672727 |


| 59 FAIRFAX CC 508 - MAS | 0 | 0 | 0 | 1396.96 | 41.42719 | 552.4981 | 5.838323 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC509-PLAZ | 0 | 0 | 0 | 683.5844 | 0 | 100.6627 | 1.134545 |
| 59 FAIRFAX CC510-PARK | 0 | 0 | 0 | 1090.395 | 0 | 433.891 | 4.538182 |
| 59 FAIRFAX CC 511 - RAVE | 0 | 0 | 0 | 1265.622 | 42.54684 | 462.7172 | 5.838323 |
| 59 FAIRFAX CC512-SLEEF | 0 | 0 | 0 | 762.9551 | 25.75204 | 295.8167 | 2.335329 |
| 59 FAIRFAX CC513-SAIN7 | 0 | 0 | 0 | 1273.65 | 21.27342 | 495.859 | 1.134545 |
| 59 FAIRFAX CC514-CROS | 0 | 0 | 0 | 690.7424 | 0 | 135.374 | 1.134545 |
| 59 FAIRFAX CC515-WEST | 0 | 0 | 0 | 888.7791 | 0 | 325.129 | 2.269091 |
| 59 FAIRFAX CC516-WEY/ | 0 | 0 | 0 | 1636.785 | 0 | 470.9163 | 5.672727 |
| 59 FAIRFAX CC517-WILLS | 0 | 0 | 0 | 813.6206 | 0 | 314.7156 | 4.538182 |
| 59 FAIRFAX CC518-COLU | 0 | 0 | 0 | 1254.876 | 39.18788 | 492.6442 | 4.670659 |
| 59 FAIRFAX CC519-HUM | 0 | 0 | 0 | 919.3668 | 27.99134 | 379.8425 | 1.167665 |
| 59 FAIRFAX CC520-SKYLI | 0 | 0 | 0 | 1485.275 | 0 | 271.905 | 5.672727 |
| 59 FAIRFAX CC521-BROC | 0 | 0 | 0 | 918.6039 | 0 | 507.9417 | 5.672727 |
| 59 FAIRFAX CC522-CAMI | 0 | 0 | 0 | 704.4499 | 12.31619 | 382.1445 | 1.167665 |
| 59 FAIRFAX CC 523 - POE | 0 | 0 | 0 | 1251.449 | 0 | 554.2234 | 7.941818 |
| 59 FAIRFAX CC $525-$ WAL | 0 | 0 | 0 | 1697.628 | 0 | 731.2509 | 7.941818 |
| 59 FAIRFAX CC526-BREN | 0 | 0 | 0 | 1905.208 | 0 | 483.6438 | 3.403636 |
| 59 FAIRFAX CC527-EDSA | 0 | 0 | 0 | 1009.271 | 0 | 476.7015 | 4.538182 |
| 59 FAIRFAX CC 528 -RIDG\| | 0 | 0 | 0 | 639.9748 | 14.5555 | 301.5719 | 2.335329 |
| 59 FAIRFAX CC530-HOLA | 0 | 0 | 0 | 999.3637 | 17.91446 | 210.6399 | 2.335329 |
| 59 FAIRFAX CC 601 - BELLE | 0 | 0 | 0 | 983.0254 | 0 | 540.3389 | 6.807273 |
| 59 FAIRFAX CC 602 - BELLE | 0 | 0 | 0 | 1141.693 | 0 | 502.1565 | 7.941818 |
| 59 FAIRFAX CC 604 - BUCK | 0 | 0 | 0 | 1880.155 | 0 | 475.5445 | 3.403636 |
| 59 FAIRFAX CC 605 - FORT | 0 | 0 | 0 | 1109.483 | 0 | 630.5882 | 2.269091 |
| 59 FAIRFAX CC 606 - HOLL | 0 | 0 | 0 | 1274.115 | 0 | 689.5974 | 6.807273 |
| 59 FAIRFAX CC 607 - HUN7 | 0 | 0 | 0 | 2056.718 | 0 | 597.034 | 6.807273 |
| 59 FAIRFAX CC 608 - KIRKS | 0 | 0 | 0 | 1092.781 | 0 | 322.8149 | 2.269091 |
| 59 FAIRFAX CC 609 - MARI | 0 | 0 | 0 | 1045.061 | 0 | 590.0917 | 3.403636 |
| 59 FAIRFAX C( 610 - SHER' | 0 | 0 | 0 | 1074.886 | 0 | 369.0966 | 2.269091 |
| 59 FAIRFAX CC 611 - STRA | 0 | 0 | 0 | 1350.467 | 0 | 719.6805 | 2.269091 |
| 59 FAIRFAX CC 612 - WAYI | 0 | 0 | 0 | 644.2157 | 0 | 357.5261 | 3.403636 |
| 59 FAIRFAX CC 613 - WEST | 0 | 0 | 0 | 1339.73 | 0 | 1172.084 | 1.134545 |
| 59 FAIRFAX CC 614 - RIVEF | 0 | 0 | 0 | 905.481 | 0 | 598.191 | 2.269091 |
| 59 FAIRFAX CC 615 - WOO | 0 | 0 | 0 | 1375.52 | 0 | 667.6135 | 5.672727 |
| 59 FAIRFAX C( 616 - GUNs | 0 | 0 | 0 | 960.3586 | 0 | 782.1608 | 2.269091 |
| 59 FAIRFAX CC 617 - LORT | 0 | 0 | 0 | 1241.905 | 0 | 273.062 | 0 |
| 59 FAIRFAX C( 618 - NEWI | 0 | 0 | 0 | 2534.826 | 76.13646 | 1007.158 | 3.502994 |
| 59 FAIRFAX CC 619 - BELVI | 0 | 0 | 0 | 1682.119 | 0 | 716.2093 | 4.538182 |
| 59 FAIRFAX C( 621 - GROS | 0 | 0 | 0 | 1272.923 | 0 | 370.2536 | 4.538182 |
| 59 FAIRFAX CC 622 - LORT | 0 | 0 | 0 | 1878.962 | 0 | 485.9579 | 6.807273 |
| 59 FAIRFAX CC 623 - ALBA | 0 | 0 | 0 | 1548.504 | 0 | 556.5375 | 2.269091 |
| 59 FAIRFAX CC 626 - SARA | 0 | 0 | 0 | 1689.277 | 0 | 777.5326 | 6.807273 |
| 59 FAIRFAX CC 627 - WOO | 0 | 0 | 0 | 2061.49 | 0 | 579.6783 | 3.403636 |
| 59 FAIRFAX CC 628 -LAUR | 0 | 0 | 0 | 2124.096 | 36.94857 | 521.4201 | 1.167665 |
| 59 FAIRFAX CC 629 - SOUT | 0 | 0 | 0 | 1438.749 | 36.94857 | 839.1066 | 2.335329 |
| 59 FAIRFAX CC 630-ARMY | 0 | 0 | 0 | 382.9504 | 0 | 164.3 | 1.134545 |


| 59 FAIRFAX CC 701 - BLAK | 0 | 0 | 0 | 2210.062 | 69.41853 | 738.9663 | 2.335329 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 703 - FORT | 0 | 0 | 0 | 1142.886 | 0 | 365.6254 | 3.403636 |
| 59 FAIRFAX CC 704 - FREEI | 0 | 0 | 0 | 1112.792 | 20.15377 | 423.5819 | 2.335329 |
| 59 FAIRFAX CC 705 -GRAF | 0 | 0 | 0 | 1943.384 | 0 | 659.5142 | 6.807273 |
| 59 FAIRFAX CC 707 - MAN | 0 | 0 | 0 | 1134.284 | 21.27342 | 445.4516 | 3.502994 |
| 59 FAIRFAX CC 708 - MAR | 0 | 0 | 0 | 2521.985 | 0 | 791.4171 | 5.672727 |
| 59 FAIRFAX CC 709 - MOSI | 0 | 0 | 0 | 1688.292 | 53.74338 | 497.2483 | 1.167665 |
| 59 FAIRFAX CC 710 - PINE | 0 | 0 | 0 | 1241.905 | 0 | 437.3621 | 3.403636 |
| 59 FAIRFAX CC 711 - PRICE | 0 | 0 | 0 | 969.5141 | 22.39308 | 421.2798 | 1.167665 |
| 59 FAIRFAX CC 712 - SHRE' | 0 | 0 | 0 | 814.8136 | 0 | 296.2029 | 2.269091 |
| 59 FAIRFAX CC 713 - TIMB | 0 | 0 | 0 | 1697.628 | 0 | 492.9001 | 3.403636 |
| 59 FAIRFAX CC 714 - WALk | 0 | 0 | 0 | 1633.369 | 40.30754 | 636.5239 | 4.670659 |
| 59 FAIRFAX CC 717 - WOO | 0 | 0 | 0 | 985.0359 | 31.35031 | 345.3113 | 0 |
| 59 FAIRFAX CC 718 - PINE | 0 | 0 | 0 | 1183.237 | 29.111 | 461.5662 | 3.502994 |
| 59 FAIRFAX CC 720 - THOR | 0 | 0 | 0 | 1491.285 | 38.06823 | 614.6542 | 10.50898 |
| 59 FAIRFAX CC 721 - MERF | 0 | 0 | 0 | 2127.678 | 64.93992 | 505.3056 | 4.670659 |
| 59 FAIRFAX CC 723 -GALLI | 0 | 0 | 0 | 1001.752 | 29.111 | 258.9835 | 2.335329 |
| 59 FAIRFAX CC 726 - MAG، | 0 | 0 | 0 | 1843.173 | 0 | 620.1748 | 4.538182 |
| 59 FAIRFAX CC727-OAKT | 0 | 0 | 0 | 1133.09 | 32.46996 | 639.977 | 3.502994 |
| 59 FAIRFAX CC729-NOTT | 0 | 0 | 0 | 1683.516 | 30.23065 | 585.8782 | 8.173653 |
| 59 FAIRFAX CC $730-\mathrm{PEND}$ | 0 | 0 | 0 | 1773.065 | 41.42719 | 699.831 | 5.838323 |
| 59 FAIRFAX CC 731 - TYSO | 0 | 0 | 0 | 1468.599 | 45.9058 | 483.4359 | 3.502994 |
| 59 FAIRFAX CC732-OAK I | 0 | 0 | 0 | 1522.328 | 39.18788 | 902.4136 | 4.670659 |
| 59 FAIRFAX CC 733 - KILM | 0 | 0 | 0 | 2165.885 | 57.10234 | 694.0758 | 4.670659 |
| 59 FAIRFAX CC $734-$ HUN 7 | 0 | 0 | 0 | 1068.615 | 36.94857 | 337.2541 | 1.167665 |
| 59 FAIRFAX CC $735-$ ROTC | 0 | 0 | 0 | 610.1253 | 12.31619 | 231.3586 | 0 |
| 59 FAIRFAX CC 801 - BURK | 0 | 0 | 0 | 2267.374 | 54.86303 | 850.6169 | 8.173653 |
| 59 FAIRFAX CC 802 - CEDA | 0 | 0 | 0 | 668.6304 | 15.67515 | 232.5096 | 0 |
| 59 FAIRFAX CC 803 - CLIFT | 0 | 0 | 0 | 1407.114 | 0 | 1700.836 | 3.38961 |
| 59 FAIRFAX CC 804 - COLC | 0 | 0 | 0 | 769.834 | 0 | 630.2045 | 1.12987 |
| 59 FAIRFAX CC 805 - FAIRF | 0 | 0 | 0 | 678.0657 | 0 | 578.881 | 1.12987 |
| 59 FAIRFAX CC 806 - SYDEI | 0 | 0 | 0 | 1570.088 | 34.70927 | 761.987 | 4.670659 |
| 59 FAIRFAX CC 807 - HUN7 | 0 | 0 | 0 | 953.9923 | 32.46996 | 552.4981 | 3.502994 |
| 59 FAIRFAX CC 811 - POHII | 0 | 0 | 0 | 1069.809 | 23.51273 | 366.03 | 2.335329 |
| 59 FAIRFAX C( 812 - VALLI | 0 | 0 | 0 | 1346.813 | 29.111 | 676.8102 | 1.167665 |
| 59 FAIRFAX CC 815 - WOO | 0 | 0 | 0 | 1028.57 | 0 | 1020.502 | 1.12987 |
| 59 FAIRFAX C( 824 - ORAN | 0 | 0 | 0 | 1807.69 | 59.34165 | 1020.971 | 8.173653 |
| 59 FAIRFAX CC 825 - CHER | 0 | 0 | 0 | 1290.696 | 26.87169 | 710.1903 | 1.167665 |
| 59 FAIRFAX CC 827 - IRVIN | 0 | 0 | 0 | 1242.936 | 38.06823 | 636.5239 | 1.167665 |
| 59 FAIRFAX CC 833 - WHIT | 0 | 0 | 0 | 1460.241 | 47.02546 | 635.3729 | 2.335329 |
| 59 FAIRFAX C( 838 - SANG | 0 | 0 | 0 | 987.7837 | 0 | 753.1421 | 1.12987 |
| 59 FAIRFAX CC $839-$ SILVE | 0 | 0 | 0 | 1507.804 | 0 | 1184.02 | 4.519481 |
| 59 FAIRFAX CC 840 - WEST | 0 | 0 | 0 | 1402.93 | 22.39308 | 683.7165 | 2.335329 |
| 59 FAIRFAX CC 841 - POPE | 0 | 0 | 0 | 592.6702 | 0 | 632.5916 | 0 |
| 59 FAIRFAX CC 842 - PARK | 0 | 0 | 0 | 999.3637 | 23.51273 | 660.6957 | 2.335329 |
| 59 FAIRFAX CC 843 - FAIR I | 0 | 0 | 0 | 1564.118 | 51.50407 | 666.4509 | 2.335329 |
| 59 FAIRFAX CC 844 - CENT | 0 | 0 | 0 | 1396.96 | 40.30754 | 405.1653 | 4.670659 |


| 59 FAIRFAX CC 845 -FOUN | 0 | 0 | 0 | 1529.471 | 0 | 1411.992 | 3.38961 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 846 -GREE | 0 | 0 | 0 | 1671.576 | 30.23065 | 643.4301 | 2.335329 |
| 59 FAIRFAX CC 847 -GREE | 0 | 0 | 0 | 1131.809 | 0 | 640.9466 | 2.25974 |
| 59 FAIRFAX CC 848 - FAIR I | 0 | 0 | 0 | 1484.121 | 32.46996 | 635.3729 | 0 |
| 59 FAIRFAX CC 849 - NEW | 0 | 0 | 0 | 1995.96 | 0 | 1688.9 | 6.779221 |
| 59 FAIRFAX CC $850-$ SOUT | 0 | 0 | 0 | 1161.124 | 0 | 1007.372 | 5.649351 |
| 59 FAIRFAX CC 851 - WILL | 0 | 0 | 0 | 1115.18 | 27.99134 | 679.1123 | 3.502994 |
| 59 FAIRFAX CC901-CENT | 0 | 0 | 0 | 1531.88 | 50.38442 | 587.0293 | 2.335329 |
| 59 FAIRFAX CC 902 - BROC | 0 | 0 | 0 | 2139.986 | 0 | 886.8218 | 2.25974 |
| 59 FAIRFAX CC 903 - CUB F | 0 | 0 | 0 | 1792.031 | 0 | 1101.664 | 1.12987 |
| 59 FAIRFAX CC 904 - STON | 0 | 0 | 0 | 666.5947 | 0 | 514.4283 | 3.38961 |
| 59 FAIRFAX CC 905 - FRAN | 0 | 0 | 0 | 463.9397 | 0 | 257.8109 | 6.779221 |
| 59 FAIRFAX CC 908 - HIDD | 0 | 0 | 0 | 1089.748 | 0 | 741.2064 | 4.519481 |
| 59 FAIRFAX CC 909 - OAK I | 0 | 0 | 0 | 1185.34 | 0 | 587.236 | 4.519481 |
| 59 FAIRFAX CC910-LONL | 0 | 0 | 0 | 1835.152 | 61.58096 | 627.3156 | 4.670659 |
| 59 FAIRFAX CC911-NAVY | 0 | 0 | 0 | 1693.89 | 0 | 899.9511 | 3.38961 |
| 59 FAIRFAX CC 913 - ROCK | 0 | 0 | 0 | 1822.62 | 0 | 1248.473 | 2.25974 |
| 59 FAIRFAX CC 914 - VALE | 0 | 0 | 0 | 1102.494 | 0 | 707.7864 | 3.38961 |
| 59 FAIRFAX CC 915 - VIRGI | 0 | 0 | 0 | 1018.373 | 0 | 1069.438 | 2.25974 |
| 59 FAIRFAX CC 916 - WAPI | 0 | 0 | 0 | 1877.426 | 0 | 1314.12 | 4.519481 |
| 59 FAIRFAX CC 917 - STON | 0 | 0 | 0 | 1009.451 | 0 | 515.6218 | 6.779221 |
| 59 FAIRFAX CC918-CENT | 0 | 0 | 0 | 2112.156 | 64.93992 | 799.9713 | 3.502994 |
| 59 FAIRFAX CC 919 - GREE | 0 | 0 | 0 | 1958.132 | 59.34165 | 797.6692 | 4.670659 |
| 59 FAIRFAX CC 920 - CHAN | 0 | 0 | 0 | 1431.33 | 0 | 719.7221 | 3.38961 |
| 59 FAIRFAX CC921-DEER | 0 | 0 | 0 | 1512.902 | 0 | 1096.89 | 5.649351 |
| 59 FAIRFAX CC 923 - BULL | 0 | 0 | 0 | 911.3101 | 0 | 874.8861 | 7.909091 |
| 59 FAIRFAX CC 924 - SPIN[ | 0 | 0 | 0 | 992.1998 | 27.99134 | 300.4209 | 0 |
| 59 FAIRFAX CC925-OLD 1 | 0 | 0 | 0 | 904.9373 | 0 | 495.3312 | 2.25974 |
| 59 FAIRFAX CC 926 - POW | 0 | 0 | 0 | 2125.29 | 57.10234 | 783.8567 | 2.335329 |
| 59 FAIRFAX CC 927 - ARMF | 0 | 0 | 0 | 971.2144 | 0 | 539.4932 | 1.12987 |
| 59 FAIRFAX CC 928 - POPL | 0 | 0 | 0 | 1314.071 | 0 | 836.6919 | 4.519481 |
| 59 FAIRFAX CC 929 - DIFFII | 0 | 0 | 0 | 312.2671 | 0 | 291.2308 | 1.12987 |
| 59 FAIRFAX CC 930 -LEES । | 0 | 0 | 0 | 1105.043 | 0 | 629.0109 | 5.649351 |
| 59 FAIRFAX CC931-CARS | 0 | 0 | 0 | 1386.721 | 0 | 608.7202 | 4.519481 |
| 59 FAIRFAX CC932-STON | 0 | 0 | 0 | 916.4083 | 0 | 334.1993 | 4.519481 |
| 59 FAIRFAX CC 933 - COMI | 0 | 0 | 0 | 335.5092 | 6.717923 | 155.3901 | 0 |
| 61 FAUQUIER 101 -KETTI | 0 | 0 | 0 | 240.4445 | 0 | 608.819 | 3.075 |
| 61 FAUQUIER 102-CATLI | 0 | 0 | 0 | 484.3075 | 0 | 1298.976 | 1 |
| 61 FAUQUIER 103 -CASA | 0 | 0 | 0 | 383.7865 | 0 | 532.5785 | 1.025 |
| 61 FAUQUIER 104 -LOIS | 0 | 0 | 0 | 238.3446 | 0 | 551.6929 | 0 |
| 61 FAUQUIER 105-OPAL | 0 | 0 | 0 | 279.748 | 0 | 569.0413 | 1.025 |
| 61 FAUQUIER 106 - BALD | 0 | 0 | 0 | 470.4852 | 0 | 707.1582 | 3.075 |
| 61 FAUQUIER 201 - COUF | 0 | 0 | 0 | 1084.312 | 0 | 1108.249 | 1.025 |
| 61 FAUQUIER 202 - AIRLII | 0 | 0 | 0 | 772.1969 | 0 | 1055.213 | 2.05 |
| 61 FAUQUIER 203 -WARI | 0 | 0 | 0 | 994.1457 | 0 | 1030.904 | 4.1 |
| 61 FAUQUIER 301 -MORI | 0 | 0 | 0 | 335.2061 | 0 | 862.0866 | 0 |
| 61 FAUQUIER 302-REMI | 0 | 0 | 0 | 745.6093 | 0 | 1146.922 | 3.075 |


| 61 FAUQUIER 303-BEALI | 0 | 0 | 0 | 938.1418 | 0 | 1202.244 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 401 - MARs | 0 | 0 | 0 | 873.9234 | 0 | 1054.108 | 3.075 |
| 61 FAUQUIER 402 -LEED! | 0 | 0 | 0 | 818.4362 | 0 | 880.6329 | 2.05 |
| 61 FAUQUIER 403 -WATE | 0 | 0 | 0 | 775.6648 | 0 | 1306.033 | 2.05 |
| 61 FAUQUIER 404 -SPRIN | 0 | 0 | 0 | 371.0707 | 0 | 570.1463 | 2.05 |
| 61 FAUQUIER 501-THE F | 0 | 0 | 0 | 834.62 | 0 | 766.8246 | 0 |
| 61 FAUQUIER 502 - NEW | 0 | 0 | 0 | 702.8379 | 0 | 1124.823 | 4.1 |
| 61 FAUQUIER 503-BROA | 0 | 0 | 0 | 634.6349 | 0 | 949.1389 | 4.1 |
| 61 FAUQUIER 504 - VINT | 0 | 0 | 0 | 1127.084 | 0 | 1636.408 | 5.125 |
| 63 FLOYD COL 101 - LOCU | 0 | 0 | 0 | 472.8333 | 0 | 856.7026 | 1 |
| 63 FLOYD COL 201 - LITTL | 0 | 0 | 0 | 661.7319 | 0 | 905.3789 | 2 |
| 63 FLOYD COL 301 - COUF | 0 | 0 | 0 | 592.5082 | 0 | 697.6934 | 0 |
| 63 FLOYD COL 401 - BURK | 0 | 0 | 0 | 407.1294 | 0 | 829.6602 | 2 |
| 63 FLOYD COL 501 - INDIA | 0 | 0 | 0 | 377.7973 | 0 | 947.565 | 0 |
| 65 FLUVANNA 101 - PALN | 0 | 0 | 0 | 1455.884 | 0 | 1286.156 | 6.26087 |
| 65 FLUVANNA 201 - COLU | 0 | 0 | 0 | 849.9401 | 0 | 966.5522 | 3.130435 |
| 65 FLUVANNA 301 - FORK | 0 | 0 | 0 | 992.175 | 0 | 984.2466 | 6.26087 |
| 65 FLUVANNA 401 - CUNs | 0 | 0 | 0 | 1017.615 | 0 | 1567.053 | 4.173913 |
| 65 FLUVANNA 501 - RIVAI | 0 | 0 | 0 | 1474.386 | 0 | 1367.992 | 4.173913 |
| 67 FRANKLIN (102-BURN | 0 | 0 | 0 | 463.6308 | 0 | 1153.109 | 5.113636 |
| 67 FRANKLIN (103-SCRU | 0 | 0 | 0 | 769.453 | 0 | 2028.539 | 2.045455 |
| 67 FRANKLIN ( 201 - GLAD | 0 | 0 | 0 | 317.7939 | 0 | 941.1403 | 3.068182 |
| 67 FRANKLIN ( 202 - PENH | 0 | 0 | 0 | 356.974 | 0 | 717.5135 | 1.022727 |
| 67 FRANKLIN ( 203 - HODC | 0 | 0 | 0 | 69.65345 | 0 | 151.5575 | 0 |
| 67 FRANKLIN ( 204 - DUDL | 0 | 0 | 0 | 244.8754 | 0 | 599.8709 | 2.045455 |
| 67 FRANKLIN ( 301 - SNOV | 0 | 0 | 0 | 137.1302 | 0 | 450.4331 | 1.022727 |
| 67 FRANKLIN (302-FORK | 0 | 0 | 0 | 117.5402 | 0 | 435.5953 | 0 |
| 67 FRANKLIN (303-SONT | 0 | 0 | 0 | 437.5108 | 0 | 561.7166 | 3.068182 |
| 67 FRANKLIN ( 304 - DICKI | 0 | 0 | 0 | 206.7837 | 0 | 248.0032 | 1.022727 |
| 67 FRANKLIN (401-HENR | 0 | 0 | 0 | 202.4304 | 0 | 774.745 | 3.068182 |
| 67 FRANKLIN ( 402 - FERRI | 0 | 0 | 0 | 198.077 | 0 | 393.2016 | 1.022727 |
| 67 FRANKLIN ( 403 -ENDII | 0 | 0 | 0 | 163.2503 | 0 | 436.6552 | 1.022727 |
| 67 FRANKLIN (501- WAIC | 0 | 0 | 0 | 210.0487 | 0 | 518.263 | 2.045455 |
| 67 FRANKLIN (502-CALL | 0 | 0 | 0 | 256.8471 | 0 | 752.4883 | 1.022727 |
| 67 FRANKLIN (503-BOW | 0 | 0 | 0 | 167.6036 | 0 | 386.8426 | 1.022727 |
| 67 FRANKLIN (504-GOG( | 0 | 0 | 0 | 222.0204 | 0 | 657.1024 | 2.045455 |
| 67 FRANKLIN (601-BOON | 0 | 0 | 0 | 379.829 | 0 | 922.0631 | 2.045455 |
| 67 FRANKLIN (602-BONE | 0 | 0 | 0 | 324.3239 | 0 | 881.7891 | 4.090909 |
| 67 FRANKLIN (603-COOF | 0 | 0 | 0 | 201.342 | 0 | 703.7355 | 2.045455 |
| 67 FRANKLIN ( 701 - ROCK | 0 | 0 | 0 | 497.3692 | 0 | 720.693 | 4.090909 |
| 67 FRANKLIN ( 702 - ROCK | 0 | 0 | 0 | 441.8641 | 0 | 485.4079 | 1.022727 |
| 67 FRANKLIN ( 703 -ROCK | 0 | 0 | 0 | 340.6489 | 0 | 434.5355 | 2.045455 |
| 69 FREDERICK 101 - RUSS | 0 | 0 | 0 | 323.6356 | 0 | 1095.098 | 1.048387 |
| 69 FREDERICK 102 -GORE | 0 | 0 | 0 | 413.2914 | 0 | 1116.28 | 5.241935 |
| 69 FREDERICK 103 - KERN | 0 | 0 | 0 | 603.5366 | 0 | 1180.884 | 4.193548 |
| 69 FREDERICK 104 - CEDA | 0 | 0 | 0 | 342.2228 | 0 | 701.1169 |  |
| 69 FREDERICK 201 -GAIN | 0 | 0 | 0 | 228.513 | 0 | 759.3668 | 4.193548 |


| 69 FREDERICK 202 - ALBII | 0 | 0 | 0 | 438.4387 | 0 | 1047.439 | 3.145161 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 69 FREDERICK 203 -REDL | 0 | 0 | 0 | 595.8831 | 0 | 1342.925 | 6.290323 |
| 69 FREDERICK 204 - NAIN | 0 | 0 | 0 | 487.6401 | 0 | 1124.752 | 3.145161 |
| 69 FREDERICK 301 - CLEAI | 0 | 0 | 0 | 255.847 | 0 | 693.7033 | 3.145161 |
| 69 FREDERICK 302 - NEFF' | 0 | 0 | 0 | 1032.135 | 0 | 1180.884 | 9.435484 |
| 69 FREDERICK 303 - WHIT | 0 | 0 | 0 | 680.0721 | 0 | 1456.247 | 3.145161 |
| 69 FREDERICK 401 - CARP | 0 | 0 | 0 | 621.0304 | 0 | 1013.548 | 2.096774 |
| 69 FREDERICK 402 - SHEN | 0 | 0 | 0 | 290.8347 | 0 | 544.3717 | 1.048387 |
| 69 FREDERICK 403 - PARK | 0 | 0 | 0 | 614.4702 | 0 | 1018.844 | 4.193548 |
| 69 FREDERICK 404 - ARMI | 0 | 0 | 0 | 602.4433 | 0 | 968.0073 | 4.193548 |
| 69 FREDERICK 501 - STEPY | 0 | 0 | 0 | 712.873 | 0 | 1123.693 | 2.096774 |
| 69 FREDERICK 502 - NEW | 0 | 0 | 0 | 817.8358 | 0 | 1315.388 | 1.048387 |
| 69 FREDERICK 503 - CANT | 0 | 0 | 0 | 908.585 | 0 | 1356.693 | 2.096774 |
| 69 FREDERICK 601 - MILLE | 0 | 0 | 0 | 415.4781 | 0 | 706.4123 | 0 |
| 69 FREDERICK 602 - ASH - | 0 | 0 | 0 | 672.4185 | 0 | 814.4394 | 1.048387 |
| 69 FREDERICK 603 -GREE | 0 | 0 | 0 | 1051.816 | 0 | 1503.906 | 4.193548 |
| 71 GILES COUI 101 - GLEN | 0 | 0 | 0 | 20.85576 | 0 | 68.56727 | 0 |
| 71 GILES COUI 102 - RICH | 0 | 0 | 0 | 91.10676 | 0 | 302.1245 | 0 |
| 71 GILES COUI 103 - NARR | 0 | 0 | 0 | 353.4503 | 0 | 939.5859 | 0 |
| 71 GILES COUI 201 - PEAR | 0 | 0 | 0 | 470.9012 | 0 | 1293.136 | 0 |
| 71 GILES COUI 202 - STAFI | 0 | 0 | 0 | 74.64168 | 0 | 211.0586 |  |
| 71 GILES COUI 203 - WHIT | 0 | 0 | 0 | 29.63714 | 0 | 170.3468 | 0 |
| 71 GILES COUI301-EGGL | 0 | 0 | 0 | 197.5809 | 0 | 356.7641 | 0 |
| 71 GILES COUI302-PEME | 0 | 0 | 0 | 386.3805 | 0 | 937.4432 | 0 |
| 71 GILES COUI303-NEWI | 0 | 0 | 0 | 308.4458 | 0 | 434.9736 | 0 |
| 73 GLOUCESTI 101 - HARC | 0 | 0 | 0 | 321.3447 | 0 | 829.1738 | 2 |
| 73 GLOUCESTI 102 - SALEI | 0 | 0 | 0 | 290.9473 | 0 | 700.7103 | 0 |
| 73 GLOUCEST103-PEASI | 0 | 0 | 0 | 196.498 | 0 | 552.0748 | 3 |
| 73 GLOUCESTI 201 - COUF | 0 | 0 | 0 | 460.3046 | 0 | 796.2617 | 1 |
| 73 GLOUCESTI202-BOTE | 0 | 0 | 0 | 643.7751 | 0 | 1184.837 | 4 |
| 73 GLOUCESTI301-WHIT | 0 | 0 | 0 | 415.7941 | 0 | 962.9458 | 3 |
| 73 GLOUCESTI302-ROA介 | 0 | 0 | 0 | 536.2983 | 0 | 1207.133 | 3 |
| 73 GLOUCESTI401-HAYE | 0 | 0 | 0 | 561.2677 | 0 | 1115.828 | 0 |
| 73 GLOUCESTI402-SARA | 0 | 0 | 0 | 473.3321 | 0 | 939.5888 |  |
| 73 GLOUCESTI501-ACHII | 0 | 0 | 0 | 478.7603 | 0 | 1538.378 | 2 |
| 73 GLOUCESTI502-WALk | 0 | 0 | 0 | 439.6778 | 0 | 965.0692 | 2 |
| 75 GOOCHLAP 101 - FIFE | 0 | 0 | 0 | 383.8343 | 14.78505 | 496.4678 | 0 |
| 75 GOOCHLAP 102 - HADE | 0 | 0 | 0 | 568.3918 | 10.56075 | 849.2212 | 3.5 |
| 75 GOOCHLAR 201 - THRE | 0 | 0 | 0 | 237.7735 | 5.280374 | 182.9092 | 0 |
| 75 GOOCHLAR 202 - SAND | 0 | 0 | 0 | 843.5297 | 16.8972 | 1043.018 | 2.333333 |
| 75 GOOCHLAR 301 -GOOC | 0 | 0 | 0 | 521.9694 | 6.336449 | 766.4766 | 0 |
| 75 GOOCHLAP $302-\mathrm{GOO}$ | 0 | 0 | 0 | 230.9799 | 2.11215 | 364.7296 | 0 |
| 75 GOOCHLAP 401 - SHAL | 0 | 0 | 0 | 536.6887 | 15.84112 | 676.1108 | 0 |
| 75 GOOCHLAR 402 - CENT | 0 | 0 | 0 | 739.3622 | 23.23364 | 1405.57 | 0 |
| 75 GOOCHLAP 501 - MAN, | 0 | 0 | 0 | 741.6268 | 13.72897 | 1328.269 | 0 |
| 75 GOOCHLAP 502 - BLAIR | 0 | 0 | 0 | 443.8438 | 4.224299 | 800.2277 | 1.166667 |
| 77 GRAYSON (101-BRIDI | 0 | 0 | 0 | 90.50813 | 0 | 147.8399 |  |


| 77 GRAYSON ( 102 - FLATF | 0 | 0 | 0 | 44.70883 | 0 | 94.96289 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 GRAYSON (103-GRAN | 0 | 0 | 0 | 95.96042 | 0 | 171.5807 | 0 |
| 77 GRAYSON (104-MOU | 0 | 0 | 0 | 64.3371 | 0 | 103.5959 | 1 |
| 77 GRAYSON ( 105 - MOU | 0 | 0 | 0 | 42.52792 | 0 | 141.3652 | 0 |
| 77 GRAYSON (106-RUGE | 0 | 0 | 0 | 41.43746 | 0 | 133.8113 | 0 |
| 77 GRAYSON (107-TROU | 0 | 0 | 0 | 21.80919 | 0 | 100.3585 | 0 |
| 77 GRAYSON ( 108 - COMI | 0 | 0 | 0 | 55.61343 | 0 | 121.941 | 0 |
| 77 GRAYSON ( 202 - ELK C | 0 | 0 | 0 | 110.1364 | 0 | 293.5216 | 1 |
| 77 GRAYSON ( 203 - INDEI | 0 | 0 | 0 | 304.2382 | 0 | 765.0987 | 1 |
| 77 GRAYSON (301-BAYM | 0 | 0 | 0 | 151.5739 | 0 | 475.8936 | 0 |
| 77 GRAYSON (302-FAIR\} | 0 | 0 | 0 | 177.7449 | 0 | 651.7907 | 0 |
| 77 GRAYSON ( 401 - FRIES | 0 | 0 | 0 | 106.865 | 0 | 221.2204 | 0 |
| 77 GRAYSON ( 402 - PROV | 0 | 0 | 0 | 140.6693 | 0 | 536.3245 | 0 |
| 77 GRAYSON ( 403 - OLDT | 0 | 0 | 0 | 94.86996 | 0 | 227.6951 | 0 |
| 79 GREENE CC 101 - DYKE | 0 | 0 | 0 | 259.6829 | 0 | 541.1104 | 2.545455 |
| 79 GREENE CC 102 - SWIF | 0 | 0 | 0 | 412.1055 | 0 | 680.7518 | 0 |
| 79 GREENE CC 201 - RUCK | 0 | 0 | 0 | 791.4683 | 0 | 1253.5 | 1.272727 |
| 79 GREENE CC 301 - STAN | 0 | 0 | 0 | 631.1423 | 0 | 1186.952 | 1.272727 |
| 79 GREENE CC 401 - MIDV | 0 | 0 | 0 | 967.601 | 0 | 1387.686 | 8.909091 |
| 81 GREENSVIL 101 - PREC | 0 | 0 | 0 | 239 | 2 | 129.0935 | 0 |
| 81 GREENSVIL 102 - PREC | 0 | 0 | 0 | 70 | 1 | 97.07029 | 0 |
| 81 GREENSVIL 103 - PREC | 0 | 0 | 0 | 204 | 4 | 36.02609 | 1 |
| 81 GREENSVIL 201 - PREC | 0 | 0 | 0 | 312 | 1 | 109.079 | 0 |
| 81 GREENSVIL 202 - PREC | 0 | 0 | 0 | 204 | 2 | 294.213 | 0 |
| 81 GREENSVIL 302 - PREC | 0 | 0 | 0 | 620 | 7 | 300.2174 | 1 |
| 81 GREENSVIL 401 - PREC | 0 | 0 | 0 | 87 | 1 | 155.1123 | 0 |
| 81 GREENSVIL 402 - PREC | 0 | 0 | 0 | 258 | 1 | 148.1072 | 0 |
| 81 GREENSVIL 403 - PREC | 0 | 0 | 0 | 73 | 3 | 112.0812 | 0 |
| 83 HALIFAX C( 101 - CHILE | 0 | 0 | 0 | 278.466 | 0 | 369.9227 | 0 |
| 83 HALIFAX C( 102 - LIBER | 0 | 0 | 0 | 123.3986 | 0 | 200.4192 | 0 |
| 83 HALIFAX C ( 103 - REPU | 0 | 0 | 0 | 325.423 | 0 | 350.7336 | 2.307692 |
| 83 HALIFAX C( 201 - CLAY! | 0 | 0 | 0 | 158.3434 | 0 | 339.0069 | 0 |
| 83 HALIFAX C( 202 - CROS | 0 | 0 | 0 | 194.3802 | 0 | 269.7131 | 0 |
| 83 HALIFAX C( 203 - CLOV | 0 | 0 | 0 | 364.7358 | 0 | 337.9409 | 0 |
| 83 HALIFAX C( 302 - MEAL | 0 | 0 | 0 | 207.4844 | 0 | 88.48294 | 0 |
| 83 HALIFAX C( 304 - VERN | 0 | 0 | 0 | 168.1716 | 0 | 330.4785 | 0 |
| 83 HALIFAX C( 305 - SINAI | 0 | 0 | 0 | 572.2203 | 0 | 328.3463 | 0 |
| 83 HALIFAX C( 401 - COUF | 0 | 0 | 0 | 429.1652 | 0 | 420.0275 | 3.461538 |
| 83 HALIFAX C( $403-\mathrm{CENT}$ | 0 | 0 | 0 | 255.5335 | 0 | 544.7564 | 0 |
| 83 HALIFAX C( 502 - DAN | 0 | 0 | 0 | 435.7173 | 0 | 723.8544 | 1.153846 |
| 83 HALIFAX C(503-SCOT | 0 | 0 | 0 | 133.2269 | 0 | 433.8862 | 0 |
| 83 HALIFAX C(601-BLAC | 0 | 0 | 0 | 216.2206 | 0 | 453.0753 | 1.153846 |
| 83 HALIFAX C(603-MT C. | 0 | 0 | 0 | 458.6498 | 0 | 535.1619 | 2.307692 |
| 83 HALIFAX C( 605 -UNIO | 0 | 0 | 0 | 101.5582 | 0 | 189.7586 | 1.153846 |
| 83 HALIFAX C( 701 - HYCC | 0 | 0 | 0 | 250.0734 | 0 | 712.1278 | 1.153846 |
| 83 HALIFAX C( 702 - MIDV | 0 | 0 | 0 | 105.9263 | 0 | 526.6334 |  |
| 83 HALIFAX C(703-VIRGI | 0 | 0 | 0 | 107.0183 | 0 | 318.7518 | 1.153846 |


| 83 HALIFAX C( 801 - SOUT | 0 | 0 | 0 | 905.2874 | 0 | 369.9227 | 1.153846 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85 HANOVER 1101 -ASHL | 0 | 0 | 0 | 740.1414 | 0 | 577.2733 | 0 |
| 85 HANOVER 1104 -SLIDII | 0 | 0 | 0 | 676.9187 | 0 | 858.4817 | 1.034483 |
| 85 HANOVER 1105 - BERK | 0 | 0 | 0 | 735.7812 | 0 | 453.1171 | 4.137931 |
| 85 HANOVER 1106 -KERSI | 0 | 0 | 0 | 335.7342 | 0 | 567.7228 | 1.034483 |
| 85 HANOVER $1107-\mathrm{CHICl}$ | 0 | 0 | 0 | 512.3217 | 0 | 738.5702 | 2.068966 |
| 85 HANOVER 1201 - BEAV | 0 | 0 | 0 | 478.5303 | 0 | 1396.492 | 1.034483 |
| 85 HANOVER 1202 - BLUN | 0 | 0 | 0 | 378.2461 | 0 | 604.8635 | 0 |
| 85 HANOVER 1203 - WILN | 0 | 0 | 0 | 500.3312 | 0 | 1010.228 | 2.068966 |
| 85 HANOVER 1206 - COUF | 0 | 0 | 0 | 588.625 | 0 | 749.1818 | 1.034483 |
| 85 HANOVER 1208 -OAK I | 0 | 0 | 0 | 433.8384 | 0 | 943.3749 | 2.068966 |
| 85 HANOVER 1209 - WEST | 0 | 0 | 0 | 115.5449 | 0 | 270.5968 | 0 |
| 85 HANOVER 1210-OAK I | 0 | 0 | 0 | 151.5164 | 0 | 367.1628 | 0 |
| 85 HANOVER 1301 - CLAY | 0 | 0 | 0 | 521.0421 | 0 | 1257.479 | 1.034483 |
| 85 HANOVER 1303 -SHAD | 0 | 0 | 0 | 525.4023 | 0 | 1139.69 | 2.068966 |
| 85 HANOVER 304 -ATLEI | 0 | 0 | 0 | 1492.273 | 0 | 2331.378 | 8.275862 |
| 85 HANOVER $1305-\mathrm{COOL}$ | 0 | 0 | 0 | 613.696 | 0 | 1116.345 | 3.103448 |
| 85 HANOVER 1401 - BATT | 0 | 0 | 0 | 390.2366 | 0 | 1423.021 | 3.103448 |
| 85 HANOVER 1403 -COLD | 0 | 0 | 0 | 639.8572 | 0 | 1538.688 | 0 |
| 85 HANOVER 1404 - BLAC | 0 | 0 | 0 | 378.2461 | 0 | 1656.477 | 0 |
| 85 HANOVER 1405 - PEBB | 0 | 0 | 0 | 404.4072 | 0 | 727.9586 | 0 |
| 85 HANOVER 1406 - BEAV | 0 | 0 | 0 | 139.5259 | 0 | 263.1687 | 0 |
| 85 HANOVER 1502 -RURA | 0 | 0 | 0 | 578.8146 | 0 | 1202.299 | 3.103448 |
| 85 HANOVER 1503 -NEWI | 0 | 0 | 0 | 550.4734 | 0 | 860.6041 | 3.103448 |
| 85 HANOVER 1504 - STUD | 0 | 0 | 0 | 236.54 | 0 | 920.0293 | 1.034483 |
| 85 HANOVER 1505 -TOTO | 0 | 0 | 0 | 222.3694 | 0 | 696.1236 | 0 |
| 85 HANOVER 1506 -GEOR | 0 | 0 | 0 | 422.9379 | 0 | 931.7021 | 2.068966 |
| 85 HANOVER 1507 -LAUR | 0 | 0 | 0 | 456.7294 | 0 | 1132.262 | 3.103448 |
| 85 HANOVER 1601 -VILLA | 0 | 0 | 0 | 748.8618 | 0 | 1778.511 | 4.137931 |
| 85 HANOVER 1602 -LEE D | 0 | 0 | 0 | 600.6155 | 0 | 1344.495 | 1.034483 |
| 85 HANOVER 1603 - MECF | 0 | 0 | 0 | 576.6345 | 0 | 712.0411 | 2.068966 |
| 85 HANOVER 1604 -HANC | 0 | 0 | 0 | 361.8954 | 0 | 857.4206 | 0 |
| 85 HANOVER 1701 - FARR | 0 | 0 | 0 | 515.5919 | 0 | 1189.565 | 0 |
| 85 HANOVER 1702 - MON | 0 | 0 | 0 | 610.4259 | 0 | 957.17 | 0 |
| 85 HANOVER $1703-$ ROCK | 0 | 0 | 0 | 545.0231 | 0 | 1139.69 | 3.103448 |
| 85 HANOVER 1704 -ELMC | 0 | 0 | 0 | 680.1889 | 0 | 1109.978 | 1.034483 |
| 85 HANOVER 1705 -SOUT | 0 | 0 | 0 | 286.6822 | 0 | 673.8392 | 4.137931 |
| 87 HENRICO C 101 - COAL | 0 | 0 | 0 | 1503.613 | 29.03201 | 1241.078 | 2.126582 |
| 87 HENRICO C 102 - DUM | 0 | 0 | 0 | 1661.135 | 23.65571 | 481.7413 | 3.189873 |
| 87 HENRICO C 103 -GLEN | 0 | 0 | 0 | 1500.309 | 22.58045 | 1410.66 | 0 |
| 87 HENRICO C 105 -GREE | 0 | 0 | 0 | 1405.576 | 40.85986 | 745.2949 | 3.189873 |
| 87 HENRICO C 106 - HERN | 0 | 0 | 0 | 1252.46 | 44.08564 | 761.4969 | 2.126582 |
| 87 HENRICO C $108-\mathrm{HUNC}$ | 0 | 0 | 0 | 1573.011 | 24.73097 | 1212.994 | 1.063291 |
| 87 HENRICO C 109 - HUN7 | 0 | 0 | 0 | 310.6366 | 9.677336 | 397.4906 | 1.063291 |
| 87 HENRICO C 110 - JOHN | 0 | 0 | 0 | 1676.556 | 40.85986 | 555.1907 | 1.063291 |
| 87 HENRICO C 111 -LAKE! | 0 | 0 | 0 | 1671.049 | 48.38668 | 987.2457 | 2.126582 |
| 87 HENRICO C 112 -LONE | 0 | 0 | 0 | 1061.892 | 21.50519 | 814.4237 |  |


| 87 HENRICO C 113 - MAU | 0 | 0 | 0 | 463.7518 | 23.65571 | 361.8461 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 114 - MON | 0 | 0 | 0 | 443.9239 | 13.97837 | 379.1283 | 1.063291 |
| 87 HENRICO C 115 - STAPI | 0 | 0 | 0 | 1417.693 | 26.88149 | 1404.179 | 1.063291 |
| 87 HENRICO C 117 - WEST | 0 | 0 | 0 | 967.1593 | 16.12889 | 574.6331 | 3.189873 |
| 87 HENRICO C 201 - ADAn | 0 | 0 | 0 | 1333.484 | 9.487952 | 59.1538 | 0 |
| 87 HENRICO C 202 - AZALI | 0 | 0 | 0 | 1973.974 | 17.20415 | 105.8535 | 6.379747 |
| 87 HENRICO C 203 - BELM | 0 | 0 | 0 | 1227.125 | 40.85986 | 424.494 | 3.189873 |
| 87 HENRICO C 204 - BROC | 0 | 0 | 0 | 307.332 | 6.451557 | 194.4247 | 1.063291 |
| 87 HENRICO C 205 -CANT | 0 | 0 | 0 | 272.0824 | 4.301038 | 327.2817 | 0 |
| 87 HENRICO C 206 - CENT | 0 | 0 | 0 | 1698.823 | 4.216867 | 42.25271 | 0 |
| 87 HENRICO C 207 - CHAN | 0 | 0 | 0 | 1500.309 | 21.50519 | 424.494 | 2.126582 |
| 87 HENRICO C 208 - FAIRF | 0 | 0 | 0 | 1496.812 | 6.325301 | 48.59062 | 0 |
| 87 HENRICO C 209 - GLEN | 0 | 0 | 0 | 1030.469 | 11.59639 | 142.6029 | 1 |
| 87 HENRICO C 210 - GREE | 0 | 0 | 0 | 945.1284 | 15.05363 | 187.9439 | 4.253165 |
| 87 HENRICO C 211 - HIGH | 0 | 0 | 0 | 675.8757 | 4.216867 | 24.29531 | 0 |
| 87 HENRICO C 212 - HOLL | 0 | 0 | 0 | 490.189 | 10.7526 | 147.9788 | 1.063291 |
| 87 HENRICO C 213 - HUNC | 0 | 0 | 0 | 986.9872 | 19.35467 | 194.4247 | 0 |
| 87 HENRICO C 214 -LONG | 0 | 0 | 0 | 811.841 | 12.90311 | 333.7625 | 0 |
| 87 HENRICO C 215 - MAPI | 0 | 0 | 0 | 1791.232 | 12.6506 | 66.54802 | 0 |
| 87 HENRICO C 216 - MOO | 0 | 0 | 0 | 452.7363 | 16.12889 | 307.8392 | 0 |
| 87 HENRICO C 217 - MOU | 0 | 0 | 0 | 370.1202 | 8.602076 | 204.146 | 0 |
| 87 HENRICO C 218 - OAKV | 0 | 0 | 0 | 59.4836 | 3.225779 | 56.16715 | 0 |
| 87 HENRICO C 219 - RANL | 0 | 0 | 0 | 214.8019 | 1.07526 | 43.2055 | 0 |
| 87 HENRICO C 220 - RATC | 0 | 0 | 0 | 2102.844 | 14.75904 | 104.5755 |  |
| 87 HENRICO C 221 - STRA | 0 | 0 | 0 | 170.74 | 6.451557 | 91.81169 | 0 |
| 87 HENRICO C 222 - WILD | 0 | 0 | 0 | 1255.765 | 13.97837 | 223.5885 | 0 |
| 87 HENRICO C 223 - YELLC | 0 | 0 | 0 | 1440.825 | 21.50519 | 831.7059 | 1.063291 |
| 87 HENRICO C 224 - ESSE | 0 | 0 | 0 | 395.4249 | 3.162651 | 7.394224 | 0 |
| 87 HENRICO C 301 - CAUS | 0 | 0 | 0 | 884.5432 | 6.451557 | 682.6469 | 0 |
| 87 HENRICO C 302 - CEDA | 0 | 0 | 0 | 946.2299 | 26.88149 | 1026.131 | 3.189873 |
| 87 HENRICO C 303 -INNSI | 0 | 0 | 0 | 1288.811 | 26.88149 | 871.6709 | 1.063291 |
| 87 HENRICO C 304 - JACKS | 0 | 0 | 0 | 589.3283 | 19.35467 | 619.9989 | 1.063291 |
| 87 HENRICO C 305 - NUCK | 0 | 0 | 0 | 1206.195 | 22.58045 | 1230.277 | 3.189873 |
| 87 HENRICO C 306 - POCA | 0 | 0 | 0 | 1100.447 | 21.50519 | 815.5038 | 0 |
| 87 HENRICO C 307 - RIDGI | 0 | 0 | 0 | 597.0391 | 20.42993 | 500.1037 | 1.063291 |
| 87 HENRICO C 308 - RIVEF | 0 | 0 | 0 | 1122.478 | 17.20415 | 1110.381 | 0 |
| 87 HENRICO C 309 - SADL | 0 | 0 | 0 | 1265.679 | 16.12889 | 909.4758 | 0 |
| 87 HENRICO C 310 -SHAD | 0 | 0 | 0 | 1161.032 | 19.35467 | 1194.632 | 3.189873 |
| 87 HENRICO C 311 - SHOR | 0 | 0 | 0 | 1699.689 | 27.95675 | 1187.071 | 2.126582 |
| 87 HENRICO C 312 - SPRIN | 0 | 0 | 0 | 826.1612 | 15.05363 | 535.7482 | 1.063291 |
| 87 HENRICO C 313 - STON | 0 | 0 | 0 | 1504.715 | 32.25779 | 1283.203 | 2.126582 |
| 87 HENRICO C 314 - THRE | 0 | 0 | 0 | 1109.259 | 25.80623 | 888.9531 | 4.253165 |
| 87 HENRICO C 315 -TUCK | 0 | 0 | 0 | 1647.916 | 17.20415 | 530.3475 | 3.189873 |
| 87 HENRICO C 401 - QUIO | 0 | 0 | 0 | 1251.359 | 23.65571 | 823.0648 | 0 |
| 87 HENRICO C 402 - CRES | 0 | 0 | 0 | 1085.025 | 19.35467 | 550.8701 | 1.063291 |
| 87 HENRICO C 403 - DERB | 0 | 0 | 0 | 681.8583 | 7.526817 | 851.1483 | 2.126582 |
| 87 HENRICO C 404 - FREEI | 0 | 0 | 0 | 739.1389 | 18.27941 | 600.5564 |  |


| 87 HENRICO C 405 - GAYT | 0 | 0 | 0 | 1101.548 | 17.20415 | 1183.831 | 3.189873 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 406 -GODI | 0 | 0 | 0 | 1024.44 | 17.20415 | 778.7791 | 0 |
| 87 HENRICO C 407 - LAKEI | 0 | 0 | 0 | 725.9203 | 13.97837 | 737.7339 | 0 |
| 87 HENRICO C 408 - LAUD | 0 | 0 | 0 | 1001.307 | 16.12889 | 725.8524 | 0 |
| 87 HENRICO C 409 - MAYE | 0 | 0 | 0 | 1036.557 | 17.20415 | 951.6011 | 1.063291 |
| 87 HENRICO C 410 - MOO | 0 | 0 | 0 | 496.7982 | 6.451557 | 728.0127 | 0 |
| 87 HENRICO C 411 - PEME | 0 | 0 | 0 | 991.3934 | 19.35467 | 592.9955 | 3.189873 |
| 87 HENRICO C 412 - PINCI | 0 | 0 | 0 | 1243.648 | 22.58045 | 873.8312 | 0 |
| 87 HENRICO C 413 -RIDGI | 0 | 0 | 0 | 1213.906 | 26.88149 | 1101.74 | 2.126582 |
| 87 HENRICO C 414 - ROLLI | 0 | 0 | 0 | 826.1612 | 13.97837 | 662.1243 | 1.063291 |
| 87 HENRICO C 415 - SKIPV | 0 | 0 | 0 | 653.2181 | 15.05363 | 385.6091 | 0 |
| 87 HENRICO C 416 - SPOT | 0 | 0 | 0 | 480.275 | 9.677336 | 374.8077 | 1.063291 |
| 87 HENRICO C 417 - TUCK | 0 | 0 | 0 | 1197.383 | 19.35467 | 1526.234 | 2.126582 |
| 87 HENRICO C 418 - WELE | 0 | 0 | 0 | 795.3178 | 13.97837 | 519.5461 | 0 |
| 87 HENRICO C 419 - WEST | 0 | 0 | 0 | 1009.018 | 24.73097 | 902.9949 | 1.063291 |
| 87 HENRICO C501-ANTIC | 0 | 0 | 0 | 376.0834 | 15.81325 | 939.0665 |  |
| 87 HENRICO C502-CEDA | 0 | 0 | 0 | 727.4528 | 6.325301 | 92.95596 | 0 |
| 87 HENRICO C503-CHICH | 0 | 0 | 0 | 758.614 | 20.03012 | 745.7604 | 0 |
| 87 HENRICO C504-DON/ | 0 | 0 | 0 | 806.9676 | 6.325301 | 286.2621 | 3 |
| 87 HENRICO C505-DORE | 0 | 0 | 0 | 1005.755 | 13.70482 | 794.351 |  |
| 87 HENRICO C506-EANE | 0 | 0 | 0 | 1213.138 | 26.35542 | 331.6838 |  |
| 87 HENRICO C507-ELKO | 0 | 0 | 0 | 99.93074 | 7.379518 | 374.9928 | 0 |
| 87 HENRICO C508-HIGH | 0 | 0 | 0 | 1050.885 | 17.92169 | 176.4051 |  |
| 87 HENRICO C509-LABU | 0 | 0 | 0 | 1022.947 | 17.92169 | 282.0368 | 2 |
| 87 HENRICO C510-MEHI | 0 | 0 | 0 | 1105.685 | 11.59639 | 346.4722 | 0 |
| 87 HENRICO C511-MON | 0 | 0 | 0 | 2242.532 | 25.3012 | 261.9668 |  |
| 87 HENRICO C512-NINE | 0 | 0 | 0 | 497.5047 | 16.86747 | 224.9957 | 0 |
| 87 HENRICO C513-PLEA! | 0 | 0 | 0 | 1776.188 | 15.81325 | 174.2924 |  |
| 87 HENRICO C514-ROLF | 0 | 0 | 0 | 2987.177 | 22.13855 | 255.6289 | 3 |
| 87 HENRICO C515-SAND | 0 | 0 | 0 | 489.983 | 8.433735 | 732.0282 |  |
| 87 HENRICO C516-SULLI | 0 | 0 | 0 | 939.1341 | 17.92169 | 415.1329 | 0 |
| 87 HENRICO C517-TOWI | 0 | 0 | 0 | 291.196 | 12.6506 | 363.3733 | 0 |
| 87 HENRICO C518-WHIT | 0 | 0 | 0 | 646.8635 | 21.08434 | 791.182 |  |
| 89 HENRY COI 101 - BASSI | 0 | 0 | 0 | 213.9963 | 0 | 196.6968 | 0 |
| 89 HENRY COI 102 - GUN | 0 | 0 | 0 | 163.1457 | 0 | 620.7583 | 0 |
| 89 HENRY COI 103 - SCOT | 0 | 0 | 0 | 331.5883 | 0 | 1012.037 | 0 |
| 89 HENRY COI 201 - FIELD | 0 | 0 | 0 | 208.6993 | 0 | 315.138 | 0 |
| 89 HENRY COI 202 - HORS | 0 | 0 | 0 | 350.6572 | 0 | 583.7455 | 0 |
| 89 HENRY COI 203 - HORS | 0 | 0 | 0 | 645.1669 | 0 | 210.4445 | 0 |
| 89 HENRY COI 204 - SPEN | 0 | 0 | 0 | 288.1534 | 0 | 694.784 | 0 |
| 89 HENRY COI 302 - AXTO | 0 | 0 | 0 | 338.0399 | 0 | 296.8044 |  |
| 89 HENRY COI 303 - IRISBI | 0 | 0 | 0 | 510.269 | 0 | 610.5087 | 1 |
| 89 HENRY COI 304 - MOU | 0 | 0 | 0 | 696.3738 | 0 | 593.6088 | 3 |
| 89 HENRY COI 305 - MOU | 0 | 0 | 0 | 250.3207 | 0 | 321.098 | 0 |
| 89 HENRY COI 401 - COLLI | 0 | 0 | 0 | 172.6801 | 0 | 415.6014 | 0 |
| 89 HENRY COI 402 - DANI | 0 | 0 | 0 | 223.5307 | 0 | 427.234 |  |
| 89 HENRY COI 404 - COLLI | 0 | 0 | 0 | 389.8546 | 0 | 724.3943 |  |


| 89 HENRY COI 405 - MOU | 0 | 0 | 0 | 279.2038 | 0 | 365.4602 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 501 - BASSI | 0 | 0 | 0 | 237.3028 | 0 | 260.1474 | 0 |
| 89 HENRY COI 502 - FIGSE | 0 | 0 | 0 | 186.4522 | 0 | 535.1 | 1 |
| 89 HENRY COI 503 - STAN | 0 | 0 | 0 | 201.2836 | 0 | 854.468 | 1 |
| 89 HENRY COI 504-OAK I | 0 | 0 | 0 | 120.7702 | 0 | 287.6427 | 0 |
| 89 HENRY COI 505 - DYER | 0 | 0 | 0 | 148.4178 | 0 | 288.6407 | 0 |
| 89 HENRY COI 601 - FONT | 0 | 0 | 0 | 287.094 | 0 | 648.2536 | 0 |
| 89 HENRY COI 602 - HILLC | 0 | 0 | 0 | 163.1457 | 0 | 201.9844 | 0 |
| 89 HENRY COI 603 -RIDGI | 0 | 0 | 0 | 280.2736 | 0 | 748.8765 | 2 |
| 89 HENRY COI 604 -RIDGI | 0 | 0 | 0 | 206.5805 | 0 | 580.5729 | 1 |
| 91 HIGHLAND 001 - MON | 0 | 0 | 0 | 150 | 0 | 236 | 0 |
| 91 HIGHLAND 003 -WILSI | 0 | 0 | 0 | 30 | 0 | 65 | 0 |
| 91 HIGHLAND 005 - BLUE | 0 | 0 | 0 | 74 | 0 | 149 | 0 |
| 91 HIGHLAND 007 - MILL | 0 | 0 | 0 | 52 | 0 | 89 | 0 |
| 91 HIGHLAND 008 - MCD | 0 | 0 | 0 | 60 | 0 | 199 | 0 |
| 91 HIGHLAND 010 - HEAD | 0 | 0 | 0 | 16 | 0 | 62 | 0 |
| 93 ISLE OF WII 101 - SMITI | 0 | 0 | 0 | 1134.66 | 0 | 0 | 336.6111 |
| 93 ISLE OF WII 102 - CYPR | 0 | 0 | 0 | 906.6625 | 0 | 0 | 275.2166 |
| 93 ISLE OF WII 201 - BART | 0 | 0 | 0 | 1072.866 | 0 | 0 | 339.7866 |
| 93 ISLE OF WII 202 - CARR | 0 | 0 | 0 | 1230.547 | 0 | 0 | 310.1479 |
| 93 ISLE OF WII301-RUSH | 0 | 0 | 0 | 978.0449 | 0 | 0 | 177.8323 |
| 93 ISLE OF WII302-PONS | 0 | 0 | 0 | 1052.623 | 0 | 0 | 146.0765 |
| 93 ISLE OF WII401-COUF | 0 | 0 | 0 | 283.3986 | 0 | 0 | 117.4963 |
| 93 ISLE OF WII 402 - WINE | 0 | 0 | 0 | 147.0264 | 0 | 0 | 35.98986 |
| 93 ISLE OF WII403-LONG | 0 | 0 | 0 | 674.4035 | 0 | 0 | 182.0664 |
| 93 ISLE OF WII501-WALT | 0 | 0 | 0 | 313.2301 | 0 | 0 | 100.5599 |
| 93 ISLE OF WII502-CAMI | 0 | 0 | 0 | 231.1936 | 0 | 0 | 32.81429 |
| 93 ISLE OF WII503-CARR | 0 | 0 | 0 | 298.3143 | 0 | 0 | 51.86774 |
| 93 ISLE OF WII504-ZUNI | 0 | 0 | 0 | 422.9671 | 0 | 0 | 127.023 |
| 93 ISLE OF WII505-RAYN | 0 | 0 | 0 | 229.0628 | 0 | 0 | 63.51152 |
| 95 JAMES CIT) 101 - BERK | 0 | 0 | 0 | 1118.243 | 0 | 1387.252 | 2.066667 |
| 95 JAMES CIT 102 - BERK | 0 | 0 | 0 | 828.8836 | 0 | 844.608 | 5.166667 |
| 95 JAMES CIT 103 - BERK | 0 | 0 | 0 | 1319.988 | 0 | 2034.636 | 3.1 |
| 95 JAMES CIT 104- BERKE | 0 | 0 | 0 | 444.2771 | 0 | 368.0423 | 1.052632 |
| 95 JAMES CIT) 201 - JAME | 0 | 0 | 0 | 455.9686 | 0 | 307.2752 | 1.052632 |
| 95 JAMES CIT) 202 - JAME | 0 | 0 | 0 | 1386.901 | 0 | 951.5769 | 2.066667 |
| 95 JAMES CIT) 203 -JAME | 0 | 0 | 0 | 901.5117 | 0 | 1085.288 | 1.033333 |
| 95 JAMES CIT) 204 - JAME | 0 | 0 | 0 | 1151.675 | 0 | 1619.018 | 2.066667 |
| 95 JAMES CIT 301 - POW | 0 | 0 | 0 | 1231.221 | 0 | 1627.932 | 3.1 |
| 95 JAMES CIT) 302 -POW | 0 | 0 | 0 | 473.8124 | 0 | 345.4202 | 1.033333 |
| 95 JAMES CIT 303 - POW | 0 | 0 | 0 | 304.3467 | 0 | 665.2124 | 1.033333 |
| 95 JAMES CIT) 304 - POW | 0 | 0 | 0 | 1330.364 | 0 | 971.6335 | 3.1 |
| 95 JAMES CIT 401 - STON | 0 | 0 | 0 | 1211.623 | 0 | 1514.277 | 2.066667 |
| 95 JAMES CIT 402 - STON | 0 | 0 | 0 | 1735.007 | 0 | 1935.467 | 4.133333 |
| 95 JAMES CIT 403 - STON | 0 | 0 | 0 | 940.7079 | 0 | 1448.536 | 1.033333 |
| 95 JAMES CIT 501 - ROBE | 0 | 0 | 0 | 872.1861 | 0 | 287.7838 | 3.157895 |
| 95 JAMES CIT 502 -ROBE | 0 | 0 | 0 | 1047.559 | 0 | 1652.177 | 8.421053 |


| 95 JAMES CIT\503-ROBE | 0 | 0 | 0 | 309.8248 | 0 | 136.4394 | 2.105263 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 JAMES CIT\504-ROBE | 0 | 0 | 0 | 1347.9 | 0 | 1163.425 | 4.210526 |
| 97 KING \& QU 101-OWEI | 0 | 0 | 0 | 327.3648 | 0 | 245.0308 | 1 |
| 97 KING \& QU 201 - CLAR | 0 | 0 | 0 | 222.2178 | 0 | 410.1603 | 1 |
| 97 KING \& QU 301 - SHAC | 0 | 0 | 0 | 252.5696 | 0 | 355.8274 | 1 |
| 97 KING \& QU 401 - COUF | 0 | 0 | 0 | 298.0971 | 0 | 324.9322 | 0 |
| 97 KING \& QU 501 - OLDN | 0 | 0 | 0 | 138.7507 | 0 | 392.0493 | 1 |
| 99 KING GEOR 101 - COUF | 0 | 0 | 0 | 663.0373 | 0 | 1181.018 | 0 |
| 99 KING GEOR 102 - PASS, | 0 | 0 | 0 | 317.4474 | 0 | 586.664 | 0 |
| 99 KING GEOR 201 - MON | 0 | 0 | 0 | 812.7554 | 0 | 1680.891 | 4 |
| 99 KING GEOR 301 - DAHL | 0 | 0 | 0 | 968.1021 | 0 | 1206.287 | 1.333333 |
| 99 KING GEOR 401 - SHILC | 0 | 0 | 0 | 856.6577 | 0 | 1483.139 | 2.666667 |
| 101 KING WILLI 101 - WEST | 0 | 0 | 0 | 476.1402 | 0 | 916.5393 | 3 |
| 101 KING WILLI 201-SWEE | 0 | 0 | 0 | 182.0844 | 0 | 357.6484 | 0 |
| 101 KING WILLI 202 - COUF | 0 | 0 | 0 | 383.0051 | 0 | 560.9763 | 0 |
| 101 KING WILLI 301 - AYLE ${ }^{-}$ | 0 | 0 | 0 | 375.6799 | 0 | 1080.244 | 3 |
| 101 KING WILLI 401 - MAN | 0 | 0 | 0 | 481.3725 | 0 | 1093.799 | 0 |
| 101 KING WILLI 501 - MAN ${ }^{\text {d }}$ | 0 | 0 | 0 | 556.7178 | 0 | 1044.792 | 0 |
| 103 LANCASTEF 101 - PREC | 0 | 0 | 0 | 403.3517 | 0 | 715.601 | 0 |
| 103 LANCASTEF 201 - PREC | 0 | 0 | 0 | 574.4706 | 0 | 429.8072 | 1.25 |
| 103 LANCASTEF 301 - PREC | 0 | 0 | 0 | 264.4565 | 0 | 584.9843 | 0 |
| 103 LANCASTEF 302 - PREC | 0 | 0 | 0 | 146.6733 | 0 | 312.587 | 2.5 |
| 103 LANCASTEF 401 - PREC | 0 | 0 | 0 | 612.2501 | 0 | 375.1044 | 1.25 |
| 103 LANCASTEF 501 - PREC | 0 | 0 | 0 | 437.7977 | 0 | 852.916 | 0 |
| 105 LEE COUNT 101 - ELYD, | 0 | 0 | 0 | 82.51427 | 0 | 249.8313 | 0 |
| 105 LEE COUNT 102 - EWIN | 0 | 0 | 0 | 74.81294 | 0 | 270.0304 | 0 |
| 105 LEE COUNT 103 - ROSE | 0 | 0 | 0 | 163.9283 | 0 | 502.8519 | 0 |
| 105 LEE COUNT 201 - BLAC | 0 | 0 | 0 | 49.50856 | 0 | 94.61695 | 0 |
| 105 LEE COUNT 202 - FLAT | 0 | 0 | 0 | 114.4198 | 0 | 425.2447 | 0 |
| 105 LEE COUNT 203 - JONE | 0 | 0 | 0 | 242.0419 | 0 | 588.964 | 0 |
| 105 LEE COUNT 301 - BEN + | 0 | 0 | 0 | 232.1401 | 0 | 646.372 | 1 |
| 105 LEE COUNT 302 - WOO | 0 | 0 | 0 | 126.5219 | 0 | 444.3808 | 0 |
| 105 LEE COUNT 401 - STICK | 0 | 0 | 0 | 94.61636 | 0 | 215.8117 | 1 |
| 105 LEE COUNT 402 - JASPE | 0 | 0 | 0 | 47.30818 | 0 | 184.9815 | 1 |
| 105 LEE COUNT 403 - SEMII | 0 | 0 | 0 | 58.31008 | 0 | 260.4624 | 0 |
| 105 LEE COUNT 404 - DRYD | 0 | 0 | 0 | 147.4255 | 0 | 425.2447 | 0 |
| 105 LEE COUNT 501 - SAIN7 | 0 | 0 | 0 | 101.2175 | 0 | 167.9717 | 0 |
| 105 LEE COUNT 502 - PENN | 0 | 0 | 0 | 141.9245 | 0 | 464.5799 | 0 |
| 105 LEE COUNT 503 - ROBE | 0 | 0 | 0 | 14.30247 | 0 | 71.22849 | 0 |
| 105 LEE COUNT 504 - KEOK | 0 | 0 | 0 | 44.00761 | 0 | 91.42762 | 0 |
| 107 LOUDOUN 107-LITTL | 0 | 0 | 0 | 1092.919 | 0 | 800.5581 | 2.239316 |
| 107 LOUDOUN 108-MERC | 0 | 0 | 0 | 1128.733 | 0 | 682.2051 | 5.598291 |
| 107 LOUDOUN 112 - FREEI | 0 | 0 | 0 | 888.4295 | 0 | 460.0139 | 1.119658 |
| 107 LOUDOUN 114 - DULL | 0 | 0 | 0 | 1084.831 | 0 | 597.3481 | 0 |
| 107 LOUDOUN 117-CART | 0 | 0 | 0 | 665.4557 | 0 | 250.1046 | 3.358974 |
| 107 LOUDOUN 118-MOO | 0 | 0 | 0 | 1418.715 | 0 | 605.1639 | 1.119658 |
| 107 LOUDOUN 119 - ARCC | 0 | 0 | 0 | 1031.687 | 0 | 509.1416 | 3.358974 |


| 107 LOUDOUN 120 - LUNS | 0 | 0 | 0 | 1325.135 | 0 | 782.6935 | 1.119658 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 121-TOWI | 0 | 0 | 0 | 794.8498 | 0 | 502.4424 | 1.119658 |
| 107 LOUDOUN 122-HUTC | 0 | 0 | 0 | 1302.029 | 0 | 836.2874 | 1.119658 |
| 107 LOUDOUN 123 - CARD | 0 | 0 | 0 | 733.6187 | 0 | 516.9574 | 1.119658 |
| 107 LOUDOUN 124 - LIBER | 0 | 0 | 0 | 923.0887 | 0 | 509.1416 | 0 |
| 107 LOUDOUN 125-ROCK | 0 | 0 | 0 | 1207.294 | 0 | 510.2581 | 0 |
| 107 LOUDOUN 126-GOSHE | 0 | 0 | 0 | 1240.798 | 0 | 692.2539 | 1.119658 |
| 107 LOUDOUN 207 - RIVEF | 0 | 0 | 0 | 750.9482 | 0 | 576.1339 | 2.239316 |
| 107 LOUDOUN 208 - ALGO | 0 | 0 | 0 | 786.7627 | 0 | 552.6866 | 5.598291 |
| 107 LOUDOUN 209 - POTC | 0 | 0 | 0 | 1237.332 | 0 | 715.7012 | 2.239316 |
| 107 LOUDOUN 210 - CASC | 0 | 0 | 0 | 1446.442 | 0 | 793.8589 | 2.239316 |
| 107 LOUDOUN 213 - COUN | 0 | 0 | 0 | 509.4895 | 0 | 259.0369 | 5.598291 |
| 107 LOUDOUN 214 - SUGA | 0 | 0 | 0 | 1365.57 | 0 | 1001.535 | 1.119658 |
| 107 LOUDOUN 215 -SUGA | 0 | 0 | 0 | 1369.036 | 0 | 736.9154 | 6.717949 |
| 107 LOUDOUN 216 -LOWI | 0 | 0 | 0 | 1055.949 | 0 | 759.2462 | 1.119658 |
| 107 LOUDOUN 217 - SOUT | 0 | 0 | 0 | 1371.347 | 0 | 858.6182 | 3.358974 |
| 107 LOUDOUN 218 - UNIV | 0 | 0 | 0 | 963.5244 | 0 | 429.8673 | 2.239316 |
| 107 LOUDOUN 219-GALIL | 0 | 0 | 0 | 1039.774 | 0 | 561.6189 | 3.358974 |
| 107 LOUDOUN 301 - PURC | 0 | 0 | 0 | 1131.044 | 0 | 1184.647 | 5.598291 |
| 107 LOUDOUN 302 -ROUN | 0 | 0 | 0 | 859.5469 | 0 | 1125.471 | 5.598291 |
| 107 LOUDOUN 303 - HILLS | 0 | 0 | 0 | 798.3157 | 0 | 1040.614 | 1.119658 |
| 107 LOUDOUN 305 - PHILC | 0 | 0 | 0 | 377.7847 | 0 | 491.277 | 1.119658 |
| 107 LOUDOUN 307 - MIDC | 0 | 0 | 0 | 530.285 | 0 | 393.0216 | 1.119658 |
| 107 LOUDOUN 308-ST LO | 0 | 0 | 0 | 512.9554 | 0 | 429.8673 | 2.239316 |
| 107 LOUDOUN 309 - ALDIE | 0 | 0 | 0 | 353.5233 | 0 | 378.5066 | 1.119658 |
| 107 LOUDOUN 310 - MOU | 0 | 0 | 0 | 1149.528 | 0 | 1340.963 | 4.478632 |
| 107 LOUDOUN 311-ROUN | 0 | 0 | 0 | 797.1604 | 0 | 1106.49 | 5.598291 |
| 107 LOUDOUN 312 - BRIAF | 0 | 0 | 0 | 1434.889 | 0 | 710.1185 | 4.478632 |
| 107 LOUDOUN 313 - PINEE | 0 | 0 | 0 | 1181.877 | 0 | 773.7612 | 3.358974 |
| 107 LOUDOUN 314 -LEGA | 0 | 0 | 0 | 1273.146 | 0 | 616.3293 | 3.358974 |
| 107 LOUDOUN 315 - FIREF | 0 | 0 | 0 | 277.2732 | 0 | 380.7396 | 0 |
| 107 LOUDOUN 316 - CREIG | 0 | 0 | 0 | 1432.578 | 0 | 696.7201 | 2.239316 |
| 107 LOUDOUN 318 - MADI | 0 | 0 | 0 | 1015.513 | 0 | 1189.114 | 3.358974 |
| 107 LOUDOUN 319 - JOHN | 0 | 0 | 0 | 1598.942 | 0 | 1037.264 | 2.239316 |
| 107 LOUDOUN 320-STON | 0 | 0 | 0 | 1649.776 | 0 | 579.4835 | 0 |
| 107 LOUDOUN 321 - BRAN | 0 | 0 | 0 | 897.672 | 0 | 423.1681 | 0 |
| 107 LOUDOUN 322-BUFFA | 0 | 0 | 0 | 925.3993 | 0 | 497.9762 | 1.119658 |
| 107 LOUDOUN 401 - WEST | 0 | 0 | 0 | 1023.6 | 0 | 1340.963 | 4.478632 |
| 107 LOUDOUN 402 - WATE | 0 | 0 | 0 | 886.1189 | 0 | 1184.647 | 2.239316 |
| 107 LOUDOUN 403 - LUCK | 0 | 0 | 0 | 1156.46 | 0 | 1201.395 | 3.358974 |
| 107 LOUDOUN 407 - HARP | 0 | 0 | 0 | 753.2589 | 0 | 563.852 | 0 |
| 107 LOUDOUN 408 - EVER | 0 | 0 | 0 | 1189.964 | 0 | 979.2043 | 0 |
| 107 LOUDOUN 409 - CLAR | 0 | 0 | 0 | 883.8083 | 0 | 1171.249 | 2.239316 |
| 107 LOUDOUN 411 - EAST | 0 | 0 | 0 | 661.9898 | 0 | 930.0766 | 1.119658 |
| 107 LOUDOUN 413 - TUSC | 0 | 0 | 0 | 39.28037 | 0 | 60.29308 | 0 |
| 107 LOUDOUN 414 - RED F | 0 | 0 | 0 | 749.7929 | 0 | 418.702 | 1.119658 |
| 107 LOUDOUN 416 - HAMI | 0 | 0 | 0 | 1178.411 | 0 | 1321.982 | 12.31624 |


| 107 LOUDOUN 420 - RIVEF | 0 | 0 | 0 | 816.8006 | 0 | 888.7647 | 1.119658 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 421 - BETM | 0 | 0 | 0 | 103.9774 | 0 | 136.2177 | 0 |
| 107 LOUDOUN 422 - SYCO | 0 | 0 | 0 | 717.4444 | 0 | 855.2685 | 0 |
| 107 LOUDOUN 501 - WEST | 0 | 0 | 0 | 1151.839 | 0 | 746.9643 | 4.478632 |
| 107 LOUDOUN 502 -EAST | 0 | 0 | 0 | 1421.025 | 0 | 599.5812 | 3.358974 |
| 107 LOUDOUN 503 - DRY ${ }^{\text {r }}$ | 0 | 0 | 0 | 593.8268 | 0 | 451.0816 | 0 |
| 107 LOUDOUN 504-SMAF | 0 | 0 | 0 | 1303.184 | 0 | 819.5393 | 6.717949 |
| 107 LOUDOUN 505-COOL | 0 | 0 | 0 | 1168.013 | 0 | 965.8059 | 5.598291 |
| 107 LOUDOUN 506-BRAN | 0 | 0 | 0 | 819.1112 | 0 | 386.3223 | 3.358974 |
| 107 LOUDOUN 507 -GREE | 0 | 0 | 0 | 603.0692 | 0 | 489.0439 | 1.119658 |
| 107 LOUDOUN 508-BALLS | 0 | 0 | 0 | 1253.506 | 0 | 828.4716 | 2.239316 |
| 107 LOUDOUN 509-TOLB | 0 | 0 | 0 | 1504.207 | 0 | 716.8178 | 1.119658 |
| 107 LOUDOUN 510 - HERI7 | 0 | 0 | 0 | 688.5618 | 0 | 614.0962 | 1.119658 |
| 107 LOUDOUN 615 - HILLS | 0 | 0 | 0 | 1113.714 | 0 | 802.7912 | 1.119658 |
| 107 LOUDOUN 616 -EAGL | 0 | 0 | 0 | 1304.339 | 0 | 829.5881 | 1.119658 |
| 107 LOUDOUN 617-OAK | 0 | 0 | 0 | 673.5428 | 0 | 187.5785 | 1.119658 |
| 107 LOUDOUN 619 - RIDG\| | 0 | 0 | 0 | 755.5695 | 0 | 206.5596 | 0 |
| 107 LOUDOUN 620 -RUSS | 0 | 0 | 0 | 1441.821 | 0 | 913.3285 | 8.957265 |
| 107 LOUDOUN 621 - DOM | 0 | 0 | 0 | 1548.109 | 0 | 854.152 | 2.239316 |
| 107 LOUDOUN 622 -FARN | 0 | 0 | 0 | 1566.594 | 0 | 772.6447 | 4.478632 |
| 107 LOUDOUN 623 -WELL | 0 | 0 | 0 | 1757.219 | 0 | 1029.449 | 5.598291 |
| 107 LOUDOUN 625 - MILL | 0 | 0 | 0 | 475.9857 | 0 | 416.4689 | 1.119658 |
| 107 LOUDOUN 626 - ASHB | 0 | 0 | 0 | 622.7094 | 0 | 541.5212 | 1.119658 |
| 107 LOUDOUN 627 - ASHB | 0 | 0 | 0 | 545.304 | 0 | 199.8604 | 3.358974 |
| 107 LOUDOUN 628 - MOO | 0 | 0 | 0 | 1589.7 | 0 | 671.0397 | 10.07692 |
| 107 LOUDOUN 629 - DISCC | 0 | 0 | 0 | 343.1256 | 0 | 209.9092 | 0 |
| 107 LOUDOUN 701-SULL) | 0 | 0 | 0 | 1168.013 | 0 | 606.2804 | 7.837607 |
| 107 LOUDOUN 702 - PARK | 0 | 0 | 0 | 1049.017 | 0 | 538.1716 | 4.478632 |
| 107 LOUDOUN 703 -ROLLI | 0 | 0 | 0 | 1509.984 | 0 | 453.3147 | 2.239316 |
| 107 LOUDOUN 705 - FORE | 0 | 0 | 0 | 1519.226 | 0 | 796.092 | 4.478632 |
| 107 LOUDOUN 707 - CLAU | 0 | 0 | 0 | 1081.365 | 0 | 462.247 | 0 |
| 107 LOUDOUN 708 - SENE | 0 | 0 | 0 | 1035.153 | 0 | 674.3893 | 3.358974 |
| 107 LOUDOUN 709 - MIRR | 0 | 0 | 0 | 1292.786 | 0 | 566.085 | 6.717949 |
| 107 LOUDOUN 710 - STERI | 0 | 0 | 0 | 1013.202 | 0 | 476.762 | 6.717949 |
| 107 LOUDOUN 808 - STON | 0 | 0 | 0 | 1461.461 | 0 | 968.0389 | 4.478632 |
| 107 LOUDOUN 810 - CEDA | 0 | 0 | 0 | 1302.029 | 0 | 767.062 | 1.119658 |
| 107 LOUDOUN 813 - SELDI | 0 | 0 | 0 | 1043.24 | 0 | 505.792 | 2.239316 |
| 107 LOUDOUN 814 - NEW | 0 | 0 | 0 | 1132.199 | 0 | 1030.565 | 3.358974 |
| 107 LOUDOUN 815 - BELM | 0 | 0 | 0 | 1221.157 | 0 | 876.4828 | 1.119658 |
| 107 LOUDOUN 817 -SAND | 0 | 0 | 0 | 1479.946 | 0 | 1030.565 | 3.358974 |
| 107 LOUDOUN 818 - BROA | 0 | 0 | 0 | 1005.115 | 0 | 686.6712 | 1.119658 |
| 107 LOUDOUN 819 - HERI7 | 0 | 0 | 0 | 936.9523 | 0 | 643.1262 | 0 |
| 107 LOUDOUN 820 - BELM | 0 | 0 | 0 | 1101.006 | 0 | 706.7689 | 1.119658 |
| 107 LOUDOUN 822 - RIVEF | 0 | 0 | 0 | 827.1984 | 0 | 556.0362 | 4.478632 |
| 109 LOUISA CO 101-ZION | 0 | 0 | 0 | 917.5317 | 24.12183 | 982.6425 | 2 |
| 109 LOUISA CO 102 - MECF | 0 | 0 | 0 | 387.1536 | 9.86802 | 510.7581 | 0 |
| 109 LOUISA CO 201 -LOUIS | 0 | 0 | 0 | 411.7703 | 10.96447 | 587.4258 | 2 |


| 109 LOUISA CO 202 - LOUIS | 0 | 0 | 0 | 403.9378 | 13.15736 | 544.2327 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 109 LOUISA CO 301 - PATR | 0 | 0 | 0 | 1013.761 | 19.73604 | 791.5131 | 0 |
| 109 LOUISA CO 302 - PATR | 0 | 0 | 0 | 212.5988 | 2.192893 | 267.7971 | 0 |
| 109 LOUISA CO 401 - MINE | 0 | 0 | 0 | 524.7834 | 25.21827 | 969.6845 | 0 |
| 109 LOUISA CO 402 - YANC | 0 | 0 | 0 | 251.7618 | 8.771574 | 253.7593 | 0 |
| 109 LOUISA CO 501 - FRED | 0 | 0 | 0 | 273.0216 | 7.675127 | 230.0031 | 0 |
| 109 LOUISA CO 502 - CUCK | 0 | 0 | 0 | 281.9732 | 10.96447 | 518.3169 | 0 |
| 109 LOUISA CO 503 - ELK C | 0 | 0 | 0 | 203.6473 | 10.96447 | 467.565 | 0 |
| 109 LOUISA CO 601 - BUMI | 0 | 0 | 0 | 224.9072 | 19.73604 | 666.2532 | 0 |
| 109 LOUISA CO 602 - LOCU | 0 | 0 | 0 | 387.1536 | 10.96447 | 794.7526 | 0 |
| 109 LOUISA CO 701 - SHEL` & 0 & 0 & 0 & 407.2946 & 23.02538 & 806.6307 & 0 \\ \hline 109 LOUISA CO 702 - SOUT & 0 & 0 & 0 & 354.7043 & 18.63959 & 590.6653 & 0 \\ \hline 111 LUNENBUR 101 - PLYM & 0 & 0 & 0 & 151.7762 & 0 & 344.8829 & 0 \\ \hline 111 LUNENBUR 201 - BROV & 0 & 0 & 0 & 179.3718 & 0 & 343.825 & 1 \\ \hline 111 LUNENBUR 301 -ROSE & 0 & 0 & 0 & 73.58845 & 0 & 279.2917 & 1 \\ \hline 111 LUNENBUR 302 - FLAT & 0 & 0 & 0 & 160.9747 & 0 & 208.4108 & 0 \\ \hline 111 LUNENBUR 401 - ARRC & 0 & 0 & 0 & 55.19134 & 0 & 185.1365 & 0 \\ \hline 111 LUNENBUR 402 - PLEA! & 0 & 0 & 0 & 143.7274 & 0 & 301.5081 & 1 \\ \hline 111 LUNENBUR 501 -REED & 0 & 0 & 0 & 182.8213 & 0 & 150.2251 & 1 \\ \hline 111 LUNENBUR 502 - PEOP & 0 & 0 & 0 & 290.9043 & 0 & 121.6612 & 1 \\ \hline 111 LUNENBUR601-HOUP & 0 & 0 & 0 & 375.991 & 0 & 235.9168 & 1 \\ \hline 111 LUNENBUR 701 - MEHI & 0 & 0 & 0 & 139.1282 & 0 & 163.9781 & 1 \\ \hline 111 LUNENBUR 702 - VICTC & 0 & 0 & 0 & 157.5253 & 0 & 222.1638 & 1 \\ \hline 113 MADISON 1001 - OAK I & 0 & 0 & 0 & 323.6238 & 0 & 364.7681 & 2 \\ \hline 113 MADISON (002-RADI, & 0 & 0 & 0 & 418.6742 & 0 & 582.3491 & 1 \\ \hline 113 MADISON (003-ROCF & 0 & 0 & 0 & 145.9702 & 0 & 354.1024 & 0 \\ \hline 113 MADISON (004-GRAV & 0 & 0 & 0 & 21.49949 & 0 & 43.72951 & 1 \\ \hline 113 MADISON 1005 - MADI & 0 & 0 & 0 & 442.4368 & 0 & 687.9399 & 2 \\ \hline 113 MADISON (006-WOLI & 0 & 0 & 0 & 242.1521 & 0 & 407.431 & 1 \\ \hline 113 MADISON (007-BRIGI & 0 & 0 & 0 & 306.6506 & 0 & 816.9952 & 2 \\ \hline 113 MADISON 1008 - CRIGI & 0 & 0 & 0 & 194.6269 & 0 & 333.8375 & 1 \\ \hline 113 MADISON 1009 - ETLAI & 0 & 0 & 0 & 106.3659 & 0 & 221.8473 & 0 \\ \hline 115 MATHEWS 001 - CHES & 0 & 0 & 0 & 307.4374 & 0 & 726.0161 & 0 \\ \hline 115 MATHEWS 002 - WEST & 0 & 0 & 0 & 532.2434 & 0 & 1075.107 & 1.2 \\ \hline 115 MATHEWS 003 - PIANI & 0 & 0 & 0 & 538.3192 & 0 & 1225.877 & 4.8 \\ \hline 117 MECKLENB 101 - WRIG & 0 & 0 & 0 & 248.9802 & 0 & 213.2797 & 0 \\ \hline 117 MECKLENB 102 - PEAR & 0 & 0 & 0 & 45.57226 & 0 & 116.9249 & 1.1 \\ \hline 117 MECKLENB 103 - SOUT & 0 & 0 & 0 & 392.366 & 0 & 325.874 & 1.1 \\ \hline 117 MECKLENB 201 - BOYD & 0 & 0 & 0 & 225.6383 & 0 & 186.2137 & 0 \\ \hline 117 MECKLENB 202 - BLUE: & 0 & 0 & 0 & 104.4827 & 0 & 64.95827 & 0 \\ \hline 117 MECKLENB 203 - CHAS & 0 & 0 & 0 & 273.4336 & 0 & 76.86729 & 0 \\ \hline 117 MECKLENB 301 - BRAC & 0 & 0 & 0 & 253.4262 & 0 & 629.0126 & 1.1 \\ \hline 117 MECKLENB 302 - LACR & 0 & 0 & 0 & 246.7571 & 0 & 292.3122 & 0 \\ \hline 117 MECKLENB 401 - AMEF & 0 & 0 & 0 & 759.1672 & 0 & 380.0059 & 1.1 \\ \hline 117 MECKLENB 402 - PARK & 0 & 0 & 0 & 106.7058 & 0 & 67.12355 & 0 \\ \hline 117 MECKLENB 501 - SOUT & 0 & 0 & 0 & 553.5362 & 0 & 725.3674 & 1.1 \\ \hline 117 MECKLENB 601 - BASK & 0 & 0 & 0 & 212.3 & 0 & 342.1136 & 3.3 \\ \hline \end{tabular} \begin{tabular}{\|c|c|c|c|c|c|c|c|} \hline 117 MECKLENB 602 - UNIO & 0 & 0 & 0 & 64.46808 & 0 & 241.4282 & 0 \\ \hline 117 MECKLENB 603 - SMITI & 0 & 0 & 0 & 88.92148 & 0 & 147.2387 & 0 \\ \hline 117 MECKLENB 604 - LAKE & 0 & 0 & 0 & 104.4827 & 0 & 210.0317 & 0 \\ \hline 117 MECKLENB 701 - CHAS & 0 & 0 & 0 & 262.3184 & 0 & 300.9733 & 0 \\ \hline 117 MECKLENB 702 - SUNS & 0 & 0 & 0 & 200.0733 & 0 & 293.3949 & 0 \\ \hline 117 MECKLENB 801 - FINC & 0 & 0 & 0 & 84.47541 & 0 & 110.4291 & 0 \\ \hline 117 MECKLENB 802 - BLUE: & 0 & 0 & 0 & 212.3 & 0 & 461.2037 & 0 \\ \hline 117 MECKLENB 803 - CHAS & 0 & 0 & 0 & 233.4189 & 0 & 267.4116 & 0 \\ \hline 117 MECKLENB 901 - AVER & 0 & 0 & 0 & 31.12252 & 0 & 143.9908 & 0 \\ \hline 117 MECKLENB 902 - BUFF, & 0 & 0 & 0 & 70.02567 & 0 & 239.263 & 2.2 \\ \hline 117 MECKLENB 903 - CLAR & 0 & 0 & 0 & 379.0278 & 0 & 780.5819 & 0 \\ \hline 119 MIDDLESE) 101 - SALU & 0 & 0 & 0 & 130.0803 & 0 & 229.5544 & 1 \\ \hline 119 MIDDLESE) 102 - URBA & 0 & 0 & 0 & 221.2477 & 0 & 438.6321 & 0 \\ \hline 119 MIDDLESE) 201 - NEW & 0 & 0 & 0 & 283.5083 & 0 & 890.1969 & 0 \\ \hline 119 MIDDLESE) 302 - CHUR & 0 & 0 & 0 & 412.4768 & 0 & 517.3057 & 2 \\ \hline 119 MIDDLESE) 401- HARN & 0 & 0 & 0 & 384.6819 & 0 & 505.4508 & 1 \\ \hline 119 MIDDLESE) 501 - WILTI & 0 & 0 & 0 & 368.0049 & 0 & 746.8601 & 0 \\ \hline 121 MONTGON 101 - PREC & 814.8375 & 578.5385 & 1 & 1104.756 & 0 & 752.2588 & 0 \\ \hline 121 MONTGON 102 - PREC & 0 & 0 & 0 & 1288.882 & 0 & 333.5189 & 1.029412 \\ \hline 121 MONTGON 103 - PREC & 0 & 0 & 0 & 1734.033 & 0 & 716.487 & 2.058824 \\ \hline 121 MONTGON 201 - PREC & 0 & 0 & 0 & 120.2234 & 0 & 118.8885 & 0 \\ \hline 121 MONTGON 202 - PREC & 940.031 & 982.0481 & 9 & 991.0308 & 0 & 955.3161 & 1.029412 \\ \hline 121 MONTGON 203 - PREC & 0 & 0 & 0 & 549.1285 & 0 & 677.559 & 3.088235 \\ \hline 121 MONTGON 204 - PREC & 0 & 0 & 0 & 1230.395 & 0 & 1147.852 & 3.088235 \\ \hline 121 MONTGON 301 - PREC & 387.4525 & 936.9808 & 2 & 412.6587 & 0 & 994.2441 & 3.088235 \\ \hline 121 MONTGON 302 - PREC & 0 & 0 & 0 & 569.7073 & 0 & 900.6063 & 0 \\ \hline 121 MONTGON 303 - PREC & 154.3335 & 366.8269 & 1 & 158.1317 & 0 & 371.3949 & 0 \\ \hline 121 MONTGON 304 - PREC & 598.9865 & 810.1635 & 3 & 669.352 & 0 & 879.5641 & 2.058824 \\ \hline 121 MONTGON 401 - PREC & 0 & 0 & 0 & 401.8278 & 0 & 566.0353 & 0 \\ \hline 121 MONTGON 402 - PREC & 0 & 0 & 0 & 431.0713 & 0 & 1055.267 & 0 \\ \hline 121 MONTGON 403 - PREC & 0 & 0 & 0 & 353.0886 & 0 & 794.3432 & 0 \\ \hline 121 MONTGON 404 - PREC & 0 & 0 & 0 & 183.0428 & 0 & 463.9806 & 0 \\ \hline 121 MONTGON 405 - PREC & 0 & 0 & 0 & 760.3318 & 0 & 933.2217 & 2.058824 \\ \hline 121 MONTGON 501 - PREC & 0 & 0 & 0 & 955.2887 & 0 & 727.0081 & 1.029412 \\ \hline 121 MONTGON 502 - PREC & 0 & 0 & 0 & 491.7246 & 0 & 634.4224 & 0 \\ \hline 121 MONTGON 503 - PREC & 0 & 0 & 0 & 1061.432 & 0 & 366.1343 & 5.147059 \\ \hline 121 MONTGON 601 - PREC & 0 & 0 & 0 & 1569.403 & 0 & 516.5861 & 3.088235 \\ \hline 121 MONTGON 602 - PREC & 0 & 0 & 0 & 1449.179 & 0 & 445.0426 & 3.088235 \\ \hline 121 MONTGON 603 - PREC & 0 & 0 & 0 & 397.4954 & 0 & 207.2657 & 3.088235 \\ \hline 121 MONTGON 701 - PREC & 59.35902 & 31.44231 & 0 & 1843.426 & 0 & 635.4746 & 1.029412 \\ \hline 121 MONTGON 702 - PREC & 0 & 0 & 0 & 1243.392 & 0 & 313.5288 & 1.029412 \\ \hline 125 NELSON CC 101 - ROCK & 0 & 0 & 0 & 821.3683 & 0 & 720.4116 & 1.083333 \\ \hline 125 NELSON CC 201 - LOVII & 0 & 0 & 0 & 385.7438 & 0 & 431.3969 & 3.25 \\ \hline 125 NELSON CC 202 - SCHU & 0 & 0 & 0 & 257.1625 & 0 & 246.5125 & 4.333333 \\ \hline 125 NELSON CC 301 - SHIPN & 0 & 0 & 0 & 514.3251 & 0 & 535.5272 & 1.083333 \\ \hline 125 NELSON CC 302 - GLAD & 0 & 0 & 0 & 72.04985 & 0 & 103.0677 & 0 \\ \hline 125 NELSON CC 401 - ROSE & 0 & 0 & 0 & 515.4335 & 0 & 719.3491 & 2.166667 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 125 NELSON CC 402 - MON & 0 & 0 & 0 & 37.68761 & 0 & 69.06601 & 0 \\ \hline 125 NELSON CC 501 - FABE & 0 & 0 & 0 & 324.7785 & 0 & 251.8253 & 1.083333 \\ \hline 125 NELSON CC 502 - NELL) & 0 & 0 & 0 & 740.4508 & 0 & 608.8435 & 0 \\ \hline 127 NEW KENT 102 - TUNS & 0 & 0 & 0 & 115.5133 & 0 & 414.2565 & 1 \\ \hline 127 NEW KENT 103 - SOUT & 0 & 0 & 0 & 377.0527 & 0 & 1152.944 & 1 \\ \hline 127 NEW KENT 201 - QUIN & 0 & 0 & 0 & 575.3868 & 0 & 997.5973 & 2 \\ \hline 127 NEW KENT 202 - KENT & 0 & 0 & 0 & 202.6931 & 0 & 674.2236 & 0 \\ \hline 127 NEW KENT 301 - WATr & 0 & 0 & 0 & 471.8607 & 0 & 541.0697 & 0 \\ \hline 127 NEW KENT 302 - CUMI & 0 & 0 & 0 & 409.7451 & 0 & 761.9361 & 1 \\ \hline 127 NEW KENT 401 - PROV & 0 & 0 & 0 & 563.3996 & 0 & 943.7017 & 1 \\ \hline 127 NEW KENT 403 - MOU & 0 & 0 & 0 & 208.1418 & 0 & 391.0074 & 1 \\ \hline 127 NEW KENT 501 - ELTH, & 0 & 0 & 0 & 237.565 & 0 & 527.3316 & 0 \\ \hline 127 NEW KENT 502 - CHIC & 0 & 0 & 0 & 250.642 & 0 & 854.9325 & 0 \\ \hline 131 NORTHAM 101 - PREC & 0 & 0 & 0 & 628.4996 & 0 & 656.093 & 4.571429 \\ \hline 131 NORTHAM 201 - PREC & 0 & 0 & 0 & 667.641 & 0 & 287.7404 & 1.142857 \\ \hline 131 NORTHAM 301 - PREC & 0 & 0 & 0 & 579.2932 & 0 & 267.5874 & 1.142857 \\ \hline 131 NORTHAM 401 - PREC & 0 & 0 & 0 & 487.5904 & 0 & 549.7298 & 0 \\ \hline 131 NORTHAM 501 - PREC & 0 & 0 & 0 & 443.9757 & 0 & 550.8494 & 1.142857 \\ \hline 133 NORTHUM 101-1A & 0 & 0 & 0 & 376.4211 & 0 & 634.0712 & 1.5 \\ \hline 133 NORTHUM 201-2A & 0 & 0 & 0 & 414.5113 & 0 & 841.3637 & 0 \\ \hline 133 NORTHUM 301-3A & 0 & 0 & 0 & 421.2331 & 0 & 216.1606 & 0 \\ \hline 133 NORTHUM 302-3B & 0 & 0 & 0 & 239.7444 & 0 & 82.03019 & 0 \\ \hline 133 NORTHUM 401-4A & 0 & 0 & 0 & 482.8496 & 0 & 1063.067 & 1.5 \\ \hline 133 NORTHUM 501-5A & 0 & 0 & 0 & 449.2406 & 0 & 1055.307 & 0 \\ \hline 135 NOTTOWA 101 - PREC & 0 & 0 & 0 & 259.3938 & 10.47619 & 349.8594 & 0 \\ \hline 135 NOTTOWA 102 - PREC & 0 & 0 & 0 & 167.2125 & 4.190476 & 287.8049 & 0 \\ \hline 135 NOTTOWA 201 - PREC & 0 & 0 & 0 & 312.9875 & 11.52381 & 439.7316 & 0 \\ \hline 135 NOTTOWA 202 - PREC & 0 & 0 & 0 & 88.96563 & 6.285714 & 268.5465 & 0 \\ \hline 135 NOTTOWA 301 - PREC & 0 & 0 & 0 & 345.1438 & 7.333333 & 210.7716 & 0 \\ \hline 135 NOTTOWA 302 - PREC & 0 & 0 & 0 & 146.8469 & 2.095238 & 230.0299 & 0 \\ \hline 135 NOTTOWA 401 - PREC & 0 & 0 & 0 & 415.8875 & 6.285714 & 109.1305 & 1 \\ \hline 135 NOTTOWA 402 - PREC & 0 & 0 & 0 & 173.6438 & 7.333333 & 381.9566 & 0 \\ \hline 135 NOTTOWA 501 - PREC & 0 & 0 & 0 & 490.9188 & 10.47619 & 584.169 & 0 \\ \hline 137 ORANGE C 101 - ONE ' & 0 & 0 & 0 & 652.3088 & 9.89441 & 948.4866 & 0 \\ \hline 137 ORANGE C102-ONE I & 0 & 0 & 0 & 711.0055 & 14.29193 & 795.7461 & 0 \\ \hline 137 ORANGE Cl 201 - TWO & 0 & 0 & 0 & 500.5833 & 16.49068 & 964.5084 & 2.222222 \\ \hline 137 ORANGE Cl 202 - TWO & 0 & 0 & 0 & 378.76 & 26.38509 & 875.8548 & 1.111111 \\ \hline 137 ORANGE Cl301-THRE & 0 & 0 & 0 & 872.6984 & 19.78882 & 887.6041 & 1.111111 \\ \hline 137 ORANGE Cl302-THRE & 0 & 0 & 0 & 219.2821 & 3.298137 & 356.7506 & 0 \\ \hline 137 ORANGE C1401-FOUR & 0 & 0 & 0 & 388.7273 & 16.49068 & 1068.116 & 1.111111 \\ \hline 137 ORANGE C1402-FOUR & 0 & 0 & 0 & 661.1687 & 18.68944 & 807.4954 & 2.222222 \\ \hline 137 ORANGE CI501-FIVE! & 0 & 0 & 0 & 779.6696 & 23.08696 & 976.2576 & 1.111111 \\ \hline 137 ORANGE CI502-FIVE I & 0 & 0 & 0 & 842.7963 & 28.58385 & 1116.181 & 1.111111 \\ \hline 139 PAGE COUI 101 - WEST & 0 & 0 & 0 & 609.4645 & 0 & 1064.056 & 0 \\ \hline 139 PAGE COUI 201 - EAST & 0 & 0 & 0 & 609.4645 & 0 & 1188.003 & 2 \\ \hline 139 PAGE COUI 301 - MARI & 0 & 0 & 0 & 427.5181 & 0 & 1372.874 & 1 \\ \hline 139 PAGE COUI 401 - NEWI & 0 & 0 & 0 & 354.9628 & 0 & 998.9311 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 139 PAGE COUI 501 - SHEN & 0 & 0 & 0 & 370.5901 & 0 & 1274.136 & 4 \\ \hline 141 PATRICK C(101-ARAR & 0 & 0 & 0 & 117.5806 & 0 & 296.2807 & 0 \\ \hline 141 PATRICK C( 102 - CLAU & 0 & 0 & 0 & 70.76613 & 0 & 323.0209 & 1 \\ \hline 141 PATRICK C( 103 - WILLI & 0 & 0 & 0 & 87.09677 & 0 & 334.7865 & 0 \\ \hline 141 PATRICK C( 201 - DRY F & 0 & 0 & 0 & 58.79032 & 0 & 197.877 & 0 \\ \hline 141 PATRICK C( 202 - PATR & 0 & 0 & 0 & 153.5081 & 0 & 564.7517 & 0 \\ \hline 141 PATRICK C( 203 - RUSS & 0 & 0 & 0 & 120.8468 & 0 & 393.6148 & 1 \\ \hline 141 PATRICK C( 301 - CRITZ & 0 & 0 & 0 & 216.6532 & 0 & 575.4478 & 2 \\ \hline 141 PATRICK C( 302 - LIBER & 0 & 0 & 0 & 88.18548 & 0 & 454.5824 & 1 \\ \hline 141 PATRICK C( 401 - MEAI & 0 & 0 & 0 & 193.7903 & 0 & 378.6404 & 1 \\ \hline 141 PATRICK C( 402 - STUA & 0 & 0 & 0 & 190.5242 & 0 & 495.2274 & 4 \\ \hline 141 PATRICK C(501-STUA & 0 & 0 & 0 & 65.32258 & 0 & 232.1044 & 0 \\ \hline 141 PATRICK C( 502 - ELAN & 0 & 0 & 0 & 112.1371 & 0 & 356.1787 & 0 \\ \hline 141 PATRICK C(503-WOO & 0 & 0 & 0 & 144.7984 & 0 & 468.4872 & 0 \\ \hline 143 PITTSYLVAI 103-TWIN & 0 & 0 & 0 & 363.3677 & 0 & 1680.698 & 4 \\ \hline 143 PITTSYLVAI 105-CHAT & 0 & 0 & 0 & 228.8674 & 0 & 540.3367 & 1 \\ \hline 143 PITTSYLVAI 106-TUNS & 0 & 0 & 0 & 186.5649 & 0 & 654.4776 & 4 \\ \hline 143 PITTSYLVAI 108 - WEST & 0 & 0 & 0 & 167.0407 & 0 & 350.8 & 1 \\ \hline 143 PITTSYLVAI 201 - CALL/ & 0 & 0 & 0 & 174.6334 & 0 & 550.8083 & 0 \\ \hline 143 PITTSYLVAI 202-BEARS & 0 & 0 & 0 & 74.8429 & 0 & 152.886 & 0 \\ \hline 143 PITTSYLVAI 204 -SAND & 0 & 0 & 0 & 130.1616 & 0 & 371.7433 & 4 \\ \hline 143 PITTSYLVAI 206 - CLIM, & 0 & 0 & 0 & 114.976 & 0 & 443.9976 & 2 \\ \hline 143 PITTSYLVAI 207 -GRET & 0 & 0 & 0 & 340.5894 & 0 & 998.9946 & 1 \\ \hline 143 PITTSYLVAI 301 - CENT & 0 & 0 & 0 & 405.6702 & 0 & 257.6024 & 0 \\ \hline 143 PITTSYLVAI 305 - RICEV & 0 & 0 & 0 & 374.2145 & 0 & 295.3003 & 1 \\ \hline 143 PITTSYLVAI 307 -EAST & 0 & 0 & 0 & 680.0942 & 0 & 200.0084 & 0 \\ \hline 143 PITTSYLVAI 308 - MT A & 0 & 0 & 0 & 216.9359 & 0 & 154.9803 & 0 \\ \hline 143 PITTSYLVAI 309 - EAST & 0 & 0 & 0 & 187.6496 & 0 & 230.3761 & 2 \\ \hline 143 PITTSYLVAI 402 - KEELI & 0 & 0 & 0 & 144.2624 & 0 & 651.3361 & 0 \\ \hline 143 PITTSYLVAI 404 - KENT & 0 & 0 & 0 & 357.9443 & 0 & 1101.617 & 0 \\ \hline 143 PITTSYLVAI 405 - RING & 0 & 0 & 0 & 457.7348 & 0 & 1092.192 & 1 \\ \hline 143 PITTSYLVAI 501 - HURT & 0 & 0 & 0 & 404.5855 & 0 & 805.2692 & 3 \\ \hline 143 PITTSYLVAI 502 - MOTI & 0 & 0 & 0 & 387.2306 & 0 & 885.9009 & 1 \\ \hline 143 PITTSYLVAI503-RENA & 0 & 0 & 0 & 202.8351 & 0 & 500.5445 & 0 \\ \hline 143 PITTSYLVAI 603 -STON & 0 & 0 & 0 & 248.3916 & 0 & 719.4018 & 1 \\ \hline 143 PITTSYLVAI 604 -SWAr & 0 & 0 & 0 & 286.3554 & 0 & 516.2519 & 1 \\ \hline 143 PITTSYLVAI 605 - WHIT & 0 & 0 & 0 & 235.3755 & 0 & 573.846 & 0 \\ \hline 143 PITTSYLVAI 606 - BROS & 0 & 0 & 0 & 388.3153 & 0 & 394.7809 & 0 \\ \hline 143 PITTSYLVAI 607 - DRY F & 0 & 0 & 0 & 80.2663 & 0 & 286.923 & 0 \\ \hline 143 PITTSYLVAI 702 - BACH & 0 & 0 & 0 & 194.1577 & 0 & 964.4382 & 0 \\ \hline 143 PITTSYLVAI 703 - FERR' & 0 & 0 & 0 & 84.60501 & 0 & 163.3576 & 0 \\ \hline 143 PITTSYLVAI 704 - MT H & 0 & 0 & 0 & 511.9688 & 0 & 1266.021 & 3 \\ \hline 143 PITTSYLVAI 705 - MT C & 0 & 0 & 0 & 158.3632 & 0 & 624.1098 & 1 \\ \hline 145 POWHATAI 101 -SUBL & 0 & 0 & 0 & 479.3533 & 22.3 & 1188.751 & 2 \\ \hline 145 POWHATAI 102 - MAN, & 0 & 0 & 0 & 408.502 & 15.92857 & 869.3213 & 1 \\ \hline 145 POWHATAI 103 - FLAT & 0 & 0 & 0 & 244.6584 & 15.92857 & 676.377 & 1 \\ \hline 145 POWHATAI 201 - POW & 0 & 0 & 0 & 292.2616 & 16.99048 & 981.8722 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 145 POWHATAI 202 -GRAC & 0 & 0 & 0 & 469.3899 & 27.60952 & 1226.268 & 0 \\ \hline 145 POWHATAI 301 - BETH & 0 & 0 & 0 & 418.4655 & 25.48571 & 960.4339 & 1 \\ \hline 145 POWHATAI302-LEE'S & 0 & 0 & 0 & 329.9014 & 16.99048 & 829.6606 & 0 \\ \hline 145 POWHATAI401-POW & 0 & 0 & 0 & 542.4553 & 32.91905 & 1576.784 & 1 \\ \hline 145 POWHATAI 402 - MT ZI & 0 & 0 & 0 & 212.5539 & 14.86667 & 571.3296 & 1 \\ \hline 145 POWHATAI501-SMITI & 0 & 0 & 0 & 505.9226 & 9.557143 & 714.9659 & 0 \\ \hline 145 POWHATAI502-PINE & 0 & 0 & 0 & 301.118 & 10.61905 & 410.5426 & 0 \\ \hline 145 POWHATAI503-TOBA & 0 & 0 & 0 & 128.418 & 13.80476 & 427.6932 & 1 \\ \hline 147 PRINCE ED 101 - FARN & 0 & 0 & 0 & 514.993 & 0 & 410.3205 & 1 \\ \hline 147 PRINCE ED 201 - LOCK & 0 & 0 & 0 & 550.1789 & 0 & 582.356 & 1 \\ \hline 147 PRINCE ED 301 - LEIGF & 0 & 0 & 0 & 357.1898 & 0 & 333.3854 & 1 \\ \hline 147 PRINCE ED 302 - MT P & 0 & 0 & 0 & 218.5788 & 0 & 139.9791 & 2 \\ \hline 147 PRINCE ED 401 - HAM & 0 & 0 & 0 & 390.2432 & 0 & 354.7563 & 0 \\ \hline 147 PRINCE ED 501 - DARL & 0 & 0 & 0 & 205.784 & 0 & 346.2079 & 0 \\ \hline 147 PRINCE ED 502 - BUFF, & 0 & 0 & 0 & 148.2071 & 0 & 180.5838 & 0 \\ \hline 147 PRINCE ED 601 - PROS & 0 & 0 & 0 & 575.7686 & 0 & 449.8566 & 1 \\ \hline 147 PRINCE ED 701 - WEST & 0 & 0 & 0 & 484.0721 & 0 & 335.5225 & 1 \\ \hline 147 PRINCE ED 801 - CENT & 0 & 0 & 0 & 369.9846 & 0 & 94.03179 & 1 \\ \hline 149 PRINCE GE 101 - RICH/ & 0 & 0 & 0 & 345.1459 & 14.21875 & 530.1608 & 1 \\ \hline 149 PRINCE GE 102 - TEMF & 0 & 0 & 0 & 553.1185 & 22.96875 & 1558.416 & 1 \\ \hline 149 PRINCE GEI 103 - UNIO & 0 & 0 & 0 & 613.9615 & 16.40625 & 743.9353 & 1 \\ \hline 149 PRINCE GE 104 - RIVES & 0 & 0 & 0 & 536.5249 & 10.9375 & 389.0696 & 1 \\ \hline 149 PRINCE GE 105 - HARR & 0 & 0 & 0 & 111.7299 & 4.375 & 367.6922 & 0 \\ \hline 149 PRINCE GEI 201 - BLAN & 0 & 0 & 0 & 740.0726 & 16.40625 & 1191.793 & 1 \\ \hline 149 PRINCE GEI 202 - BLAC & 0 & 0 & 0 & 452.4509 & 13.125 & 903.1973 & 1 \\ \hline 149 PRINCE GEI 203 - BRAN & 0 & 0 & 0 & 178.1042 & 5.46875 & 382.6564 & 0 \\ \hline 149 PRINCE GEI 204 - COUF & 0 & 0 & 0 & 956.895 & 26.25 & 757.8307 & 1 \\ \hline 149 PRINCE GEI 205 - JEFFE & 0 & 0 & 0 & 832.9965 & 9.84375 & 314.2485 & 1 \\ \hline 153 PRINCE WI 101 - BREN & 0 & 0 & 0 & 531.6894 & 0 & 1243.067 & 4.683761 \\ \hline 153 PRINCE WI 102 - CEDA & 0 & 0 & 0 & 1440.139 & 0 & 1182.233 & 1.17094 \\ \hline 153 PRINCE WI 103 - GLEN & 0 & 0 & 0 & 978.8718 & 0 & 934.3088 & 5.854701 \\ \hline 153 PRINCE WI 104 - NOKE & 0 & 0 & 0 & 863.8485 & 0 & 1238.476 & 2.34188 \\ \hline 153 PRINCE WI 105 - LIME! & 0 & 0 & 0 & 1468.308 & 0 & 1212.076 & 4.683761 \\ \hline 153 PRINCE WI 106 - WEST & 0 & 0 & 0 & 961.2662 & 0 & 296.1323 & 1.17094 \\ \hline 153 PRINCE WI 107 - MAR & 0 & 0 & 0 & 1507.04 & 0 & 1231.589 & 5.854701 \\ \hline 153 PRINCE WI 108 - VICTC & 0 & 0 & 0 & 1612.674 & 0 & 1020.394 & 4.683761 \\ \hline 153 PRINCE WI 109 - PINE & 0 & 0 & 0 & 1302.815 & 0 & 775.9124 & 5.854701 \\ \hline 153 PRINCE WI 110-BUCK & 0 & 0 & 0 & 1003.416 & 0 & 791.4032 & 12.69231 \\ \hline 153 PRINCE WI 111 - BRIST & 0 & 0 & 0 & 1514.082 & 0 & 1236.18 & 2.34188 \\ \hline 153 PRINCE WI 112 - BURK & 0 & 0 & 0 & 1442.248 & 0 & 1168.378 & 4.615385 \\ \hline 153 PRINCE WI 201 - SAUN & 0 & 0 & 0 & 1113.744 & 23.60932 & 393.1916 & 0 \\ \hline 153 PRINCE WI 202 - MAR! & 0 & 0 & 0 & 949.5292 & 0 & 1156.982 & 3.512821 \\ \hline 153 PRINCE WI 203 - BENN & 0 & 0 & 0 & 1165.491 & 0 & 1051.384 & 7.025641 \\ \hline 153 PRINCE WI 204 - ELLIS & 0 & 0 & 0 & 1002.346 & 0 & 633.5853 & 5.854701 \\ \hline 153 PRINCE WI 205 - BUCK & 0 & 0 & 0 & 1254.855 & 0 & 1131.835 & 1.153846 \\ \hline 153 PRINCE WI 206 - COLE: & 0 & 0 & 0 & 753.5201 & 0 & 914.7962 & 2.34188 \\ \hline 153 PRINCE WI 207 - SPRIG & 0 & 0 & 0 & 1559.857 & 0 & 863.1452 & 4.683761 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 153 PRINCE WI 208 - HYLTI & 0 & 0 & 0 & 651.4075 & 0 & 884.9534 & 2.34188 \\ \hline 153 PRINCE WI 209-INDEI & 0 & 0 & 0 & 517.6049 & 0 & 905.6138 & 1.17094 \\ \hline 153 PRINCE WI 210 - PENN & 0 & 0 & 0 & 871.9305 & 5.621266 & 983.128 & 3.512821 \\ \hline 153 PRINCE WI 211-SIGN, & 0 & 0 & 0 & 1105.252 & 0 & 913.4105 & 5.769231 \\ \hline 153 PRINCE WI 212 - YORK & 0 & 0 & 0 & 1753.959 & 0 & 949.4008 & 9.230769 \\ \hline 153 PRINCE WI 213 - SARA & 0 & 0 & 0 & 849.764 & 0 & 359.2612 & 0 \\ \hline 153 PRINCE WI 214 - LUCA & 0 & 0 & 0 & 480.0463 & 0 & 742.6263 & 3.512821 \\ \hline 153 PRINCE WI 215 - ROSA & 0 & 0 & 0 & 1069.056 & 30.35484 & 461.3751 & 0 \\ \hline 153 PRINCE WI 301 - DUM & 0 & 0 & 0 & 1030.098 & 22.48507 & 297.7346 & 1.064516 \\ \hline 153 PRINCE WI 302 - POTC & 0 & 0 & 0 & 2180.508 & 30.35484 & 345.4631 & 7.451613 \\ \hline 153 PRINCE WI 303-GRAF & 0 & 0 & 0 & 786.0372 & 11.24253 & 234.0967 & 1.064516 \\ \hline 153 PRINCE WI 304 - QUAT & 0 & 0 & 0 & 156.1031 & 0 & 138.8837 & 0 \\ \hline 153 PRINCE WI 305 - PATT & 0 & 0 & 0 & 1048.121 & 0 & 800.0162 & 5.854701 \\ \hline 153 PRINCE WI 306 - WASt & 0 & 0 & 0 & 1132.627 & 0 & 880.3622 & 3.512821 \\ \hline 153 PRINCE WI 307-HENL & 0 & 0 & 0 & 933.0973 & 0 & 798.8684 & 4.683761 \\ \hline 153 PRINCE WI 308 - MON & 0 & 0 & 0 & 647.8864 & 0 & 548.6481 & 2.34188 \\ \hline 153 PRINCE WI 309-ASHL & 0 & 0 & 0 & 774.6468 & 0 & 642.7677 & 1.17094 \\ \hline 153 PRINCE WI 310-FORE & 0 & 0 & 0 & 1181.923 & 0 & 485.5192 & 1.17094 \\ \hline 153 PRINCE WI 311-SWAP & 0 & 0 & 0 & 1979.989 & 34.85185 & 560.2411 & 1.064516 \\ \hline 153 PRINCE WI 312 - TRIAT & 0 & 0 & 0 & 1342.697 & 26.98208 & 464.4236 & 1.064516 \\ \hline 153 PRINCE WI 313-CARD & 0 & 0 & 0 & 1016.43 & 0 & 447.6418 & 1.17094 \\ \hline 153 PRINCE WI 314 - CABIr & 0 & 0 & 0 & 897.886 & 0 & 576.1953 & 3.512821 \\ \hline 153 PRINCE WI 401 - EVER & 0 & 0 & 0 & 867.952 & 0 & 1288.207 & 5.769231 \\ \hline 153 PRINCE WI 402 - BATT & 0 & 0 & 0 & 913.0906 & 0 & 1402.383 & 0 \\ \hline 153 PRINCE WI 403 - BULL & 0 & 0 & 0 & 996.9196 & 0 & 835.2245 & 0 \\ \hline 153 PRINCE WI 404 - BEN L & 0 & 0 & 0 & 1129.106 & 0 & 441.9028 & 7.025641 \\ \hline 153 PRINCE WI 405 - UNIT & 0 & 0 & 0 & 1453.05 & 0 & 580.7865 & 10.53846 \\ \hline 153 PRINCE WI 406 - ALVE' & 0 & 0 & 0 & 472.0214 & 0 & 511.3113 & 4.615385 \\ \hline 153 PRINCE WI 407 - HERI7 & 0 & 0 & 0 & 1074.3 & 0 & 1417.275 & 3.461538 \\ \hline 153 PRINCE WI 408 - SUDL & 0 & 0 & 0 & 725.3511 & 0 & 511.9186 & 1.17094 \\ \hline 153 PRINCE WI 409 - TYLEF & 0 & 0 & 0 & 1350.291 & 0 & 941.9545 & 9.230769 \\ \hline 153 PRINCE WI 410 - MOU & 0 & 0 & 0 & 1222.613 & 0 & 1200.092 & 1.153846 \\ \hline 153 PRINCE WI 411 - MULI & 0 & 0 & 0 & 1309.857 & 0 & 338.6008 & 3.512821 \\ \hline 153 PRINCE WI 412 - CATH & 0 & 0 & 0 & 573.9058 & 0 & 915.8926 & 5.769231 \\ \hline 153 PRINCE WI 413 - REAG & 0 & 0 & 0 & 1327.077 & 0 & 1406.106 & 8.076923 \\ \hline 153 PRINCE WI 501 - LAKE & 0 & 0 & 0 & 1115.022 & 0 & 643.9155 & 2.34188 \\ \hline 153 PRINCE WI 502 - OCCC & 0 & 0 & 0 & 835.3077 & 30.35484 & 367.0545 & 1.064516 \\ \hline 153 PRINCE WI 503 - OLD E & 0 & 0 & 0 & 1057.598 & 25.85783 & 363.6454 & 2.129032 \\ \hline 153 PRINCE WI 504-ROCK & 0 & 0 & 0 & 847.9118 & 28.10633 & 442.0564 & 3.193548 \\ \hline 153 PRINCE WI \(505-\mathrm{MOH}\) & 0 & 0 & 0 & 1156.102 & 0 & 730.0005 & 5.854701 \\ \hline 153 PRINCE WI 506 - BETH & 0 & 0 & 0 & 1480.408 & 33.7276 & 700.0173 & 5.322581 \\ \hline 153 PRINCE WI 507-CHINI & 0 & 0 & 0 & 1109.16 & 23.60932 & 507.9671 & 3.193548 \\ \hline 153 PRINCE WI 508-SPRIN & 0 & 0 & 0 & 927.2287 & 0 & 361.5568 & 2.34188 \\ \hline 153 PRINCE WI 509-MC C & 0 & 0 & 0 & 1010.562 & 0 & 1083.523 & 4.683761 \\ \hline 153 PRINCE WI 510 - YATE: & 0 & 0 & 0 & 702.8734 & 0 & 778.1364 & 3.461538 \\ \hline 153 PRINCE WI 511 - WEST & 0 & 0 & 0 & 1308.684 & 0 & 752.9564 & 3.512821 \\ \hline 153 PRINCE WI 512 - YORK & 0 & 0 & 0 & 1479.262 & 29.23059 & 287.5071 & 1.064516 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 153 PRINCE WI 513 - LYNN & 0 & 0 & 0 & 1087.39 & 24.73357 & 698.8809 & 1.064516 \\ \hline 153 PRINCE WI 514 - ANTII & 0 & 0 & 0 & 1356.659 & 38.22461 & 618.1971 & 3.193548 \\ \hline 153 PRINCE WI 601 - DALE & 0 & 0 & 0 & 1188.222 & 20.23656 & 245.4606 & 6.387097 \\ \hline 153 PRINCE WI 602 - BEVIL & 0 & 0 & 0 & 1758.844 & 33.7276 & 494.3304 & 8.516129 \\ \hline 153 PRINCE WI 603 - HAMI & 0 & 0 & 0 & 1039.265 & 12.36679 & 211.3689 & 1.064516 \\ \hline 153 PRINCE WI 604 - GIDEI & 0 & 0 & 0 & 1146.973 & 15.73955 & 302.2802 & 3.193548 \\ \hline 153 PRINCE WI 605 - MIN^ & 0 & 0 & 0 & 1062.181 & 29.23059 & 429.5561 & 2.129032 \\ \hline 153 PRINCE WI 606 - BEL A & 0 & 0 & 0 & 1098.848 & 14.61529 & 397.7371 & 1.064516 \\ \hline 153 PRINCE WI 607 - KERR' & 0 & 0 & 0 & 1411.659 & 21.36081 & 406.8283 & 3.193548 \\ \hline 153 PRINCE WI 608 - ENTE & 0 & 0 & 0 & 1190.514 & 22.48507 & 369.3273 & 1.064516 \\ \hline 153 PRINCE WI 609 - KING & 0 & 0 & 0 & 1543.37 & 37.10036 & 505.7286 & 3.193548 \\ \hline 153 PRINCE WI 610 - FITZG & 0 & 0 & 0 & 1438.013 & 19.11231 & 389.7824 & 6.387097 \\ \hline 153 PRINCE WI 611 - NEAB & 0 & 0 & 0 & 981.9736 & 19.11231 & 285.2343 & 2.129032 \\ \hline 153 PRINCE WI 701 - BELM & 0 & 0 & 0 & 1149.264 & 23.60932 & 582.969 & 2.129032 \\ \hline 153 PRINCE WI 702 - LIBRA & 0 & 0 & 0 & 1424.263 & 25.85783 & 340.9175 & 1.064516 \\ \hline 153 PRINCE WI 703 - LYNN & 0 & 0 & 0 & 830.7244 & 17.98805 & 136.367 & 1.064516 \\ \hline 153 PRINCE WI 704 - PORT & 0 & 0 & 0 & 1338.326 & 30.35484 & 190.9138 & 7.451613 \\ \hline 153 PRINCE WI 705 - POTC & 0 & 0 & 0 & 758.5373 & 20.23656 & 337.5084 & 1.064516 \\ \hline 153 PRINCE WI 706-RIPPC & 0 & 0 & 0 & 1330.305 & 24.73357 & 468.1934 & 2.129032 \\ \hline 153 PRINCE WI 707 - KILBY & 0 & 0 & 0 & 1061.036 & 22.48507 & 303.4166 & 3.193548 \\ \hline 153 PRINCE WI 708 - RIVEF & 0 & 0 & 0 & 1558.324 & 21.36081 & 269.3248 & 1.064516 \\ \hline 153 PRINCE WI 709 - FREEI & 0 & 0 & 0 & 1591.553 & 23.60932 & 245.4606 & 6.387097 \\ \hline 153 PRINCE WI 710 - POW & 0 & 0 & 0 & 1322.284 & 19.11231 & 214.778 & 1.064516 \\ \hline 153 PRINCE WI 711 - GRAY & 0 & 0 & 0 & 1416.242 & 23.60932 & 305.6894 & 0 \\ \hline 153 PRINCE WI 712 - LEESY & 0 & 0 & 0 & 1231.764 & 23.60932 & 542.0589 & 2.129032 \\ \hline 155 PULASKI CC 101 - BELSF & 0 & 0 & 0 & 162.1541 & 0 & 354.5193 & 1 \\ \hline 155 PULASKI CC 102 - NEW & 0 & 0 & 0 & 722.7133 & 0 & 868.3614 & 2 \\ \hline 155 PULASKI C( 103 - WEST & 0 & 0 & 0 & 253.4329 & 0 & 557.1018 & 1 \\ \hline 155 PULASKI CC 201 - DRAP & 0 & 0 & 0 & 240.5465 & 0 & 690.0466 & 2 \\ \hline 155 PULASKI CC 202 - SOUT & 0 & 0 & 0 & 62.28435 & 0 & 118.1731 & 0 \\ \hline 155 PULASKI CC 203 - NEWI & 0 & 0 & 0 & 509.0135 & 0 & 926.3928 & 0 \\ \hline 155 PULASKI CC 301 - DUBL & 0 & 0 & 0 & 385.5187 & 0 & 929.5581 & 0 \\ \hline 155 PULASKI C( 302 - HIWA & 0 & 0 & 0 & 70.8753 & 0 & 226.8502 & 0 \\ \hline 155 PULASKI C( 304 -SNOV & 0 & 0 & 0 & 217.9952 & 0 & 562.3774 & 1 \\ \hline 155 PULASKI CC 401 - MASS & 0 & 0 & 0 & 576.6672 & 0 & 1181.731 & 2 \\ \hline 155 PULASKI CC 402 - WALk & 0 & 0 & 0 & 133.1597 & 0 & 457.9208 & 1 \\ \hline 155 PULASKI CC501-ROBII & 0 & 0 & 0 & 721.6394 & 0 & 1147.967 & 5 \\ \hline 157 RAPPAHAN 101 - WASt & 0 & 0 & 0 & 423.6492 & 0 & 399.9682 & 1 \\ \hline 157 RAPPAHAN 201 - AMIS & 0 & 0 & 0 & 297.8598 & 0 & 497.2578 & 1 \\ \hline 157 RAPPAHAN 301 - SPERI & 0 & 0 & 0 & 421.2758 & 0 & 329.7035 & 1 \\ \hline 157 RAPPAHAN401-SCRA & 0 & 0 & 0 & 344.1408 & 0 & 350.2425 & 2 \\ \hline 157 RAPPAHAN501-CHES & 0 & 0 & 0 & 110.3624 & 0 & 251.8719 & 1 \\ \hline 157 RAPPAHAN502-FLINT & 0 & 0 & 0 & 239.7119 & 0 & 212.9561 & 0 \\ \hline 159 RICHMONL 101 - PREC & 0 & 0 & 0 & 368.9583 & 0 & 239.8226 & 0 \\ \hline 159 RICHMONL 201 - PREC & 0 & 0 & 0 & 164.45 & 0 & 413.5608 & 0 \\ \hline 159 RICHMONL 301 - PREC & 0 & 0 & 0 & 173.9375 & 0 & 364.5304 & 0 \\ \hline 159 RICHMON[ 401 - PREC & 0 & 0 & 0 & 166.5583 & 0 & 433.8125 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 159 RICHMON[501-PREC & 0 & 0 & 0 & 138.0958 & 0 & 441.2736 & 1 \\ \hline 161 ROANOKE 101 - CATA & 133.7607 & 360.843 & 0 & 146.533 & 0 & 343.006 & 0 \\ \hline 161 ROANOKE 102 -MASC & 123.8115 & 356.5473 & 1.045455 & 130.2516 & 0 & 355.7099 & 0 \\ \hline 161 ROANOKE 1103 - GLEN & 373.6455 & 834.4495 & 2.090909 & 356.021 & 0 & 850.1044 & 3 \\ \hline 161 ROANOKE 104 - NORT & 0 & 0 & 0 & 462.3931 & 0 & 521.9196 & 1 \\ \hline 161 ROANOKE 105 - PETEI & 0 & 0 & 0 & 810.8161 & 0 & 1190.993 & 1 \\ \hline 161 ROANOKE 106 -GREE & 643.3777 & 1270.468 & 3.136364 & 640.4036 & 0 & 1252.395 & 1 \\ \hline 161 ROANOKE (107-BENN & 171.3463 & 491.8634 & 1.045455 & 178.0105 & 0 & 478.5145 & 2 \\ \hline 161 ROANOKE 108 - WILD & 334.9544 & 664.7673 & 3.136364 & 337.5687 & 0 & 652.1349 & 1 \\ \hline 161 ROANOKE 201 - PLAN & 0 & 0 & 0 & 511.2084 & 0 & 739.8333 & 11.75 \\ \hline 161 ROANOKE 1202 - BURL & 0 & 0 & 0 & 420.5454 & 0 & 472.85 & 0 \\ \hline 161 ROANOKE 1203 - MOU & 0 & 0 & 0 & 716.5656 & 0 & 1292.028 & 1.175 \\ \hline 161 ROANOKE 1204 - BOTE & 0 & 0 & 0 & 672.9665 & 0 & 935.8559 & 2 \\ \hline 161 ROANOKE 1205 - ORCF & 0 & 0 & 0 & 726.3965 & 0 & 1495.75 & 2.35 \\ \hline 161 ROANOKE 1206 - HOLL & 0 & 0 & 0 & 321.1437 & 0 & 369.9167 & 1.175 \\ \hline 161 ROANOKE 301 -BENT & 191.2446 & 300.7025 & 1.045455 & 191.0357 & 0 & 295.3663 & 0 \\ \hline 161 ROANOKE 302 -POAG & 706.3889 & 1409.006 & 1.045455 & 718.7502 & 0 & 1407.828 & 0 \\ \hline 161 ROANOKE 1303 - WINL & 0 & 0 & 0 & 501.3775 & 0 & 672.2833 & 3.525 \\ \hline 161 ROANOKE 304 -OAK I & 841.255 & 1310.204 & 6.272727 & 872.7682 & 0 & 1283.45 & 1.175 \\ \hline 161 ROANOKE 305 -CASTI & 960.6447 & 1388.601 & 0 & 1007.124 & 0 & 1359.578 & 5.875 \\ \hline 161 ROANOKE 306 -GARS & 0 & 0 & 0 & 493.7312 & 0 & 515.7389 & 1.175 \\ \hline 161 ROANOKE 402 - BONS & 0 & 0 & 0 & 135.4484 & 0 & 284.1389 & 0 \\ \hline 161 ROANOKE 403 - NORT & 0 & 0 & 0 & 403.0681 & 0 & 767.7111 & 0 \\ \hline 161 ROANOKE 1404 - SOUT & 0 & 0 & 0 & 573.4709 & 0 & 845.9833 & 3.525 \\ \hline 161 ROANOKE 405 - LIND & 0 & 0 & 0 & 703.4577 & 0 & 1416.406 & 1.175 \\ \hline 161 ROANOKE 1406 - MOU & 0 & 0 & 0 & 500.2851 & 0 & 1152.639 & 2.35 \\ \hline 161 ROANOKE 1501 - COTT & 464.2932 & 731.3515 & 2.090909 & 479.5309 & 0 & 723.75 & 0 \\ \hline 161 ROANOKE 1502 - PENN & 415.653 & 588.5178 & 0 & 432.5609 & 0 & 573.6389 & 1.175 \\ \hline 161 ROANOKE 1503 - CAVE & 551.6245 & 779.6786 & 2.090909 & 554.9014 & 0 & 789.1556 & 1.175 \\ \hline 161 ROANOKE 1504 - OGDE & 0 & 0 & 0 & 586.5788 & 0 & 530.75 & 2.35 \\ \hline 161 ROANOKE 1505 - CLEAI & 0 & 0 & 0 & 311.3128 & 0 & 613.3111 & 1.175 \\ \hline 161 ROANOKE 1506-MOU & 0 & 0 & 0 & 457.6844 & 0 & 529.6778 & 2.35 \\ \hline 161 ROANOKE 1507-HUN7 & 0 & 0 & 0 & 770.0895 & 0 & 1077.583 & 3.525 \\ \hline 163 ROCKBRID (101-AIRPC & 0 & 0 & 0 & 398.4571 & 0 & 488.4394 & 0 \\ \hline 163 ROCKBRID 102 - BEN \(\subseteq\) & 0 & 0 & 0 & 212.1363 & 0 & 405.0734 & 0 \\ \hline 163 ROCKBRID 103 - PLAN & 0 & 0 & 0 & 96.52764 & 0 & 249.0293 & 0 \\ \hline 163 ROCKBRID ( 104 - EFFIN & 0 & 0 & 0 & 120.0983 & 0 & 244.7541 & 0 \\ \hline 163 ROCKBRID ( 201 - COLLI & 0 & 0 & 0 & 248.0536 & 0 & 365.528 & 0 \\ \hline 163 ROCKBRID ( 202 - HIGH & 0 & 0 & 0 & 425.395 & 0 & 709.68 & 0 \\ \hline 163 ROCKBRID( 203 - VO-TI & 0 & 0 & 0 & 167.2397 & 0 & 145.3561 & 0 \\ \hline 163 ROCKBRID 301 - MAU & 0 & 0 & 0 & 186.3208 & 0 & 342.0145 & 0 \\ \hline 163 ROCKBRID 302 - NATL & 0 & 0 & 0 & 143.669 & 0 & 384.7663 & 0 \\ \hline 163 ROCKBRID 303 - FALLI & 0 & 0 & 0 & 76.32418 & 0 & 210.5527 & 0 \\ \hline 163 ROCKBRID ( 401 - FAIRF & 0 & 0 & 0 & 198.6673 & 0 & 434.9996 & 0 \\ \hline 163 ROCKBRID ( 402 - MOU & 0 & 0 & 0 & 235.707 & 0 & 606.0069 & 0 \\ \hline 163 ROCKBRID( 403 - VESU & 0 & 0 & 0 & 65.10003 & 0 & 237.2725 & 0 \\ \hline 163 ROCKBRID( 501 -GOSF & 0 & 0 & 0 & 48.26382 & 0 & 249.0293 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 163 ROCKBRID( 502 - MEA[ & 0 & 0 & 0 & 262.645 & 0 & 327.0513 & 0 \\ \hline 163 ROCKBRID( 503 -ROCK & 0 & 0 & 0 & 175.0966 & 0 & 241.5477 & 0 \\ \hline 163 ROCKBRID 504 -ROCK & 0 & 0 & 0 & 250.2984 & 0 & 417.8989 & 0 \\ \hline 165 ROCKINGH 101 - BROA & 0 & 0 & 0 & 489.0098 & 0 & 1080.283 & 0 \\ \hline 165 ROCKINGH 102-TIMB & 0 & 0 & 0 & 220.491 & 0 & 517.5262 & 1 \\ \hline 165 ROCKINGH 103 -FULK! & 0 & 0 & 0 & 130.9848 & 0 & 652.1671 & 0 \\ \hline 165 ROCKINGH 104 - BERG & 0 & 0 & 0 & 50.21083 & 0 & 252.4518 & 0 \\ \hline 165 ROCKINGH 105 -LACE' & 0 & 0 & 0 & 128.8017 & 0 & 558.5496 & 0 \\ \hline 165 ROCKINGH 106-TENT & 0 & 0 & 0 & 152.8156 & 0 & 458.6208 & 1 \\ \hline 165 ROCKINGH 107 - PLAIN & 0 & 0 & 0 & 169.1887 & 0 & 523.8375 & 0 \\ \hline 165 ROCKINGH 108 - LITTL & 0 & 0 & 0 & 117.8863 & 0 & 359.7438 & 1 \\ \hline 165 ROCKINGH 201-SINGI & 0 & 0 & 0 & 256.5119 & 0 & 751.0441 & 1 \\ \hline 165 ROCKINGH 202 -EDON & 0 & 0 & 0 & 571.9669 & 0 & 1031.897 & 3 \\ \hline 165 ROCKINGH 203 - DAYT & 0 & 0 & 0 & 265.2442 & 0 & 501.7479 & 1 \\ \hline 165 ROCKINGH 204 - MT C & 0 & 0 & 0 & 316.5466 & 0 & 789.9637 & 0 \\ \hline 165 ROCKINGH 205 - SILVE & 0 & 0 & 0 & 518.4814 & 0 & 923.5528 & 1 \\ \hline 165 ROCKINGH 301 - KEEZI & 0 & 0 & 0 & 229.2234 & 0 & 537.5119 & 2 \\ \hline 165 ROCKINGH 302 - PORT & 0 & 0 & 0 & 311.0889 & 0 & 825.7277 & 0 \\ \hline 165 ROCKINGH 303 - MELR & 0 & 0 & 0 & 177.921 & 0 & 482.8141 & 0 \\ \hline 165 ROCKINGH 304-GROT & 0 & 0 & 0 & 327.462 & 0 & 767.8742 & 2 \\ \hline 165 ROCKINGH 305 - MASS & 0 & 0 & 0 & 676.7547 & 0 & 833.0909 & 2 \\ \hline 165 ROCKINGH 306 - CROS & 0 & 0 & 0 & 136.4425 & 0 & 299.7865 & 0 \\ \hline 165 ROCKINGH 307-CROS & 0 & 0 & 0 & 802.2818 & 0 & 1079.231 & 1 \\ \hline 165 ROCKINGH 401 - WEST & 0 & 0 & 0 & 348.2012 & 0 & 611.1437 & 1 \\ \hline 165 ROCKINGH 402 - MON & 0 & 0 & 0 & 259.7865 & 0 & 854.1286 & 2 \\ \hline 165 ROCKINGH 403-MT C & 0 & 0 & 0 & 62.21777 & 0 & 120.9665 & 0 \\ \hline 165 ROCKINGH 404 - NORT & 0 & 0 & 0 & 379.8559 & 0 & 775.2374 & 2 \\ \hline 165 ROCKINGH 405 - OTTO & 0 & 0 & 0 & 227.0403 & 0 & 1015.067 & 0 \\ \hline 165 ROCKINGH 406 - EAST & 0 & 0 & 0 & 627.6354 & 0 & 785.7562 & 1 \\ \hline 165 ROCKINGH 501 - ELKT( & 0 & 0 & 0 & 354.7504 & 0 & 826.7796 & 4 \\ \hline 165 ROCKINGH 502-SWIF & 0 & 0 & 0 & 281.6173 & 0 & 1267.518 & 2 \\ \hline 165 ROCKINGH 503 - MCG, & 0 & 0 & 0 & 431.1582 & 0 & 1063.453 & 1 \\ \hline 165 ROCKINGH 504 - SOUT & 0 & 0 & 0 & 146.2663 & 0 & 563.809 & 0 \\ \hline 165 ROCKINGH 505-STON & 0 & 0 & 0 & 586.1569 & 0 & 764.7186 & 0 \\ \hline 167 RUSSELL C( 101 - MOCI & 0 & 0 & 0 & 153.1634 & 0 & 508.8534 & 2 \\ \hline 167 RUSSELL C( 102 - COPP & 0 & 0 & 0 & 150.911 & 0 & 366.3744 & 0 \\ \hline 167 RUSSELL C( 103 - SOUT & 0 & 0 & 0 & 143.0276 & 0 & 275.3165 & 0 \\ \hline 167 RUSSELL C( 201 - NORT & 0 & 0 & 0 & 318.715 & 0 & 731.6776 & 2 \\ \hline 167 RUSSELL C( 202 - DANT & 0 & 0 & 0 & 96.85332 & 0 & 128.5524 & 0 \\ \hline 167 RUSSELL C( 301 - COOk & 0 & 0 & 0 & 61.94108 & 0 & 147.8353 & 0 \\ \hline 167 RUSSELL C( 302 - DAUC & 0 & 0 & 0 & 76.5817 & 0 & 235.6795 & 0 \\ \hline 167 RUSSELL C( 303 - NEW & 0 & 0 & 0 & 190.328 & 0 & 428.5081 & 0 \\ \hline 167 RUSSELL C( 304 - CLEVI & 0 & 0 & 0 & 138.5228 & 0 & 213.1828 & 2 \\ \hline 167 RUSSELL C( 401 - DRILL & 0 & 0 & 0 & 45.04806 & 0 & 40.70827 & 0 \\ \hline 167 RUSSELL C( 402 -SWOI & 0 & 0 & 0 & 194.8328 & 0 & 693.1118 & 0 \\ \hline 167 RUSSELL C( 403 - HON/ & 0 & 0 & 0 & 158.7944 & 0 & 284.9579 & 0 \\ \hline 167 RUSSELL C( 501 - WEST & 0 & 0 & 0 & 478.6356 & 0 & 985.5686 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 167 RUSSELL C( 601 - EAST & 0 & 0 & 0 & 236.5023 & 0 & 557.0605 & 0 \\ \hline 167 RUSSELL C( 602 - ELK G & 0 & 0 & 0 & 251.1429 & 0 & 685.613 & 2.4 \\ \hline 169 SCOTT COL 101 - WEBE & 0 & 0 & 0 & 143.482 & 0 & 446.0076 & 2 \\ \hline 169 SCOTT COL 102 - YUM, & 0 & 0 & 0 & 165.2216 & 0 & 540.5187 & 0 \\ \hline 169 SCOTT COL 202 - WEBE & 0 & 0 & 0 & 92.39369 & 0 & 355.7442 & 0 \\ \hline 169 SCOTT COL 203 - HILTC & 0 & 0 & 0 & 136.9601 & 0 & 572.3764 & 0 \\ \hline 169 SCOTT COL 204 - CLAR & 0 & 0 & 0 & 31.52255 & 0 & 168.8457 & 0 \\ \hline 169 SCOTT COL 301 - NICKI & 0 & 0 & 0 & 107.6115 & 0 & 410.9641 & 0 \\ \hline 169 SCOTT COL 302 - SNOV & 0 & 0 & 0 & 83.69781 & 0 & 320.7007 & 0 \\ \hline 169 SCOTT COL 303 - TWIN & 0 & 0 & 0 & 91.3067 & 0 & 268.6665 & 1 \\ \hline 169 SCOTT COL 304 - COPP & 0 & 0 & 0 & 29.34858 & 0 & 83.89191 & 1 \\ \hline 169 SCOTT COL 401 - GATE & 0 & 0 & 0 & 305.4427 & 0 & 986.5263 & 0 \\ \hline 169 SCOTT COL 501 - DUNC & 0 & 0 & 0 & 108.6985 & 0 & 181.5888 & 0 \\ \hline 169 SCOTT COL 502 - FORT & 0 & 0 & 0 & 76.08892 & 0 & 211.3227 & 0 \\ \hline 169 SCOTT COL 503 - MAN' & 0 & 0 & 0 & 20.65271 & 0 & 135.9261 & 0 \\ \hline 169 SCOTT COL 504 - RYE C & 0 & 0 & 0 & 70.65399 & 0 & 339.8153 & 1 \\ \hline 169 SCOTT COL 601 - CLINC & 0 & 0 & 0 & 46.74034 & 0 & 224.0657 & 0 \\ \hline 169 SCOTT COL 602 - DUFF & 0 & 0 & 0 & 132.6121 & 0 & 510.7849 & 1 \\ \hline 169 SCOTT COL 603 - FAIR & 0 & 0 & 0 & 44.56637 & 0 & 107.2542 & 0 \\ \hline 171 SHENANDC 101 - ORK^ & 0 & 0 & 0 & 297.2313 & 0 & 517.9339 & 1.25 \\ \hline 171 SHENANDC 103 - NEW & 0 & 0 & 0 & 584.5914 & 0 & 1368.147 & 0 \\ \hline 171 SHENANDC 201 - CON I & 0 & 0 & 0 & 340.0062 & 0 & 1021.1 & 0 \\ \hline 171 SHENANDC 202 - MT Jt & 0 & 0 & 0 & 358.6517 & 0 & 774.2636 & 2.5 \\ \hline 171 SHENANDC 302 -EDINI & 0 & 0 & 0 & 368.5229 & 0 & 883.9686 & 1.25 \\ \hline 171 SHENANDC 303 - ST LU & 0 & 0 & 0 & 254.4563 & 0 & 935.6565 & 1.25 \\ \hline 171 SHENANDC 304 -FORT & 0 & 0 & 0 & 201.8102 & 0 & 511.6047 & 0 \\ \hline 171 SHENANDC 401 - WOO & 0 & 0 & 0 & 1013.438 & 0 & 1525.32 & 0 \\ \hline 171 SHENANDC 501 - CEDA & 0 & 0 & 0 & 51.54933 & 0 & 69.62044 & 0 \\ \hline 171 SHENANDC503-TOM! & 0 & 0 & 0 & 504.5254 & 0 & 1208.864 & 2.5 \\ \hline 171 SHENANDC 504 -LEBAI & 0 & 0 & 0 & 331.2319 & 0 & 891.3526 & 0 \\ \hline 171 SHENANDC 601 - STRA: & 0 & 0 & 0 & 962.9854 & 0 & 1503.169 & 1.25 \\ \hline 173 SMYTH COI 101 - SALT & 0 & 0 & 0 & 381.5834 & 0 & 847.347 & 1 \\ \hline 173 SMYTH COI 201 - SEVEI & 0 & 0 & 0 & 230.874 & 0 & 680.5708 & 0 \\ \hline 173 SMYTH COI 202 - RICH & 0 & 0 & 0 & 109.0238 & 0 & 243.431 & 1 \\ \hline 173 SMYTH COI 301 - CHILL & 0 & 0 & 0 & 298.2123 & 0 & 878.4233 & 0 \\ \hline 173 SMYTH COI 302 - ST CL & 0 & 0 & 0 & 63.06281 & 0 & 297.2965 & 0 \\ \hline 173 SMYTH COI 401 - EAST & 0 & 0 & 0 & 321.7272 & 0 & 552.1222 & 0 \\ \hline 173 SMYTH COI 402 - WEST & 0 & 0 & 0 & 165.6735 & 0 & 248.6104 & 0 \\ \hline 173 SMYTH COI 501 - ATKIN & 0 & 0 & 0 & 208.4279 & 0 & 680.5708 & 0 \\ \hline 173 SMYTH COI 502 - WAS & 0 & 0 & 0 & 270.4219 & 0 & 381.2025 & 0 \\ \hline 173 SMYTH COI 601 - ROYA & 0 & 0 & 0 & 275.7662 & 0 & 553.158 & 0 \\ \hline 173 SMYTH COI 602 -ROYA & 0 & 0 & 0 & 137.8831 & 0 & 341.8392 & 0 \\ \hline 173 SMYTH COI 701 - ADW & 0 & 0 & 0 & 179.5687 & 0 & 706.4678 & 0 \\ \hline 173 SMYTH COI 702 - SUGA & 0 & 0 & 0 & 166.7423 & 0 & 362.5568 & 1 \\ \hline 173 SMYTH COI 703 - KONr & 0 & 0 & 0 & 16.03292 & 0 & 69.40372 & 0 \\ \hline 175 SOUTHAMI 101 - BERLI & 0 & 0 & 0 & 91.78754 & 17.30233 & 397.6393 & 0 \\ \hline 175 SOUTHAMI 102 - IVOR & 0 & 0 & 0 & 297.5182 & 9.732558 & 433.1242 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 175 SOUTHAMI 201 - BOYK & 0 & 0 & 0 & 415.6815 & 9.732558 & 275.5296 & 0 \\ \hline 175 SOUTHAMI 202 - BRAN & 0 & 0 & 0 & 92.84257 & 2.162791 & 137.7648 & 0 \\ \hline 175 SOUTHAMI301-CAPR & 0 & 0 & 0 & 297.5182 & 5.406977 & 295.3594 & 0 \\ \hline 175 SOUTHAMI302-SEBRI & 0 & 0 & 0 & 207.8407 & 1.081395 & 323.5385 & 0 \\ \hline 175 SOUTHAMI 401 - DREV & 0 & 0 & 0 & 227.8863 & 2.162791 & 183.6864 & 1 \\ \hline 175 SOUTHAMI501-HUN1 & 0 & 0 & 0 & 279.5827 & 10.81395 & 568.8016 & 0 \\ \hline 175 SOUTHAMI502-FORK & 0 & 0 & 0 & 164.5845 & 2.162791 & 195.1668 & 0 \\ \hline 175 SOUTHAMI601-COUF & 0 & 0 & 0 & 328.1141 & 14.05814 & 428.9495 & 3 \\ \hline 175 SOUTHAMI602-SEDLI & 0 & 0 & 0 & 53.80649 & 7.569767 & 252.5688 & 0 \\ \hline 175 SOUTHAMI701-BLAC & 0 & 0 & 0 & 238.4366 & 4.325581 & 125.2407 & 0 \\ \hline 175 SOUTHAMI 702 - NEW: & 0 & 0 & 0 & 199.4005 & 6.488372 & 349.6304 & 0 \\ \hline 177 SPOTSYLVA 101 - PART & 0 & 0 & 0 & 393.05 & 22.96732 & 1004.606 & 0 \\ \hline 177 SPOTSYLVA 102 - BLAYI & 0 & 0 & 0 & 489.6085 & 25.15468 & 984.735 & 3.6 \\ \hline 177 SPOTSYLVf 103-TRAV & 0 & 0 & 0 & 945.1279 & 20.77996 & 1195.634 & 1.2 \\ \hline 177 SPOTSYLVA 104 - MASS & 0 & 0 & 0 & 830.9121 & 0 & 1128.332 & 1 \\ \hline 177 SPOTSYLVf 201 - WILD & 0 & 0 & 0 & 849.715 & 25.15468 & 973.6953 & 1.2 \\ \hline 177 SPOTSYLVf 202 - WILD & 0 & 0 & 0 & 678.1816 & 25.15468 & 1047.661 & 0 \\ \hline 177 SPOTSYLVf 203 - NI RII & 0 & 0 & 0 & 595.2549 & 12.0305 & 1110.587 & 0 \\ \hline 177 SPOTSYLVA 204 - CHAA & 0 & 0 & 0 & 1190.51 & 24.061 & 1041.037 & 1.2 \\ \hline 177 SPOTSYLVf 301 - PLAN & 0 & 0 & 0 & 996.2567 & 22.96732 & 1073.052 & 2.4 \\ \hline 177 SPOTSYLVf 302 - HAZE & 0 & 0 & 0 & 1229.133 & 36.0915 & 1036.621 & 2.4 \\ \hline 177 SPOTSYLVf 303 - RIVEF & 0 & 0 & 0 & 1279.116 & 32.81046 & 1640.489 & 2.4 \\ \hline 177 SPOTSYLVf 401 - SUMI & 0 & 0 & 0 & 1185.722 & 0 & 1177.83 & 2 \\ \hline 177 SPOTSYLVA 402 - PARK & 0 & 0 & 0 & 1337.012 & 5.46841 & 1014.874 & 4.2 \\ \hline 177 SPOTSYLVf 403 -LEE H & 0 & 0 & 0 & 1319.484 & 0 & 1333.074 & 1 \\ \hline 177 SPOTSYLVA 501 - BELM & 0 & 0 & 0 & 407.8177 & 20.77996 & 877.6506 & 0 \\ \hline 177 SPOTSYLVf 502 - BROK & 0 & 0 & 0 & 366.9224 & 10.93682 & 822.4524 & 0 \\ \hline 177 SPOTSYLVA 503 - POST & 0 & 0 & 0 & 353.2906 & 16.40523 & 928.4329 & 0 \\ \hline 177 SPOTSYLVA 504 - COUF & 0 & 0 & 0 & 854.2589 & 24.061 & 1143.706 & 0 \\ \hline 177 SPOTSYLVA 505 - BROC & 0 & 0 & 0 & 707.7171 & 21.87364 & 1384.37 & 0 \\ \hline 177 SPOTSYLVA 601 - SALEI & 0 & 0 & 0 & 1191.646 & 37.18519 & 1071.948 & 0 \\ \hline 177 SPOTSYLVA 602 - SMITI & 0 & 0 & 0 & 1575.608 & 39.37255 & 1273.973 & 3.6 \\ \hline 177 SPOTSYLVA 603 - PIED & 0 & 0 & 0 & 746.3406 & 28.43573 & 667.8976 & 1.2 \\ \hline 177 SPOTSYLVA 701 - BATT & 0 & 0 & 0 & 867.1865 & 0 & 831.343 & 0 \\ \hline 177 SPOTSYLVA 702 - BREN & 0 & 0 & 0 & 1202.811 & 18.59259 & 1050.253 & 6.4 \\ \hline 177 SPOTSYLVA 703 - FAIR\ & 0 & 0 & 0 & 664.2227 & 6.562092 & 458.6029 & 1 \\ \hline 177 SPOTSYLVA 704 - GAYL & 0 & 0 & 0 & 1461.096 & 25.15468 & 1445.145 & 2.2 \\ \hline 179 STAFFORD 101 - HART & 0 & 0 & 0 & 1069.551 & 0 & 2254.707 & 3.083333 \\ \hline 179 STAFFORD 102 -ROCK & 0 & 0 & 0 & 975.9237 & 0 & 1049.605 & 2.055556 \\ \hline 179 STAFFORD 103 - SIMP: & 0 & 0 & 0 & 942.8789 & 0 & 1198.623 & 3.083333 \\ \hline 179 STAFFORD 104 - COLLI & 0 & 0 & 0 & 1138.945 & 0 & 1428.629 & 5.138889 \\ \hline 179 STAFFORD 201 -ROCK & 0 & 0 & 0 & 800.7861 & 0 & 945.9401 & 4.111111 \\ \hline 179 STAFFORD 202 -ROSE & 0 & 0 & 0 & 1177.497 & 0 & 1197.543 & 4.111111 \\ \hline 179 STAFFORD 203 -RUBY & 0 & 0 & 0 & 526.5141 & 0 & 1132.752 & 1.027778 \\ \hline 179 STAFFORD 204 - STEF/ & 0 & 0 & 0 & 993.5476 & 0 & 1443.747 & 0 \\ \hline 179 STAFFORD 301 - GRIFF & 0 & 0 & 0 & 1090.479 & 0 & 466.491 & 2.055556 \\ \hline 179 STAFFORD 302 - WIDE & 0 & 0 & 0 & 1393.39 & 0 & 988.0539 & 6.166667 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 179 STAFFORD 303 - HARB & 0 & 0 & 0 & 591.5023 & 0 & 798.002 & 3.083333 \\ \hline 179 STAFFORD 304 - BARR & 0 & 0 & 0 & 556.2545 & 0 & 416.8184 & 1.027778 \\ \hline 179 STAFFORD 401 - AQUI & 0 & 0 & 0 & 615.7352 & 0 & 247.2834 & 0 \\ \hline 179 STAFFORD 402 - COUF & 0 & 0 & 0 & 1839.495 & 0 & 959.978 & 9.25 \\ \hline 179 STAFFORD 403 - BROC & 0 & 0 & 0 & 1030.998 & 0 & 1534.453 & 1.027778 \\ \hline 179 STAFFORD 404 -GOVE & 0 & 0 & 0 & 677.4188 & 0 & 961.0579 & 0 \\ \hline 179 STAFFORD 501 - GRAF & 0 & 0 & 0 & 1116.915 & 0 & 1565.768 & 3.083333 \\ \hline 179 STAFFORD 502 - FALM & 0 & 0 & 0 & 869.0788 & 0 & 984.8144 & 0 \\ \hline 179 STAFFORD 503 - DREV & 0 & 0 & 0 & 881.1952 & 0 & 986.9741 & 2.055556 \\ \hline 179 STAFFORD 504 - GAYL & 0 & 0 & 0 & 1027.694 & 0 & 771.006 & 4.111111 \\ \hline 179 STAFFORD 601 - FERR' & 0 & 0 & 0 & 732.4935 & 0 & 1146.79 & 2.055556 \\ \hline 179 STAFFORD 602 - CHAT & 0 & 0 & 0 & 1061.84 & 0 & 1168.387 & 0 \\ \hline 179 STAFFORD 603 - WHIT & 0 & 0 & 0 & 739.1025 & 0 & 1580.886 & 3.083333 \\ \hline 179 STAFFORD 604 -ENGL & 0 & 0 & 0 & 861.3683 & 0 & 381.1836 & 7.194444 \\ \hline 179 STAFFORD 701 - WOO & 0 & 0 & 0 & 1320.691 & 0 & 1313.086 & 4.111111 \\ \hline 179 STAFFORD 702 - WHIT & 0 & 0 & 0 & 1184.106 & 0 & 764.5269 & 1.027778 \\ \hline 179 STAFFORD 703 - HAMI & 0 & 0 & 0 & 1547.599 & 0 & 1526.894 & 2.055556 \\ \hline 181 SURRY COL 101 - SURR & 0 & 0 & 0 & 315.6495 & 8 & 416 & 2 \\ \hline 181 SURRY COL 201 - BACC & 0 & 0 & 0 & 442.9113 & 11 & 249 & 1 \\ \hline 181 SURRY COL 301 - DEN[ & 0 & 0 & 0 & 179.3691 & 5 & 178 & 0 \\ \hline 181 SURRY COL 302 - WALI & 0 & 0 & 0 & 171.3526 & 1 & 146 & 0 \\ \hline 181 SURRY COL 401 - CARS & 0 & 0 & 0 & 411.8474 & 1 & 249 & 0 \\ \hline 181 SURRY COL 501 - CLAR & 0 & 0 & 0 & 231.4763 & 3 & 208 & 1 \\ \hline 181 SURRY COL 502 - SPRIN & 0 & 0 & 0 & 191.3938 & 2 & 32 & 2 \\ \hline 183 SUSSEX CO 101 - WAVI & 0 & 0 & 0 & 462.298 & 5 & 136.2368 & 0 \\ \hline 183 SUSSEX CO 201 - STON & 0 & 0 & 0 & 342.0169 & 3 & 137.2929 & 0 \\ \hline 183 SUSSEX CO 202 - LITTL & 0 & 0 & 0 & 81.58201 & 0 & 45.41226 & 0 \\ \hline 183 SUSSEX CO 301 - COUF & 0 & 0 & 0 & 186.1743 & 3 & 327.3907 & 0 \\ \hline 183 SUSSEX CO 302 - WAKI & 0 & 0 & 0 & 21.96439 & 1 & 121.4514 & 0 \\ \hline 183 SUSSEX CO 401 - MAR! & 0 & 0 & 0 & 346.2006 & 8 & 206.9954 & 1 \\ \hline 183 SUSSEX CO 402 - WEST & 0 & 0 & 0 & 59.61762 & 0 & 11.61709 & 0 \\ \hline 183 SUSSEX CO 501 - HENR & 0 & 0 & 0 & 288.6748 & 1 & 161.5832 & 0 \\ \hline 183 SUSSEX CO 502 - YALE & 0 & 0 & 0 & 135.97 & 2 & 86.60013 & 0 \\ \hline 183 SUSSEX CO 601 - BLAC & 0 & 0 & 0 & 190.358 & 4 & 253.4638 & 0 \\ \hline 183 SUSSEX CO 602 - NEW & 0 & 0 & 0 & 117.1434 & 2 & 130.9563 & 0 \\ \hline 185 TAZEWELL 101 - INDIA & 0 & 0 & 0 & 83.97764 & 0 & 329.1979 & 0 \\ \hline 185 TAZEWELL 102 - TIP T & 0 & 0 & 0 & 57.80279 & 0 & 249.2955 & 0 \\ \hline 185 TAZEWELL 103 - MUN & 0 & 0 & 0 & 111.2431 & 0 & 533.748 & 1.090909 \\ \hline 185 TAZEWELL 104 - FALLS & 0 & 0 & 0 & 52.3497 & 0 & 280.1911 & 0 \\ \hline 185 TAZEWELL 106 - POCA & 0 & 0 & 0 & 54.53094 & 0 & 137.4321 & 0 \\ \hline 185 TAZEWELL 107 - AMO & 0 & 0 & 0 & 10.90619 & 0 & 52.2029 & 0 \\ \hline 185 TAZEWELL 109 - BISHC & 0 & 0 & 0 & 16.35928 & 0 & 95.88288 & 0 \\ \hline 185 TAZEWELL 112 - BANL & 0 & 0 & 0 & 31.62794 & 0 & 100.1443 & 0 \\ \hline 185 TAZEWELL 203 - BURK & 0 & 0 & 0 & 15.26866 & 0 & 86.29459 & 0 \\ \hline 185 TAZEWELL 204 - CLEAI & 0 & 0 & 0 & 64.34651 & 0 & 323.8711 & 0 \\ \hline 185 TAZEWELL 207 - FREE & 0 & 0 & 0 & 29.44671 & 0 & 101.2097 & 0 \\ \hline 185 TAZEWELL 209 - JEFFE & 0 & 0 & 0 & 465.6942 & 0 & 1421.197 & 2.181818 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 185 TAZEWELL 214 - THON & 0 & 0 & 0 & 74.16208 & 0 & 351.5706 & 0 \\ \hline 185 TAZEWELL 301 - CEDA & 0 & 0 & 0 & 259.5673 & 0 & 1264.589 & 1.090909 \\ \hline 185 TAZEWELL 302 - BAPT & 0 & 0 & 0 & 74.16208 & 0 & 213.0731 & 0 \\ \hline 185 TAZEWELL 303 - PAIN \({ }^{-}\) & 0 & 0 & 0 & 205.0363 & 0 & 853.3577 & 2.181818 \\ \hline 185 TAZEWELL 401 - RICHI & 0 & 0 & 0 & 572.5749 & 0 & 1867.585 & 5.454545 \\ \hline 185 TAZEWELL 402 - JEWE & 0 & 0 & 0 & 37.08104 & 0 & 137.4321 & 0 \\ \hline 185 TAZEWELL 501 - SPRIN & 0 & 0 & 0 & 146.1429 & 0 & 829.9196 & 0 \\ \hline 185 TAZEWELL 502 - GRAF & 0 & 0 & 0 & 369.7198 & 0 & 1414.805 & 0 \\ \hline 187 WARREN C 101 - FORK & 0 & 0 & 0 & 369.4898 & 0 & 522.279 & 3 \\ \hline 187 WARREN C 102 - OTTE & 0 & 0 & 0 & 553.1351 & 0 & 1249.249 & 1 \\ \hline 187 WARREN C 201 - HAPP & 0 & 0 & 0 & 633.4111 & 0 & 1059.33 & 2 \\ \hline 187 WARREN C 202 - LINDE & 0 & 0 & 0 & 577.3279 & 0 & 900.008 & 5 \\ \hline 187 WARREN C 301 - NORT & 0 & 0 & 0 & 510.2479 & 0 & 724.8599 & 3 \\ \hline 187 WARREN C 302 - RIVEF & 0 & 0 & 0 & 415.6761 & 0 & 1009.739 & 1 \\ \hline 187 WARREN C 401 - EAST & 0 & 0 & 0 & 629.0125 & 0 & 1398.02 & 4 \\ \hline 187 WARREN C 402 - TOWI & 0 & 0 & 0 & 320.0046 & 0 & 630.9552 & 0 \\ \hline 187 WARREN C 501 - SOUT & 0 & 0 & 0 & 675.1987 & 0 & 953.8186 & 4 \\ \hline 187 WARREN C 502 - BENT & 0 & 0 & 0 & 172.6485 & 0 & 422.0436 & 0 \\ \hline 187 WARREN C504-BROV & 0 & 0 & 0 & 174.8479 & 0 & 319.698 & 0 \\ \hline 191 WASHINGT 101 - EAST & 0 & 0 & 0 & 754.3408 & 0 & 1218.624 & 2.272727 \\ \hline 191 WASHINGT 102 - WEST & 0 & 0 & 0 & 426.0732 & 0 & 587.7816 & 1.136364 \\ \hline 191 WASHINGT 201 - CLINC & 0 & 0 & 0 & 143.8981 & 0 & 439.2214 & 0 \\ \hline 191 WASHINGT 202 -GREE & 0 & 0 & 0 & 211.3503 & 0 & 782.6322 & 0 \\ \hline 191 WASHINGT 203 - HAYT & 0 & 0 & 0 & 69.70064 & 0 & 289.5847 & 0 \\ \hline 191 WASHINGT 204 WOOD & 0 & 0 & 0 & 321.5223 & 0 & 668.5208 & 0 \\ \hline 191 WASHINGT 301 - WAT/ & 0 & 0 & 0 & 483.4076 & 0 & 1198.17 & 4.545455 \\ \hline 191 WASHINGT 302 -SOUT & 0 & 0 & 0 & 644.1688 & 0 & 961.3351 & 1.136364 \\ \hline 191 WASHINGT 401 - GLAD & 0 & 0 & 0 & 354.1242 & 0 & 840.7645 & 2.272727 \\ \hline 191 WASHINGT 402 - MEAI & 0 & 0 & 0 & 445.1847 & 0 & 1006.549 & 4.545455 \\ \hline 191 WASHINGT 501 - RHEA & 0 & 0 & 0 & 441.8121 & 0 & 1310.129 & 0 \\ \hline 191 WASHINGT 502 - DAM, & 0 & 0 & 0 & 338.3854 & 0 & 516.7311 & 1.136364 \\ \hline 191 WASHINGT 504-GREE & 0 & 0 & 0 & 38.22293 & 0 & 105.4993 & 0 \\ \hline 191 WASHINGT 601 - BURS & 0 & 0 & 0 & 273.1815 & 0 & 1098.053 & 0 \\ \hline 191 WASHINGT 602 - MENI & 0 & 0 & 0 & 48.34076 & 0 & 229.2994 & 1.136364 \\ \hline 191 WASHINGT 603 - VALLI & 0 & 0 & 0 & 225.965 & 0 & 851.5297 & 1.136364 \\ \hline 191 WASHINGT 701 - HIGH & 0 & 0 & 0 & 261.9395 & 0 & 977.4829 & 2.272727 \\ \hline 191 WASHINGT 702 - WALL & 0 & 0 & 0 & 142.7739 & 0 & 448.9101 & 0 \\ \hline 191 WASHINGT 703 -JOHN & 0 & 0 & 0 & 376.6083 & 0 & 959.182 & 3.409091 \\ \hline 193 WESTMOR 101 - PREC & 0 & 0 & 0 & 602.9265 & 0 & 296.263 & 1 \\ \hline 193 WESTMOR 102 - PREC & 0 & 0 & 0 & 314.2324 & 0 & 232.3847 & 0 \\ \hline 193 WESTMOR 201 - PREC & 0 & 0 & 0 & 512.9872 & 0 & 517.6342 & 0 \\ \hline 193 WESTMOR 202 - PREC & 0 & 0 & 0 & 188.7615 & 0 & 352.4318 & 0 \\ \hline 193 WESTMOR 301 - PREC & 0 & 0 & 0 & 286.4734 & 0 & 344.7224 & 1 \\ \hline 193 WESTMOR 302 - PREC & 0 & 0 & 0 & 270.9283 & 0 & 294.0603 & 1 \\ \hline 193 WESTMOR 401 - PREC & 0 & 0 & 0 & 386.406 & 0 & 932.843 & 1 \\ \hline 193 WESTMOR 501 - PREC & 0 & 0 & 0 & 566.2846 & 0 & 865.6606 & 2 \\ \hline 195 WISE COUT 101 - APPA & 0 & 0 & 0 & 257.621 & 0 & 404.5154 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 195 WISE COUT 102 - DORC & 0 & 0 & 0 & 115.7111 & 0 & 342.6107 & 0 \\ \hline 195 WISE COUT 103-GUES & 0 & 0 & 0 & 114.6195 & 0 & 342.6107 & 0 \\ \hline 195 WISE COUT 104 - WEST & 0 & 0 & 0 & 305.652 & 0 & 866.6663 & 1.285714 \\ \hline 195 WISE COUT 201 - NORT & 0 & 0 & 0 & 125.5356 & 0 & 472.8241 & 0 \\ \hline 195 WISE COUT 202 - WISE & 0 & 0 & 0 & 542.5323 & 0 & 1187.931 & 2.571429 \\ \hline 195 WISE COUT 203 - EAST & 0 & 0 & 0 & 70.95493 & 0 & 234.8111 & 0 \\ \hline 195 WISE COUT 301 - BIG S & 0 & 0 & 0 & 414.8134 & 0 & 954.1868 & 1.285714 \\ \hline 195 WISE COUT 302 - EAST & 0 & 0 & 0 & 338.4004 & 0 & 1079.064 & 2.571429 \\ \hline 195 WISE COUT 401 - CLINC & 0 & 0 & 0 & 278.3617 & 0 & 909.3592 & 1.285714 \\ \hline 195 WISE COUT 402 -SOUT & 0 & 0 & 0 & 234.6971 & 0 & 959.5234 & 0 \\ \hline 195 WISE COUT 403 - ST PA & 0 & 0 & 0 & 156.1008 & 0 & 267.8981 & 0 \\ \hline 197 WYTHE CO 101 - ROYA & 0 & 0 & 0 & 76.84075 & 0 & 336.2019 & 1.222222 \\ \hline 197 WYTHE CO 102 - RURA & 0 & 0 & 0 & 346.3245 & 0 & 1063.068 & 1.222222 \\ \hline 197 WYTHE CO 203 - WEST & 0 & 0 & 0 & 632.0423 & 0 & 1075.637 & 1.222222 \\ \hline 197 WYTHE CO 303 - EAST & 0 & 0 & 0 & 675.3328 & 0 & 1208.651 & 0 \\ \hline 197 WYTHE CO 401 - FORT & 0 & 0 & 0 & 195.8898 & 0 & 728.9611 & 1.222222 \\ \hline 197 WYTHE CO 402 - MAX & 0 & 0 & 0 & 200.2189 & 0 & 728.9611 & 0 \\ \hline 197 WYTHE CO 501 - JACK & 0 & 0 & 0 & 149.3525 & 0 & 510.0633 & 1.222222 \\ \hline 197 WYTHE CO 502 -SHEFI & 0 & 0 & 0 & 191.5608 & 0 & 807.5129 & 1.222222 \\ \hline 197 WYTHE CO 601 - HUD[ & 0 & 0 & 0 & 73.59396 & 0 & 373.9068 & 0 \\ \hline 197 WYTHE CO 602 - ZION & 0 & 0 & 0 & 181.8204 & 0 & 570.81 & 1.222222 \\ \hline 197 WYTHE CO 603 EVER & 0 & 0 & 0 & 145.0234 & 0 & 425.2273 & 2.444444 \\ \hline 199 YORK COUI 101 - QUEE & 0 & 0 & 0 & 861.9213 & 0 & 784.9939 & 1.142857 \\ \hline 199 YORK COUI 102 - WALL & 0 & 0 & 0 & 1011.143 & 0 & 1097.048 & 4.571429 \\ \hline 199 YORK COUI 103 - MAG & 0 & 0 & 0 & 1638.096 & 0 & 841.142 & 1.142857 \\ \hline 199 YORK COUI 201 - COVE & 0 & 0 & 0 & 1358.584 & 0 & 1464.17 & 5.714286 \\ \hline 199 YORK COUI 202 - KILN & 0 & 0 & 0 & 707.1318 & 0 & 778.5153 & 2.285714 \\ \hline 199 YORK COUI 301 - SEAFI & 0 & 0 & 0 & 733.8581 & 0 & 1928.472 & 4.571429 \\ \hline 199 YORK COUI 302 - YORK & 0 & 0 & 0 & 840.763 & 0 & 1190.988 & 2.285714 \\ \hline 199 YORK COUI 303 - EDGE & 0 & 0 & 0 & 1119.161 & 0 & 958.8371 & 2.285714 \\ \hline 199 YORK COUI 401 - HARV & 0 & 0 & 0 & 885.3068 & 0 & 1623.976 & 3.428571 \\ \hline 199 YORK COUI 402 - DARE & 0 & 0 & 0 & 855.2397 & 0 & 1662.848 & 4.571429 \\ \hline 199 YORK COUI 403 - GRAF & 0 & 0 & 0 & 535.6384 & 0 & 783.9141 & 3.428571 \\ \hline 199 YORK COUI 501 - TABB & 0 & 0 & 0 & 1099.117 & 0 & 1614.258 & 5.714286 \\ \hline 199 YORK COUI 502 - BETH & 0 & 0 & 0 & 1314.04 & 0 & 1337.837 & 6.857143 \\ \hline 510 ALEXANDR 101-LADR & 0 & 0 & 0 & 1302.107 & 0 & 497.6235 & 2.253731 \\ \hline 510 ALEXANDR 102-CITY I & 0 & 0 & 0 & 1174.426 & 0 & 558.3662 & 6.761194 \\ \hline 510 ALEXANDR 103 - LYLES & 0 & 0 & 0 & 1938.104 & 0 & 747.6033 & 12.39552 \\ \hline 510 ALEXANDR 104 - DURA & 0 & 0 & 0 & 1679.128 & 0 & 410.0137 & 7.88806 \\ \hline 510 ALEXANDR 105 - LEE C & 0 & 0 & 0 & 2451.238 & 0 & 705.5506 & 3.380597 \\ \hline 510 ALEXANDR 106-CORA & 0 & 0 & 0 & 2482.556 & 0 & 448.562 & 9.014925 \\ \hline 510 ALEXANDR 107 - MT V & 0 & 0 & 0 & 2729.487 & 0 & 499.9597 & 12.39552 \\ \hline 510 ALEXANDR 108-GEOR & 0 & 0 & 0 & 2682.51 & 0 & 542.0124 & 7.88806 \\ \hline 510 ALEXANDR 109 - FIRE I & 0 & 0 & 0 & 1404.493 & 0 & 511.641 & 2.253731 \\ \hline 510 ALEXANDR 110-CHAR & 0 & 0 & 0 & 1850.173 & 0 & 407.6774 & 9.014925 \\ \hline 510 ALEXANDR 111 - POTC & 0 & 0 & 0 & 881.723 & 0 & 293.2007 & 0 \\ \hline 510 ALEXANDR 201 - MAU & 0 & 0 & 0 & 1721.287 & 0 & 422.8631 & 9.014925 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 510 ALEXANDR 202 - GEOR & 0 & 0 & 0 & 1610.47 & 0 & 579.3926 & 2.253731 \\ \hline 510 ALEXANDR 203 - CHAR & 0 & 0 & 0 & 1780.31 & 0 & 446.2257 & 2.253731 \\ \hline 510 ALEXANDR 204 - BLESS & 0 & 0 & 0 & 1557.47 & 0 & 550.1893 & 7.88806 \\ \hline 510 ALEXANDR 205 - DOUC & 0 & 0 & 0 & 2012.786 & 0 & 654.1529 & 3.380597 \\ \hline 510 ALEXANDR 206 - CHIN & 0 & 0 & 0 & 1505.675 & 0 & 436.8807 & 3.380597 \\ \hline 510 ALEXANDR 207 - TEMF & 0 & 0 & 0 & 1930.877 & 0 & 674.0111 & 6.761194 \\ \hline 510 ALEXANDR 208 - NOV/ & 0 & 0 & 0 & 2206.717 & 0 & 502.296 & 7.88806 \\ \hline 510 ALEXANDR 209 - JAME & 0 & 0 & 0 & 2180.217 & 0 & 495.2872 & 6.761194 \\ \hline 510 ALEXANDR 210 - The - & 0 & 0 & 0 & 1027.472 & 0 & 316.5633 & 3.380597 \\ \hline 510 ALEXANDR 302 - PATR & 0 & 0 & 0 & 1608.06 & 0 & 308.3864 & 6.761194 \\ \hline 510 ALEXANDR 303 - CHAR & 0 & 0 & 0 & 1897.15 & 0 & 336.4215 & 1.126866 \\ \hline 510 ALEXANDR 304 - SAMI & 0 & 0 & 0 & 2768.032 & 0 & 452.0664 & 5.634328 \\ \hline 510 ALEXANDR 305 - JOHN & 0 & 0 & 0 & 1941.718 & 0 & 350.439 & 4.507463 \\ \hline 510 ALEXANDR 306 - WILLI & 0 & 0 & 0 & 2056.149 & 0 & 334.0852 & 3.380597 \\ \hline 510 ALEXANDR 307 - SOUT & 0 & 0 & 0 & 1730.923 & 0 & 384.3148 & 2.253731 \\ \hline 510 ALEXANDR 308 - CAMI & 0 & 0 & 0 & 1894.741 & 0 & 703.2144 & 1.126866 \\ \hline 520 BRISTOL Cl 001 - FIRST & 0 & 0 & 0 & 299.9194 & 0 & 635.3603 & 0 \\ \hline 520 BRISTOL Cl 002 - SECO & 0 & 0 & 0 & 499.4981 & 0 & 843.1783 & 8 \\ \hline 520 BRISTOL Cl 003 - THIRI & 0 & 0 & 0 & 349.5384 & 0 & 424.2951 & 0 \\ \hline 520 BRISTOL Cl 004 - FOUR & 0 & 0 & 0 & 602.0441 & 0 & 1618.166 & 3 \\ \hline 530 BUENA VIS 001 - FIRST & 0 & 0 & 0 & 303 & 0 & 694 & 3 \\ \hline 530 BUENA VIS 002 - SECO & 0 & 0 & 0 & 261 & 0 & 497 & 1 \\ \hline 540 CHARLOTTI 101 - Key R & 0 & 0 & 0 & 2289.788 & 0 & 422.3385 & 4.377358 \\ \hline 540 CHARLOTTI 102 - CLAR & 0 & 0 & 0 & 2242.493 & 0 & 343.0104 & 7.660377 \\ \hline 540 CHARLOTTI201-CARV & 0 & 0 & 0 & 2079.843 & 0 & 215.6385 & 5.471698 \\ \hline 540 CHARLOTTI 202 - WALk & 0 & 0 & 0 & 2444.363 & 0 & 557.5316 & 7.660377 \\ \hline 540 CHARLOTTI301-BENJ, & 0 & 0 & 0 & 1978.331 & 0 & 235.7498 & 4.377358 \\ \hline 540 CHARLOTTI302-JOHN & 0 & 0 & 0 & 2445.517 & 0 & 511.7223 & 13.13208 \\ \hline 540 CHARLOTTI303-BUFC & 0 & 0 & 0 & 1340.42 & 0 & 183.2368 & 4.377358 \\ \hline 540 CHARLOTT/401-VENA & 0 & 0 & 0 & 1242.369 & 0 & 196.6444 & 1.09434 \\ \hline 540 CHARLOTTI402-ALUN & 0 & 0 & 0 & 1358.877 & 0 & 344.1277 & 9.849057 \\ \hline 550 CHESAPEAIO01-GREA & 0 & 0 & 0 & 567.4159 & 30.69373 & 956.5309 & 1.06 \\ \hline 550 CHESAPEAIOO2-BETH & 0 & 0 & 0 & 321.3879 & 22.2265 & 1178.755 & 0 \\ \hline 550 CHESAPEAIO03-CAMI & 0 & 0 & 0 & 1856.417 & 0 & 0 & 28.53302 \\ \hline 550 CHESAPEAIO04-CHUR & 0 & 0 & 0 & 687.2468 & 0 & 0 & 181.7659 \\ \hline 550 CHESAPEAIO05-CRES & 0 & 0 & 0 & 1440.452 & 0 & 0 & 44.3847 \\ \hline 550 CHESAPEAI006-DEEP & 0 & 0 & 0 & 1595.857 & 46.5698 & 1178.755 & 3.18 \\ \hline 550 CHESAPEAI007-GREE & 0 & 0 & 0 & 785.738 & 17.99288 & 1069.253 & 2.12 \\ \hline 550 CHESAPEAIO08-SOUT & 0 & 0 & 0 & 1167.043 & 0 & 0 & 145.8355 \\ \hline 550 CHESAPEAI009-BELLS & 0 & 0 & 0 & 1046.173 & 37.04416 & 1805.707 & 2.12 \\ \hline 550 CHESAPEAIO10-OSCA & 0 & 0 & 0 & 504.2647 & 0 & 0 & 82.42874 \\ \hline 550 CHESAPEAIO11-GENE & 0 & 0 & 0 & 715.9708 & 0 & 0 & 139.4948 \\ \hline 550 CHESAPEAIO12-GEOR & 0 & 0 & 0 & 1274.492 & 0 & 0 & 45.44148 \\ \hline 550 CHESAPEAIO13-GILM & 0 & 0 & 0 & 847.8881 & 0 & 0 & 177.5388 \\ \hline 550 CHESAPEAIO14-GRAS & 0 & 0 & 0 & 230.5127 & 7.408832 & 295.2256 & 0 \\ \hline 550 CHESAPEAIO15-B M V & 0 & 0 & 0 & 1035.126 & 0 & 0 & 118.3592 \\ \hline 550 CHESAPEAIO16-HICKC & 0 & 0 & 0 & 499.8136 & 21.16809 & 1204.52 & 1.06 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 550 CHESAPEAI 017 - INDIA & 0 & 0 & 0 & 308.0891 & 20.10969 & 813.749 & 4.24 \\ \hline 550 CHESAPEAI018-INDIA & 0 & 0 & 0 & 841.505 & 0 & 0 & 109.905 \\ \hline 550 CHESAPEAI019-JOLLI & 0 & 0 & 0 & 404.5054 & 22.2265 & 694.5853 & 0 \\ \hline 550 CHESAPEAIO20-E W C & 0 & 0 & 0 & 840.4839 & 27.51852 & 987.6637 & 6.347115 \\ \hline 550 CHESAPEAI 021 - FELLC & 0 & 0 & 0 & 1000.019 & 0 & 0 & 214.5261 \\ \hline 550 CHESAPEAIO22-NORF & 0 & 0 & 0 & 541.4994 & 0 & 0 & 166.971 \\ \hline 550 CHESAPEAIO23-OAK 1 & 0 & 0 & 0 & 975.246 & 20.10969 & 718.2033 & 1.06 \\ \hline 550 CHESAPEAIO24-OAKL & 0 & 0 & 0 & 981.9331 & 0 & 0 & 107.7914 \\ \hline 550 CHESAPEAIO25-ST JU & 0 & 0 & 0 & 517.0309 & 0 & 0 & 68.69061 \\ \hline 550 CHESAPEAIO26-JOHN & 0 & 0 & 0 & 555.3295 & 0 & 0 & 45.44148 \\ \hline 550 CHESAPEAI027-SILVE & 0 & 0 & 0 & 1115.978 & 0 & 0 & 231.4345 \\ \hline 550 CHESAPEAI028-SUNR & 0 & 0 & 0 & 98.63284 & 2.116809 & 162.1057 & 0 \\ \hline 550 CHESAPEAIO29-TANG & 0 & 0 & 0 & 629.7989 & 0 & 0 & 196.5608 \\ \hline 550 CHESAPEAIO30-SOUT & 0 & 0 & 0 & 673.4168 & 0 & 0 & 10.56779 \\ \hline 550 CHESAPEAI031-CARV & 0 & 0 & 0 & 1417.048 & 0 & 0 & 49.6686 \\ \hline 550 CHESAPEAI 032 - PROV & 0 & 0 & 0 & 1747.905 & 0 & 0 & 68.69061 \\ \hline 550 CHESAPEAIO33-WEST & 0 & 0 & 0 & 504.2647 & 0 & 0 & 151.1194 \\ \hline 550 CHESAPEAI034-HICKC & 0 & 0 & 0 & 630.5852 & 29.63533 & 1583.483 & 4.24 \\ \hline 550 CHESAPEAI 035 - TAYL( & 0 & 0 & 0 & 813.8449 & 0 & 0 & 68.69061 \\ \hline 550 CHESAPEAIO36-GREA & 0 & 0 & 0 & 947.5402 & 51.86182 & 1528.732 & 0 \\ \hline 550 CHESAPEAI 037 - BRID & 0 & 0 & 0 & 550.7923 & 26.46011 & 772.9542 & 1.06 \\ \hline 550 CHESAPEAI038-BAILE & 0 & 0 & 0 & 667.0337 & 0 & 0 & 213.4693 \\ \hline 550 CHESAPEAI039-LAKE & 0 & 0 & 0 & 226.0798 & 10.58405 & 411.1687 & 0 \\ \hline 550 CHESAPEAI 040 - RIVEF & 0 & 0 & 0 & 1388.324 & 0 & 0 & 185.993 \\ \hline 550 CHESAPEAI041-JOHN & 0 & 0 & 0 & 1429.622 & 40.21937 & 1034.9 & 4.24 \\ \hline 550 CHESAPEAIO42-PARK & 0 & 0 & 0 & 1000.019 & 0 & 0 & 110.9618 \\ \hline 550 CHESAPEAIO43-PLEA! & 0 & 0 & 0 & 376.7996 & 14.81766 & 947.9425 & 1.06 \\ \hline 550 CHESAPEAI044-NANS & 0 & 0 & 0 & 887.2505 & 0 & 0 & 121.5295 \\ \hline 550 CHESAPEAIO45-SUNR & 0 & 0 & 0 & 425.5619 & 14.81766 & 188.9444 & 1.06 \\ \hline 550 CHESAPEAI046-BELLS & 0 & 0 & 0 & 658.2911 & 21.16809 & 733.233 & 0 \\ \hline 550 CHESAPEAI047-GREE & 0 & 0 & 0 & 277.0585 & 14.81766 & 549.6563 & 1.06 \\ \hline 550 CHESAPEAI048-JOLLI & 0 & 0 & 0 & 1629.104 & 12.70085 & 138.4876 & 1.06 \\ \hline 550 CHESAPEAIO49-WATE & 0 & 0 & 0 & 1430.73 & 30.69373 & 1485.79 & 4.24 \\ \hline 550 CHESAPEAI 050 - RIVEF & 0 & 0 & 0 & 992.9778 & 26.46011 & 625.8782 & 1.06 \\ \hline 550 CHESAPEAI 051 - COOF & 0 & 0 & 0 & 514.2206 & 24.3433 & 1321.537 & 3.18 \\ \hline 550 CHESAPEAIO52-SHIPY & 0 & 0 & 0 & 1039.524 & 22.2265 & 640.9079 & 2.12 \\ \hline 550 CHESAPEAI053-FAIRV & 0 & 0 & 0 & 801.0787 & 0 & 0 & 122.5863 \\ \hline 550 CHESAPEAIO54-PUGF & 0 & 0 & 0 & 1194.703 & 0 & 0 & 119.416 \\ \hline 550 CHESAPEAIO55-GEOR & 0 & 0 & 0 & 977.6777 & 0 & 0 & 47.55504 \\ \hline 550 CHESAPEAIO56-GREE & 0 & 0 & 0 & 885.1228 & 0 & 0 & 145.8355 \\ \hline 550 CHESAPEAI057-CYPR & 0 & 0 & 0 & 1072.36 & 0 & 0 & 122.5863 \\ \hline 550 CHESAPEAI058-EXPR & 0 & 0 & 0 & 474.3242 & 13.75926 & 156.7379 & 1.06 \\ \hline 550 CHESAPEAI 059 - CLEAI & 0 & 0 & 0 & 636.1264 & 14.81766 & 575.4215 & 1.06 \\ \hline 550 CHESAPEAI 060 - PARK & 0 & 0 & 0 & 689.3216 & 43.39459 & 1329.052 & 4.24 \\ \hline 550 CHESAPEAI 061 - CENT & 0 & 0 & 0 & 436.6442 & 14.81766 & 916.8096 & 0 \\ \hline 550 CHESAPEAI062-FENT & 0 & 0 & 0 & 551.9006 & 27.51852 & 1093.945 & 4.24 \\ \hline 550 CHESAPEAI063-POPL & 0 & 0 & 0 & 295.8985 & 12.70085 & 764.3658 & 1.06 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 570 COLONIAL 001 - FIRST & 0 & 0 & 0 & 363.8633 & 25.56522 & 552.8117 & 0 \\ \hline 570 COLONIAL 002 - SECO & 0 & 0 & 0 & 320.5991 & 24.5 & 671.5885 & 0 \\ \hline 570 COLONIAL 003 - THIRI & 0 & 0 & 0 & 420.4396 & 18.1087 & 838.0981 & 1 \\ \hline 570 COLONIAL 004 - FOUR & 0 & 0 & 0 & 510.2961 & 13.84783 & 1035.689 & 0 \\ \hline 570 COLONIAL 005 - FIFTH & 0 & 0 & 0 & 332.8018 & 15.97826 & 1258.812 & 1 \\ \hline 580 COVINGTO 101 - PREC & 0 & 0 & 0 & 121.9777 & 0 & 176.9489 & 0 \\ \hline 580 COVINGTO 201 - PREC & 0 & 0 & 0 & 157.7298 & 0 & 172.7607 & 1 \\ \hline 580 COVINGTO 301 - PREC & 0 & 0 & 0 & 180.8635 & 0 & 108.8916 & 0 \\ \hline 580 COVINGTO 401 - PREC & 0 & 0 & 0 & 154.5752 & 0 & 284.7935 & 0 \\ \hline 580 COVINGTO 501 - PREC & 0 & 0 & 0 & 139.8538 & 0 & 280.6053 & 0 \\ \hline 590 DANVILLE (001-WARI & 0 & 0 & 0 & 368.8096 & 0 & 57.17546 & 0 \\ \hline 590 DANVILLE (002-WARI & 0 & 0 & 0 & 295.6835 & 0 & 175.8415 & 0 \\ \hline 590 DANVILLE (003-WARI & 0 & 0 & 0 & 698.4066 & 0 & 251.3563 & 4.571429 \\ \hline 590 DANVILLE (004-WARI & 0 & 0 & 0 & 865.8546 & 0 & 763.7779 & 0 \\ \hline 590 DANVILLE (006-WARI & 0 & 0 & 0 & 393.1849 & 0 & 47.46642 & 0 \\ \hline 590 DANVILLE (007-WARI & 0 & 0 & 0 & 695.2272 & 0 & 97.09041 & 0 \\ \hline 590 DANVILLE (008-WARI & 0 & 0 & 0 & 540.4968 & 0 & 230.8594 & 1.142857 \\ \hline 590 DANVILLE (009-WARI & 0 & 0 & 0 & 403.7829 & 0 & 304.2166 & 0 \\ \hline 590 DANVILLE (010-WARI & 0 & 0 & 0 & 576.5299 & 0 & 396.9919 & 1.142857 \\ \hline 590 DANVILLE (011-WARI & 0 & 0 & 0 & 933.6817 & 0 & 402.3858 & 2.285714 \\ \hline 590 DANVILLE (012-WARI & 0 & 0 & 0 & 919.9043 & 0 & 541.5487 & 2.285714 \\ \hline 590 DANVILLE (013-WARI & 0 & 0 & 0 & 820.2833 & 0 & 414.2524 & 2.285714 \\ \hline 590 DANVILLE (014-WARI & 0 & 0 & 0 & 198.1822 & 0 & 7.551476 & 0 \\ \hline 590 DANVILLE (015-WARI & 0 & 0 & 0 & 579.7093 & 0 & 559.888 & 0 \\ \hline 590 DANVILLE (016-WARI & 0 & 0 & 0 & 561.6927 & 0 & 746.5173 & 1.142857 \\ \hline 590 DANVILLE (017-WARI & 0 & 0 & 0 & 364.5704 & 0 & 850.0804 & 1.142857 \\ \hline 595 EMPORIA (101-PREC & 0 & 0 & 0 & 228.2253 & 1 & 84.65109 & 0 \\ \hline 595 EMPORIA ( 201 - PREC & 0 & 0 & 0 & 186.5403 & 3 & 8.360601 & 0 \\ \hline 595 EMPORIA ( 301 - PREC & 0 & 0 & 0 & 109.4231 & 2 & 140.0401 & 1 \\ \hline 595 EMPORIA ( 401 - PREC & 0 & 0 & 0 & 168.8242 & 3 & 155.7162 & 0 \\ \hline 595 EMPORIA ( 501 - PREC & 0 & 0 & 0 & 177.1612 & 1 & 9.405676 & 0 \\ \hline 595 EMPORIA ( 601 - DISTF & 0 & 0 & 0 & 126.0971 & 2 & 165.1219 & 0 \\ \hline 595 EMPORIA ( 701 - DISTF & 0 & 0 & 0 & 141.7289 & 0 & 62.70451 & 0 \\ \hline 600 FAIRFAX Cl 001 - ONE & 0 & 0 & 0 & 1128.776 & 38.04324 & 491.3199 & 5.052632 \\ \hline 600 FAIRFAX Cl 002 - TWO & 0 & 0 & 0 & 1068.862 & 29.09189 & 558.7335 & 6.315789 \\ \hline 600 FAIRFAX Cl 003 - THRE & 0 & 0 & 0 & 1509.828 & 52.58919 & 700.4165 & 3.789474 \\ \hline 600 FAIRFAX Cl 004 - FOUR & 0 & 0 & 0 & 1216.25 & 29.09189 & 556.4483 & 1.263158 \\ \hline 600 FAIRFAX Cl 005 - FIVE & 0 & 0 & 0 & 1089.233 & 33.56757 & 454.7565 & 6.315789 \\ \hline 600 FAIRFAX Cl 006 - SIX & 0 & 0 & 0 & 1076.052 & 24.61622 & 467.3252 & 1.263158 \\ \hline 610 FALLS CHU 001 - FIRST & 0 & 0 & 0 & 2058.514 & 0 & 489.2821 & 2.625 \\ \hline 610 FALLS CHU 002 - SECO & 0 & 0 & 0 & 1628.356 & 0 & 360.3333 & 7.875 \\ \hline 610 FALLS CHU 003 - THIRI & 0 & 0 & 0 & 2074.13 & 0 & 560.3846 & 10.5 \\ \hline 620 FRANKLIN (101-PREC & 0 & 0 & 0 & 410.2084 & 0 & 0 & 93.69585 \\ \hline 620 FRANKLIN (201-PREC & 0 & 0 & 0 & 315.6267 & 0 & 0 & 51.94009 \\ \hline 620 FRANKLIN (301-PREC & 0 & 0 & 0 & 400.644 & 0 & 0 & 16.29493 \\ \hline 620 FRANKLIN (401- PREC & 0 & 0 & 0 & 297.5605 & 0 & 0 & 4.073733 \\ \hline 620 FRANKLIN (501- PREC & 0 & 0 & 0 & 346.4454 & 0 & 0 & 1.018433 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 620 FRANKLIN (601-PREC & 0 & 0 & 0 & 381.5151 & 0 & 0 & 53.97696 \\ \hline 630 FREDERICK 101 - PREC & 0 & 0 & 0 & 1614.213 & 0 & 1067.171 & 5 \\ \hline 630 FREDERICK 201 - PREC & 0 & 0 & 0 & 1797.471 & 0 & 912.6386 & 3 \\ \hline 630 FREDERICK 301 - PREC & 0 & 0 & 0 & 1288.298 & 0 & 875.6851 & 3 \\ \hline 630 FREDERICK 401 - PREC & 0 & 0 & 0 & 1040.295 & 0 & 294.5079 & 5 \\ \hline 630 FREDERICK 402 - PREC & 0 & 0 & 0 & 571.7232 & 0 & 242.997 & 0 \\ \hline 640 GALAX CIT 001 - EAST & 0 & 0 & 0 & 285.943 & 0 & 508.5886 & 0 \\ \hline 640 GALAX CIT 003 - SOUT & 0 & 0 & 0 & 163.396 & 0 & 319.2205 & 1 \\ \hline 640 GALAX CIT 005 - WEST & 0 & 0 & 0 & 208.6611 & 0 & 345.191 & 0 \\ \hline 650 HAMPTON 101 - ABER & 0 & 0 & 0 & 1392.283 & 0 & 0 & 53.39341 \\ \hline 650 HAMPTON 102 - BASSI & 0 & 0 & 0 & 1571.245 & 0 & 0 & 24.07938 \\ \hline 650 HAMPTON 103 - CITY I & 0 & 0 & 0 & 888.4192 & 0 & 0 & 39.78333 \\ \hline 650 HAMPTON 104 - COOF & 0 & 0 & 0 & 2189.09 & 0 & 0 & 79.56665 \\ \hline 650 HAMPTON 105 - EAST & 0 & 0 & 0 & 1611.724 & 0 & 0 & 56.5342 \\ \hline 650 HAMPTON 106 - ARM & 0 & 0 & 0 & 1360.325 & 0 & 0 & 142.3824 \\ \hline 650 HAMPTON 107 - LIND & 0 & 0 & 0 & 1453.002 & 0 & 0 & 40.83025 \\ \hline 650 HAMPTON 108-THON & 0 & 0 & 0 & 1837.558 & 0 & 0 & 59.67499 \\ \hline 650 HAMPTON 109 - PHEN & 0 & 0 & 0 & 1817.318 & 0 & 0 & 23.03245 \\ \hline 650 HAMPTON 110 - PHOE & 0 & 0 & 0 & 327.4201 & 0 & 165.5763 & 0 \\ \hline 650 HAMPTON 111 - HAM & 0 & 0 & 0 & 466.5798 & 0 & 0 & 77.47279 \\ \hline 650 HAMPTON 112 - SMIT & 0 & 0 & 0 & 1750.207 & 0 & 0 & 172.7434 \\ \hline 650 HAMPTON 115 - WYTr & 0 & 0 & 0 & 721.1748 & 0 & 0 & 99.45831 \\ \hline 650 HAMPTON 116 - JONE & 0 & 0 & 0 & 686.0215 & 0 & 0 & 39.78333 \\ \hline 650 HAMPTON 117 - KECO & 0 & 0 & 0 & 1163.254 & 0 & 0 & 72.23814 \\ \hline 650 HAMPTON 118-MALL & 0 & 0 & 0 & 1867.385 & 0 & 0 & 47.11183 \\ \hline 650 HAMPTON 201 - BOOk & 0 & 0 & 0 & 1003.731 & 0 & 944.9452 & 5 \\ \hline 650 HAMPTON 202 - BRYA & 0 & 0 & 0 & 1123.963 & 0 & 809.953 & 7 \\ \hline 650 HAMPTON 203 - BURB & 0 & 0 & 0 & 858.8069 & 0 & 513.603 & 5 \\ \hline 650 HAMPTON 204 - FORR & 0 & 0 & 0 & 1230.365 & 0 & 0 & 99.45831 \\ \hline 650 HAMPTON 205 - ASBU & 0 & 0 & 0 & 1167.977 & 0 & 1579.83 & 0 \\ \hline 650 HAMPTON 208 - KRAF & 0 & 0 & 0 & 1979.236 & 0 & 0 & 222.996 \\ \hline 650 HAMPTON 209 - LANG & 0 & 0 & 0 & 967.2312 & 0 & 660.1961 & 3 \\ \hline 650 HAMPTON \(210-\mathrm{MACl}\) & 0 & 0 & 0 & 2142.219 & 0 & 0 & 155.9925 \\ \hline 650 HAMPTON 212 - BETH & 0 & 0 & 0 & 2282.832 & 0 & 0 & 158.0864 \\ \hline 650 HAMPTON 213 - PHILL & 0 & 0 & 0 & 1334.371 & 0 & 1241.295 & 6 \\ \hline 650 HAMPTON 214 -TUCK & 0 & 0 & 0 & 1577.636 & 0 & 0 & 189.4943 \\ \hline 650 HAMPTON 215 - TYLEF & 0 & 0 & 0 & 415.7286 & 0 & 11.60089 & 28.2671 \\ \hline 650 HAMPTON 216 - SAND & 0 & 0 & 0 & 961.9215 & 0 & 0 & 119.35 \\ \hline 650 HAMPTON 217 - SYMS & 0 & 0 & 0 & 570.9744 & 0 & 0 & 95.27059 \\ \hline 660 HARRISONI 101 - NORT & 0 & 0 & 0 & 1423.621 & 0 & 610.7476 & 2.3 \\ \hline 660 HARRISONI 102 - EAST & 0 & 0 & 0 & 741.2242 & 0 & 259.4036 & 0 \\ \hline 660 HARRISONI 103 - SOUT & 0 & 0 & 0 & 1328.428 & 0 & 610.7476 & 4.6 \\ \hline 660 HARRISONI 104 - EAST & 0 & 0 & 0 & 1172.268 & 0 & 669.8522 & 3.45 \\ \hline 660 HARRISONI 105 - Soutr & 0 & 0 & 0 & 835.3479 & 0 & 357.9112 & 1.15 \\ \hline 660 HARRISONI 201 - NORT & 0 & 0 & 0 & 1167.99 & 0 & 712.5389 & 2.3 \\ \hline 660 HARRISONI202-SOUT & 0 & 0 & 0 & 1263.183 & 0 & 719.106 & 4.6 \\ \hline 660 HARRISONI203-WES & 0 & 0 & 0 & 1197.938 & 0 & 621.6929 & 4.6 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 670 HOPEWELL 101 - WARI & 0 & 0 & 0 & 373.9955 & 24.5 & 370.2986 & 1 \\ \hline 670 HOPEWELL 201 - WARI & 0 & 0 & 0 & 584.5015 & 10.20833 & 103.3391 & 0 \\ \hline 670 HOPEWELL 301 - WARI & 0 & 0 & 0 & 388.9553 & 18.375 & 827.7895 & 0 \\ \hline 670 HOPEWELL 401 - WARI & 0 & 0 & 0 & 803.5561 & 15.3125 & 655.5576 & 0 \\ \hline 670 HOPEWELL 501 - WARI & 0 & 0 & 0 & 398.5724 & 10.20833 & 596.3529 & 0 \\ \hline 670 HOPEWELL 601 - WARI & 0 & 0 & 0 & 727.6884 & 10.20833 & 106.5685 & 1 \\ \hline 670 HOPEWELL 701 - WARI & 0 & 0 & 0 & 525.7308 & 9.1875 & 311.0938 & 0 \\ \hline 678 LEXINGTON 001 - LEXIN & 0 & 0 & 0 & 1431 & 0 & 697 & 5 \\ \hline 680 LYNCHBUR 101 - FIRST & 0 & 0 & 0 & 1143.648 & 0 & 1165.417 & 4.244898 \\ \hline 680 LYNCHBUR 102 - FIRST & 0 & 0 & 0 & 1053.782 & 0 & 1425.216 & 3.183673 \\ \hline 680 LYNCHBUR 103 - FIRST & 0 & 0 & 0 & 758.5092 & 0 & 965.571 & 2.122449 \\ \hline 680 LYNCHBUR 104 - FIRST & 0 & 0 & 0 & 481.4234 & 0 & 297.6651 & 1.061224 \\ \hline 680 LYNCHBUR 105 - FIRST & 0 & 0 & 0 & 652.5961 & 0 & 491.2001 & 3.183673 \\ \hline 680 LYNCHBUR 201 - SECO & 0 & 0 & 0 & 1618.652 & 0 & 428.0909 & 6.367347 \\ \hline 680 LYNCHBUR 202 - SECO & 0 & 0 & 0 & 1305.192 & 0 & 318.7015 & 4.244898 \\ \hline 680 LYNCHBUR 203 - SECO & 0 & 0 & 0 & 437.5603 & 0 & 116.7521 & 1.061224 \\ \hline 680 LYNCHBUR 204 - SECO & 0 & 0 & 0 & 297.4127 & 0 & 225.0895 & 4.244898 \\ \hline 680 LYNCHBUR 301 - THIRI & 0 & 0 & 0 & 528.4959 & 0 & 384.9662 & 0 \\ \hline 680 LYNCHBUR 302 - THIRI & 0 & 0 & 0 & 99.49416 & 0 & 980.2965 & 1.061224 \\ \hline 680 LYNCHBUR 303 - THIRI & 0 & 0 & 0 & 436.4905 & 0 & 555.3611 & 3.183673 \\ \hline 680 LYNCHBUR 304 - THIRI & 0 & 0 & 0 & 394.7672 & 0 & 590.0712 & 3.183673 \\ \hline 680 LYNCHBUR 305 - THIR[ & 0 & 0 & 0 & 693.2496 & 0 & 1240.096 & 2.122449 \\ \hline 680 LYNCHBUR 401 - FOUR & 0 & 0 & 0 & 982.1036 & 0 & 1740.763 & 3.183673 \\ \hline 680 LYNCHBUR 402 - FOUR & 0 & 0 & 0 & 445.0491 & 0 & 582.7084 & 0 \\ \hline 680 LYNCHBUR 403 - FOUR & 0 & 0 & 0 & 889.0285 & 0 & 1031.836 & 4.244898 \\ \hline 680 LYNCHBUR 404 - FOUR & 0 & 0 & 0 & 973.545 & 0 & 1039.198 & 5.306122 \\ \hline 683 MANASSAS 001 - DEAN & 0 & 0 & 0 & 1275.19 & 0 & 573.3664 & 4.235294 \\ \hline 683 MANASSAS002-WEET & 0 & 0 & 0 & 1529.291 & 0 & 930.5455 & 2.117647 \\ \hline 683 MANASSAS003-METZ & 0 & 0 & 0 & 1488.307 & 0 & 964.6185 & 2.117647 \\ \hline 683 MANASSAS 004 - HAYD & 0 & 0 & 0 & 1289.242 & 0 & 950.5193 & 2.117647 \\ \hline 683 MANASSAS 005 - BALD & 0 & 0 & 0 & 1197.906 & 0 & 739.0317 & 2.117647 \\ \hline 683 MANASSAS006-ROUT & 0 & 0 & 0 & 1014.063 & 0 & 959.9187 & 5.294118 \\ \hline 685 MANASSAS 001 - PREC & 0 & 0 & 0 & 1180.379 & 0 & 471.4555 & 3 \\ \hline 685 MANASSAS 002 - PREC & 0 & 0 & 0 & 839.8406 & 0 & 434.3878 & 0 \\ \hline 685 MANASSAS003-PREC & 0 & 0 & 0 & 938.7807 & 0 & 513.1567 & 0 \\ \hline 690 MARTINSV 001 - PREC & 0 & 0 & 0 & 478.5706 & 0 & 20.70814 & 2 \\ \hline 690 MARTINSV 002 - PREC & 0 & 0 & 0 & 577.0684 & 0 & 360.7577 & 4 \\ \hline 690 MARTINSV 003 - PREC & 0 & 0 & 0 & 395.0617 & 0 & 168.9349 & 5 \\ \hline 690 MARTINSV 004 - PREC & 0 & 0 & 0 & 639.1648 & 0 & 289.914 & 1 \\ \hline 690 MARTINSV 005 - PREC & 0 & 0 & 0 & 541.7377 & 0 & 827.2358 & 2 \\ \hline 690 MARTINSV 006 - PREC & 0 & 0 & 0 & 233.3969 & 0 & 5.449511 & 0 \\ \hline 700 NEWPORT 101 - DENB & 0 & 0 & 0 & 1724.689 & 0 & 0 & 126.1557 \\ \hline 700 NEWPORT 102 -EPES & 0 & 0 & 0 & 1660.539 & 0 & 0 & 93.83483 \\ \hline 700 NEWPORT 103 -JENKI & 0 & 0 & 0 & 1460.727 & 0 & 0 & 163.6897 \\ \hline 700 NEWPORT 104 - MCIN & 0 & 0 & 0 & 1193.611 & 0 & 0 & 75.06787 \\ \hline 700 NEWPORT 105 - OYST & 0 & 0 & 0 & 406.9845 & 0 & 0 & 30.23567 \\ \hline 700 NEWPORT 106 - RESEF & 0 & 0 & 0 & 1910.829 & 0 & 0 & 181.414 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 700 NEWPORT 107-RICHI & 0 & 0 & 0 & 1682.623 & 0 & 0 & 167.8601 \\ \hline 700 NEWPORT 108 -LEE H & 0 & 0 & 0 & 1382.906 & 0 & 0 & 111.5592 \\ \hline 700 NEWPORT 109 - WIN[ & 0 & 0 & 0 & 859.1894 & 0 & 0 & 96.96266 \\ \hline 700 NEWPORT 110 -GREE & 0 & 0 & 0 & 1561.685 & 0 & 0 & 126.1557 \\ \hline 700 NEWPORT 201 - BLAN & 0 & 0 & 0 & 310.2336 & 0 & 0 & 32.32089 \\ \hline 700 NEWPORT 202 -BOUL & 0 & 0 & 0 & 968.5599 & 0 & 0 & 149.0931 \\ \hline 700 NEWPORT 203 - CHAR & 0 & 0 & 0 & 1589.027 & 0 & 0 & 300.2715 \\ \hline 700 NEWPORT 204 - WELL & 0 & 0 & 0 & 901.255 & 0 & 0 & 85.49396 \\ \hline 700 NEWPORT 205 - DEEP & 0 & 0 & 0 & 1170.475 & 0 & 0 & 237.7149 \\ \hline 700 NEWPORT 208 -HIDEI & 0 & 0 & 0 & 691.9787 & 0 & 0 & 143.8801 \\ \hline 700 NEWPORT 209 - HILTC & 0 & 0 & 0 & 1026.4 & 0 & 0 & 166.8175 \\ \hline 700 NEWPORT 210 - NELSI & 0 & 0 & 0 & 1659.487 & 0 & 0 & 305.4845 \\ \hline 700 NEWPORT 211 - PALN & 0 & 0 & 0 & 1338.737 & 0 & 0 & 155.3488 \\ \hline 700 NEWPORT 212 - RIVEF & 0 & 0 & 0 & 626.7771 & 0 & 0 & 112.6018 \\ \hline 700 NEWPORT 213 - SANF & 0 & 0 & 0 & 432.2238 & 0 & 0 & 109.474 \\ \hline 700 NEWPORT 215 -WAR & 0 & 0 & 0 & 653.0681 & 0 & 0 & 68.81221 \\ \hline 700 NEWPORT 216 - YATE: & 0 & 0 & 0 & 686.7205 & 0 & 0 & 115.7296 \\ \hline 700 NEWPORT 217 -RIVEF & 0 & 0 & 0 & 1039.02 & 0 & 0 & 158.4766 \\ \hline 700 NEWPORT 218 -KILN & 0 & 0 & 0 & 1915.035 & 0 & 0 & 241.8854 \\ \hline 700 NEWPORT 219 - DEER & 0 & 0 & 0 & 1702.604 & 0 & 0 & 109.474 \\ \hline 700 NEWPORT 302 - BRIAF & 0 & 0 & 0 & 951.7337 & 0 & 0 & 59.42873 \\ \hline 700 NEWPORT 303 - CARV & 0 & 0 & 0 & 646.7582 & 0 & 0 & 52.13046 \\ \hline 700 NEWPORT 304-CHES & 0 & 0 & 0 & 545.8009 & 0 & 0 & 3.127828 \\ \hline 700 NEWPORT 305 - DOW & 0 & 0 & 0 & 362.8156 & 0 & 0 & 19.80958 \\ \hline 700 NEWPORT 306 - DUNE & 0 & 0 & 0 & 168.2623 & 0 & 0 & 3.127828 \\ \hline 700 NEWPORT 307 - HUN7 & 0 & 0 & 0 & 413.2943 & 0 & 0 & 3.127828 \\ \hline 700 NEWPORT 308 - JEFFE & 0 & 0 & 0 & 449.05 & 0 & 0 & 2.085219 \\ \hline 700 NEWPORT 309 - MAG & 0 & 0 & 0 & 551.0591 & 0 & 0 & 4.170437 \\ \hline 700 NEWPORT 310 -MAR & 0 & 0 & 0 & 707.7533 & 0 & 0 & 3.127828 \\ \hline 700 NEWPORT 311 - NEWI & 0 & 0 & 0 & 1369.235 & 0 & 0 & 83.40874 \\ \hline 700 NEWPORT 312 - NEW: & 0 & 0 & 0 & 155.6426 & 0 & 0 & 0 \\ \hline 700 NEWPORT 313 -REED & 0 & 0 & 0 & 1026.4 & 0 & 0 & 10.42609 \\ \hline 700 NEWPORT 314 -RIVEF & 0 & 0 & 0 & 592.073 & 0 & 0 & 79.2383 \\ \hline 700 NEWPORT 315 -SEDG & 0 & 0 & 0 & 798.1943 & 0 & 0 & 125.1131 \\ \hline 700 NEWPORT 316 -SOUT & 0 & 0 & 0 & 1106.325 & 0 & 0 & 110.5166 \\ \hline 700 NEWPORT 317 -WASt & 0 & 0 & 0 & 318.6467 & 0 & 0 & 3.127828 \\ \hline 700 NEWPORT 318 -WILSI & 0 & 0 & 0 & 620.4673 & 0 & 0 & 19.80958 \\ \hline 700 NEWPORT 319 - SAUN & 0 & 0 & 0 & 1431.281 & 0 & 0 & 196.0105 \\ \hline 700 NEWPORT 320 - WATr & 0 & 0 & 0 & 1747.825 & 0 & 0 & 303.3993 \\ \hline 710 NORFOLK (101-GRAN & 0 & 0 & 0 & 1563.911 & 0 & 0 & 155.9467 \\ \hline 710 NORFOLK ( 102 - OCEA & 0 & 0 & 0 & 536.1838 & 0 & 405.689 & 2.1 \\ \hline 710 NORFOLK ( 103 - NORT & 0 & 0 & 0 & 741.7562 & 0 & 563.9811 & 4.2 \\ \hline 710 NORFOLK (104-TITUS & 0 & 0 & 0 & 665.5522 & 0 & 87.00823 & 5.260862 \\ \hline 710 NORFOLK ( 106 - SECO & 0 & 0 & 0 & 1138.066 & 0 & 620.5889 & 1.05 \\ \hline 710 NORFOLK ( 201 - LARC & 0 & 0 & 0 & 1680.7 & 0 & 0 & 178.2248 \\ \hline 710 NORFOLK ( 203 - GHEN & 0 & 0 & 0 & 647.6482 & 0 & 0 & 49.86051 \\ \hline 710 NORFOLK ( 207 - LAME & 0 & 0 & 0 & 1440.752 & 0 & 0 & 49.86051 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 710 NORFOLK ( 208 - LARC & 0 & 0 & 0 & 836.6341 & 0 & 0 & 132.6077 \\ \hline 710 NORFOLK ( 210 - MAU & 0 & 0 & 0 & 1302.729 & 0 & 0 & 118.8165 \\ \hline 710 NORFOLK ( 211 - CHRY & 0 & 0 & 0 & 1670.083 & 0 & 0 & 163.3727 \\ \hline 710 NORFOLK ( 212 - PARK & 0 & 0 & 0 & 955.5466 & 0 & 0 & 19.09551 \\ \hline 710 NORFOLK ( 213 - TAYLC & 0 & 0 & 0 & 1624.429 & 0 & 0 & 107.147 \\ \hline 710 NORFOLK ( 214 - STUA & 0 & 0 & 0 & 1570.282 & 0 & 0 & 112.4514 \\ \hline 710 NORFOLK ( 215 - SUBU & 0 & 0 & 0 & 875.2724 & 0 & 498.987 & 1.05 \\ \hline 710 NORFOLK ( 217 - WESL & 0 & 0 & 0 & 836.0653 & 0 & 334.4051 & 1.05 \\ \hline 710 NORFOLK ( 218 - WILL & 0 & 0 & 0 & 1606.38 & 0 & 0 & 254.6068 \\ \hline 710 NORFOLK ( 301 - BALLI & 0 & 0 & 0 & 1175.322 & 0 & 0 & 49.86051 \\ \hline 710 NORFOLK (302-TAN^ & 0 & 0 & 0 & 706.0428 & 0 & 0 & 42.43447 \\ \hline 710 NORFOLK ( \(303-\) BROA & 0 & 0 & 0 & 1526.751 & 0 & 0 & 24.39982 \\ \hline 710 NORFOLK ( 304 - COLE & 0 & 0 & 0 & 704.981 & 0 & 0 & 32.88672 \\ \hline 710 NORFOLK ( 305 -LAFA) & 0 & 0 & 0 & 1044.731 & 0 & 0 & 53.04309 \\ \hline 710 NORFOLK (306-LINDE & 0 & 0 & 0 & 870.6091 & 0 & 0 & 25.46068 \\ \hline 710 NORFOLK ( 309 - NOR\} & 0 & 0 & 0 & 1936.574 & 0 & 0 & 135.7903 \\ \hline 710 NORFOLK ( 310 - ROSE & 0 & 0 & 0 & 1800.674 & 0 & 0 & 19.09551 \\ \hline 710 NORFOLK (311-SHER' & 0 & 0 & 0 & 1770.946 & 0 & 0 & 169.7379 \\ \hline 710 NORFOLK ( 313 - UNIO & 0 & 0 & 0 & 630.6607 & 0 & 0 & 4.243447 \\ \hline 710 NORFOLK ( 402 - BERK & 0 & 0 & 0 & 1067.027 & 0 & 0 & 4.243447 \\ \hline 710 NORFOLK ( 404 - CAM & 0 & 0 & 0 & 1079.768 & 0 & 0 & 12.73034 \\ \hline 710 NORFOLK ( 405 - CHES & 0 & 0 & 0 & 1557.541 & 0 & 0 & 14.85207 \\ \hline 710 NORFOLK ( 406 - BARR & 0 & 0 & 0 & 660.1631 & 0 & 403.5924 & 0 \\ \hline 710 NORFOLK ( 408 - EASTI & 0 & 0 & 0 & 985.2747 & 0 & 0 & 123.06 \\ \hline 710 NORFOLK ( 409 - FAIRL & 0 & 0 & 0 & 768.6841 & 0 & 0 & 98.66015 \\ \hline 710 NORFOLK ( 411 - RUFF & 0 & 0 & 0 & 689.0553 & 0 & 0 & 9.547757 \\ \hline 710 NORFOLK ( 412 - INGLI & 0 & 0 & 0 & 1167.89 & 0 & 0 & 40.31275 \\ \hline 710 NORFOLK ( 413 - POPL & 0 & 0 & 0 & 1642.478 & 0 & 0 & 73.19947 \\ \hline 710 NORFOLK ( 414 - YOUN & 0 & 0 & 0 & 1153.026 & 0 & 0 & 8.486895 \\ \hline 710 NORFOLK ( 415 - LAKE & 0 & 0 & 0 & 897.1521 & 0 & 0 & 102.9036 \\ \hline 710 NORFOLK ( 501 - BAYV & 0 & 0 & 0 & 924.0164 & 0 & 741.1424 & 4.2 \\ \hline 710 NORFOLK ( \(503-\) EAST & 0 & 0 & 0 & 1086.143 & 0 & 807.1848 & 0 \\ \hline 710 NORFOLK ( 504 -LARR' & 0 & 0 & 0 & 895.4058 & 0 & 521.0011 & 3.15 \\ \hline 710 NORFOLK ( 505 - LITTL & 0 & 0 & 0 & 513.9311 & 0 & 467.5382 & 1.05 \\ \hline 710 NORFOLK (506- OCEA & 0 & 0 & 0 & 1272.642 & 0 & 602.7679 & 4.2 \\ \hline 710 NORFOLK ( 507 - PRETI & 0 & 0 & 0 & 925.076 & 0 & 604.8645 & 3.15 \\ \hline 710 NORFOLK ( 509 - TARR & 0 & 0 & 0 & 709.9667 & 0 & 832.3438 & 2.1 \\ \hline 710 NORFOLK ( 510 - THIRL & 0 & 0 & 0 & 841.3635 & 0 & 850.1648 & 6.3 \\ \hline 710 NORFOLK ( 511 - CROS & 0 & 0 & 0 & 894.3461 & 0 & 656.2308 & 3.15 \\ \hline 710 NORFOLK ( 512 - AZALI & 0 & 0 & 0 & 528.7662 & 0 & 423.51 & 1.05 \\ \hline 720 NORTON C 001 - EAST & 0 & 0 & 0 & 416 & 0 & 684 & 3 \\ \hline 730 PETERSBUF 101 - FIRST & 0 & 0 & 0 & 967.6939 & 4.340426 & 89.34228 & 2.571429 \\ \hline 730 PETERSBUF 201 - SECO & 0 & 0 & 0 & 1777.749 & 11.93617 & 136.3043 & 1.285714 \\ \hline 730 PETERSBUF 301 -THIRI & 0 & 0 & 0 & 1617.809 & 22.78723 & 351.6421 & 1.285714 \\ \hline 730 PETERSBUF 401 - FOUR & 0 & 0 & 0 & 1158.701 & 26.04255 & 206.1745 & 0 \\ \hline 730 PETERSBUF 501 - FIFTH & 0 & 0 & 0 & 1080.457 & 15.19149 & 80.17897 & 2.571429 \\ \hline 730 PETERSBUF 601 - SIXTH & 0 & 0 & 0 & 1068.951 & 9.765957 & 38.94407 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 730 PETERSBUF 701 - SEVEI & 0 & 0 & 0 & 1402.638 & 11.93617 & 121.4139 & 1.285714 \\ \hline 735 POQUOSOI001-CENT & 0 & 0 & 0 & 489.8999 & 0 & 1384.474 & 2 \\ \hline 735 POQUOSOI002-EASTI & 0 & 0 & 0 & 510.6486 & 0 & 1492.07 & 6 \\ \hline 735 POQUOSOI003-WEST & 0 & 0 & 0 & 554.4514 & 0 & 1552.456 & 2 \\ \hline 740 PORTSMOL 001 - EMAI & 0 & 0 & 0 & 1008.502 & 0 & 0 & 73.96988 \\ \hline 740 PORTSMOI 005 - HAMI & 0 & 0 & 0 & 671.6238 & 0 & 0 & 6.250976 \\ \hline 740 PORTSMOL 007-PARK & 0 & 0 & 0 & 650.3024 & 0 & 0 & 44.79866 \\ \hline 740 PORTSMOL 009 - THIRI & 0 & 0 & 0 & 970.1232 & 0 & 0 & 30.21305 \\ \hline 740 PORTSMOI 010 - PORT & 0 & 0 & 0 & 476.5331 & 0 & 0 & 40.63134 \\ \hline 740 PORTSMOL011-JOSEF & 0 & 0 & 0 & 747.3147 & 0 & 0 & 7.292805 \\ \hline 740 PORTSMOI 013 - ST. M & 0 & 0 & 0 & 480.7973 & 0 & 0 & 6.250976 \\ \hline 740 PORTSMOI 014 - BRIG & 0 & 0 & 0 & 856.0538 & 0 & 0 & 9.376464 \\ \hline 740 PORTSMOI 016 - CRAD & 0 & 0 & 0 & 713.2005 & 0 & 0 & 45.84049 \\ \hline 740 PORTSMOI 017 - VICTC & 0 & 0 & 0 & 813.411 & 0 & 0 & 63.55159 \\ \hline 740 PORTSMOI 019 - VICTC & 0 & 0 & 0 & 450.9474 & 0 & 0 & 45.84049 \\ \hline 740 PORTSMOL 020 - NOBL & 0 & 0 & 0 & 746.2486 & 0 & 0 & 34.38037 \\ \hline 740 PORTSMOL 021 - JOHN & 0 & 0 & 0 & 612.9899 & 0 & 0 & 4.167317 \\ \hline 740 PORTSMOL 022 - ST. M & 0 & 0 & 0 & 649.2363 & 0 & 0 & 83.34635 \\ \hline 740 PORTSMOL 023 - WEST & 0 & 0 & 0 & 575.6775 & 0 & 0 & 90.63915 \\ \hline 740 PORTSMOL 024 - THE S & 0 & 0 & 0 & 603.3953 & 0 & 0 & 67.71891 \\ \hline 740 PORTSMOL 025 -JOHN & 0 & 0 & 0 & 769.7022 & 0 & 0 & 73.96988 \\ \hline 740 PORTSMOI 026 - WILLI & 0 & 0 & 0 & 1089.523 & 0 & 0 & 15.62744 \\ \hline 740 PORTSMOI 027 - CAVA & 0 & 0 & 0 & 1042.616 & 0 & 0 & 10.41829 \\ \hline 740 PORTSMOI 028 - LAKEI & 0 & 0 & 0 & 1531.942 & 0 & 0 & 7.292805 \\ \hline 740 PORTSMOL 029 - WOO & 0 & 0 & 0 & 405.1064 & 0 & 0 & 92.72281 \\ \hline 740 PORTSMOL 030 - THE F & 0 & 0 & 0 & 479.7313 & 0 & 0 & 117.7267 \\ \hline 740 PORTSMOL 031 - WEST & 0 & 0 & 0 & 1069.268 & 0 & 0 & 95.8483 \\ \hline 740 PORTSMOI 032 - HODC & 0 & 0 & 0 & 560.7525 & 0 & 0 & 80.22086 \\ \hline 740 PORTSMOL 033- PINEC & 0 & 0 & 0 & 406.1725 & 0 & 0 & 65.63525 \\ \hline 740 PORTSMOI 034-CHUR & 0 & 0 & 0 & 695.0773 & 0 & 0 & 100.0156 \\ \hline 740 PORTSMOI 035 - CHUR & 0 & 0 & 0 & 828.336 & 0 & 0 & 117.7267 \\ \hline 740 PORTSMOL 036 -SCOT & 0 & 0 & 0 & 1701.447 & 0 & 0 & 158.3581 \\ \hline 740 PORTSMOL 037 - CHUR & 0 & 0 & 0 & 1372.031 & 0 & 0 & 115.6431 \\ \hline 740 PORTSMOI 038 -GRO\} & 0 & 0 & 0 & 1610.831 & 0 & 0 & 58.34244 \\ \hline 740 PORTSMOL 039 - CHUR & 0 & 0 & 0 & 1712.108 & 0 & 0 & 104.1829 \\ \hline 750 RADFORD (001-EAST & 0 & 0 & 0 & 1544.504 & 0 & 678.1833 & 1 \\ \hline 750 RADFORD (002-CENT & 0 & 0 & 0 & 737.562 & 0 & 665.5463 & 4 \\ \hline 750 RADFORD (003-WEST & 0 & 0 & 0 & 695.9341 & 0 & 759.2704 & 3 \\ \hline 760 RICHMONL 101 - ONE I & 0 & 0 & 0 & 617.8687 & 14.73418 & 241.1931 & 0 \\ \hline 760 RICHMONL 102 - ONE I & 0 & 0 & 0 & 519.3064 & 21.04882 & 413.9253 & 5.211864 \\ \hline 760 RICHMONL 104 - ONE I & 0 & 0 & 0 & 745.0457 & 19.99638 & 675.1301 & 3.127119 \\ \hline 760 RICHMONL 105 - ONE I & 0 & 0 & 0 & 862.6845 & 27.36347 & 487.6525 & 3.127119 \\ \hline 760 RICHMONL 106 - ONE I & 0 & 0 & 0 & 580.7753 & 23.15371 & 877.3532 & 1.042373 \\ \hline 760 RICHMONE 111 - ONE I & 0 & 0 & 0 & 801.2156 & 24.20615 & 429.724 & 0 \\ \hline 760 RICHMONL 112 - ONE & 0 & 0 & 0 & 783.1989 & 17.8915 & 329.6657 & 1.042373 \\ \hline 760 RICHMONL 113 - ONE I & 0 & 0 & 0 & 1359.735 & 32.62568 & 260.1515 & 0 \\ \hline 760 RICHMONL 114 - ONE I & 0 & 0 & 0 & 1692.515 & 62.09403 & 366.5293 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 760 RICHMONL 115 - ONE I & 0 & 0 & 0 & 595.6127 & 27.36347 & 473.9603 & 1.042373 \\ \hline 760 RICHMONL 203 -TWO & 0 & 0 & 0 & 1672.379 & 45.25497 & 417.0851 & 2.084746 \\ \hline 760 RICHMONL 204 - TWO & 0 & 0 & 0 & 1413.785 & 47.35986 & 287.5359 & 3.127119 \\ \hline 760 RICHMONL 206 - TWO & 0 & 0 & 0 & 892.3592 & 21.04882 & 116.9102 & 3.127119 \\ \hline 760 RICHMONL 207 -TWO & 0 & 0 & 0 & 1464.656 & 54.72694 & 351.7839 & 3.127119 \\ \hline 760 RICHMONL 208 - TWO & 0 & 0 & 0 & 1309.924 & 37.88788 & 274.897 & 4.169492 \\ \hline 760 RICHMONL 213 -TWO & 0 & 0 & 0 & 2112.199 & 61.04159 & 73.72716 & 0 \\ \hline 760 RICHMONL 214 - TWO & 0 & 0 & 0 & 1803.795 & 37.88788 & 126.3894 & 5.211864 \\ \hline 760 RICHMONL 301 - THRE & 0 & 0 & 0 & 636.9452 & 8.41953 & 30.54411 & 2.084746 \\ \hline 760 RICHMONL 302 -THRE & 0 & 0 & 0 & 781.0793 & 16.83906 & 99.00504 & 1.042373 \\ \hline 760 RICHMONL 303 - THRE & 0 & 0 & 0 & 753.5242 & 10.52441 & 31.59735 & 2.084746 \\ \hline 760 RICHMONL 304 -THRE & 0 & 0 & 0 & 1087.364 & 18.94394 & 27.38437 & 1.042373 \\ \hline 760 RICHMONL 305 -THRE & 0 & 0 & 0 & 1071.467 & 19.99638 & 81.09987 & 3.127119 \\ \hline 760 RICHMONL 306 -THRE & 0 & 0 & 0 & 869.0434 & 12.62929 & 35.81033 & 4.169492 \\ \hline 760 RICHMONL 307 -THRE & 0 & 0 & 0 & 1000.46 & 26.31103 & 220.1282 & 0 \\ \hline 760 RICHMONL 308 -THRE & 0 & 0 & 0 & 1018.476 & 30.5208 & 258.045 & 4.169492 \\ \hline 760 RICHMONL 309 -THRE & 0 & 0 & 0 & 615.749 & 14.73418 & 273.8437 & 2.084746 \\ \hline 760 RICHMONL 310 -THRE & 0 & 0 & 0 & 320.0623 & 5.262206 & 8.425961 & 1.042373 \\ \hline 760 RICHMONL 402 -FOUR & 0 & 0 & 0 & 1681.917 & 53.6745 & 526.6225 & 0 \\ \hline 760 RICHMONL 404 -FOUR & 0 & 0 & 0 & 1484.792 & 47.35986 & 351.7839 & 2.084746 \\ \hline 760 RICHMONL 409 -FOUR & 0 & 0 & 0 & 1735.967 & 56.83183 & 983.7309 & 4.169492 \\ \hline 760 RICHMONL 410 -FOUR & 0 & 0 & 0 & 995.1607 & 24.20615 & 427.6175 & 0 \\ \hline 760 RICHMON[ 412 -FOUR & 0 & 0 & 0 & 1072.527 & 34.73056 & 251.7256 & 2.084746 \\ \hline 760 RICHMON[ 413 -FOUR & 0 & 0 & 0 & 1012.118 & 36.83544 & 403.3929 & 0 \\ \hline 760 RICHMON[ 414 -FOUR & 0 & 0 & 0 & 1005.759 & 22.10127 & 548.7407 & 0 \\ \hline 760 RICHMON[501-FIVE I & 0 & 0 & 0 & 1591.833 & 72.61844 & 189.5841 & 1.042373 \\ \hline 760 RICHMON[503-FIVE I & 0 & 0 & 0 & 1570.637 & 28.41591 & 150.614 & 1.042373 \\ \hline 760 RICHMONL504-FIVE I & 0 & 0 & 0 & 1990.321 & 53.6745 & 232.7672 & 6.254237 \\ \hline 760 RICHMONL505-FIVE I & 0 & 0 & 0 & 1335.359 & 31.57324 & 137.9751 & 2.084746 \\ \hline 760 RICHMONL 508 - FIVE I & 0 & 0 & 0 & 796.9764 & 13.68174 & 125.3362 & 0 \\ \hline 760 RICHMONL 509 - FIVE I & 0 & 0 & 0 & 993.0411 & 16.83906 & 48.44927 & 2.084746 \\ \hline 760 RICHMONL510-FIVE I & 0 & 0 & 0 & 1245.276 & 23.15371 & 100.0583 & 4.169492 \\ \hline 760 RICHMONL602-SIX H & 0 & 0 & 0 & 572.2969 & 4.209765 & 21.0649 & 2.084746 \\ \hline 760 RICHMONL \(603-\) SIX H & 0 & 0 & 0 & 1034.374 & 12.62929 & 37.91682 & 1.042373 \\ \hline 760 RICHMONL604-SIX H & 0 & 0 & 0 & 707.9524 & 32.62568 & 28.43762 & 0 \\ \hline 760 RICHMONL 606 -SIX H & 0 & 0 & 0 & 1194.405 & 11.57685 & 36.86358 & 0 \\ \hline 760 RICHMON[607-SIX H & 0 & 0 & 0 & 1245.276 & 26.31103 & 180.1049 & 5.211864 \\ \hline 760 RICHMONL609-SIX H & 0 & 0 & 0 & 1596.072 & 39.99277 & 156.9335 & 4.169492 \\ \hline 760 RICHMON[610-SIX H & 0 & 0 & 0 & 670.8591 & 3.157324 & 25.27788 & 1.042373 \\ \hline 760 RICHMONL 701 -SEVEI & 0 & 0 & 0 & 753.5242 & 6.314647 & 27.38437 & 1.042373 \\ \hline 760 RICHMONL 702 -SEVEI & 0 & 0 & 0 & 831.9501 & 18.94394 & 37.91682 & 2.084746 \\ \hline 760 RICHMONL 703 -SEVEI & 0 & 0 & 0 & 1049.211 & 18.94394 & 46.34278 & 1.042373 \\ \hline 760 RICHMONL 705 -SEVEI & 0 & 0 & 0 & 940.0506 & 30.5208 & 91.63232 & 2.084746 \\ \hline 760 RICHMONL 706 -SEVEI & 0 & 0 & 0 & 1521.886 & 27.36347 & 97.95179 & 1.042373 \\ \hline 760 RICHMONL 707 -SEVEI & 0 & 0 & 0 & 1989.262 & 63.14647 & 273.8437 & 3.127119 \\ \hline 760 RICHMONL 708 - SEVEI & 0 & 0 & 0 & 1651.182 & 70.51356 & 265.4178 & 4.169492 \\ \hline 760 RICHMON[802-EIGH \({ }^{-}\) & 0 & 0 & 0 & 819.2324 & 12.62929 & 24.22464 & 0 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 760 RICHMON[ 806 - EIGH \({ }^{-}\) & 0 & 0 & & 1003.639 & 7.367089 & 85.31285 & 1.042373 \\ \hline 760 RICHMONL 810 - EIGH \({ }^{-}\) & 0 & 0 & 0 & 860.5649 & 8.41953 & 67.40769 & 2.084746 \\ \hline 760 RICHMON[ 811 - EIGH \({ }^{-}\) & 0 & 0 & 0 & 936.8712 & 9.471971 & 71.62067 & 2.084746 \\ \hline 760 RICHMON[812-EIGH \({ }^{-}\) & 0 & 0 & 0 & 1369.273 & 14.73418 & 171.679 & 2.084746 \\ \hline 760 RICHMONL 814 - EIGH \({ }^{-}\) & 0 & 0 & 0 & 805.4549 & 3.157324 & 42.1298 & 0 \\ \hline 760 RICHMON[ 902 - NINE & 0 & 0 & 0 & 420.7442 & 7.367089 & 24.22464 & 1.042373 \\ \hline 760 RICHMONL 903 - NINE & 0 & 0 & 0 & 1074.646 & 10.52441 & 110.5907 & 2.084746 \\ \hline 760 RICHMONL 908 - NINE & 0 & 0 & 0 & 1071.467 & 6.314647 & 77.94014 & 1.042373 \\ \hline 760 RICHMONL 909 - NINE & 0 & 0 & 0 & 1184.866 & 19.99638 & 114.8037 & 1.042373 \\ \hline 760 RICHMONL 910 - NINE & 0 & 0 & & 989.8616 & 16.83906 & 97.95179 & 0 \\ \hline 760 RICHMON[ 911 - NINE & 0 & 0 & 0 & 1066.168 & 7.367089 & 42.1298 & 1.042373 \\ \hline 770 ROANOKE 001 -Peters & 0 & 0 & 0 & 1168.724 & 0 & 267.1823 & 1.028571 \\ \hline 770 ROANOKE 002 - Grans & 0 & 0 & 0 & 1022.498 & 0 & 434.9728 & 2.057143 \\ \hline 770 ROANOKE 003 -Prestc & 0 & 0 & 0 & 696.4683 & 0 & 813.3029 & 0 \\ \hline 770 ROANOKE 004 - Willia & 0 & 0 & 0 & 792.869 & 0 & 523.6773 & 2.057143 \\ \hline 770 ROANOKE 005 - East ( & 0 & 0 & 0 & 587.0697 & 0 & 810.0967 & 0 \\ \hline 770 ROANOKE 1006-Hollir & 0 & 0 & 0 & 746.2934 & 0 & 561.0828 & 0 \\ \hline 770 ROANOKE 007 - Soutr & 0 & 0 & 0 & 500.4173 & 0 & 479.8594 & 1.028571 \\ \hline 770 ROANOKE 008 - Linco & 0 & 0 & 0 & 923.9307 & 0 & 68.39867 & 3.085714 \\ \hline 770 ROANOKE 000 - Highli & 0 & 0 & 0 & 1040.911 & 0 & 306.7253 & 4.114286 \\ \hline 770 ROANOKE 1010 - Old S & 0 & 0 & & 1377.772 & 0 & 568.5639 & 4.114286 \\ \hline 770 ROANOKE 011 -RALEI & 0 & 0 & 0 & 1489.337 & 0 & 820.784 & 3.085714 \\ \hline 770 ROANOKE 012 -SOUT & 0 & 0 & 0 & 821.031 & 0 & 879.5641 & 2.057143 \\ \hline 770 ROANOKE 013 - GARL & 0 & 0 & & 566.4897 & 0 & 887.0452 & 1.028571 \\ \hline 770 ROANOKE 014 - Crysti & 0 & 0 & & 985.6705 & 0 & 887.0452 & 1.028571 \\ \hline 770 ROANOKE 015 - Granı & 0 & 0 & 0 & 1007.334 & 0 & 703.2238 & 0 \\ \hline 770 ROANOKE 016 - Deye & 0 & 0 & 0 & 909.8497 & 0 & 997.1243 & 1.028571 \\ \hline 770 ROANOKE 017 -LEE-H & 0 & 0 & 0 & 1217.465 & 0 & 697.8801 & 4.114286 \\ \hline 770 ROANOKE 018 -Sumn & 0 & 0 & 0 & 1039.828 & 0 & 583.5261 & 2.057143 \\ \hline 770 ROANOKE 1019 - Fores & 0 & 0 & & 1100.485 & 0 & 144.2784 & 1.028571 \\ \hline 770 ROANOKE 020 - EURE & 0 & 0 & 0 & 1674.557 & 0 & 103.6667 & 3.085714 \\ \hline 775 SALEM CIT' 001 - NORT & 604.1772 & 728.4715 & 1.111111 & 590.1844 & 0 & 749.5171 & 1 \\ \hline 775 SALEM CIT' 002 - CONE & 239.7184 & 362.0805 & 0 & 247.8122 & 0 & 355.8858 & 0 \\ \hline 775 SALEM CIT'003-BEVE & 226.702 & 456.9111 & 2.222222 & 220.6398 & 0 & 469.1222 & 0 \\ \hline 775 SALEM CIT' 004 - WEST & 376.3904 & 672.4353 & 1.111111 & 369.5446 & 0 & 681.5753 & 2 \\ \hline 775 SALEM CIT' 005 - NORT & 609.6007 & 723.0834 & 0 & 596.7058 & 0 & 744.1249 & 0 \\ \hline 775 SALEM CIT'006-SOUT & 290.6993 & 385.7882 & 1.111111 & 293.4619 & 0 & 382.8469 & 0 \\ \hline 775 SALEM CIT'007-SOUT & 381.8139 & 606.7004 & 3.333333 & 384.7611 & 0 & 605.0059 & 1 \\ \hline 775 SALEM CIT'008-EAST & 147.519 & 213.3689 & 0 & 151.0785 & 0 & 213.5315 & 0 \\ \hline 775 SALEM CIT'009-SOUT & 447.9806 & 898.7356 & 0 & 444.5404 & 0 & 910.205 & 1 \\ \hline 775 SALEM CIT' 010 - HIDD & 581.3985 & 894.4251 & 1.111111 & 591.2713 & 0 & 896.1852 & 0 \\ \hline 790 STAUNTON 101 - WARI & 0 & 0 & 0 & 1001.256 & 0 & 841.8171 & 3 \\ \hline 790 STAUNTON 201 - WARI & 0 & 0 & 0 & 1112.629 & 0 & 1099.671 & 2 \\ \hline 790 STAUNTON 301 - WARI & 0 & 0 & 0 & 1079.548 & 0 & 886.2373 & 2 \\ \hline 790 STAUNTON 401 - WARI & 0 & 0 & 0 & 914.1424 & 0 & 761.644 & 0 \\ \hline 790 STAUNTON 501 - WARI & 0 & 0 & 0 & 1314.424 & 0 & 592.6306 & 3 \\ \hline 800 SUFFOLK C 101 - BELLE & 0 & 0 & 0 & D 977.6515 & 0 & 0 & 71.09217 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 800 SUFFOLK C 102 - DRIVI & 0 & 0 & 0 & 1463.734 & 0 & 0 & 376.6824 \\ \hline 800 SUFFOLK C 104 - BENN & 0 & 0 & 0 & 1183.935 & 0 & 0 & 172.9556 \\ \hline 800 SUFFOLK C 201 - EBEN & 0 & 0 & 0 & 718.7001 & 0 & 0 & 165.528 \\ \hline 800 SUFFOLK C 202 - CHUC & 0 & 0 & 0 & 771.3682 & 0 & 0 & 137.94 \\ \hline 800 SUFFOLK C 203 - KING! & 0 & 0 & 0 & 1438.497 & 0 & 0 & 120.9628 \\ \hline 800 SUFFOLK C 204 - HILLP & 0 & 0 & 0 & 1118.1 & 0 & 0 & 95.49695 \\ \hline 800 SUFFOLK C 301 - WHIT & 0 & 0 & 0 & 340.7454 & 6.666667 & 145.1609 & 1 \\ \hline 800 SUFFOLK C 302 - JOHN & 0 & 0 & 0 & 1513.586 & 6.666667 & 32.6086 & 42.25986 \\ \hline 800 SUFFOLK C 304 - NANS & 0 & 0 & 0 & 1291.466 & 0 & 0 & 107.1688 \\ \hline 800 SUFFOLK C 305 - SHOL & 0 & 0 & 0 & 589.2243 & 0 & 0 & 47.74847 \\ \hline 800 SUFFOLK C 401 - AIRPC & 0 & 0 & 0 & 401.0741 & 14.44444 & 440.7421 & 0 \\ \hline 800 SUFFOLK C 402 - WHA & 0 & 0 & 0 & 283.7683 & 7.777778 & 739.479 & 0 \\ \hline 800 SUFFOLK C 403 - SOUT & 0 & 0 & 0 & 603.287 & 7.777778 & 38.91995 & 0 \\ \hline 800 SUFFOLK C 404 - BOOk & 0 & 0 & 0 & 1101.079 & 5.555556 & 57.85397 & 6.244309 \\ \hline 800 SUFFOLK C 405 - PITTM & 0 & 0 & 0 & 168.6969 & 6.666667 & 228.2602 & 0 \\ \hline 800 SUFFOLK C 501 - KILBY & 0 & 0 & 0 & 776.4527 & 21.11111 & 1047.683 & 0 \\ \hline 800 SUFFOLK C 502 - HOLL & 0 & 0 & 0 & 634.5685 & 25.55556 & 966.6873 & 2 \\ \hline 800 SUFFOLK C 504 - LAKE & 0 & 0 & 0 & 703.9551 & 20 & 920.4041 & 39.25986 \\ \hline 800 SUFFOLK C 601 -LAKE: & 0 & 0 & 0 & 913.868 & 15.55556 & 592.2143 & 3 \\ \hline 800 SUFFOLK C 602 - OLDE & 0 & 0 & 0 & 328.1182 & 0 & 0 & 22.28262 \\ \hline 800 SUFFOLK C 603 - ELEPY & 0 & 0 & 0 & 281.5339 & 12.22222 & 242.9867 & 0 \\ \hline 800 SUFFOLK C 604 - WILR & 0 & 0 & 0 & 815.2582 & 0 & 0 & 102.9245 \\ \hline 800 SUFFOLK C 605 - HOLL & 0 & 0 & 0 & 647.3787 & 0 & 0 & 1.061077 \\ \hline 800 SUFFOLK C 702 - HARB & 0 & 0 & 0 & 1348.523 & 0 & 0 & 201.6047 \\ \hline 800 SUFFOLK C 704 - BURB & 0 & 0 & 0 & 1437.4 & 0 & 0 & 144.3065 \\ \hline 800 SUFFOLK C 706 - HUN7 & 0 & 0 & 0 & 1625.03 & 0 & 0 & 60.4814 \\ \hline 810 VIRGINIA B 001 - NORT & 0 & 0 & 0 & 987.7197 & 0 & 1525.798 & 3.238806 \\ \hline 810 VIRGINIA B 002 - SOUT & 0 & 0 & 0 & 965.5983 & 0 & 954.7136 & 2.159204 \\ \hline 810 VIRGINIA B 003 - OCEA & 0 & 0 & 0 & 603.9137 & 0 & 743.2816 & 1.079602 \\ \hline 810 VIRGINIA B 004 - LINKF & 0 & 0 & 0 & 798.5819 & 0 & 1183.583 & 4.318408 \\ \hline 810 VIRGINIA B 005 - SEAT, & 0 & 0 & 0 & 1057.402 & 0 & 705.1367 & 3.238806 \\ \hline 810 VIRGINIA B 006 - ALAN & 0 & 0 & 0 & 879.3249 & 0 & 1267.502 & 4.318408 \\ \hline 810 VIRGINIA B 007 - KING! & 0 & 0 & 0 & 576.262 & 0 & 786.8759 & 1.079602 \\ \hline 810 VIRGINIA B 008 - LONL & 0 & 0 & 0 & 1065.145 & 0 & 1029.914 & 5.39801 \\ \hline 810 VIRGINIA B 009 - TRAN & 0 & 0 & 0 & 745.4906 & 0 & 1165.056 & 1.079602 \\ \hline 810 VIRGINIA B 010 - GREA & 0 & 0 & 0 & 705.6721 & 0 & 1494.192 & 0 \\ \hline 810 VIRGINIA B 011 - CAPE & 0 & 0 & 0 & 1150.312 & 0 & 1222.818 & 3.238806 \\ \hline 810 VIRGINIA B 012 - PLAZ & 0 & 0 & 0 & 1062.932 & 0 & 747.6411 & 1.079602 \\ \hline 810 VIRGINIA B 013 - MT TI & 0 & 0 & 0 & 1116.024 & 0 & 1144.349 & 5.39801 \\ \hline 810 VIRGINIA B 014 - MALI & 0 & 0 & 0 & 932.4163 & 0 & 999.3977 & 2.159204 \\ \hline 810 VIRGINIA B 015 - OLD [ & 0 & 0 & 0 & 672.49 & 0 & 605.9598 & 2.159204 \\ \hline 810 VIRGINIA B 016 - ARAE & 0 & 0 & 0 & 1134.827 & 0 & 1033.183 & 2.159204 \\ \hline 810 VIRGINIA B 017 - OCEA & 0 & 0 & 0 & 668.0657 & 0 & 826.1107 & 1.079602 \\ \hline 810 VIRGINIA B 018 - THOR & 0 & 0 & 0 & 1068.463 & 0 & 1242.436 & 4.318408 \\ \hline 810 VIRGINIA B 019 - LAKE & 0 & 0 & 0 & 467.8672 & 0 & 605.9598 & 2.159204 \\ \hline 810 VIRGINIA B 020 - BAYS & 0 & 0 & 0 & 775.3544 & 0 & 777.0672 & 1.079602 \\ \hline 810 VIRGINIA B 021 - DAVI! & 0 & 0 & 0 & 1290.783 & 0 & 369.4611 & 1.079602 \\ \hline \end{tabular} \begin{tabular}{|c|c|c|c|c|c|c|c|} \hline 810 VIRGINIA B 022 - POIN & 0 & 0 & 0 & 684.6568 & 0 & 893.6817 & 3.238806 \\ \hline 810 VIRGINIA B 023 - ARRC & 0 & 0 & 0 & 843.9307 & 0 & 983.0499 & 2.159204 \\ \hline 810 VIRGINIA B 024 - LARK: & 0 & 0 & 0 & 679.1264 & 0 & 633.2062 & 0 \\ \hline 810 VIRGINIA B 025 - AVAL & 0 & 0 & 0 & 1328.389 & 0 & 1230.447 & 2.159204 \\ \hline 810 VIRGINIA B 026 - FAIRF & 0 & 0 & 0 & 814.0669 & 0 & 938.3658 & 0 \\ \hline 810 VIRGINIA B 027 - EDWI & 0 & 0 & 0 & 853.8853 & 0 & 1096.395 & 1.079602 \\ \hline 810 VIRGINIA B 028 - THAL & 0 & 0 & 0 & 648.1565 & 0 & 826.1107 & 2.159204 \\ \hline 810 VIRGINIA B 029 - HOLL & 0 & 0 & 0 & 1103.857 & 0 & 613.5888 & 0 \\ \hline 810 VIRGINIA B \(030-\) RED & 0 & 0 & 0 & 706.7782 & 0 & 1076.777 & 4.318408 \\ \hline 810 VIRGINIA B 031 - SIGM & 0 & 0 & 0 & 768.718 & 0 & 1499.642 & 1.079602 \\ \hline 810 VIRGINIA B 032 - CREEI & 0 & 0 & 0 & 235.5927 & 0 & 724.7541 & 4.318408 \\ \hline 810 VIRGINIA B 033 - CAPP & 0 & 0 & 0 & 267.6687 & 0 & 794.5048 & 1.079602 \\ \hline 810 VIRGINIA B 034 - BLAC & 0 & 0 & 0 & 150.4254 & 0 & 469.7278 & 1.079602 \\ \hline 810 VIRGINIA B 035 - COUF & 0 & 0 & 0 & 739.9602 & 0 & 1269.682 & 0 \\ \hline 810 VIRGINIA B 036 - WINL & 0 & 0 & 0 & 1318.434 & 0 & 845.7281 & 3.238806 \\ \hline 810 VIRGINIA B 037 - CHES, & 0 & 0 & 0 & 717.8388 & 0 & 680.07 & 1.079602 \\ \hline 810 VIRGINIA B 038 - WITC & 0 & 0 & 0 & 971.1287 & 0 & 1407.004 & 4.318408 \\ \hline 810 VIRGINIA B 039 - PEME & 0 & 0 & 0 & 1160.266 & 0 & 1038.633 & 5.39801 \\ \hline 810 VIRGINIA B 040 - BON & 0 & 0 & 0 & 749.9148 & 0 & 669.1714 & 1.079602 \\ \hline 810 VIRGINIA B 041 - COLLI & 0 & 0 & 0 & 1806.211 & 0 & 525.3105 & 3.238806 \\ \hline 810 VIRGINIA B 042 - BRAN & 0 & 0 & 0 & 1010.947 & 0 & 820.6614 & 3.238806 \\ \hline 810 VIRGINIA B 043 - BELL/ & 0 & 0 & 0 & 1060.72 & 0 & 547.1076 & 3.238806 \\ \hline 810 VIRGINIA B 044 - CENT & 0 & 0 & 0 & 1076.205 & 0 & 1056.07 & 1.079602 \\ \hline 810 VIRGINIA B 045 - TIMB & 0 & 0 & 0 & 1245.434 & 0 & 475.1771 & 5.39801 \\ \hline 810 VIRGINIA B 046 - GREE & 0 & 0 & 0 & 1022.008 & 0 & 522.0409 & 2.159204 \\ \hline 810 VIRGINIA B 047 - KING: & 0 & 0 & 0 & 947.9012 & 0 & 1448.418 & 2.159204 \\ \hline 810 VIRGINIA B 048 - WOLI & 0 & 0 & 0 & 957.8558 & 0 & 1189.033 & 5.39801 \\ \hline 810 VIRGINIA B 049 - LYNN & 0 & 0 & 0 & 822.9154 & 0 & 1201.021 & 0 \\ \hline 810 VIRGINIA B 050 - OCEA & 0 & 0 & 0 & 784.203 & 0 & 343.3046 & 1.079602 \\ \hline 810 VIRGINIA B 051 - STRA & 0 & 0 & 0 & 784.203 & 0 & 856.6266 & 1.079602 \\ \hline 810 VIRGINIA B 052 - HOM & 0 & 0 & 0 & 1144.782 & 0 & 1151.978 & 5.39801 \\ \hline 810 VIRGINIA B \(053-\) SHAN & 0 & 0 & 0 & 720.051 & 0 & 823.931 & 5.39801 \\ \hline 810 VIRGINIA B 054 - CRON & 0 & 0 & 0 & 734.4299 & 0 & 633.2062 & 0 \\ \hline 810 VIRGINIA B 055 - MAG & 0 & 0 & 0 & 1182.388 & 0 & 548.1974 & 1.079602 \\ \hline 810 VIRGINIA B 056 - EDINI & 0 & 0 & 0 & 420.3063 & 0 & 542.7482 & 0 \\ \hline 810 VIRGINIA B 057 - SHER & 0 & 0 & 0 & 512.11 & 0 & 651.7337 & 3.238806 \\ \hline 810 VIRGINIA B 058 - GLEN & 0 & 0 & 0 & 974.4469 & 0 & 848.9976 & 1.079602 \\ \hline 810 VIRGINIA B 059 - SHEL` | 0 | 0 | 0 | 678.0204 | 0 | 620.1279 | 1.079602 |
| 810 VIRGINIA B 060 - FOXF | 0 | 0 | 0 | 800.794 | 0 | 1367.769 | 2.159204 |
| 810 VIRGINIA B 061 - BAKE | 0 | 0 | 0 | 1446.738 | 0 | 190.7248 | 4.318408 |
| 810 VIRGINIA B 062 - LAND | 0 | 0 | 0 | 968.9165 | 0 | 1086.586 | 3.238806 |
| 810 VIRGINIA B 063 - CULV | 0 | 0 | 0 | 1046.341 | 0 | 1221.728 | 3.238806 |
| 810 VIRGINIA B 064 - ROSE | 0 | 0 | 0 | 913.6131 | 0 | 811.9425 | 1.079602 |
| 810 VIRGINIA B 065 - COLO | 0 | 0 | 0 | 923.5677 | 0 | 810.8527 | 4.318408 |
| 810 VIRGINIA B 066 - HUN7 | 0 | 0 | 0 | 685.7628 | 0 | 1016.835 | 1.079602 |
| 810 VIRGINIA B 067 - EASTI | 0 | 0 | 0 | 509.8979 | 0 | 359.6524 | 2.159204 |
| 810 VIRGINIA B 068 - MAN | 0 | 0 | 0 | 829.5518 | 0 | 947.0847 | 1.079602 |


| 810 VIRGINIA B 069 - SHELI | 0 | 0 | 0 | 1040.811 | 0 | 404.3365 | 1.079602 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 070 - CORP | 0 | 0 | 0 | 889.2796 | 0 | 899.131 | 4.318408 |
| 810 VIRGINIA B 071 - ROUN | 0 | 0 | 0 | 572.9438 | 0 | 402.1568 | 1.079602 |
| 810 VIRGINIA B 072 - RUDE | 0 | 0 | 0 | 791.9455 | 0 | 1120.372 | 1.079602 |
| 810 VIRGINIA B 073 - DAHL | 0 | 0 | 0 | 1057.402 | 0 | 433.7626 | 1.079602 |
| 810 VIRGINIA B 074 - BUCK | 0 | 0 | 0 | 1016.478 | 0 | 477.3568 | 4.318408 |
| 810 VIRGINIA B 075 - COLO | 0 | 0 | 0 | 830.6579 | 0 | 1301.288 | 3.238806 |
| 810 VIRGINIA B 076 - VILLA | 0 | 0 | 0 | 1108.281 | 0 | 395.6176 | 1.079602 |
| 810 VIRGINIA B 077 - BROC | 0 | 0 | 0 | 868.2642 | 0 | 724.7541 | 2.159204 |
| 810 VIRGINIA B 078 - INDIA | 0 | 0 | 0 | 890.3856 | 0 | 696.4178 | 1.079602 |
| 810 VIRGINIA B 079 - PLEA؛ | 0 | 0 | 0 | 1124.872 | 0 | 463.1887 | 1.079602 |
| 810 VIRGINIA B 080 - CHIM | 0 | 0 | 0 | 967.8105 | 0 | 462.0988 | 5.39801 |
| 810 VIRGINIA B 081 - ROCK | 0 | 0 | 0 | 1161.373 | 0 | 714.9454 | 3.238806 |
| 810 VIRGINIA B 082 - SHELI | 0 | 0 | 0 | 629.3533 | 0 | 850.0875 | 6.477612 |
| 810 VIRGINIA B 083 - STRA' | 0 | 0 | 0 | 779.7787 | 0 | 1112.743 | 4.318408 |
| 810 VIRGINIA B 084 - TALLI | 0 | 0 | 0 | 1036.387 | 0 | 660.4526 | 0 |
| 810 VIRGINIA B 085 - UPTC | 0 | 0 | 0 | 951.2194 | 0 | 1323.085 | 0 |
| 810 VIRGINIA B 086 - HAYG | 0 | 0 | 0 | 1005.417 | 0 | 1007.027 | 0 |
| 810 VIRGINIA B 087 - HILLC | 0 | 0 | 0 | 810.7486 | 0 | 866.4353 | 1.079602 |
| 810 VIRGINIA B 088 - NORT | 0 | 0 | 0 | 747.7027 | 0 | 874.0643 | 1.079602 |
| 810 VIRGINIA B 089 - LAKE | 0 | 0 | 0 | 877.1128 | 0 | 919.8383 | 0 |
| 810 VIRGINIA B 090 - LAKE | 0 | 0 | 0 | 492.2007 | 0 | 696.4178 | 0 |
| 810 VIRGINIA B 091 - LEXIN | 0 | 0 | 0 | 1150.312 | 0 | 608.1395 | 3.238806 |
| 810 VIRGINIA B 092 - LITTL | 0 | 0 | 0 | 580.6863 | 0 | 818.4817 | 2.159204 |
| 810 VIRGINIA B 093 - NEW | 0 | 0 | 0 | 1414.662 | 0 | 236.4987 | 1.079602 |
| 810 VIRGINIA B 094 - PINE | 0 | 0 | 0 | 497.7311 | 0 | 507.8728 | 0 |
| 810 VIRGINIA B 095 - DAM | 0 | 0 | 0 | 559.671 | 0 | 542.7482 | 0 |
| 810 VIRGINIA B 096 - HILLT | 0 | 0 | 0 | 749.9148 | 0 | 403.2466 | 1.079602 |
| 810 VIRGINIA B 097 - INDIA | 0 | 0 | 0 | 1078.417 | 0 | 565.6351 | 4.318408 |
| 810 VIRGINIA B 098 - INDEI | 0 | 0 | 0 | 701.2478 | 0 | 354.2031 | 2.159204 |
| 810 VIRGINIA B 099 - SALEI | 0 | 0 | 0 | 659.2172 | 0 | 423.9539 | 2.159204 |
| 810 VIRGINIA B 100 - SAND | 0 | 0 | 0 | 301.9569 | 0 | 579.8033 | 0 |
| 820 WAYNESBC 001 - WARI | 0 | 0 | 0 | 630.1262 | 0 | 510.3189 | 1 |
| 820 WAYNESBC 002 - WARI | 0 | 0 | 0 | 1072.83 | 0 | 1109.435 | 1 |
| 820 WAYNESBC 003 - WARI | 0 | 0 | 0 | 866.0196 | 0 | 771.3625 | 1 |
| 820 WAYNESBC 004 - WARI | 0 | 0 | 0 | 1271.024 | 0 | 1483.883 | 1 |
| 830 WILLIAMSE 001 - STRYY | 0 | 0 | 0 | 2300.02 | 0 | 948.1344 | 9 |
| 830 WILLIAMSE 002 - MATC | 0 | 0 | 0 | 2107.98 | 0 | 838.8656 | 7 |
| 840 WINCHEST 101 - MERF | 0 | 0 | 0 | 1046.182 | 0 | 949.2268 | 0 |
| 840 WINCHEST 102 - OLD 1 | 0 | 0 | 0 | 763.9145 | 0 | 763.2958 | 3 |
| 840 WINCHEST 201 - VIRGI | 0 | 0 | 0 | 1011.459 | 0 | 556.7058 | 2 |
| 840 WINCHEST 301 - WAR | 0 | 0 | 0 | 935.2912 | 0 | 717.6285 | 3 |
| 840 WINCHEST 401 - FRED | 0 | 0 | 0 | 460.3649 | 0 | 394.6957 | 1 |
| 840 WINCHEST 402 -ROLLI | 0 | 0 | 0 | 706.7889 | 0 | 827.4474 | 1 |


| GE18USSD | GE18USSL | GE18USSR | GE18USSW |
| ---: | ---: | ---: | ---: |
| 556.6112 | 17.28 | 994.0029 | 0 |
| 181.7273 | 10.8 | 458.6065 | 0 |
| 316.5941 | 7.56 | 576.991 | 1.142857 |
| 588.6135 | 10.8 | 476.7374 | 0 |
| 121.1515 | 4.32 | 277.2969 | 0 |
| 269.7336 | 7.56 | 387.1492 | 0 |
| 44.57461 | 0 | 124.7836 | 0 |
| 341.7387 | 4.32 | 191.9748 | 1.142857 |
| 356.5969 | 0 | 104.5196 | 1.142857 |
| 498.3213 | 11.88 | 527.9307 | 0 |
| 34.28816 | 2.16 | 182.3761 | 0 |
| 862.9188 | 20.52 | 813.7599 | 3.428571 |
| 244.5889 | 3.24 | 331.6898 | 1.142857 |
| 409.1721 | 8.64 | 328.4902 | 0 |
| 177.1555 | 10.8 | 303.9601 | 0 |
| 993.2138 | 15.12 | 524.7311 | 0 |
| 1431.698 | 57.1868 | 643.3447 | 4.65 |
| 605.1974 | 21.57993 | 185.0569 | 1.1625 |
| 1258.946 | 32.36989 | 373.3794 | 1.1625 |
| 1852.852 | 55.02881 | 536.6649 | 1.1625 |
| 1543.479 | 64.73978 | 868.6786 | 3.4875 |
| 1682.358 | 50.71283 | 781.5931 | 9.3 |
| 2182.55 | 83.08271 | 335.2795 | 6.975 |
| 1531.059 | 60.42379 | 314.5966 | 3.4875 |
| 2044.799 | 56.10781 | 841.4644 | 6.975 |
| 1358.307 | 34.52788 | 697.7732 | 1.1625 |
| 479.8673 | 18.34294 | 226.4225 | 2.325 |
| 1348.145 | 33.44888 | 490.9449 | 2.325 |
| 678.5889 | 20.50093 | 374.468 | 1.1625 |
| 299.2114 | 10.78996 | 193.7654 | 1.1625 |
| 521.644 | 21.57993 | 534.4877 | 0 |
| 528.4186 | 16.18494 | 475.705 | 1.1625 |
| 1698.166 | 44.23885 | 501.8306 | 9.3 |
| 1152.811 | 41.00186 | 1006.927 | 5.8125 |
| 1082.807 | 47.47584 | 252.5482 | 2.325 |
| 665.0397 | 10.78996 | 373.3794 | 0 |
| 618.7466 | 24.81691 | 494.2107 | 0 |
| 1186.684 | 38.84387 | 508.3621 | 1.1625 |
| 1190.071 | 29.1329 | 438.6936 | 1.1625 |
| 1405.729 | 47.47584 | 910.0443 | 5.8125 |
| 1054.579 | 22.65892 | 453.9336 | 2.325 |
| 1541.221 | 57.1868 | 760.9102 | 2.325 |
| 582.6154 | 8.63197 | 426.7193 | 0 |
| 1327.821 | 42.08086 | 992.7756 | 4.65 |
| 1237.493 | 44.23885 | 620.4847 | 5.8125 |
| 1610.096 | 65.81877 | 756.556 | 4.65 |
|  |  |  |  |


| 146.185 | 4.061538 | 347.8047 | 0 |
| :---: | :---: | :---: | :---: |
| 53.74449 | 3.046154 | 131.9982 | 0 |
| 96.74009 | 2.030769 | 233.6158 | 0 |
| 125.7621 | 6.092308 | 284.9484 | 0 |
| 59.11894 | 3.046154 | 232.5682 | 0 |
| 170.9075 | 6.092308 | 371.8996 | 0 |
| 134.3612 | 3.046154 | 253.5203 | 0 |
| 153.7093 | 10.15385 | 340.4715 | 0 |
| 104.2643 | 5.076923 | 130.9506 | 0 |
| 175.207 | 9.138462 | 451.5175 | 0 |
| 405.2335 | 8.123077 | 402.2801 | 0 |
| 326.7665 | 6.092308 | 251.4251 | 2 |
| 322.8157 | 7.363636 | 655.5882 | 0 |
| 454.3742 | 15.77922 | 770.4515 | 2.333333 |
| 316.1825 | 23.14286 | 821.3815 | 2.333333 |
| 321.7102 | 16.83117 | 771.5351 | 2.333333 |
| 522.9173 | 17.88312 | 804.0437 | 0 |
| 508.6527 | 6.35468 | 342.3856 | 0 |
| 402.3671 | 21.18227 | 711.1085 | 1.25 |
| 139.9066 | 13.76847 | 415.0767 | 0 |
| 749.4223 | 31.7734 | 1008.194 | 3.75 |
| 197.3876 | 4.236453 | 483.5538 | 0 |
| 223.4168 | 11.65025 | 515.1586 | 0 |
| 496.7227 | 25.41872 | 1308.44 | 0 |
| 126.892 | 9.53202 | 290.7644 | 2.5 |
| 674.5885 | 39.18719 | 1236.802 | 2.5 |
| 156.1748 | 9.53202 | 313.9412 | 0 |
| 865.4688 | 42.36453 | 1153.576 | 0 |
| 106.3915 | 14.58947 | 378.9852 | 0 |
| 260.0682 | 14.58947 | 603.218 | 1 |
| 151.5273 | 2.084211 | 187.3871 | 0 |
| 216.0071 | 13.54737 | 860.0858 | 1 |
| 169.7966 | 7.294737 | 500.0499 | 0 |
| 213.8577 | 8.336842 | 589.5325 | 0 |
| 323.4733 | 22.92632 | 796.9216 | 1 |
| 265.4415 | 8.336842 | 602.1653 | 0 |
| 121.4368 | 7.294737 | 232.6548 | 0 |
| 1667.84 | 28.4965 | 232.9638 | 2.329341 |
| 1892.066 | 50.15385 | 304.0177 | 9.317365 |
| 1045.549 | 42.17483 | 271.4028 | 5.823353 |
| 1806.407 | 66.11189 | 337.7975 | 6.988024 |
| 1496.521 | 43.31469 | 269.0732 | 6.988024 |
| 1405.823 | 31.91608 | 306.3474 | 6.988024 |
| 1753.499 | 50.15385 | 335.4678 | 5.823353 |
| 2020.555 | 70.67133 | 426.3237 | 13.97605 |
| 2446.333 | 67.25175 | 411.1811 | 11.64671 |
| 2108.734 | 72.95105 | 399.5329 | 9.317365 |


| 1240.802 | 31.91608 | 293.5344 | 5.823353 |
| ---: | ---: | ---: | ---: |
| 1820.263 | 77.51049 | 335.4678 | 9.317365 |
| 1189.155 | 30.77622 | 245.7768 | 5.823353 |
| 1366.772 | 69.53147 | 245.7768 | 2.329341 |
| 958.6299 | 28.4965 | 186.371 | 1.164671 |
| 1735.863 | 69.53147 | 308.677 | 12.81138 |
| 1858.054 | 45.59441 | 377.4013 | 10.48204 |
| 2574.822 | 82.06993 | 453.1145 | 12.81138 |
| 1982.764 | 51.29371 | 345.9512 | 8.152695 |
| 1500.3 | 52.43357 | 427.4885 | 9.317365 |
| 883.0481 | 35.33566 | 208.5026 | 4.658683 |
| 1976.466 | 69.53147 | 349.4457 | 9.317365 |
| 1694.293 | 58.13287 | 301.6881 | 6.988024 |
| 2229.665 | 67.25175 | 364.5883 | 9.317365 |
| 1705.631 | 53.57343 | 355.2698 | 11.64671 |
| 2283.832 | 90.04895 | 355.2698 | 5.823353 |
| 1871.911 | 47.87413 | 327.3141 | 4.658683 |
| 2083.54 | 50.15385 | 290.0399 | 8.152695 |
| 1778.693 | 47.87413 | 322.6548 | 2.329341 |
| 1876.95 | 47.87413 | 225.9749 | 3.494012 |
| 1863.093 | 39.8951 | 366.9179 | 5.823353 |
| 726.8456 | 23.93706 | 208.5026 | 4.658683 |
| 1682.956 | 36.47552 | 491.5536 | 8.152695 |
| 1570.843 | 41.03497 | 338.9623 | 12.81138 |
| 1687.995 | 35.33566 | 656.9578 | 16.30539 |
| 1836.639 | 59.27273 | 425.1589 | 8.152695 |
| 1584.7 | 46.73427 | 379.731 | 5.823353 |
| 1703.111 | 52.43357 | 207.3378 | 3.494012 |
| 1002.719 | 34.1958 | 196.8544 | 1.164671 |
| 2166.68 | 79.79021 | 419.3348 | 9.317365 |
| 1694.293 | 70.67133 | 266.7435 | 6.988024 |
| 1501.56 | 52.43357 | 216.6563 | 4.658683 |
| 1459.99 | 20.51748 | 146.7672 | 5.823353 |
| 1391.966 | 51.29371 | 205.0081 | 3.494012 |
| 1412.121 | 50.15385 | 207.3378 | 2.329341 |
| 2063.385 | 87.76923 | 357.5994 | 10.48204 |
| 1473.846 | 43.31469 | 166.5691 | 3.494012 |
| 1312.605 | 52.43357 | 299.3584 | 6.988024 |
| 1054.367 | 50.15385 | 159.5802 | 2.329341 |
| 1457.47 | 52.43357 | 345.9512 | 12.81138 |
| 486.2433 | 11.3986 | 131.6245 | 2.329341 |
| 1375.59 | 46.73427 | 224.81 | 9.317365 |
| 1614.932 | 53.57343 | 334.303 | 10.48204 |
| 879.269 | 49.01399 | 126.9653 | 8.152695 |
| 311.8323 | 16.4794 | 531.9882 | 1.096774 |
| 326.8863 | 17.50936 | 606.7826 | 1.096774 |
| 421.5113 | 37.07865 | 1078.725 | 3.290323 |


| 398.9303 | 29.86891 | 1141.931 | 0 |
| :---: | :---: | :---: | :---: |
| 251.6164 | 11.32959 | 757.4249 | 1.096774 |
| 480.6519 | 30.89888 | 1058.709 | 4.387097 |
| 720.4402 | 63.85768 | 1620.194 | 2.193548 |
| 147.3139 | 11.32959 | 480.3696 | 0 |
| 135.4858 | 7.209738 | 641.5462 | 2.193548 |
| 188.1747 | 6.179775 | 564.645 | 0 |
| 202.1534 | 16.4794 | 619.4239 | 0 |
| 209.6804 | 13.38951 | 643.6531 | 0 |
| 110.7542 | 6.179775 | 442.4457 | 0 |
| 53.7642 | 5.149813 | 220.1694 | 1.096774 |
| 380.6505 | 22.65918 | 705.8062 | 0 |
| 350.5426 | 27.80899 | 1043.961 | 2.193548 |
| 183.8735 | 16.4794 | 529.8814 | 0 |
| 159.142 | 4.11985 | 565.6984 | 0 |
| 359.1448 | 37.07865 | 1089.259 | 3.290323 |
| 268.821 | 15.44944 | 725.8216 | 0 |
| 578.5027 | 32.9588 | 1584.377 | 3.290323 |
| 496.7812 | 35.01873 | 1036.587 | 3.290323 |
| 304.3053 | 15.44944 | 816.4176 | 2.193548 |
| 721.5155 | 32.9588 | 1329.444 | 1.096774 |
| 664.5255 | 37.07865 | 960.7392 | 8 |
| 129.5728 | 4.571429 | 176.587 | 0 |
| 14.15501 | 1.142857 | 45.46852 | 1 |
| 113.2401 | 1.142857 | 151.2093 | 1 |
| 62.06427 | 4.571429 | 214.6537 | 0 |
| 17.42155 | 0 | 48.64074 | 0 |
| 115.4178 | 5.714286 | 267.5241 | 0 |
| 124.1285 | 6.857143 | 237.9167 | 4 |
| 339.9014 | 23.76 | 1165.399 | 1.5 |
| 179.8188 | 4.32 | 484.6109 | 0 |
| 289.4645 | 10.8 | 822.8842 | 0 |
| 249.992 | 11.88 | 718.9633 | 1.5 |
| 166.6614 | 6.48 | 426.288 | 0 |
| 198.4586 | 7.56 | 565.2027 | 0 |
| 457.2223 | 10.8 | 1122.982 | 0 |
| 155.6968 | 7.56 | 382.8108 | 1.5 |
| 357.4447 | 11.88 | 909.8385 | 0 |
| 365.5321 | 40.42812 | 1231.016 | 2 |
| 277.4034 | 15.12 | 776.2258 | 1.5 |
| 167.7578 | 10.8 | 503.6985 | 0 |
| 197.1658 | 11.70288 | 515.0383 | 0 |
| 108.5492 | 10.8 | 430.5296 | 0 |
| 180.5507 | 9.57508 | 752.9924 | 0 |
| 447.4999 | 32.98083 | 1275.434 | 0 |
| 303.5024 | 27.66134 | 660.9835 | 0 |
| 622.5122 | 59.57827 | 1400.227 | 2 |


| 379.9318 | 20.21406 | 1148.525 | 1 |
| :---: | :---: | :---: | :---: |
| 109.6596 | 4.255591 | 285.5449 | 0 |
| 142.8898 | 8.511182 | 402.9355 | 0 |
| 197.1658 | 15.95847 | 632.429 | 0 |
| 572.6669 | 34.04473 | 990.9464 | 1 |
| 623.6199 | 48.9393 | 1614.915 | 0 |
| 260.3031 | 19.15016 | 735.0136 | 0 |
| 270.8247 | 8.64 | 790.0113 | 0 |
| 70.1732 | 4.32 | 235.4128 | 0 |
| 505.4663 | 37.8 | 961.7989 | 0 |
| 350.866 | 25.92 | 1286.287 | 0 |
| 240.1239 | 9.72 | 613.9819 | 0 |
| 158.9862 | 10.8 | 489.913 | 0 |
| 684.1887 | 41.04 | 968.1615 | 0 |
| 66.11613 | 3 | 260.417 | 2 |
| 67.2 | 5 | 253.0961 | 0 |
| 24.92903 | 2 | 70.07205 | 0 |
| 126.8129 | 9 | 457.0371 | 1 |
| 52.02581 | 6 | 240.5459 | 0 |
| 26.0129 | 0 | 135.9607 | 0 |
| 140.9032 | 5 | 498.8712 | 0 |
| 573.9899 | 23.84141 | 1060.789 | 0 |
| 487.0218 | 33.59471 | 1330.481 | 2.166667 |
| 443.5377 | 29.25991 | 1152.802 | 0 |
| 470.7152 | 23.84141 | 1194.049 | 0 |
| 389.1826 | 17.33921 | 968.7766 | 2.166667 |
| 389.1826 | 33.59471 | 927.5296 | 1.083333 |
| 238.0754 | 11.9207 | 665.2407 | 0 |
| 592.4707 | 24.92511 | 1322.021 | 1.083333 |
| 257.6432 | 15.17181 | 663.1255 | 1.083333 |
| 701.1809 | 32.51101 | 1435.185 | 5.416667 |
| 180.3425 | 4.432432 | 132.6954 | 0 |
| 208.4198 | 5.540541 | 277.454 | 1.333333 |
| 222.4585 | 2.216216 | 345.4466 | 0 |
| 93.9509 | 2.216216 | 98.69904 | 0 |
| 426.5587 | 3.324324 | 143.6619 | 0 |
| 333.6877 | 1.108108 | 152.4352 | 1.333333 |
| 84.23184 | 1.108108 | 71.28264 | 0 |
| 296.9712 | 3.324324 | 287.3239 | 0 |
| 149.0256 | 0 | 131.5987 | 0 |
| 143.6261 | 2.216216 | 117.3422 | 0 |
| 582.0636 | 9.972973 | 323.5135 | 0 |
| 247.296 | 0 | 93.21576 | 1.333333 |
| 748.3675 | 5.540541 | 219.3312 | 0 |
| 55.53333 | 0 | 219.5885 | 0 |
| 83.86667 | 3.409091 | 442.4383 | 0 |
| 32.86667 | 0 | 48.91824 | 0 |


| 106.5333 | 3.409091 | 248.9395 | 0 |
| ---: | ---: | ---: | ---: |
| 111.0667 | 5.681818 | 257.636 | 0 |
| 136 | 2.272727 | 304.3801 | 0 |
| 114.4667 | 5.681818 | 297.8577 | 1.5 |
| 182.4667 | 6.818182 | 455.4831 | 0 |
| 19.26667 | 1.136364 | 41.30873 | 0 |
| 150.7333 | 3.409091 | 222.8497 | 0 |
| 71.4 | 0 | 59.78896 | 0 |
| 112.2 | 3.409091 | 291.3353 | 1.5 |
| 88.4 | 0 | 166.322 | 0 |
| 125.8 | 2.272727 | 267.4197 | 0 |
| 129.2 | 0 | 133.7098 | 0 |
| 166.6 | 3.409091 | 338.0794 | 0 |
| 98.6 | 9.090909 | 298.9448 | 0 |
| 403.0569 | 11.85714 | 420.6724 | 0 |
| 86.21538 | 6.467532 | 140.9359 | 1 |
| 258.6462 | 6.467532 | 292.5488 | 1 |
| 262.9569 | 9.701299 | 366.2198 | 1 |
| 139.0223 | 6.467532 | 302.1581 | 0 |
| 409.5231 | 10.77922 | 539.1867 | 1 |
| 143.3331 | 7.545455 | 276.5334 | 0 |
| 329.7738 | 3.233766 | 261.5856 | 1 |
| 492.5054 | 14.01299 | 341.6628 | 0 |
| 276.9669 | 6.467532 | 307.4965 | 0 |
| 524.0851 | 35.78947 | 1299.425 | 4 |
| 445.2593 | 46.01504 | 1315.094 | 0 |
| 407.9769 | 47.03759 | 919.2076 | 6 |
| 467.6288 | 43.96992 | 1409.104 | 2 |
| 185.3472 | 6.135338 | 473.183 | 0 |
| 168.3038 | 11.24812 | 436.6236 | 1 |
| 677.4759 | 22.49624 | 990.2373 | 1 |
| 265.2382 | 18.40602 | 862.8017 | 2 |
| 486.8027 | 35.78947 | 1525.049 | 2 |
| 477.2157 | 35.78947 | 1356.876 | 4 |
| 383.4769 | 16.3609 | 747.9007 | 1 |
| 378.1509 | 16.3609 | 782.371 | 3 |
| 508.1069 | 33.74436 | 1259.732 | 1 |
| 325.9554 | 12.27068 | 611.0642 | 0 |
| 427.1507 | 16.3609 | 853.4007 | 0 |
| 176.8255 | 10.22556 | 396.9306 | 0 |
| 408.4331 | 14 | 653.3065 | 4.333333 |
| 327.3948 | 12 | 482.7388 | 1.444444 |
| 527.2893 | 11 | 394.7731 | 0 |
| 546.7385 | 31 | 585.7231 | 0 |
| 221.5047 | 5 | 249.9514 | 0 |
| 567.2682 | 18 | 629.706 | 2.888889 |
| 963.8157 | 12 | 521.3579 | 1.444444 |
|  |  |  |  |


| 324.1532 | 8 | 184.5135 | 0 |
| :---: | :---: | :---: | :---: |
| 673.1582 | 14 | 370.0998 | 1.444444 |
| 349.005 | 8 | 432.3194 | 1.444444 |
| 572.6707 | 28 | 466.6475 | 0 |
| 356.5686 | 18 | 351.863 | 0 |
| 95.98728 | 1.065421 | 323.5409 | 1 |
| 115.4004 | 3.196262 | 501.1712 | 0 |
| 63.63202 | 3.196262 | 275.9613 | 1 |
| 150.9912 | 2.130841 | 423.9866 | 0 |
| 341.8873 | 15.98131 | 861.7184 | 1 |
| 106.7724 | 4.261682 | 310.853 | 0 |
| 148.8342 | 7.457944 | 468.3942 | 0 |
| 299.8254 | 17.04673 | 978.0239 | 0 |
| 110.0079 | 8.523364 | 377.4644 | 0 |
| 61.475 | 5.327103 | 232.6111 | 0 |
| 225.4083 | 11.71963 | 735.8969 | 1 |
| 264.2346 | 13.85047 | 722.1517 | 1 |
| 43.14035 | 3.196262 | 126.8788 | 0 |
| 64.71053 | 2.130841 | 283.3626 | 0 |
| 159.6193 | 9.588785 | 693.604 | 1 |
| 110.0079 | 2.130841 | 329.8848 | 0 |
| 97.06579 | 3.196262 | 396.4962 | 0 |
| 642.9157 | 16 | 463.4571 | 1 |
| 764.9454 | 9 | 292.8256 | 0 |
| 723.1389 | 11 | 411.7172 | 1 |
| 313.8381 | 6 | 428.0238 | 1 |
| 290.8743 | 2 | 416.6236 | 0 |
| 224.1701 | 11 | 338.8953 | 0 |
| 276.6587 | 8 | 437.3512 | 0 |
| 242.7598 | 6 | 376.2049 | 2 |
| 247.1338 | 9 | 474.6607 | 1 |
| 275.5652 | 10 | 320.2405 | 0 |
| 689.3793 | 21.79048 | 511.8253 | 0 |
| 1005.117 | 32.68571 | 906.7856 | 2.292683 |
| 1164.625 | 37.04381 | 1332.044 | 4.585366 |
| 936.2885 | 43.58095 | 1320.141 | 3.439024 |
| 905.4524 | 20.40634 | 509.4106 | 1.113924 |
| 1678.109 | 23.96952 | 1172.978 | 3.439024 |
| 1084.871 | 26.14857 | 827.7936 | 0 |
| 1190.845 | 41.4019 | 1591.744 | 2.292683 |
| 1664.998 | 51.20762 | 1386.148 | 2.292683 |
| 689.3793 | 19.61143 | 710.9286 | 2.292683 |
| 1743.66 | 39.22286 | 1526.819 | 3.439024 |
| 1029.153 | 21.79048 | 774.7715 | 3.439024 |
| 784.4284 | 28.32762 | 794.249 | 0 |
| 1671.1 | 37.59063 | 708.466 | 3.341772 |
| 281.8698 | 14.16381 | 318.1324 | 2.292683 |


| 839.9191 | 27 | 532.9548 | 2. |
| :---: | :---: | :---: | :---: |
| 1626.319 | 19.33233 | 633.5527 |  |
| 115 | 9.666163 | 169.090 |  |
| 563.5868 | 6.444109 | 175.5112 |  |
| 1490.884 | 17.18429 | 470.8838 | 1.113924 |
| 1259.674 | 57.74476 | 1063.688 | 5.7 |
| 1952.894 | 37.5906 | 878.6263 | 2.2 |
| 1173.365 | 47 | 1769.206 | 1.146341 |
| 638.9501 | 16 | 599.3066 | 2.227848 |
| 2737.109 | 34.36858 | 546 |  |
| 246.8423 | 3.222054 | 36.38647 |  |
| 634.5812 | 4.296073 | 206.5467 |  |
| 20 | 11 | 38 | 2.292683 |
| 400.8 | 13 | 5 | 0 |
| 1324.133 | 19.6114 | 1194.62 | 5.731707 |
| 824.8516 | 20.70095 | 1821.146 | 2.292683 |
| 231.614 | 13 | 63 | 0 |
| 774.3857 | 38 | 17 | 6.683544 |
| 16 | 54 | 15 | 4. |
| 499.1457 | 9.66616 | 323.1975 | 1.113924 |
| 1703.867 | 74.10725 | 2202.452 | 3.341772 |
| 1095.499 | 63.36 | 1188.982 | 1. |
| 1491.976 | 68 | 16 | 4.455696 |
| 796.2302 | 49 | 14 | 3. |
| 1034.335 | 42.96073 | 1073.401 | 5.56962 |
| 1334.696 | 35.4426 | 1439.406 | 3.341772 |
| 363.7101 | 7.51812 | 431.2 | 0 |
| 776.5702 | 50 | 71 | 1.113924 |
| 1793.429 | 62.2930 | 1337.738 | 10.0 |
| 1309.575 | 53.70091 | 1138.683 | 1.11392 |
| 1191.615 | 44.0347 | 787.6601 | 3.341772 |
| 1230.935 | 38.6646 | 1024.172 | 2.2 |
| 962.248 | 52 | 956.7502 | 4.455696 |
| 626.9357 | 25.7764 | 689.2026 | 3.3 |
| 1962.724 | 57.99698 | 931.0656 | 3.341772 |
| 729.6046 | 17.18429 | 463.3924 | 1.113924 |
| 754.7257 | 22.55438 | 560.7798 | 1.113924 |
| 1178.508 | 47.2568 | 1046.646 | 3.341772 |
| 1158.848 | 36.51662 | 799.4322 | 4.455696 |
| 1567.339 | 42.96073 | 1451.178 | 4.455696 |
| 1220.012 | 50.47885 | 1088.384 | 5.56962 |
| 699.0224 | 20.40634 | 480.5155 | 3.341772 |
| 657.5179 | 26.85045 | 526.5337 | 1.113924 |
| 946.9569 | 36.51662 | 623.921 | 11.13924 |
| 689.1924 | 25.77644 | 507.2702 | 3.341772 |
| 1103.145 | 37.59063 | 1115.138 | 2.227848 |
| 1718.066 | 66.58912 | 1635.251 | 18.93671 |


| 1418.797 | 61.21903 | 932.1358 | 8.911392 |
| :---: | :---: | :---: | :---: |
| 1304.114 | 55.84894 | 875.4157 | 1.113924 |
| 1404.598 | 89.1435 | 1572.11 | 4.455696 |
| 1127.174 | 42.96073 | 859.3629 | 2.227848 |
| 970.9858 | 39.73867 | 530.8144 | 0 |
| 1189.43 | 74.10725 | 1145.104 | 3.341772 |
| 766.7402 | 41.88671 | 818.6956 | 7.797468 |
| 785.3079 | 24.70242 | 223.6698 | 1.113924 |
| 1320.497 | 82.6994 | 1285.299 | 5.56962 |
| 1519.281 | 13.96224 | 306.0744 | 2.227848 |
| 943.6802 | 22.55438 | 232.2313 | 0 |
| 493.6846 | 20.40634 | 629.2719 | 0 |
| 1198.168 | 54.77492 | 1430.845 | 4.455696 |
| 560.2034 | 25.42105 | 911.1792 | 0 |
| 651.8522 | 30.94737 | 571.1377 | 1.666667 |
| 502.9229 | 18.78947 | 574.439 | 1.666667 |
| 217.666 | 7.736842 | 253.1053 | 0 |
| 643.833 | 21 | 770.3205 | 1.666667 |
| 451.3704 | 7.736842 | 553.5303 | 0 |
| 182.152 | 14.36842 | 211.2879 | 0 |
| 80 | 9 | 290 | 1 |
| 100 | 5 | 389 | 0 |
| 92 | 5 | 183 | 2 |
| 77 | 3 | 154 | 1 |
| 54 | 2 | 142 | 0 |
| 14 | 0 | 25 | 0 |
| 42 | 1 | 151 | 0 |
| 85 | 5 | 281 | 0 |
| 1307.892 | 61.40176 | 1022.558 | 4.933333 |
| 1242.834 | 46.58065 | 801.9856 | 6.166667 |
| 366.7929 | 21.17302 | 791.2782 | 1.233333 |
| 332.0205 | 19.05572 | 582.4835 | 1.233333 |
| 245.6503 | 10.58651 | 200.2287 | 1.233333 |
| 467.7451 | 15.87977 | 792.3489 | 0 |
| 780.6969 | 30.70088 | 1237.777 | 2.466667 |
| 627.0252 | 32.81818 | 1087.874 | 1.233333 |
| 511.4911 | 26.46628 | 1054.681 | 1.233333 |
| 112.1691 | 4.234604 | 175.6016 | 0 |
| 799.7656 | 34.93548 | 1016.134 | 3.7 |
| 293.883 | 10.58651 | 258.0488 | 1.233333 |
| 611.3216 | 20.11437 | 1076.095 | 8.633333 |
| 270.3275 | 19.05572 | 523.5927 | 2.466667 |
| 123.386 | 7.410557 | 292.3125 | 1.233333 |
| 389.3202 | 13.17808 | 519.7414 | 0 |
| 293.888 | 20.27397 | 568.834 | 0 |
| 485.837 | 10.13699 | 312.6986 | 1 |
| 332.9284 | 18.24658 | 497.3296 | 0 |


| 347.0264 | 12.16438 | 371.3963 | 0 |
| ---: | ---: | ---: | ---: |
| 324.9619 | 3.75 | 613.5337 | 2 |
| 97.25136 | 0 | 185.2588 | 0 |
| 36.76576 | 1.25 | 93.71918 | 0 |
| 166.0389 | 3.75 | 268.0804 | 0 |
| 18.97588 | 1.25 | 156.9251 | 0 |
| 54.55564 | 0 | 225.5799 | 0 |
| 113.8553 | 3.75 | 350.902 | 0 |
| 360.5416 | 5 | 408.6592 | 1 |
| 105.5533 | 0 | 137.3095 | 1 |
| 245.5004 | 1.25 | 486.032 | 1 |
| 117.63 | 2.108108 | 328.8129 | 1 |
| 194.2005 | 1.054054 | 465.0202 | 0 |
| 218.6143 | 5.27027 | 832.1415 | 2 |
| 378.4135 | 9.486486 | 208.5674 | 0 |
| 663.6109 | 5.27027 | 880.0269 | 1 |
| 168.677 | 5.27027 | 294.7611 | 0 |
| 288.5265 | 7.378378 | 461.8279 | 2 |
| 557.078 | 10.54054 | 498.0079 | 0 |
| 461.6423 | 6.324324 | 635.2794 | 1 |
| 278.539 | 6.324324 | 333.0694 | 0 |
| 260.7835 | 4.216216 | 187.285 | 0 |
| 163.1284 | 1.054054 | 47.88538 | 0 |
| 1114.156 | 13.7027 | 453.3149 | 0 |
| 554.5999 | 11.64706 | 426.7201 | 0 |
| 686.3312 | 4.235294 | 347.941 | 0 |
| 485.9668 | 11.64706 | 744.0248 | 0 |
| 539.1021 | 8.470588 | 596.314 | 0 |
| 1174.233 | 34.58547 | 546.831 | 4.814433 |
| 2324.625 | 68.05529 | 925.9364 | 8.425258 |
| 1726.183 | 33.46981 | 504.3252 | 2.407216 |
| 1183.77 | 31.23849 | 542.2357 | 4.814433 |
| 724.806 | 20.08189 | 303.2844 | 1.203608 |
| 1950.3 | 60.24566 | 848.9665 | 1.203608 |
| 1989.64 | 58.01434 | 819.0976 | 12.03608 |
| 913.1602 | 35.70113 | 426.2065 | 2.407216 |
| 846.4018 | 31.23849 | 422.7601 | 3.610825 |
| 1224.302 | 37.93245 | 469.861 | 4.814433 |
| 1277.947 | 39.04811 | 624.9497 | 7.221649 |
| 2096.931 | 70.28661 | 659.4138 | 4.814433 |
| 1943.148 | 59.13 | 835.1809 | 7.221649 |
| 1423.386 | 31.23849 | 821.3952 | 4.814433 |
| 919.1208 | 40.16378 | 415.8672 | 3.610825 |
| 1956.261 | 69.17095 | 823.6928 | 3.610825 |
| 1513.986 | 41.27944 | 637.5865 | 8.425258 |
| 1242.184 | 58.01434 | 420.4625 | 3.610825 |
| 2242.369 | 83.67453 | 806.4608 | 2.407216 |
|  |  |  |  |


| 1163.504 | 34.5854 | 419.3137 |  |
| :---: | :---: | :---: | :---: |
| 879.781 | 27.89151 | 350.3854 |  |
| 1207.613 | 50.20 | 51 | 3.610825 |
| 1616.508 | 40.16378 | 661.7114 | 6.018041 |
| 1928.842 | 56.89868 | 587.0391 |  |
| 401.7428 | 12.27226 | 117.1781 |  |
| 17 | 60 | 2 | 2.407216 |
| 2003.946 | 68.05529 | 65 | 2.407216 |
| 1416.233 | 37.93245 | 724.8957 | 8.425258 |
| 1876.389 | 31.23849 | 781.1871 | 4.8 |
| 475 | 8.925283 | 130.9637 |  |
| 1 | 55 | 49 | 4.814433 |
| 18 | 45 | 39 | 0 |
| 1992.024 | 61.3613 | 817.9488 | 4.814433 |
| 1583.129 | 42.395 | 627.2473 | 10.83247 |
| 830.9043 | 25.6601 | 295.2428 |  |
| 12 | 23 | 36 | 1.203608 |
| 17 | 43 | 72 | 3.610825 |
| 2231 | 45.7420 | 607.7176 | 3.6108 |
| 1519.947 | 33.46981 | 492.8371 | 3.610825 |
| 1342.322 | 26 | 25 | 3 |
| 21 | 56 | 5 | 9.628866 |
| 26 | 79 | 629.5449 | 7. |
| 2179.187 | 64.7083 | 456.0754 | 1.203608 |
| 1724.991 | 45.74208 | 770.8478 | 8.425258 |
| 869 | 35 | 40 | 1.203608 |
| 24 | 64 | 11 | 4.080645 |
| 1659.42 | 29 | 749.0205 | 4. |
| 1524.715 | 31.23849 | 505.474 | 1.203608 |
| 1580.745 | 31.23849 | 406.6768 | 0 |
| 740.3035 | 25.6601 | 27 | 608 |
| 1769.099 | 49.0890 | 400.9328 | 3.6 |
| 1609.355 | 51.32038 | 662.8602 | 6.0180 |
| 1152.696 | 25.65477 | 658.375 | 1.360215 |
| 1408.145 | 50.14341 | 683.3766 | 6.801075 |
| 1230.258 | 34.5278 | 583.2311 | 9.307042 |
| 767.6171 | 19.82414 | 311.9245 | 2.72043 |
| 862.9337 | 19.82414 | 485.7451 | 8.1612 |
| 1096.871 | 32.30027 | 404.3116 | 4.653521 |
| 866.7464 | 16.32576 | 635.7546 | 6.801075 |
| 1230.258 | 32.30027 | 456.5933 | 6.980282 |
| 1586.07 | 34.98378 | 800.0507 | 14.96237 |
| 1003.977 | 24.50365 | 356.6772 | 6.980282 |
| 845.1413 | 39.64828 | 495.2695 | 10.88172 |
| 1217.158 | 42.32449 | 490.2859 | 5.816901 |
| 1122.195 | 45.47891 | 478.6017 | 8.16129 |
| 1581.591 | 52.34871 | 632.0273 | 4.653521 |


| 394.2067 | 10.02422 | 210.2885 | 3. |
| :---: | :---: | :---: | :---: |
| 1142.128 | 21.16225 | 448.4606 | 9.307042 |
| 6 | 21 | 29.7483 | 2. |
| 1971.758 | 74.74925 | 730.6397 | 8 |
| 2211.374 | 78.09623 | 652.521 | 3.610825 |
| 2163.053 | 81.62881 | 934.583 | 6.801075 |
| 1 | 44 | 927 |  |
| 1 | 15 | 541.701 | 5 |
| 189 | 68.05529 | 512.3668 | 6 |
| 1281.524 | 24.54453 |  | 0 |
| 08 | 54.80792 | 87 | 1.360215 |
| 1441.188 | 51 | 8 | 6 |
| 1 | 36 | 942.9169 | 5 |
| 986.21 | 26 | 46 |  |
| 1916.921 | 43.51076 | 426.2065 | 4.814433 |
| 7 | 28.95886 | 32 | 8.143662 |
| 1638.757 | 47.8935 | 6 | 1 |
| 65 | 15 | 19 | 8 |
| 665.7448 | 14.47943 | 238.1721 | 1.16338 |
| 1885.285 | 38.98308 | 559.9948 | 1.16338 |
| 108 | 24. | 23 | 1 |
| 1 | 47.8935 | 577.422 | 2 |
| 1404.138 | 56 | 234.6866 | 2. |
| 1898.385 | 35.64168 | 564.6421 | 1.16338 |
| 2183.024 | 85.76278 | 877.1703 | 9.307042 |
| 12 | 40 | 36 | 1 |
| 13 | 15 | 16 | 1.16338 |
| 12 | 32.30027 | 522.8167 | 2.326761 |
| 1761.425 | 32.30027 | 622.7328 | 8.143662 |
| 1049.233 | 30.07266 | 319.4991 | 5.816901 |
| 1951.978 | 52 | 448.4606 | 2.326761 |
| 2155.632 | 51.23491 | 655.2636 | 9.307042 |
| 1838.837 | 49.0073 | 534.4349 | 8.143662 |
| 2010.335 | 67.94195 | 514.684 | 4.653521 |
| 1417.239 | 46.7797 | 533.2731 | 4.653521 |
| 1411.284 | 53.46251 | 515.8458 | 2.326761 |
| 1027.603 | 10.04094 | 464.117 | 2.407216 |
| 1443.44 | 40.09689 | 443.8133 | 5.816901 |
| 1725.696 | 33.41407 | 234.6866 | 2.326761 |
| 1689.968 | 24.50365 | 240.4957 | 4.653521 |
| 1873.375 | 34.52787 | 388.0462 | 0 |
| 695.0031 | 20.08189 | 244.6954 | 6.018041 |
| 904.8154 | 26.77585 | 259.6298 | 0 |
| 1289.869 | 16.73491 | 366.4686 | 1.203608 |
| 1481.55 | 42.32449 | 375.2662 | 0 |
| 306.0759 | 4.45521 | 80.16523 | 2.326761 |
| 1766.189 | 41.21069 | 424.0624 | 3.490141 |


| 1431.73 | 39.04811 | 522.7061 | 8.425258 |
| :---: | :---: | :---: | :---: |
| 680.0363 | 11.13802 | 95.26882 | 0 |
| 1125.454 | 30.07266 | 378.7517 | 6.980282 |
| 1319.671 | 41.27944 | 414.7184 | 2.407216 |
| 768.9143 | 34.58547 | 282.6059 | 3.610825 |
| 1300.201 | 28.99045 | 455.5472 | 2.366989 |
| 711.0012 | 10.02422 | 108.0488 | 0 |
| 918.2277 | 24.50365 | 281.1592 | 0 |
| 1676.867 | 31.18647 | 410.1207 | 9.307042 |
| 862.2527 | 21.16225 | 269.5411 | 2.326761 |
| 1283.908 | 29.00717 | 489.3907 | 3.610825 |
| 942.9631 | 23.42887 | 366.4686 | 2.407216 |
| 1493.46 | 22.27605 | 243.9811 | 3.490141 |
| 934.9011 | 24.50365 | 475.1823 | 2.326761 |
| 717.6533 | 20.08189 | 358.427 | 3.610825 |
| 1306.48 | 41.21069 | 464.726 | 5.816901 |
| 1770.953 | 46.7797 | 627.3801 | 8.143662 |
| 1948.405 | 36.75548 | 414.7679 | 4.653521 |
| 1044.469 | 31.18647 | 410.1207 | 6.980282 |
| 654.4712 | 24.54453 | 274.5643 | 3.610825 |
| 1034.756 | 22.31321 | 186.1063 | 2.407216 |
| 1024.223 | 32.30027 | 470.535 | 12.79718 |
| 1152.846 | 40.09689 | 439.166 | 15.12394 |
| 1918.631 | 41.21069 | 411.2825 | 1.16338 |
| 1159.992 | 44.5521 | 534.4349 | 6.980282 |
| 1329.108 | 59.03153 | 563.4802 | 17.4507 |
| 2102.039 | 59.03153 | 491.4477 | 15.12394 |
| 1100.444 | 24.50365 | 290.4537 | 3.490141 |
| 1083.771 | 41.21069 | 511.1986 | 5.816901 |
| 1101.635 | 25.61745 | 312.5282 | 8.143662 |
| 1401.756 | 32.30027 | 626.2182 | 6.980282 |
| 662.172 | 23.38985 | 319.4991 | 3.490141 |
| 1408.902 | 33.41407 | 1045.633 | 19.77746 |
| 939.6649 | 25.61745 | 539.0821 | 4.653521 |
| 1402.947 | 40.09689 | 609.9528 | 3.490141 |
| 980.1574 | 43.43829 | 723.8107 | 1.16338 |
| 1279.088 | 13.36563 | 226.5539 | 0 |
| 2600.003 | 81.44321 | 931.6805 | 10.83247 |
| 1734.033 | 38.98308 | 635.5128 | 3.490141 |
| 1305.289 | 53.46251 | 273.0265 | 9.307042 |
| 1917.44 | 35.64168 | 434.5188 | 2.326761 |
| 1608.983 | 34.52787 | 472.8587 | 9.307042 |
| 1728.078 | 60.14533 | 686.6326 | 4.653521 |
| 2103.23 | 54.57632 | 501.904 | 0 |
| 2158.921 | 30.12283 | 496.2836 | 2.407216 |
| 1451.996 | 45.74208 | 814.5024 | 1.203608 |
| 390.6338 | 4.45521 | 151.0359 | 1.16338 |


| 2285.285 | 50.20472 | 680.0923 | 7.221649 |
| ---: | ---: | ---: | ---: |
| 1206.439 | 27.84506 | 283.4828 | 5.816901 |
| 1138.47 | 16.73491 | 400.9328 | 1.203608 |
| 2005.571 | 60.14533 | 537.9203 | 13.96056 |
| 1150.391 | 24.54453 | 426.2065 | 3.610825 |
| 2585.567 | 85.76278 | 657.5872 | 3.490141 |
| 1733.335 | 59.13 | 457.2242 | 2.407216 |
| 1273.133 | 41.21069 | 369.4571 | 4.653521 |
| 978.7266 | 22.31321 | 405.528 | 4.814433 |
| 836.0517 | 32.30027 | 245.1429 | 2.326761 |
| 1754.279 | 40.09689 | 405.4734 | 6.980282 |
| 1659.424 | 40.16378 | 610.0152 | 3.610825 |
| 1004.953 | 44.62642 | 304.4332 | 6.018041 |
| 1214.765 | 36.81679 | 425.0577 | 6.018041 |
| 1541.405 | 51.32038 | 553.7238 | 7.221649 |
| 2206.605 | 72.51793 | 419.3137 | 6.018041 |
| 1025.219 | 26.77585 | 238.9513 | 0 |
| 1890.048 | 49.0073 | 529.7876 | 3.490141 |
| 1181.386 | 40.16378 | 583.5927 | 2.407216 |
| 1735.72 | 42.3951 | 523.8549 | 7.221649 |
| 1817.976 | 49.08906 | 649.0746 | 2.407216 |
| 1497.297 | 61.36132 | 437.6945 | 7.221649 |
| 1590.282 | 51.32038 | 811.056 | 12.03608 |
| 2230.447 | 56.89868 | 619.2056 | 10.83247 |
| 1080.056 | 55.78302 | 298.6892 | 3.610825 |
| 623.4762 | 15.61925 | 218.2729 | 0 |
| 2290.053 | 74.74925 | 805.312 | 7.221649 |
| 690.2347 | 18.96623 | 206.7848 | 1.203608 |
| 1545.401 | 48.97729 | 1509.619 | 2.72043 |
| 814.64 | 12.82738 | 561.9404 | 2.72043 |
| 739.6575 | 19.82414 | 494.0789 | 4.080645 |
| 1603.395 | 39.04811 | 722.598 | 4.814433 |
| 978.7266 | 29.00717 | 531.8965 | 2.407216 |
| 1100.322 | 31.23849 | 328.5581 | 3.610825 |
| 1392.391 | 39.04811 | 623.8009 | 2.407216 |
| 1128.55 | 29.15315 | 889.3421 | 0 |
| 1862.084 | 69.17095 | 956.9542 | 6.018041 |
| 1331.593 | 27.89151 | 668.6042 | 3.610825 |
| 1295.829 | 44.62642 | 577.8487 | 2.407216 |
| 1504.449 | 49.08906 | 587.0391 | 4.814433 |
| 1062.463 | 30.31927 | 642.8979 | 1.360215 |
| 1633.093 | 43.14666 | 1007.207 | 8.16129 |
| 1453.188 | 37.93245 | 607.7176 | 8.425258 |
| 653.237 | 20.99027 | 546.4632 | 1.360215 |
| 1035.948 | 26.77585 | 620.3544 | 3.610825 |
| 1591.474 | 61.36132 | 622.6521 | 10.83247 |
| 1430.538 | 45.74208 | 366.4686 | 3.610825 |
| 10 |  |  |  |


| 1648.343 | 47.81116 | 1227.459 | 12.24194 |
| ---: | ---: | ---: | ---: |
| 1727.375 | 32.35415 | 592.7831 | 1.203608 |
| 1180.656 | 38.48215 | 542.8915 | 6.801075 |
| 1527.1 | 31.23849 | 595.0807 | 1.203608 |
| 2203.722 | 44.31278 | 1425.09 | 13.60215 |
| 1289.953 | 27.98702 | 838.1483 | 9.521505 |
| 1155.16 | 26.77585 | 639.8841 | 3.610825 |
| 1587.897 | 52.43604 | 533.0453 | 0 |
| 2212.618 | 43.14666 | 764.3341 | 1.360215 |
| 1868.207 | 68.80143 | 941.7263 | 4.080645 |
| 709.1562 | 32.65152 | 435.7419 | 4.080645 |
| 489.2923 | 9.329007 | 225.0143 | 2.72043 |
| 1200.99 | 29.15315 | 600.038 | 6.801075 |
| 1228.95 | 39.64828 | 504.7939 | 0 |
| 1872.813 | 73.63359 | 584.7415 | 7.221649 |
| 1795.766 | 27.98702 | 760.7625 | 5.44086 |
| 1944.46 | 40.81441 | 1073.878 | 4.080645 |
| 1170.489 | 40.81441 | 589.323 | 6.801075 |
| 1109.486 | 45.47891 | 932.2019 | 0 |
| 2019.443 | 67.6353 | 1094.117 | 6.801075 |
| 1061.192 | 37.31603 | 426.2175 | 4.080645 |
| 2156.536 | 54.66736 | 763.955 | 3.610825 |
| 2024.212 | 49.08906 | 740.9789 | 4.814433 |
| 1533.963 | 25.65477 | 584.5608 | 5.44086 |
| 1593.695 | 60.63855 | 950.0602 | 9.521505 |
| 1005.273 | 24.48864 | 756.0003 | 8.16129 |
| 1025.219 | 24.54453 | 274.5643 | 2.407216 |
| 940.458 | 19.82414 | 435.7419 | 1.360215 |
| 2169.65 | 47.9734 | 745.5741 | 3.610825 |
| 1035.775 | 27.98702 | 441.6946 | 0 |
| 1427.209 | 47.81116 | 677.4239 | 1.360215 |
| 340.5983 | 11.66126 | 248.8253 | 4.080645 |
| 1185.74 | 44.31278 | 503.6033 | 6.801075 |
| 1453.897 | 38.48215 | 503.6033 | 1.360215 |
| 942.9998 | 23.32252 | 288.1135 | 4.080645 |
| 342.1371 | 10.04094 | 145.8982 | 1.203608 |
| 252.2127 | 16.27593 | 588.1336 | 0 |
| 525.4832 | 31.87129 | 1231.805 | 1.25 |
| 395.6732 | 13.02075 | 518.6169 | 0 |
| 260.5612 | 9.891089 | 522.1666 | 0 |
| 295.0195 | 15.19087 | 540.6857 | 2.052632 |
| 497.4838 | 18.44606 | 662.0641 | 3.078947 |
| 1126.859 | 47.74274 | 1016.268 | 3.078947 |
| 824.8975 | 40.1473 | 971.0274 | 2.052632 |
| 1038.931 | 40.1473 | 948.9586 | 3.078947 |
| 355.4098 | 20.88119 | 821.9092 | 1.25 |
| 784.4047 | 34.72199 | 1080.268 | 1.026316 |


| 997.5459 | 48.35644 | 1112.119 | 2.5 |
| ---: | ---: | ---: | ---: |
| 889.6861 | 30.38174 | 1011.855 | 4.105263 |
| 849.1933 | 27.12656 | 829.787 | 2.052632 |
| 801.7588 | 53.16805 | 1220.405 | 3.078947 |
| 392.2023 | 16.27593 | 536.2719 | 4.105263 |
| 865.3904 | 28.21162 | 715.0292 | 2.052632 |
| 731.1855 | 50.99793 | 1057.096 | 2.052632 |
| 658.2983 | 37.97718 | 890.4762 | 3.078947 |
| 1192.804 | 53.16805 | 1526.058 | 4.105263 |
| 483.7589 | 13.34211 | 834.7025 | 1 |
| 632.0645 | 30.78947 | 900.657 | 2 |
| 604.9929 | 11.28947 | 670.357 | 1 |
| 394.3047 | 8.210526 | 833.6213 | 1 |
| 364.879 | 14.36842 | 940.6622 | 3 |
| 1488.306 | 58.99029 | 1201.945 | 1 |
| 880.7161 | 34.76214 | 906.7112 | 2 |
| 1013.807 | 25.28155 | 944.3065 | 2 |
| 1057.785 | 44.24272 | 1488.333 | 4 |
| 1540.385 | 53.7233 | 1251.704 | 1 |
| 482.6016 | 35.19269 | 1106.554 | 3 |
| 812.6881 | 41.59136 | 1946.264 | 0 |
| 326.8183 | 24.52824 | 910.6568 | 1 |
| 376.9304 | 7.465116 | 691.4638 | 0 |
| 71.90002 | 1.066445 | 148.2465 | 0 |
| 262.544 | 7.465116 | 580.279 | 0 |
| 144.8894 | 9.598007 | 436.2681 | 0 |
| 125.2803 | 10.66445 | 418.2668 | 0 |
| 448.8304 | 10.66445 | 546.3941 | 1 |
| 208.0743 | 5.332226 | 247.7834 | 0 |
| 211.3425 | 11.7309 | 758.1747 | 2 |
| 202.6273 | 3.199336 | 387.5586 | 0 |
| 165.5879 | 5.332226 | 428.8558 | 0 |
| 222.2364 | 9.598007 | 498.7434 | 0 |
| 270.1698 | 9.598007 | 732.761 | 2 |
| 168.8561 | 12.79734 | 376.9696 | 0 |
| 234.2197 | 21.3289 | 626.8707 | 1 |
| 388.9137 | 19.19601 | 897.9499 | 1 |
| 335.5334 | 18.12957 | 860.8883 | 1 |
| 205.8955 | 11.7309 | 687.2282 | 1 |
| 512.0153 | 26.66113 | 689.346 | 1 |
| 464.0819 | 6.398671 | 458.5051 | 1 |
| 352.9637 | 11.7309 | 412.9723 | 1 |
| 360.9458 | 22.89869 | 1033.431 | 1.078431 |
| 432.9168 | 20.81699 | 1077.948 | 3.235294 |
| 666.2775 | 29.14379 | 1086.427 | 3.235294 |
| 345.6792 | 19.77614 | 678.3546 | 1.078431 |
| 236.6321 | 10.4085 | 746.1901 | 0 |
|  |  |  |  |


| 489.6213 | 19.77614 | 978.3146 | 2.156863 |
| ---: | ---: | ---: | ---: |
| 640.1062 | 30.18464 | 1276.155 | 2.156863 |
| 517.9735 | 22.89869 | 1066.289 | 2.156863 |
| 273.7081 | 8.326797 | 670.9351 | 1.078431 |
| 1063.209 | 58.28758 | 1084.308 | 8.627451 |
| 730.6153 | 39.55229 | 1367.309 | 2.156863 |
| 677.1822 | 29.14379 | 931.6777 | 2.156863 |
| 302.0603 | 13.53105 | 519.3653 | 1.078431 |
| 657.5537 | 42.67484 | 932.7376 | 3.235294 |
| 645.5586 | 29.14379 | 893.5203 | 5.392157 |
| 770.9627 | 39.55229 | 1023.892 | 5.392157 |
| 854.9289 | 53.08333 | 1223.158 | 1.078431 |
| 957.4331 | 32.26634 | 1272.975 | 0 |
| 462.3595 | 18.73529 | 638.0773 | 1.078431 |
| 697.9012 | 47.87908 | 740.8905 | 1.078431 |
| 1101.375 | 48.91993 | 1398.047 | 7.54902 |
| 19.83117 | 2.204545 | 67.27575 | 0 |
| 109.0714 | 2.204545 | 281.9174 | 0 |
| 396.6234 | 13.22727 | 883.1277 | 1.25 |
| 511.2035 | 26.45455 | 1220.574 | 2.5 |
| 69.40909 | 4.409091 | 211.4381 | 0 |
| 26.44156 | 3.306818 | 168.7233 | 0 |
| 180.684 | 9.920455 | 360.9397 | 0 |
| 418.658 | 22.04545 | 880.9919 | 1.25 |
| 304.0779 | 13.22727 | 425.0119 | 0 |
| 365.6431 | 17.24514 | 770.3401 | 0 |
| 320.2082 | 15.08949 | 657.8662 | 0 |
| 235.829 | 11.85603 | 502.9493 | 2.5 |
| 533.3197 | 17.24514 | 706.6756 | 2.5 |
| 709.6506 | 35.56809 | 1085.479 | 0 |
| 464.0855 | 24.78988 | 890.2415 | 1.25 |
| 602.5539 | 30.17899 | 1110.945 | 1.25 |
| 655.5613 | 25.8677 | 996.3489 | 1.25 |
| 560.3643 | 22.63424 | 831.8824 | 1.25 |
| 589.5725 | 42.03502 | 1390.008 | 2.5 |
| 492.2119 | 34.49027 | 873.2643 | 2.5 |
| 392.2679 | 23.06693 | 477.0284 | 0 |
| 563.4599 | 24.16535 | 833.7156 | 5.391304 |
| 240.3491 | 9.885827 | 177.8015 | 0 |
| 854.8265 | 32.95276 | 1011.517 | 2.695652 |
| 547.5878 | 16.47638 | 726.3842 | 1.347826 |
| 236.9479 | 16.47638 | 341.509 | 1.347826 |
| 543.0529 | 34.05118 | 639.6518 | 0 |
| 784.5357 | 36.24803 | 1334.595 | 5.391304 |
| 800.4078 | 52.72441 | 1207.749 | 10.78261 |
| 479.5645 | 32.95276 | 722.0476 | 4.043478 |
| 75.70163 | 1.098361 | 161.518 | 0 |


| 37.30225 | 0 | 101.2179 | 0 |
| :---: | :---: | :---: | :---: |
| 91.06138 | 1.098361 | 172.2859 | 0 |
| 62.53613 | 2.196721 | 101.2179 | 1 |
| 38.39938 | 0 | 145.3662 | 0 |
| 42.78788 | 2.196721 | 139.9823 | 0 |
| 25.23388 | 2.196721 | 95.83401 | 0 |
| 54.85625 | 1.098361 | 121.6769 | 0 |
| 92.15851 | 4.393443 | 305.8074 | 0 |
| 284.1554 | 13.18033 | 768.8256 | 4 |
| 133.8493 | 8.786885 | 484.554 | 0 |
| 165.6659 | 10.98361 | 652.5327 | 0 |
| 100.9355 | 4.393443 | 223.9716 | 0 |
| 122.878 | 6.590164 | 544.854 | 0 |
| 84.47863 | 8.786885 | 229.3555 | 0 |
| 264.3087 | 10.91954 | 530.3341 | 0 |
| 423.5717 | 26.2069 | 642.73 | 1.142857 |
| 831.33 | 53.50575 | 1158.878 | 2.285714 |
| 656.2537 | 37.12644 | 1123.959 | 2.285714 |
| 1007.536 | 62.24138 | 1293.099 | 2.285714 |
| 245 | 0 | 127.0932 | 0 |
| 73 | 1 | 94.06902 | 0 |
| 210 | 1 | 35.0257 | 0 |
| 312 | 1 | 108.0793 | 0 |
| 204 | 3 | 296.2173 | 0 |
| 640 | 4 | 293.2151 | 0 |
| 86 | 5 | 155.1138 | 0 |
| 260 | 0 | 148.1087 | 0 |
| 79 | 4 | 106.0778 | 0 |
| 280.203 | 5.409091 | 366.0348 | 0 |
| 123.2021 | 1.081818 | 200.6255 | 0 |
| 329.2658 | 3.245455 | 346.826 | 0 |
| 161.3621 | 3.245455 | 332.953 | 0 |
| 198.4317 | 5.409091 | 264.6549 | 0 |
| 364.1549 | 4.327273 | 338.2887 | 0 |
| 207.154 | 2.163636 | 86.43971 | 0 |
| 173.3552 | 2.163636 | 325.4829 | 0 |
| 568.0381 | 8.654545 | 321.2142 | 1.4 |
| 440.4748 | 11.9 | 401.251 | 1.4 |
| 257.3071 | 9.736364 | 532.5113 | 0 |
| 444.836 | 18.39091 | 693.652 | 0 |
| 137.3758 | 2.163636 | 428.9971 | 0 |
| 221.3277 | 6.490909 | 447.1388 | 1.4 |
| 467.7319 | 8.654545 | 526.1084 | 0 |
| 102.4867 | 1.081818 | 188.8868 | 0 |
| 260.5779 | 3.245455 | 706.4579 | 0 |
| 113.3896 | 10.81818 | 510.101 | 0 |
| 110.1187 | 3.245455 | 315.8785 | 1.4 |


| 908.2068 | 7.572727 | 357.4976 |  |
| :---: | :---: | :---: | :---: |
| 783.9383 | 24.73757 | 507.8537 | 1.151899 |
|  |  |  |  |
|  |  |  |  |
| 380.5 |  |  | 0 |
|  |  |  |  |
|  |  |  | 6 |
| 406.6476 |  |  |  |
| 558.8686 | 20 |  |  |
|  |  |  |  |
| 48 | 19 | 87 | 0 |
|  | 7.528827 |  | 0 |
| 170.705 | 1 |  |  |
| 593.662 |  |  |  |
| 602.3604 | 30 | 10 | 3.455696 |
| 1720.098 | 80.666 | 2025.053 | 9 |
| 721.9626 | 6 | 952.0932 | 5 |
| 450.1393 | 32 | 1328.477 | 4.607595 |
| 718.7007 | 37 | 6 | 9 |
|  |  | 1563.85 |  |
| 461.0123 | 12 | 656.287 | 9 |
| 150.0464 | 3.22664 | 249.1558 | 0 |
| 654.5504 | 29 | 1 | 3.455696 |
|  | 33 | 785 | 94 |
|  | 33 | 84 | 1.151899 |
| 245.7282 | 19 | 6 | 9 |
| 455.5758 | 23 |  | 1.151899 |
| 5 | 33 |  | 5 |
|  | 68 |  |  |
| 6 | 38 | 12 | 7 |
| 6 | 29 | 65 | 5 |
| 4 | 21 | 7 | 7 |
| 43 | 31.19085 | 1104.767 | 899 |
| 655.6 | 26.88 | 884.238 | 0 |
| 595.8366 | 34. | 10 | 95 |
| 740.4466 | 29. | 1023.129 | 1.151899 |
| 329.4498 | 23.66 | 61 | 1.151899 |
| 1561. | 5 | 11 | 4.57732 |
| 1669.928 | 41.91555 | 45 | 9 |
| 1566.384 | 40.84079 | 13 | 33 |
| 1423.184 | 60.18643 | 703.3082 | 299 |
| 1278.883 | 51.58837 | 718.4099 | 299 |
| 1599.43 | 39.76604 | 1155.281 | 3.43299 |
| 326.0545 | 10.74758 | 381.8575 | 2.28866 |
| 1693.06 | 37.61652 | 538.2681 | 1.14433 |
| 1688.654 | 62.33595 | 947.093 | 1.14433 |
| 078.403 | 34.39225 | 775.580 | 1.1 |


| 487.9803 | 19.34564 | 341.9459 | 0 |
| :---: | :---: | :---: | :---: |
| 487.9803 | 19.34564 | 323.6081 | 4.57732 |
| 1476.058 | 51.58837 | 1305.219 | 8.010309 |
| 1004.601 | 34.39225 | 511.3008 | 4.57732 |
| 1328.373 | 8.538226 | 65.40513 | 0 |
| 1979.46 | 15.04661 | 103.5546 | 2.28866 |
| 1250.243 | 45.13982 | 399.1166 | 0 |
| 319.4453 | 1.074758 | 188.7714 | 0 |
| 317.2423 | 7.523304 | 276.1456 | 0 |
| 1704.53 | 7.470948 | 36.92225 | 0 |
| 1522.322 | 30.09322 | 393.7232 | 0 |
| 1496.032 | 8.538226 | 46.41654 |  |
| 1050.016 | 7.470948 | 128.7004 | 1 |
| 962.7421 | 15.04661 | 167.1975 | 3.43299 |
| 672.7843 | 3.201835 | 28.48288 | 0 |
| 492.3864 | 11.82234 | 143.4662 | 0 |
| 985.8744 | 17.19612 | 193.0861 | 6 |
| 825.0502 | 18.27088 | 311.7424 | 0 |
| 1804.481 | 12.80734 | 64.35021 | 0 |
| 456.0358 | 25.79419 | 290.1686 | 0 |
| 380.0298 | 17.19612 | 184.4566 | 1.14433 |
| 61 | 3.224273 | 53.93468 | 0 |
| 212.5964 | 2.149515 | 42.06905 | 0 |
| 2107.556 | 10.67278 | 106.5471 | 2 |
| 171.8396 | 6.448546 | 87.37418 | 1.14433 |
| 1263.461 | 16.12137 | 211.4239 | 0 |
| 1466.144 | 39.76604 | 776.6594 | 3.43299 |
| 397.6521 | 2.134557 | 11.60414 | 0 |
| 906.5638 | 36.54176 | 622.4062 | 4.57732 |
| 1020.022 | 39.76604 | 929.8339 | 4.57732 |
| 1358.193 | 42.99031 | 771.2659 | 9.154639 |
| 613.5553 | 24.71943 | 583.5732 | 0 |
| 1287.695 | 51.58837 | 1104.582 | 6.865979 |
| 1122.465 | 50.51361 | 754.0068 | 5.721649 |
| 620.1646 | 32.24273 | 459.5235 | 3.43299 |
| 1183.049 | 52.66313 | 996.7129 | 3.43299 |
| 1310.827 | 35.46701 | 828.4367 | 8.010309 |
| 1231.517 | 38.69128 | 1090.559 | 9.154639 |
| 1772.371 | 52.66313 | 1070.064 | 6.865979 |
| 847.0809 | 21.49515 | 501.5925 | 2.28866 |
| 1584.008 | 74.15828 | 1145.573 | 11.4433 |
| 1148.902 | 52.66313 | 815.4923 | 4.57732 |
| 1657.811 | 45.13982 | 485.4121 | 2.28866 |
| 1271.172 | 46.21458 | 763.715 | 1.14433 |
| 1114.754 | 34.39225 | 498.3564 | 3.43299 |
| 722.6074 | 44.06507 | 765.8724 | 3.43299 |
| 766.6688 | 41.91555 | 543.6616 | 1.14433 |


| 1161.019 | 61.26119 | 1072.221 | 8.010309 |
| :---: | :---: | :---: | :---: |
| 1062.982 | 48.3641 | 696.836 | 4.57732 |
| 755.6534 | 41.91555 | 666.6326 | 1.14433 |
| 1027.733 | 35.46701 | 665.5539 | 3.43299 |
| 1097.129 | 67.70974 | 815.4923 | 8.010309 |
| 557.377 | 34.39225 | 624.5636 | 3.43299 |
| 1028.834 | 35.46701 | 535.032 | 5.721649 |
| 1263.461 | 49.43886 | 804.7054 | 3.43299 |
| 1262.36 | 55.8874 | 998.8702 | 10.29897 |
| 883.4316 | 33.31749 | 573.865 | 0 |
| 651.0076 | 29.01846 | 371.0706 | 4.57732 |
| 506.7064 | 30.09322 | 325.7655 | 0 |
| 1327.35 | 83.8311 | 1306.298 | 8.010309 |
| 829.4563 | 25.79419 | 464.9169 | 3.43299 |
| 1029.936 | 48.3641 | 842.4597 | 10.29897 |
| 400.8763 | 22.41284 | 909.3423 | 0 |
| 723.2969 | 5.336391 | 95.99785 | 1 |
| 779.1831 | 16.00917 | 732.1155 | 2 |
| 813.5747 | 7.470948 | 282.7189 | 5 |
| 1019.924 | 20.27829 | 773.2574 |  |
| 1234.871 | 20.27829 | 315.4215 |  |
| 106.3988 | 8.538226 | 366.0577 | 0 |
| 1066.137 | 7.470948 | 173.0071 |  |
| 1033.895 | 13.87462 | 276.3894 | 2 |
| 1111.276 | 17.07645 | 332.3003 | 1 |
| 2267.692 | 18.14373 | 245.7967 | 0 |
| 507.2751 | 17.07645 | 217.3138 | 1 |
| 1782.986 | 11.74006 | 175.117 |  |
| 3009.259 | 20.27829 | 238.4122 | 1 |
| 500.8267 | 22.41284 | 713.1269 | 0 |
| 958.6639 | 20.27829 | 394.5406 | 0 |
| 294.4775 | 14.9419 | 355.5085 |  |
| 660.9622 | 24.5474 | 771.1476 | 2 |
| 217.1168 | 2.088235 | 191.4646 | 0 |
| 165.2206 | 9.397059 | 609.3018 | 0 |
| 331.5003 | 19.83824 | 991.1732 | 0 |
| 213.9395 | 6.264706 | 302.5353 | 0 |
| 361.1553 | 4.176471 | 569.1048 | 0 |
| 639.7003 | 4.176471 | 211.5631 | 0 |
| 287.0179 | 6.264706 | 693.927 | 0 |
| 340.9566 | 10.90909 | 290.3727 | 0 |
| 529.0706 | 8.727273 | 588.1366 | 0 |
| 726.7651 | 8.727273 | 562.795 | 0 |
| 256.5191 | 8.727273 | 308.323 | 0 |
| 176.8708 | 9.397059 | 403.0277 | 1 |
| 227.7079 | 6.264706 | 423.1262 | 0 |
| 410.9333 | 21.92647 | 680.1754 | 0 |


| 286.4463 | 4.363636 | 354.7826 | 1 |
| :---: | :---: | :---: | :---: |
| 243.5945 | 3.132353 | 252.8179 | 0 |
| 200.1711 | 5.220588 | 516.214 | 0 |
| 204.4076 | 15.66176 | 832.5009 | 2 |
| 126.0337 | 6.264706 | 276.0899 | 0 |
| 161.1106 | 4.176471 | 270.7165 | 1 |
| 291.2543 | 11.48529 | 632.5737 | 0 |
| 160.9842 | 5.220588 | 196.7537 | 0 |
| 288.584 | 6.545455 | 739.1304 | 1 |
| 213.9395 | 1.044118 | 574.3939 | 0 |
| 158 | 5 | 224 | 0 |
| 30 | 2 | 61 | 0 |
| 77 | 0 | 147 | 0 |
| 54 | 1 | 87 | 0 |
| 65 | 4 | 191 | 0 |
| 16 | 0 | 62 | 0 |
| 835.8033 | 42.249 | 1210.648 | 1.2 |
| 726.3656 | 29.5743 | 939.8589 | 0 |
| 825.0741 | 39.08032 | 1192.736 | 6 |
| 1009.616 | 36.96787 | 1077.888 | 3.6 |
| 818.6366 | 23.23695 | 643.7823 | 1.2 |
| 972.0639 | 10.56225 | 488.8952 | 2 |
| 183.469 | 7.393574 | 415.1395 | 2.4 |
| 449.5527 | 23.23695 | 749.1476 | 0 |
| 538.6049 | 20.06827 | 645.8896 | 1.2 |
| 196.344 | 6.337349 | 475.1977 | 0 |
| 194.1982 | 0 | 147.5115 | 0 |
| 207.0732 | 5.281124 | 278.1645 | 0 |
| 273.5941 | 14.78715 | 564.7583 | 1.2 |
| 126.6043 | 4.2249 | 341.3837 | 0 |
| 1250.509 | 46.90103 | 1206.759 | 2.484848 |
| 895.3551 | 43.62887 | 738.7641 | 4.969697 |
| 1557.389 | 50.1732 | 1748.297 | 7.454545 |
| 463.1052 | 19.125 | 325.816 | 1 |
| 468.9525 | 13.5 | 279.9264 | 0 |
| 1495.384 | 55.6268 | 796.7064 | 2.484848 |
| 1035.578 | 34.90309 | 908.1338 | 4.969697 |
| 1335.562 | 52.35464 | 1382.815 | 2.484848 |
| 1396.478 | 35.99381 | 1426.272 | 1.242424 |
| 501.123 | 17.45155 | 304.197 | 1.242424 |
| 349.4069 | 8.725773 | 617.3082 | 0 |
| 1417.167 | 37.08454 | 845.7345 | 6.212121 |
| 1302.23 | 58.89897 | 1359.415 | 4.969697 |
| 1876.912 | 50.1732 | 1746.068 | 2.484848 |
| 1045.922 | 37.08454 | 1312.616 | 0 |
| 884.11 | 14.625 | 263.865 | 1 |
| 1129.696 | 32.625 | 1526.975 | 11 |


| 318.0925 | 12.375 | 117.0184 | 1 |
| ---: | ---: | ---: | ---: |
| 1423.029 | 42.75 | 1048.313 | 3 |
| 341.9852 | 5.135135 | 227.375 | 0 |
| 247.5321 | 8.216216 | 377.1875 | 1 |
| 263.8171 | 8.216216 | 336.8125 | 1 |
| 310.5008 | 10.27027 | 302.8125 | 1 |
| 154.1647 | 6.162162 | 370.8125 | 0 |
| 736.1293 | 51.03125 | 1053.981 | 0 |
| 340.4457 | 14.42188 | 548.9028 | 0 |
| 908.6067 | 63.23438 | 1511.948 | 6.923077 |
| 1037.119 | 45.48438 | 1086.849 | 6.923077 |
| 953.6989 | 38.82813 | 1344.319 | 1.153846 |
| 535.2099 | 27.91525 | 826.6662 | 2 |
| 195.1942 | 15.50847 | 329.0007 | 0 |
| 430.2668 | 9.305085 | 504.9536 | 3 |
| 423.9702 | 29.98305 | 1000.537 | 1 |
| 518.419 | 19.64407 | 1038.018 | 8 |
| 571.94 | 19.64407 | 1007.825 | 0 |
| 446.7962 | 21.30303 | 649.9257 | 0 |
| 612.3998 | 11.21212 | 377.4483 | 1 |
| 295.6413 | 11.21212 | 542.7215 | 0 |
| 177.8293 | 6.727273 | 274.7109 | 0 |
| 639.0742 | 6.727273 | 339.4801 | 1 |
| 511.2593 | 16.81818 | 762.7135 | 0 |
| 83.88111 | 4.425532 | 244.2851 | 0 |
| 77.25892 | 2.212766 | 265.5273 | 0 |
| 161.14 | 6.638298 | 500.2534 | 0 |
| 48.56275 | 1.106383 | 94.52772 | 1 |
| 100.4366 | 3.319149 | 434.4027 | 0 |
| 217.4287 | 4.425532 | 599.0296 | 0 |
| 214.1176 | 4.425532 | 656.3835 | 0 |
| 120.3032 | 1.106383 | 449.2722 | 0 |
| 88.2959 | 5.531915 | 216.6703 | 0 |
| 46.35535 | 1.106383 | 186.9312 | 0 |
| 59.59974 | 4.425532 | 255.9683 | 0 |
| 148.9993 | 3.319149 | 418.471 | 0 |
| 105.9551 | 3.319149 | 157.1922 | 0 |
| 140.1697 | 6.638298 | 456.707 | 1 |
| 14.34808 | 0 | 71.16132 | 0 |
| 44.14795 | 0 | 89.21717 | 0 |
| 1173.43 | 28.96844 | 692.8734 | 1.191304 |
| 1205.705 | 25.62592 | 581.1197 | 1.191304 |
| 932.5194 | 25.62592 | 384.433 | 3.573913 |
| 1158.445 | 23.39758 | 498.4219 | 1.191304 |
| 690.4563 | 13.37005 | 214.5673 | 0 |
| 1470.822 | 27.85426 | 516.3025 | 5.956522 |
| 1086.979 | 35.65346 | 414.6065 | 2.382609 |
|  |  |  |  |


| 1 | 28.96844 | 667.1701 | - |
| :---: | :---: | :---: | :---: |
| 828.7781 | 34.53929 | 431.3696 | 2.382609 |
| 1387.829 | 45.68099 | 702.9313 | 2.382609 |
| 806.8771 | 24.51175 | 421.3118 | 0 |
| 960.1838 | 25.62592 | 438.0748 | 1.191304 |
| 1282.935 | 12.25588 | 415.7241 | 2.382609 |
| 53 | 36 | 585.5898 | 9 |
| 796.503 | 28.96844 | 502.892 | 4 |
| 843.763 | 30.08261 | 460.4256 | 2.382609 |
| 1285.24 | 45.68099 | 614.6458 | 4.765217 |
| 1522.692 | 42.33848 | 666.0525 | 1.191304 |
| 51 | 2 | 231.3303 | 4 |
| 1474.28 | 46 | 835.9183 | 4 |
| 1418.951 | 54.59436 | 630.2913 | 2.382609 |
| 1130.781 | 28.96844 | 650.407 | 4.765217 |
| 1442.005 | 36.76763 | 744.2802 | 22 |
| 98 | 41 | 369.905 | 0 |
| 1060.467 | 50.13768 | 493.9517 | 0 |
| 1224.148 | 57.93687 | 1030.37 | 5.956522 |
| 920.9926 | 45.68099 | 1014.724 | 3.573913 |
| 857 | 34.53929 | 944.3195 | 2.382609 |
| 40 | 15 | 4 | 4.765217 |
| 565.9667 | 16.71256 | 336.3789 | 2.382609 |
| 542.913 | 16.71256 | 382.1979 | 1.191304 |
| 365.4001 | 20.05507 | 345.3192 | 1.191304 |
| 1233.369 | 77.99 | 1166.709 | 5.956522 |
| 87 | 37 | 99 | 3 |
| 1492.723 | 36.76763 | 612.4107 | 1.191304 |
| 1247.202 | 32.31095 | 668.2876 | 2.382609 |
| 1360.164 | 24.51175 | 500.6569 | 3.573913 |
| 285.865 | 14.48422 | 355 | 2.382609 |
| 1489.265 | 44.56682 | 586.7074 | 1.191304 |
| 1107.727 | 54.59436 | 1039.31 | 4.765217 |
| 1699.053 | 43.45265 | 888.4426 | 2.382609 |
| 1726.717 | 26.74009 | 472.7185 | 0 |
| 954.4204 | 16.71256 | 352.0244 |  |
| 987.8482 | 21.16924 | 413.489 | 0 |
| 1085.826 | 61.27938 | 1211.411 | 5.956522 |
| 999.375 | 36.76763 | 1029.252 | 3.573913 |
| 1216.079 | 38.99597 | 1104.127 | 1.191304 |
| 795.3503 | 27.85426 | 485.0114 | 5.956522 |
| 1265.644 | 42.33848 | 858.269 | 0 |
| 971.7106 | 43.45265 | 1034.84 | 7.147826 |
| 707.7465 | 34.53929 | 844.8586 | 4.765217 |
| 49.56531 | 1.114171 | 49.17166 | 0 |
| 779.2128 | 21.16924 | 362.0823 | 1.191304 |
| 1270.255 | 55.70853 | 1175.65 | 9.530435 |


| 879.4961 | 18.9409 | 797.922 | 4.765217 |
| :---: | :---: | :---: | :---: |
| 104.894 | 3.342512 | 131.8695 | 0 |
| 776.9074 | 17.82673 | 773.3362 | 1.191304 |
| 1219.537 | 49.02351 | 626.9387 | 5.956522 |
| 1459.295 | 54.59436 | 512.9499 | 2.382609 |
| 633.9749 | 28.96844 | 377.7278 | 1.191304 |
| 1377.455 | 56.8227 | 693.991 | 2.382609 |
| 1227.606 | 47.90934 | 856.034 | 7 |
| 842.6103 | 34.53929 | 331.9087 | 2.382609 |
| 647.8071 | 21.16924 | 417.9591 | 5.956522 |
| 1324.431 | 44.56682 | 711.8716 | 1.191304 |
| 1 | 25 | 625.8212 | 4 |
| 74 | 22 | 536.4182 | 3.573913 |
| 1193.025 | 51.25185 | 663.8175 | 2.382609 |
| 1393.592 | 36.76763 | 691.7559 | 11.91304 |
| 693.9143 | 13.37005 | 156.4553 | 04 |
| 758.4645 | 21 | 18 | 0 |
| 1510.013 | 54 | 793.4518 | 3 |
| 1640.266 | 44.56682 | 714.1067 | 4.765217 |
| 1619.518 | 45.68099 | 664.935 | 3.573913 |
| 1847.749 | 43.45265 | 897.3829 | 3.573913 |
| 53 | 16 | 3 | 9 |
| 677.7768 | 6.6 | 4 | 1.191304 |
| 555.5925 | 24.51175 | 163.1605 | 3.573913 |
| 1632.197 | 47.90934 | 583.3547 | 3.573913 |
| 356.1786 | 11 | 18 | 0 |
| 1202.247 | 42 | 525.2428 | 4 |
| 1086.979 | 32.31095 | 471.601 | 13 |
| 1543.441 | 41.22431 | 386.6681 | 0 |
| 1553.815 | 49.02351 | 705.1664 | 826 |
| 1122.712 | 30.082 | 38 | 0 |
| 1103.116 | 28.96844 | 577.767 | 1.191304 |
| 1317.515 | 35.65346 | 502.892 | 4.765217 |
| 1024.734 | 38.99597 | 426.8994 | 1.191304 |
| 1569.952 | 46.79516 | 810.2149 | 3.573913 |
| 1393.592 | 47.90934 | 626.9387 | 2.382609 |
| 1083.521 | 30.08261 | 432.4871 | 0 |
| 1244.896 | 34.53929 | 873.9146 | 8.33913 |
| 1304.836 | 26.74009 | 754.338 | 4.765217 |
| 1566.494 | 51.25185 | 886.2075 | 5.956522 |
| 1068.536 | 32.31095 | 585.5898 | 1.191304 |
| 994.7642 | 30.08261 | 543.1234 | 3.573913 |
| 1150.376 | 35.65346 | 623.5861 | 1.191304 |
| 874.8854 | 21.16924 | 485.0114 | 3.573913 |
| 941.828 | 30.52252 | 950.3285 | 2 |
| 395.1412 | 15.26126 | 493.4812 |  |
| 426.5729 | 11.99099 | 571.0591 | 2 |


| 398.5089 | 17.44144 | 539.8125 | 1 |
| :---: | :---: | :---: | :---: |
| 1018.162 | 28.34234 | 779.0108 | 1 |
| 209.9188 | 3.27027 | 269.3675 | 0 |
| 551.1771 | 20.71171 | 939.5538 | 1 |
| 250.3309 | 5.45045 | 257.5153 | 0 |
| 284.0077 | 5.45045 | 223.0363 | 0 |
| 286.2529 | 14.17117 | 508.5658 | 0 |
| 220.0218 | 10.9009 | 451.4599 | 0 |
| 235.7376 | 16.35135 | 656.1792 | 1 |
| 389.5284 | 17.44144 | 779.0108 | 1 |
| 417.5924 | 25.07207 | 791.9404 | 0 |
| 359.2193 | 19.62162 | 579.6788 | 2 |
| 152.5496 | 8.5 | 336.307 | 0 |
| 190.4002 | 10.625 | 323.6162 | 0 |
| 84.87721 | 1.0625 | 266.5075 | 0 |
| 161.7255 | 2.125 | 205.1684 | 0 |
| 57.34947 | 1.0625 | 182.9595 | 0 |
| 150.2556 | 2.125 | 295.0618 | 0 |
| 180.0773 | 4.25 | 147.0021 | 0 |
| 286.7473 | 7.4375 | 116.3326 | 0 |
| 377.3595 | 8.5 | 227.3774 | 0 |
| 143.3737 | 3.1875 | 159.693 | 0 |
| 158.2845 | 2.125 | 219.9744 | 0 |
| 338.0764 | 10.23256 | 344.7912 | 1.3 |
| 429.357 | 11.25581 | 557.2167 | 1.3 |
| 158.8959 | 2.046512 | 334.1165 | 2.6 |
| 23.66534 | 0 | 42.6986 | 0 |
| 455.2762 | 21.48837 | 658.6259 | 1.3 |
| 247.9227 | 14.32558 | 388.5572 | 1.3 |
| 322.2995 | 13.30233 | 788.8566 | 2.6 |
| 197.2112 | 7.162791 | 322.3744 | 1.3 |
| 100.296 | 8.186047 | 217.7629 | 1.3 |
| 344.4711 | 13.46429 | 672.0571 | 0 |
| 593.663 | 18.64286 | 1000.002 | 0 |
| 627.8658 | 25.89286 | 1118.94 | 1 |
| 244.397 | 5.959596 | 210.9863 | 0 |
| 48.8794 | 0 | 115.7719 | 0 |
| 387.7025 | 5.959596 | 330.0041 | 0 |
| 228.8444 | 2.383838 | 181.7728 | 0 |
| 99.98058 | 0 | 69.24677 | 0 |
| 274.3912 | 3.575758 | 76.82064 | 0 |
| 253.2841 | 5.959596 | 628.6308 | 0 |
| 248.8406 | 8.343434 | 279.151 | 0 |
| 766.5178 | 8.343434 | 373.2834 | 0 |
| 107.7569 | 1.191919 | 67.08281 | 0 |
| 555.4477 | 20.26263 | 697.8776 | 3.75 |
| 216.6246 | 2.383838 | 339.742 | 1.25 |


| 65.54283 | 5.959596 | 234.7898 | 0 |
| :---: | :---: | :---: | :---: |
| 93.31521 | 3.575758 | 139.5755 | 0 |
| 104.4242 | 2.383838 | 206.6583 | 0 |
| 255.5059 | 7.151515 | 304.0366 | 0 |
| 192.1849 | 3.575758 | 299.7087 | 0 |
| 84.42805 | 1.191919 | 109.2801 | 0 |
| 213.2919 | 3.575758 | 454.4319 | 0 |
| 227.7335 | 5.959596 | 267.2493 | 0 |
| 27.77238 | 2.383838 | 144.9854 | 0 |
| 67.76462 | 7.151515 | 236.9538 | 0 |
| 384.3698 | 10.72727 | 764.9604 | 0 |
| 149.0946 | 9.701299 | 203.0211 | 0 |
| 262.8483 | 16.16883 | 379.0448 | 0 |
| 345.6786 | 9.701299 | 816.4042 | 1 |
| 446.1794 | 11.85714 | 472.9961 | 1 |
| 415.2561 | 15.09091 | 461.1172 | 0 |
| 411.9429 | 20.48052 | 681.4167 | 0 |
| 1108.199 | 50.84211 | 697.7364 | 2.04 |
| 1304.274 | 41.50376 | 282.0413 | 0 |
| 1744.087 | 59.14286 | 638.8024 | 6.12 |
| 124.5777 | 6.225564 | 107.3441 | 0 |
| 997.7045 | 54.99248 | 900.8482 | 1.02 |
| 583.8901 | 29.05263 | 611.4402 | 5.1 |
| 1247.943 | 59.14286 | 1071.336 | 3.06 |
| 415.981 | 29.05263 | 959.7822 | 3.06 |
| 564.3909 | 39.42857 | 862.9621 | 3.06 |
| 163.5759 | 6.225564 | 362.0231 | 0 |
| 679.219 | 39.42857 | 835.5999 | 0 |
| 402.9816 | 25.93985 | 536.7203 | 0 |
| 440.8966 | 18.67669 | 1026.083 | 1.02 |
| 352.0673 | 19.71429 | 774.5611 | 1.02 |
| 194.9911 | 5.18797 | 444.1098 | 1.02 |
| 769.1316 | 35.2782 | 895.5863 | 1.02 |
| 958.7063 | 45.65414 | 674.5838 | 3.06 |
| 503.727 | 23.86466 | 597.7591 | 1.02 |
| 1039.953 | 81.96992 | 309.4035 | 2.04 |
| 1588.094 | 58.10526 | 436.743 | 3.06 |
| 1457.017 | 59.14286 | 376.7566 | 3.06 |
| 394.3154 | 36.31579 | 176.802 | 1.02 |
| 1849.166 | 67.44361 | 544.0871 | 8.16 |
| 1224.111 | 73.66917 | 258.8886 | 2.04 |
| 829.707 | 39.27692 | 668.3593 | 2.5 |
| 400.4334 | 13.8 | 404.6169 | 0 |
| 278.4177 | 7.430769 | 220.3149 | 2.5 |
| 536.8692 | 19.10769 | 506.3007 | 0 |
| 75.42791 | 3.184615 | 96.38779 | 0 |
| 533.5415 | 15.92308 | 683.1882 | 2.5 |


| 41.04165 | 0 | 66.73001 | 0 |
| :---: | :---: | :---: | :---: |
| 327.224 | 12.73846 | 236.203 | 0 |
| 785.3376 | 26.53846 | 534.8993 | 7.5 |
| 135.0624 | 5.162338 | 391.7011 | 0 |
| 429.1499 | 19.61688 | 1084.305 | 1.166667 |
| 606.6915 | 28.90909 | 936.4928 | 0 |
| 232.0023 | 17.55195 | 628.1998 | 0 |
| 496.681 | 11.35714 | 503.6156 | 3.5 |
| 433.5067 | 21.68182 | 717.9426 | 0 |
| 615.4052 | 24.77922 | 861.5312 | 5.833333 |
| 226.5563 | 12.38961 | 356.8597 | 3.5 |
| 271.214 | 7.227273 | 487.7787 | 0 |
| 289.7306 | 10.32468 | 805.5739 | 0 |
| 656.8894 | 12.87273 | 615.4583 | 1.5 |
| 692.8218 | 11.8 | 250.8661 | 0 |
| 583.9017 | 5.363636 | 250.8661 | 3 |
| 524.3886 | 11.8 | 496.1575 | 5 |
| 465.9985 | 17.16364 | 510.652 | 3 |
| 416.6031 | 9.775862 | 579.928 | 1.142857 |
| 466.0115 | 10.86207 | 778.0332 | 1.142857 |
| 435.6927 | 8.689655 | 191.4648 | 0 |
| 247.0423 | 3.258621 | 70.8309 | 0 |
| 556.968 | 18.46552 | 965.0711 | 5.714286 |
| 508.6825 | 11.94828 | 981.672 | 0 |
| 269.2327 | 6.508475 | 338.1797 | 0 |
| 167.3319 | 3.254237 | 286.8106 | 0 |
| 312.1383 | 14.10169 | 434.4967 | 0 |
| 98.68291 | 5.423729 | 261.1261 | 0 |
| 351.826 | 5.423729 | 205.4763 | 0 |
| 150.1696 | 2.169492 | 225.8099 | 0 |
| 429.0561 | 6.508475 | 95.24682 | 0 |
| 187.712 | 6.508475 | 368.145 | 0 |
| 499.8504 | 14.10169 | 559.7088 |  |
| 678.0556 | 15.12563 | 908.3411 | 0 |
| 721.3357 | 29.17085 | 769.7444 | 0 |
| 516.0325 | 12.96482 | 952.0523 | 1.2 |
| 387.3018 | 17.28643 | 872.0927 | 3.6 |
| 894.4563 | 31.33166 | 850.7702 | 1.2 |
| 220.8397 | 6.482412 | 350.7561 | 0 |
| 396.1798 | 16.20603 | 1059.731 | 0 |
| 678.0556 | 24.84925 | 783.6041 | 1.2 |
| 797.9083 | 28.09045 | 942.4572 | 1.2 |
| 857.8347 | 33.49246 | 1087.451 | 3.6 |
| 605.5402 | 21.2 | 1047.179 | 0 |
| 616.7539 | 25.44 | 1162.484 | 1.142857 |
| 433.9705 | 11.66 | 1357.455 | 3.428571 |
| 344.2608 | 20.14 | 991.6232 | 1.142857 |


| 355.4745 | 27.56 | 1266.259 | 2.285714 |
| ---: | ---: | ---: | ---: |
| 120.842 | 2.113208 | 290.7887 | 0 |
| 77.29533 | 3.169811 | 313.2393 | 0 |
| 92.53667 | 1.056604 | 329.2754 | 0 |
| 59.87667 | 3.169811 | 192.4337 | 0 |
| 155.6793 | 9.509434 | 552.7124 | 0 |
| 124.108 | 1.056604 | 390.2128 | 0 |
| 222.088 | 2.113208 | 566.6104 | 1 |
| 81.65 | 5.283019 | 456.4955 | 0 |
| 191.6053 | 6.339623 | 373.1076 | 0 |
| 189.428 | 7.396226 | 490.7059 | 0 |
| 65.32 | 5.283019 | 226.6441 | 0 |
| 109.9553 | 3.169811 | 356.0024 | 0 |
| 142.6153 | 6.339623 | 460.7718 | 0 |
| 403.0829 | 29.18623 | 1617.147 | 0 |
| 247.0508 | 15.1336 | 508.6948 | 0 |
| 202.625 | 9.728745 | 636.3919 | 1.222222 |
| 180.9539 | 3.242915 | 335.9898 | 0 |
| 178.7868 | 9.728745 | 539.049 | 0 |
| 74.76537 | 2.161943 | 151.7711 | 0 |
| 139.7787 | 5.404858 | 361.1105 | 1.222222 |
| 124.609 | 7.566802 | 430.1925 | 0 |
| 378.1611 | 14.05263 | 950.401 | 1.222222 |
| 409.5842 | 12.97166 | 243.8804 | 0 |
| 372.7433 | 5.404858 | 294.1219 | 0 |
| 682.6404 | 3.242915 | 196.7791 | 0 |
| 219.9619 | 6.48583 | 145.4909 | 0 |
| 198.2908 | 2.161943 | 219.8064 | 0 |
| 147.3636 | 9.728745 | 638.4853 | 0 |
| 287.68449 | 0.1889 | 22.60417 | 668.1805 |


| 478.8592 | 29.0625 | 1214.289 | 0 |
| :---: | :---: | :---: | :---: |
| 420.1102 | 30.13889 | 951.943 | 3.272727 |
| 332.5411 | 32.29167 | 806.3139 | 0 |
| 537.6081 | 34.44444 | 1571.937 | 5.454545 |
| 213.9348 | 15.06944 | 567.5251 | 1.090909 |
| 497.7032 | 20.45139 | 709.9417 | 0 |
| 302.6124 | 18.29861 | 398.3383 | 3.272727 |
| 134.1249 | 13.99306 | 421.896 | 0 |
| 517.7882 | 16.91429 | 391.8323 | 0 |
| 561.4699 | 19.02857 | 556.7016 | 0 |
| 365.4349 | 7.4 | 321.174 | 0 |
| 227.9973 | 4.228571 | 135.9637 | 1 |
| 395.2663 | 19.02857 | 331.8798 | 1 |
| 219.474 | 8.457143 | 325.4563 | 0 |
| 152.3533 | 2.114286 | 176.6457 | 0 |
| 585.9743 | 11.62857 | 433.5849 | 0 |
| 497.5454 | 7.4 | 310.4682 | 3 |
| 369.6965 | 14.8 | 80.2935 | 0 |
| 362.3487 | 11.91667 | 517.3895 | 1.111111 |
| 575.5599 | 20.58333 | 1541.479 | 2.222222 |
| 618.6441 | 17.33333 | 739.7387 | 0 |
| 551.2561 | 8.666667 | 380.5592 | 0 |
| 119.3099 | 6.5 | 360.2485 | 1.111111 |
| 778.8287 | 16.25 | 1158.781 | 3.333333 |
| 479.4492 | 16.25 | 875.5 | 1.111111 |
| 182.2791 | 3.25 | 379.4902 | 0 |
| 972.155 | 23.83333 | 748.2906 | 0 |
| 835.1695 | 18.41667 | 302.5232 | 1.111111 |
| 609.9273 | 38.28385 | 1120.65 | 10.54777 |
| 1529.51 | 85.57567 | 999.0647 | 10.54777 |
| 1041.568 | 31.52788 | 841.9213 | 7.031847 |
| 959.4626 | 64.18175 | 1069.034 | 11.71975 |
| 1558.834 | 55.17379 | 1061.004 | 12.89172 |
| 973.5379 | 25.8979 | 260.3762 | 2.343949 |
| 1596.368 | 69.81173 | 1062.151 | 10.54777 |
| 1686.684 | 52.9218 | 895.8318 | 3.515924 |
| 1359.434 | 37.15786 | 679.0428 | 9.375796 |
| 1043.849 | 31.78238 | 724.0435 | 3.663778 |
| 1574.082 | 56.29978 | 1114.915 | 4.687898 |
| 1517.144 | 50.05282 | 1036.923 | 9.967213 |
| 1129.833 | 23.21708 | 371.4847 | 5.757576 |
| 1049.779 | 46.16582 | 1008.241 | 5.859873 |
| 1225.719 | 49.54381 | 946.3012 | 5.859873 |
| 1038.049 | 32.65387 | 566.6337 | 7.031847 |
| 1327.863 | 39.43568 | 1018.452 | 3.737705 |
| 804.6349 | 46.16582 | 816.6866 | 1.171975 |
| 1640.939 | 39.40985 | 737.5414 | 7.031847 |


| 716.6646 | 28.14989 | 794.893 | 1.171975 |
| ---: | ---: | ---: | ---: |
| 561.8369 | 39.40985 | 816.6866 | 2.343949 |
| 935.6686 | 47.21014 | 874.8849 | 5.839413 |
| 1143.688 | 37.04564 | 833.6172 | 7.47541 |
| 1810.84 | 48.99585 | 842.3007 | 12.45902 |
| 877.357 | 21.39392 | 310.8456 | 3.515924 |
| 509.0547 | 32.65387 | 683.6309 | 2.343949 |
| 1090.913 | 28.74496 | 437.5771 | 2.30303 |
| 1034.822 | 19.90036 | 296.2761 | 4.606061 |
| 2213.877 | 22.11151 | 328.1828 | 2.30303 |
| 796.7211 | 17.68921 | 221.0676 | 0 |
| 161.8653 | 6.755974 | 128.4676 | 0 |
| 1131.884 | 31.52788 | 684.778 | 5.859873 |
| 1244.486 | 32.65387 | 730.6592 | 7.031847 |
| 1012.245 | 38.28385 | 680.1898 | 4.687898 |
| 702.5894 | 39.40985 | 455.3716 | 2.343949 |
| 840.996 | 30.40188 | 541.399 | 2.343949 |
| 1229.238 | 33.77987 | 406.0492 | 1.171975 |
| 2013.552 | 32.06168 | 525.3204 | 5.757576 |
| 1370.326 | 28.84706 | 435.7035 | 2.32349 |
| 1052.125 | 30.40188 | 373.9324 | 3.515924 |
| 957.1168 | 36.03186 | 484.0474 | 2.343949 |
| 929.8906 | 45.41079 | 1175.996 | 6.229508 |
| 1016.182 | 34.6556 | 1259.109 | 1.245902 |
| 1061.26 | 31.07054 | 728.1745 | 7.47541 |
| 1154.17 | 45.03983 | 379.6675 | 1.171975 |
| 1481.42 | 45.03983 | 519.6054 | 2.343949 |
| 513.8869 | 11.95021 | 457.7451 | 2.491803 |
| 1178.462 | 34.6556 | 1264.071 | 2.491803 |
| 735.4316 | 43.91383 | 458.8127 | 2.343949 |
| 1412.867 | 63.3361 | 821.2122 | 3.737705 |
| 1295.665 | 43.02075 | 1077.996 | 9.967213 |
| 1330.111 | 39.40985 | 287.905 | 1.171975 |
| 634.953 | 25.09544 | 832.3767 | 2.491803 |
| 1424.458 | 56.16598 | 1255.388 | 2.491803 |
| 1172.937 | 32.65387 | 548.2812 | 4.687898 |
| 841.365 | 27.63938 | 362.3685 | 1.151515 |
| 1076.031 | 25.42823 | 347.5547 | 1.151515 |
| 861.9699 | 24.32266 | 434.1585 | 1.151515 |
| 1208.125 | 54.04779 | 620.5442 | 8.203822 |
| 1497.286 | 47.53974 | 680.2956 | 3.454545 |
| 1122.965 | 24.32266 | 496.8323 | 4.606061 |
| 970.0191 | 24.7719 | 297.0812 | 1.171975 |
| 1083.794 | 41.66184 | 965.8007 | 4.687898 |
| 731.5483 | 33.46058 | 714.529 | 1.245902 |
| 1384.066 | 38.28385 | 641.1908 | 2.343949 |
| 1500.72 | 28.74496 | 265.509 | 1.151515 |
|  |  |  |  |


| 12 | 48.64531 | 625.5985 | 5.757576 |
| :---: | :---: | :---: | :---: |
| 1374.802 | 50.85647 | 580.0175 | 9 |
| 1211.108 | 15.47805 | 234.7419 | 3.454545 |
| 1790.333 | 34.27284 | 477.4604 | 3.454545 |
| 1041.69 | 14.37248 | 203.9747 | 2.30303 |
| 1157.306 | 15.47805 | 292.8576 | 2.30303 |
| 1097.781 | 23.21708 | 404.5309 | 4.606061 |
| 1092.057 | 19.90036 | 405.6704 | 5 |
| 1406.854 | 19.90036 | 410.2285 | 8.060606 |
| 1206.529 | 22.11151 | 356.6709 | 1.151515 |
| 1565.925 | 34.27284 | 491.1647 | 1.151515 |
| 1451.498 | 24.32266 | 376.0428 | 3 |
| 997.0461 | 12.16133 | 274.6252 | 1.151515 |
| 1169.898 | 27.63938 | 560.6456 | 1.151515 |
| 1454.932 | 28.74496 | 308.8109 | 2.30303 |
| 840.2203 | 19.90036 | 128.7662 | 2.30303 |
| 1361.065 | 17.68921 | 184.6028 | 4.606061 |
| 756.6561 | 17.68921 | 345.2757 | 4.606061 |
| 1346.184 | 18.79478 | 470.6233 | 3.454545 |
| 1081.755 | 11.05575 | 297.4157 | 1.151515 |
| 1573.982 | 24.32266 | 252.9742 | 0 |
| 162 | 13 | 226.7652 | 5 |
| 1333.592 | 22.11151 | 198.2771 | 3.454545 |
| 1438.906 | 18.79478 | 299.6947 |  |
| 1245.449 | 27.63938 | 524.1809 | 5.757576 |
| 173.0995 | 5.522876 | 339.2778 | 1.076923 |
| 721.4271 | 27. | 840.819 | 3 |
| 259.1117 | 11.04575 | 539.4728 | 1.076923 |
| 231.1577 | 9.941176 | 688.0386 | 1.076923 |
| 61.28367 | 4.418301 | 114.8487 |  |
| 508.547 | 19.88235 | 906.1458 | 0 |
| 378.4536 | 16.56863 | 918.7897 | 1.076923 |
| 73.11035 | 2.20915 | 220.2145 | 0 |
| 219.331 | 9.941176 | 548.9558 | 1.076923 |
| 587.0331 | 27.61438 | 1137.951 | 4.307692 |
| 132.2437 | 3.313725 | 457.2875 | 0 |
| 718.2016 | 30.9281 | 1123.199 | 3.230769 |
| 425.8607 | 3.230769 | 393.5652 | 3.272727 |
| 312.853 | 9.692308 | 472.2783 | 2.181818 |
| 418.7234 | 3.230769 | 325.6348 | 1.090909 |
| 341.4023 | 9.692308 | 340.7304 | 4.363636 |
| 103.4913 | 8.615385 | 250.1565 | 0 |
| 242.6692 | 7.538462 | 201.6348 | 1.090909 |
| 395.2245 | 3 | 216.068 |  |
| 202.4061 | 5 | 369.6457 |  |
| 216.2549 | 3 | 314.5695 |  |
| 197.0796 | 4 | 392.9471 |  |


| 180.0349 | 5 | 389.7697 | 1 |
| :---: | :---: | :---: | :---: |
| 148.1487 | 9.405 | 328.072 | 0 |
| 129.6301 | 6.27 | 350.2962 | 0 |
| 366.0144 | 16.72 | 793.7225 | 2 |
| 479.3046 | 18.81 | 482.5833 | 2 |
| 837.6938 | 42.845 | 1120.736 | 5 |
| 685.1878 | 29.26 | 1185.292 | 2 |
| 181.9179 | 16.72 | 458.2425 | 1 |
| 354.0318 | 26.125 | 610.6372 | 3 |
| 535.6109 | 29.79339 | 690.2229 | 0 |
| 442.5088 | 11.70455 | 445.8583 | 1.1 |
| 743.7214 | 32.98554 | 1234.684 | 2.2 |
| 705.885 | 24.035 | 885.7943 | 2 |
| 788.6295 | 30.85744 | 1412.599 | 6.6 |
| 325.3097 | 11.70455 | 354.7574 | 1.1 |
| 185.1859 | 18.81 | 283.6235 | 0 |
| 790.8201 | 27.66529 | 1305.422 | 2.2 |
| 523.5623 | 28.72934 | 622.7011 | 3.3 |
| 944.1647 | 30.85744 | 1182.167 | 0 |
| 1106.272 | 28.72934 | 1234.684 | 0 |
| 519.1811 | 20.21694 | 472.6526 | 1.1 |
| 140.2008 | 10.6405 | 269.0154 | 0 |
| 408.5539 | 32.98554 | 727.735 | 1.1 |
| 615.5691 | 22.34504 | 786.6826 | 6.6 |
| 743.7214 | 26.60124 | 1346.149 | 2.2 |
| 500.5607 | 19.15289 | 1133.938 | 3.3 |
| 507.1326 | 18.08884 | 674.1463 | 0 |
| 456.7479 | 19.15289 | 531.6002 | 2.2 |
| 607.9019 | 27.66529 | 706.2995 | 2.2 |
| 616.6644 | 18.08884 | 487.6575 | 1.1 |
| 318.7377 | 10.6405 | 595.9067 | 0 |
| 481.9402 | 22.34504 | 491.9446 | 0 |
| 821.489 | 34.04959 | 988.1763 | 7.7 |
| 428.4245 | 15.28244 | 441.1716 | 0 |
| 232.6692 | 7.641221 | 377.0789 | 0 |
| 102.9114 | 3.274809 | 237.1431 | 0 |
| 126.402 | 7.641221 | 228.5974 | 0 |
| 278.5318 | 5.458015 | 333.2822 | 0 |
| 470.9313 | 17.46565 | 644.1319 | 0 |
| 171.1461 | 5.458015 | 131.3901 | 0 |
| 201.3483 | 8.732824 | 314.0543 | 0 |
| 163.3159 | 7.641221 | 357.851 | 0 |
| 76.06492 | 5.458015 | 204.0285 | 0 |
| 224.839 | 10.91603 | 399.5113 | 0 |
| 249.4482 | 13.09924 | 573.6299 | 0 |
| 69.35331 | 1.091603 | 233.9384 | 0 |
| 55.93009 | 5.458015 | 237.1431 | 0 |


| 284.1248 | 9.824427 | 292.6901 | 0 |
| :---: | :---: | :---: | :---: |
| 181.2135 | 8.732824 | 223.2563 | 0 |
| 267.3458 | 9.824427 | 393.102 | 0 |
| 496.0679 | 39.82692 | 1038.834 | 0 |
| 232.7367 | 13.625 | 496.2851 | 0 |
| 130.0266 | 8.384615 | 644.5398 | 0 |
| 50.26239 | 5.240385 | 247.0911 | 0 |
| 135.4899 | 17.81731 | 536.2403 | 0 |
| 152.9725 | 9.432692 | 450.0213 | 0 |
| 157.3431 | 13.625 | 517.3142 | 1.074074 |
| 119.1 | 13.625 | 340.6703 | 2.148148 |
| 268.7945 | 19.91346 | 720.2443 | 1.074074 |
| 579.1101 | 19.91346 | 999.9305 | 2.148148 |
| 278.6285 | 17.81731 | 471.0503 | 0 |
| 307.0376 | 26.20192 | 770.714 | 1.074074 |
| 529.9404 | 30.39423 | 883.2193 | 1.074074 |
| 226.1808 | 24.10577 | 515.2113 | 2.148148 |
| 314.6863 | 24.10577 | 799.1032 | 0 |
| 173.733 | 9.432692 | 476.3076 | 0 |
| 316.8716 | 24.10577 | 757.0451 | 1.074074 |
| 696.0248 | 50.30769 | 759.148 | 3.222222 |
| 132.2119 | 4.192308 | 297.5608 | 0 |
| 834.7927 | 40.875 | 1005.188 | 2.148148 |
| 356.2074 | 20.96154 | 578.2984 | 1.074074 |
| 267.7019 | 20.96154 | 822.2351 | 2.148148 |
| 64.46698 | 4.192308 | 114.6082 | 0 |
| 376.9679 | 19.91346 | 763.3538 | 0 |
| 215.2541 | 18.86538 | 1008.342 | 0 |
| 638.1138 | 34.58654 | 739.1705 | 0 |
| 332.1688 | 29.34615 | 822.2351 | 1.074074 |
| 268.7945 | 15.72115 | 1264.896 | 1.074074 |
| 428.323 | 31.44231 | 1028.32 | 5.37037 |
| 134.3973 | 13.625 | 558.3208 | 0 |
| 596.5927 | 31.44231 | 725.5016 | 1.074074 |
| 138.1586 | 5.215054 | 516.4054 | 1 |
| 140.4235 | 3.129032 | 371.7691 | 0 |
| 129.099 | 4.172043 | 281.7731 | 0 |
| 293.3038 | 8.344086 | 748.895 | 0 |
| 73.60907 | 5.215054 | 145.7078 | 0 |
| 61.15215 | 4.172043 | 144.6364 | 0 |
| 77.00642 | 5.215054 | 230.3468 | 0 |
| 166.4698 | 3.129032 | 448.9085 | 0 |
| 123.4368 | 6.258065 | 221.7758 | 1 |
| 46.43034 | 1.043011 | 41.78384 | 0 |
| 167.6022 | 10.43011 | 706.0398 | 1 |
| 155.1453 | 4.172043 | 278.559 | 0 |
| 474.4954 | 15.64516 | 966.3853 | 1 |


| 209.5027 | 11.47312 | 567.8317 | 0 |
| :---: | :---: | :---: | :---: |
| 215.165 | 9.387097 | 708.1826 | 0 |
| 145.0342 | 4.344828 | 436.3223 | 4 |
| 163.5724 | 5.431034 | 535.0521 | 0 |
| 92.69102 | 7.603448 | 348.2085 | 0 |
| 124.315 | 6.517241 | 572.2085 | 0 |
| 27.26206 | 0 | 171.981 | 0 |
| 101.4149 | 0 | 415.09 | 0 |
| 85.05764 | 3.258621 | 312.1137 | 0 |
| 89.41957 | 6.517241 | 257.9716 | 1 |
| 26.17158 | 1.086207 | 83.8673 | 1 |
| 302.0637 | 9.775862 | 971.3744 | 0 |
| 102.5054 | 2.172414 | 184.7204 | 0 |
| 69.79088 | 2.172414 | 214.4455 | 0 |
| 19.62869 | 3.258621 | 132.7014 | 0 |
| 70.88137 | 2.172414 | 338.654 | 0 |
| 46.89075 | 2.172414 | 220.8152 | 1 |
| 116.6816 | 5.431034 | 519.128 | 1 |
| 43.6193 | 1.086207 | 109.346 | 0 |
| 314.0553 | 11.60156 | 490.0068 | 0 |
| 592.9715 | 36.91406 | 1315.115 | 6.071429 |
| 331.6248 | 18.98438 | 1012.681 | 1.214286 |
| 364.5677 | 20.03906 | 753.4513 | 1.214286 |
| 379.941 | 25.3125 | 847.2376 | 1.214286 |
| 252.5619 | 24.25781 | 913.6256 | 2.428571 |
| 198.7553 | 11.60156 | 503.7059 | 0 |
| 1033.308 | 32.69531 | 1463.698 | 1.214286 |
| 45.02191 | 2.109375 | 74.81824 | 0 |
| 524.8896 | 21.09375 | 1166.532 | 0 |
| 342.6058 | 24.25781 | 856.7216 | 0 |
| 981.6973 | 41.13281 | 1438.407 | 3.642857 |
| 346.3315 | 13.75 | 863.1812 | 2 |
| 212.7159 | 4.230769 | 696.3478 | 0 |
| 110.0992 | 0 | 243.5145 | 1 |
| 281.1271 | 13.75 | 876.6522 | 1 |
| 57.72191 | 3.173077 | 298.4348 | 2 |
| 304.6434 | 14.80769 | 550.2391 | 0 |
| 157.1319 | 3.173077 | 253.8768 | 0 |
| 199.8888 | 13.75 | 674.587 | 1 |
| 265.0932 | 10.57692 | 378.2246 | 0 |
| 250.1283 | 6.346154 | 570.9638 | 1 |
| 143.2359 | 8.461538 | 329.5217 | 1 |
| 167.8211 | 11.63462 | 704.6377 | 1 |
| 168.89 | 4.230769 | 358.5362 | 1 |
| 18.17171 | 2.115385 | 65.28261 | 0 |
| 108.5204 | 9.885246 | 391.2824 | 0 |
| 306.5965 | 8.786885 | 424.6718 | 0 |


| 436.1888 | 4.393443 | 266.072 | 0 |
| :---: | :---: | :---: | :---: |
| 95.87725 | 2.196721 | 134.6011 | 0 |
| 307.6501 | 2.196721 | 292.1575 | 0 |
| 223.3624 | 3.295082 | 311.9825 | 2 |
| 231.7911 | 3.295082 | 180.5116 | 0 |
| 298.1677 | 6.590164 | 554.0558 | 0 |
| 171.7362 | 1.098361 | 188.859 | 0 |
| 351.9011 | 12.08197 | 407.9771 | 4 |
| 61.10858 | 5.491803 | 251.4641 | 0 |
| 243.3807 | 4.393443 | 123.1235 | 0 |
| 210.7192 | 3.295082 | 342.2416 | 0 |
| 399.0514 | 23.2201 | 1002.04 | 0 |
| 510.4675 | 17.69151 | 972.2761 | 5.47619 |
| 949.2995 | 36.44474 | 1174.03 | 1.095238 |
| 890.3391 | 38.22222 | 1030.969 | 0 |
| 874.275 | 32.06586 | 944.7172 | 1.095238 |
| 679.8654 | 30.96014 | 1038.417 | 0 |
| 623.0204 | 25.43154 | 1063.771 | 3.285714 |
| 1218.755 | 40.91161 | 996.5279 | 1.095238 |
| 1008.429 | 30.96014 | 1050.543 | 0 |
| 1243.767 | 45.33449 | 1015.268 | 2.190476 |
| 1316.529 | 43.12305 | 1591.799 | 3.285714 |
| 1261.219 | 43.53086 | 1064.735 | 0 |
| 1417.213 | 47.02399 | 892.5499 | 0 |
| 1427.945 | 55.20988 | 1163.78 | 5.333333 |
| 420.6525 | 17.69151 | 869.7572 | 4.380952 |
| 379.7241 | 14.37435 | 808.0253 | 1.095238 |
| 374.0396 | 14.37435 | 906.1348 | 2.190476 |
| 883.3702 | 33.17158 | 1104.559 | 6.571429 |
| 731.0258 | 33.17158 | 1343.769 | 2.190476 |
| 1211.934 | 43.12305 | 1042.827 | 2.190476 |
| 1601.89 | 56.39168 | 1234.636 | 1.095238 |
| 757.1745 | 28.7487 | 655.9005 | 2.190476 |
| 917.5597 | 27.60494 | 754.0933 | 0 |
| 1243.341 | 58.34512 | 962.3595 | 8.380952 |
| 678.3276 | 17.42756 | 431.3862 | 2.428571 |
| 1534.785 | 41.44545 | 1351.129 | 2.428571 |
| 1153.815 | 54.72189 | 2123.163 | 1.212766 |
| 1059.132 | 37.55424 | 929.9626 | 1.212766 |
| 1021.699 | 40.77318 | 1079.922 | 1.212766 |
| 1189.046 | 64.3787 | 1310.794 | 3.638298 |
| 840.0389 | 37.55424 | 871.7051 | 1.212766 |
| 1256.205 | 53.64892 | 1069.133 | 4.851064 |
| 551.5852 | 40.77318 | 1065.897 | 1.212766 |
| 1087.757 | 32.18935 | 1319.425 | 1.212766 |
| 1106.473 | 19.31361 | 433.6949 | 1.212766 |
| 1446.672 | 35.40828 | 904.0704 | 1.212766 |


| 663.8839 | 32.18935 | 694.7748 | 2.425532 |
| ---: | ---: | ---: | ---: |
| 587.9171 | 19.31361 | 366.8066 | 1.212766 |
| 626.451 | 20.38659 | 215.7686 | 0 |
| 1900.271 | 51.50296 | 847.9705 | 8.489362 |
| 1119.685 | 50.42998 | 1391.707 | 3.638298 |
| 745.3556 | 32.18935 | 860.9167 | 1.212766 |
| 1226.479 | 32.18935 | 1427.309 | 1.212766 |
| 941.328 | 41.84615 | 869.5474 | 1.212766 |
| 929.2173 | 51.50296 | 883.5724 | 1.212766 |
| 1089.959 | 26.82446 | 683.9864 | 0 |
| 807.0098 | 48.28402 | 1017.349 | 2.425532 |
| 1143.906 | 42.91913 | 1038.926 | 0 |
| 816.9186 | 55.79487 | 1445.65 | 1.212766 |
| 889.5825 | 28.97041 | 326.8894 | 6.06383 |
| 1421.35 | 42.91913 | 1178.096 | 4.851064 |
| 1245.195 | 27.89744 | 675.3557 | 0 |
| 1669.068 | 66.52465 | 1335.608 | 3.638298 |
| 332.6663 | 10 | 400 | 3 |
| 456.9152 | 8 | 243 | 1 |
| 187.3753 | 0 | 175 | 1 |
| 175.3512 | 2 | 148 | 0 |
| 414.8309 | 7 | 238 | 1 |
| 233.4676 | 6 | 203 | 2 |
| 196.3934 | 2 | 29 | 1 |
| 476.3051 | 2.064516 | 127.5449 | 0 |
| 338.1242 | 2.064516 | 143.3562 | 0 |
| 81.65229 | 1.032258 | 44.27177 | 0 |
| 191.5688 | 5.16129 | 319.3892 | 0 |
| 28.26426 | 0 | 115.9499 | 0 |
| 350.6861 | 6.193548 | 204.4934 | 0 |
| 57.57534 | 1.032258 | 10.5409 | 0 |
| 287.8767 | 3.096774 | 160.2216 | 0 |
| 138.1808 | 2.064516 | 85.38127 | 0 |
| 191.5688 | 5.16129 | 257.1979 | 0 |
| 116.1975 | 4.129032 | 129.653 | 0 |
| 99.11555 | 1.092593 | 312.1263 | 0 |
| 64.26173 | 1.092593 | 243.9485 | 0 |
| 118.7208 | 3.277778 | 521.9859 | 2.133333 |
| 58.81582 | 0 | 273.7763 | 0 |
| 70.79682 | 2.185185 | 113.9847 | 1.066667 |
| 10.89182 | 0 | 52.19859 | 0 |
| 18.51609 | 0 | 95.87496 | 0 |
| 27.22955 | 2.185185 | 102.2666 | 0 |
| 20.69446 | 1.092593 | 79.8958 | 0 |
| 62.08337 | 4.37037 | 322.779 | 1.066667 |
| 39.21055 | 0 | 91.61385 | 0 |
| 454.1888 | 12.01852 | 1422.145 | 2.133333 |
|  |  |  |  |


| 76.24273 | 3.277778 | 343.0193 | 0 |
| ---: | ---: | ---: | ---: |
| 257.0469 | 19.66667 | 1245.309 | 0 |
| 67.52927 | 5.462963 | 211.9902 | 0 |
| 193.8744 | 8.740741 | 850.0913 | 4.266667 |
| 563.107 | 27.31481 | 1848.256 | 2.133333 |
| 42.47809 | 1.092593 | 128.8986 | 0 |
| 162.2881 | 10.92593 | 801.0886 | 2.133333 |
| 401.9081 | 14.2037 | 1366.751 | 1.066667 |
| 365.0413 | 16.83045 | 507.4744 | 3.136364 |
| 551.96 | 31.55709 | 1221.737 | 1.045455 |
| 632.2251 | 47.33564 | 1017.059 | 2.090909 |
| 577.249 | 50.49135 | 854.5827 | 2.090909 |
| 522.2729 | 24.19377 | 697.3817 | 2.090909 |
| 425.515 | 13.67474 | 989.6279 | 1.045455 |
| 622.3294 | 46.28374 | 1355.727 | 6.272727 |
| 332.0556 | 23.14187 | 596.0978 | 1.045455 |
| 680.6041 | 31.55709 | 919.9952 | 2.090909 |
| 173.7245 | 8.415225 | 408.3006 | 2.090909 |
| 177.023 | 10.51903 | 307.0168 | 0 |
| 739.3789 | 34.73171 | 1185.248 | 4.615385 |
| 433.2738 | 17.36585 | 557.6369 | 1.153846 |
| 135.0464 | 2.170732 | 442.4494 | 0 |
| 209.3219 | 10.85366 | 774.0173 | 0 |
| 70.89934 | 4.341463 | 284.2011 | 0 |
| 312.8574 | 14.10976 | 659.9062 | 1.153846 |
| 461.4084 | 19.53659 | 1199.242 | 1.153846 |
| 660.6018 | 23.87805 | 919.3473 | 2.307692 |
| 334.2398 | 14.10976 | 846.144 | 1.153846 |
| 226.2027 | 10.85366 | 835.3788 | 0 |
| 254.3373 | 15.19512 | 968.8672 | 0 |
| 131.6702 | 6.512195 | 448.9085 | 1.153846 |
| 363.4998 | 19.53659 | 948.4134 | 0 |
| 635.4789 | 6.5 | 252.1432 | 0 |
| 334.9296 | 1.083333 | 208.1007 | 0 |
| 576.6999 | 8.666667 | 442.627 | 0 |
| 212.9353 | 6.5 | 320.4091 | 0 |
| 309.4217 | 5.416667 | 314.9038 | 0 |
| 309.4217 | 5.416667 | 247.739 | 0 |
| 438.0701 | 18.41667 | 866.5359 | 0 |
| 337.0428 | 18.45122 | 1006.545 | 0 |
| 333.1144 | 8.682927 | 6.125 | 410.7523 |


| 117.249 | 3.0625 | 338.2039 | 0 |
| :---: | :---: | :---: | :---: |
| 107.387 | 2.041667 | 346.739 | 0 |
| 295.8621 | 3.0625 | 868.4478 | 1 |
| 121.6322 | 6.125 | 473.6988 | 0 |
| 540.2222 | 19.39583 | 1170.377 | 0 |
| 60.2682 | 4.083333 | 240.0501 | 0 |
| 427.3563 | 16.33333 | 924.9929 | 0 |
| 317.7778 | 12.25 | 1085.026 | 2 |
| 267.3716 | 9.1875 | 908.9896 | 1 |
| 218.0613 | 9.1875 | 955.9327 | 0 |
| 145.7395 | 7.145833 | 267.7892 | 0 |
| 70.59034 | 6.287671 | 337.7999 | 1.333333 |
| 350.7797 | 13.62329 | 1045.82 | 2.666667 |
| 645.0871 | 34.58219 | 1031.179 | 1.333333 |
| 705.9034 | 31.43836 | 1145.173 | 0 |
| 183.5349 | 12.57534 | 726.8451 | 0 |
| 193.3089 | 13.62329 | 715.3411 | 1.333333 |
| 143.3527 | 9.431507 | 510.3603 | 0 |
| 203.083 | 11.5274 | 789.5943 | 1.333333 |
| 67.33233 | 6.287671 | 376.4953 | 0 |
| 181.3629 | 8.383562 | 561.6055 | 1.333333 |
| 134.6647 | 5.239726 | 428.7863 | 2.666667 |
| 884.4578 | 31.34818 | 728.1848 | 1.225806 |
| 1032.424 | 36.75304 | 1032.404 | 0 |
| 1659.888 | 39.99595 | 776.7304 | 1.225806 |
| 1444.058 | 58.37247 | 1317.205 | 2.451613 |
| 756.5173 | 17.29555 | 705.5302 | 6.129032 |
| 799.9058 | 43.23887 | 1816.686 | 3.677419 |
| 887.7953 | 34.59109 | 1108.998 | 1.225806 |
| 1138.114 | 47.56275 | 893.24 | 0 |
| 966.7847 | 49.7247 | 1484.418 | 6.129032 |
| 930.0713 | 37.83401 | 1550.225 | 4.903226 |
| 566.2755 | 22.7004 | 736.8151 | 1.225806 |
| 1170.377 | 57.2915 | 1476.867 | 7.354839 |
| 1397.332 | 57.2915 | 1200.696 | 2.451613 |
| 1333.818 | 42.53406 | 420.0414 | 4.556391 |
| 1211.14 | 27.58966 | 477.6942 | 20.50376 |
| 2009.747 | 72.42287 | 614.1782 | 9.112782 |
| 1707.864 | 66.67502 | 312.972 | 13.66917 |
| 2540.147 | 71.2733 | 532.9938 | 12.53008 |
| 2567.809 | 71.2733 | 304.7359 | 7.973684 |
| 2777.083 | 77.02114 | 369.4482 | 19.36466 |
| 2757.839 | 82.76899 | 375.3311 | 14.80827 |
| 1461.306 | 34.48708 | 414.1585 | 11.39098 |
| 1899.096 | 73.57244 | 288.2637 | 14.80827 |
| 922.487 | 32.18794 | 221.1983 | 3.417293 |
| 1748.756 | 51.73062 | 331.7974 | 13.66917 |


| 1641.714 | 52.88019 | 465.9283 | 19.36466 |
| ---: | ---: | ---: | ---: |
| 1844.974 | 55.17933 | 328.2677 | 5.695489 |
| 1605.633 | 55.17933 | 427.101 | 27.33835 |
| 2069.883 | 77.02114 | 504.7557 | 20.50376 |
| 1539.483 | 45.98277 | 349.4462 | 7.973684 |
| 1974.868 | 67.82459 | 550.6426 | 19.36466 |
| 2253.899 | 64.37588 | 400.0395 | 7.973684 |
| 2225.034 | 41.38449 | 414.1585 | 11.39098 |
| 1047.57 | 25.29052 | 271.7915 | 4.556391 |
| 1640.511 | 36.78622 | 255.3193 | 7.973684 |
| 1926.759 | 41.38449 | 257.6725 | 3.417293 |
| 2815.57 | 39.08536 | 370.6248 | 6.834586 |
| 1980.881 | 65.52545 | 250.613 | 3.417293 |
| 2097.545 | 32.18794 | 276.4979 | 2.278195 |
| 1747.554 | 26.44009 | 356.5058 | 1.139098 |
| 1958.03 | 37.93579 | 591.8231 | 7.973684 |
| 296.109 | 8 | 628.1934 | 1.142857 |
| 514.5865 | 31 | 798.7339 | 3.428571 |
| 349.3421 | 4 | 418.7956 | 1.142857 |
| 609.9624 | 24 | 1581.277 | 2.285714 |
| 362 | 22 | 609 | 2 |
| 304 | 15 | 438 | 2 |
| 2297.288 | 64.11275 | 346.7324 | 6.341463 |
| 2269.596 | 38.68873 | 274.4964 | 5.073171 |
| 2102.289 | 49.74265 | 147.8058 | 2.536585 |
| 2483.055 | 59.69118 | 463.4211 | 3.804878 |
| 1993.829 | 43.11029 | 181.1454 | 6.341463 |
| 2488.824 | 77.37745 | 395.6305 | 8.878049 |
| 1348.834 | 43.11029 | 130.0246 | 5.073171 |
| 1277.297 | 29.84559 | 126.6907 | 8.878049 |
| 1379.988 | 45.32108 | 280.0531 | 5.073171 |
| 622.7498 | 32.19512 | 904.5609 | 1.065217 |
| 365.0221 | 34.34146 | 1121.312 | 2.130435 |
| 1809.432 | 10.58722 | 115.6966 | 3.375 |
| 483.5827 | 20.11572 | 744.6653 | 5.625 |
| 1390.967 | 11.64594 | 144.0948 | 2.25 |
| 1642.599 | 48.29268 | 1135.261 | 2.130435 |
| 839.5508 | 36.4878 | 998.9872 | 2.130435 |
| 954.3552 | 27.52677 | 631.0723 | 3.375 |
| 1144.842 | 45.07317 | 1711.476 | 0 |
| 407.7894 | 23.29188 | 309.2254 | 2.25 |
| 549.7684 | 23.29188 | 540.6186 | 3.375 |
| 1232.976 | 16.93955 | 152.5091 | 2.25 |
| 693.8824 | 20.115772 | 607.933 | 2.25 |
| 243.348 | 9.658537 | 278.9867 | 0 |
| 919.1273 | 19.05699 | 459.631 | 1.125 |
| 557.4883 | 26.82927 | 1150.284 | 1.065217 |


| 334.0505 | 23.60976 | 788.6741 | 1.065217 |
| ---: | ---: | ---: | ---: |
| 759.0006 | 19.05699 | 318.6915 | 2.25 |
| 440.2387 | 20.39024 | 660.984 | 2.130435 |
| 882.265 | 28.96116 | 958.9878 | 3.195652 |
| 780.3508 | 24.3506 | 802.5136 | 2.25 |
| 420.5995 | 14.82211 | 482.7703 | 2.25 |
| 1017.637 | 30.04878 | 669.5682 | 1.065217 |
| 844.4015 | 22.23316 | 449.1131 | 0 |
| 413.1269 | 14.82211 | 302.9147 | 1.125 |
| 485.7177 | 13.76339 | 188.2699 | 1.125 |
| 933.005 | 32.82038 | 924.5209 | 2.25 |
| 101.7637 | 3.219512 | 156.6618 | 1.065217 |
| 447.2873 | 24.3506 | 722.5778 | 1.125 |
| 670.3972 | 5.29361 | 21.03574 | 1.125 |
| 1366.415 | 10.58722 | 185.1145 | 1.125 |
| 1731.504 | 13.76339 | 71.52153 | 5.625 |
| 377.899 | 19.05699 | 462.7863 | 1.125 |
| 696.8603 | 53.65854 | 1500.09 | 2.130435 |
| 735.5154 | 17.99827 | 273.4647 | 0 |
| 1035.335 | 44 | 1451.804 | 3.195652 |
| 600.6272 | 25.7561 | 724.2925 | 1.065217 |
| 478.2451 | 21.17444 | 855.1029 | 4.5 |
| 242.2419 | 12.87805 | 392.7275 | 0 |
| 1214.828 | 28.58549 | 749.9242 | 3.375 |
| 1482.211 | 41.85366 | 987.1839 | 1.065217 |
| 858.2792 | 22.23316 | 465.9417 | 1.125 |
| 430.2836 | 19.31707 | 892.7576 | 5.326087 |
| 768.6082 | 12.70466 | 439.647 | 1.125 |
| 443.5571 | 8.585366 | 177.0493 | 0 |
| 702.391 | 19.31707 | 688.8827 | 1.065217 |
| 310.8218 | 15.02439 | 512.9064 | 2.130435 |
| 1649.236 | 9.658537 | 126.6171 | 0 |
| 1481.105 | 62.2439 | 1405.664 | 3.195652 |
| 1030.911 | 36.4878 | 579.434 | 0 |
| 559.7005 | 30.04878 | 1271.536 | 2.130435 |
| 1080.687 | 27.90244 | 596.6024 | 2.130435 |
| 686.4098 | 23.29188 | 389.1612 | 2.25 |
| 1087.794 | 21.17444 | 350.2451 | 5.625 |
| 929.8024 | 19.05699 | 199.8396 | 2.25 |
| 799.566 | 32.82038 | 399.6791 | 2.25 |
| 958.6252 | 25.40933 | 466.9935 | 2.25 |
| 496.6512 | 8.585366 | 145.9315 | 0 |
| 670.3133 | 21.46341 | 538.659 | 1.065217 |
| 785.3505 | 45.07317 | 1242.564 | 1.065217 |
| 488.9083 | 18.2439 | 860.5668 | 2.130435 |
| 615.0069 | 22.53659 | 1047.273 | 1.065217 |
| 322.9892 | 19.31707 | 726.4386 | 3.195652 |


| 384.4395 | 32.72727 | 532.7249 | 0 |
| :---: | :---: | :---: | :---: |
| 345.6632 | 18.54545 | 652.588 | 0 |
| 446.4816 | 28.36364 | 802.4168 | 1.75 |
| 541.7605 | 17.45455 | 998.8591 | 1.75 |
| 386.6553 | 22.90909 | 1196.411 | 3.5 |
| 132.6014 | 6.1875 | 155.161 | 0 |
| 164.4257 | 6.1875 | 161.4091 | 1 |
| 180.3378 | 0 | 110.383 | 0 |
| 164.4257 | 11.34375 | 262.42 | 0 |
| 143.2095 | 9.28125 | 267.6268 | 0 |
| 372.5172 | 5.191083 | 51.73125 | 0 |
| 313.0843 | 7.267516 | 150.8828 | 0 |
| 705.7663 | 21.80255 | 228.4797 | 0 |
| 902.1073 | 14.53503 | 715.6156 | 2.909091 |
| 393.7433 | 4.152866 | 45.26484 | 0 |
| 690.908 | 4.152866 | 98.07383 | 0 |
| 558.2452 | 5.191083 | 214.4691 | 0 |
| 407.5402 | 6.229299 | 294.2215 | 2.909091 |
| 589.023 | 13.49682 | 372.8961 | 0 |
| 945.6207 | 8.305732 | 385.8289 | 1.454545 |
| 937.1303 | 14.53503 | 517.3125 | 0 |
| 839.4904 | 14.53503 | 381.518 | 2.909091 |
| 200.5862 | 1.038217 | 6.466406 | 0 |
| 592.2069 | 10.38217 | 534.5563 | 2.909091 |
| 582.6552 | 16.61146 | 710.227 | 0 |
| 387.3755 | 15.57325 | 810.4563 | 2.909091 |
| 230.9281 | 4 | 81.20548 | 0 |
| 187.0413 | 2 | 11.45205 | 0 |
| 115.9865 | 3 | 134.3014 | 1 |
| 175.5472 | 1 | 150.9589 | 0 |
| 178.6819 | 1 | 10.41096 | 0 |
| 132.7053 | 3 | 158.2466 | 0 |
| 142.1096 | 4 | 61.42466 | 0 |
| 1179.21 | 38.45291 | 454.2219 | 5.4 |
| 1105.061 | 43.94619 | 508.1321 | 8.64 |
| 1570.287 | 54.93274 | 649.2161 | 1.08 |
| 1252.163 | 42.84753 | 512.7202 | 4.32 |
| 1121.805 | 30.76233 | 427.8403 | 3.24 |
| 1101.473 | 34.0583 | 435.8695 | 4.32 |
| 2100.185 | 49.98347 | 392.7541 | 8.346154 |
| 1662.057 | 28.56198 | 281.9155 | 16.69231 |
| 2139.758 | 65.45455 | 437.3304 | 5.961538 |
| 252.4623 | 14.48276 | 441.7149 | 1 |
| 242.8751 | 7.241379 | 317.4826 | 0 |
| 419.7053 | 1.034483 | 29.73081 | 1 |
| 302.5287 | 3.103448 | 29.73081 | 0 |
| 357.9213 | 1.034483 | 11.67996 | 0 |


| 318.5073 | 3.103448 | 234.661 | 0 |
| ---: | ---: | ---: | ---: |
| 1695.381 | 46.53425 | 941.7577 | 3.157895 |
| 1903.18 | 81.16438 | 713.0451 | 8.421053 |
| 1356.744 | 57.35616 | 745.5582 | 4.210526 |
| 1064.286 | 30.30137 | 242.1663 | 3.157895 |
| 601.4093 | 21.64384 | 189.4727 | 1.052632 |
| 274.3165 | 5.454545 | 516.045 | 0 |
| 160.5755 | 2.181818 | 319.9694 | 0 |
| 185.1079 | 4.363636 | 361.9856 | 0 |
| 1336.527 | 12.54271 | 179.0257 | 2.036364 |
| 1553.06 | 5.226131 | 73.71646 | 3.054545 |
| 851.1962 | 11.49749 | 128.4773 | 0 |
| 2134.39 | 24.0402 | 240.105 | 3.054545 |
| 1575.46 | 15.67839 | 182.185 | 2.036364 |
| 1256.528 | 16.72362 | 510.7497 | 2.036364 |
| 1365.327 | 11.49749 | 224.3087 | 1.018182 |
| 1764.259 | 18.81407 | 203.2468 | 0 |
| 1787.725 | 10.45226 | 90.56593 | 4.072727 |
| 332.6875 | 8.430493 | 151.7325 | 0 |
| 403.1982 | 15.67839 | 244.3174 | 1.018182 |
| 1611.726 | 37.62814 | 470.7322 | 7.127273 |
| 630.3972 | 17.76884 | 377.007 | 2.036364 |
| 635.7305 | 16.72362 | 149.5391 | 1.018182 |
| 1073.062 | 15.67839 | 267.4854 | 3.054545 |
| 1821.859 | 16.72362 | 169.5479 | 5.090909 |
| 1067.819 | 36.88341 | 851.3879 | 2 |
| 1180.504 | 34.77578 | 714.4072 | 7 |
| 898.2561 | 31.61435 | 443.6068 | 1 |
| 1128.528 | 10.45226 | 417.0245 | 3.054545 |
| 1214.846 | 46.36771 | 1484.66 | 0 |
| 1734.392 | 36.58291 | 860.3764 | 2.036364 |
| 999.1356 | 33.72197 | 594.2856 | 1 |
| 1997.858 | 27.17588 | 516.0152 | 1.018182 |
| 2119.457 | 34.49246 | 547.608 | 3.054545 |
| 1425.19 | 42.15247 | 1107.436 | 5 |
| 1419.727 | 28.22111 | 665.5543 | 1.018182 |
| 400.2265 | 11.50607 | 71.61572 | 5.090909 |
| 884.2627 | 13.58794 | 354.8921 | 3.054545 |
| 474.6646 | 8.361809 | 404.3874 | 1.018182 |
| 1418.64 | 62.15385 | 551.4399 | 10.8 |
| 753.1846 | 38.32821 | 204.7262 | 2.4 |
| 1351.239 | 62.15385 | 520.6209 | 4.8 |
| 1197.178 | 45.57949 | 602.0711 | 1.2 |
| 870.8697 | 39.3641 | 282.8744 | 4.8 |
| 1161.873 | 58.01026 | 662.6084 | 0 |
| 1267.789 | 60.08205 | 659.3064 | 1.2 |
| 1213.226 | 38.32821 | 572.3528 | 4.8 |
|  |  |  |  |


| 391.1127 | 21.60577 | 354.8941 | 1 |
| ---: | ---: | ---: | ---: |
| 597.3552 | 8.230769 | 97.86473 | 1 |
| 402.8675 | 25.72115 | 809.8038 | 0 |
| 824.97 | 9.259615 | 638.8094 | 2 |
| 407.1419 | 12.34615 | 588.2638 | 0 |
| 733.0692 | 13.375 | 101.091 | 1 |
| 521.4836 | 16.46154 | 303.2731 | 0 |
| 1511 | 36 | 569 | 4 |
| 1171.969 | 88.67913 | 1049.483 | 3 |
| 1135.579 | 85.58567 | 1250.537 | 3 |
| 832.6868 | 61.86916 | 841.0599 | 2 |
| 488.053 | 20.62305 | 272.6339 | 0 |
| 657.159 | 36.09034 | 450.5302 | 0 |
| 1628.984 | 57.74455 | 369.4769 | 2 |
| 1317.529 | 31.96573 | 278.9498 | 2 |
| 437.7493 | 9.280374 | 112.6325 | 0 |
| 302.8925 | 15.46729 | 207.3702 | 1 |
| 524.4429 | 27.84112 | 358.9505 | 1 |
| 109.1697 | 145.3925 | 822.1123 | 2 |
| 461.2957 | 40.21495 | 495.7937 | 0 |
| 401.3593 | 36.09034 | 548.4258 | 1 |
| 719.2359 | 75.27414 | 1138.957 | 6 |
| 1029.62 | 83.52336 | 1615.803 | 4 |
| 446.3116 | 34.02804 | 535.7941 | 1 |
| 902.2558 | 89.71028 | 937.9028 | 1 |
| 1015.707 | 53.61994 | 951.5871 | 3 |
| 1316.476 | 42.76863 | 507.6508 | 0 |
| 1607.461 | 54.02353 | 802.6053 | 1.142857 |
| 1534.715 | 57.4 | 863.7114 | 3.428571 |
| 1338.769 | 43.89412 | 850.7852 | 3.428571 |
| 1241.383 | 39.39216 | 642.7893 | 5.714286 |
| 1091.196 | 49.52157 | 828.4579 | 2.285714 |
| 1210.034 | 25.76316 | 415.3973 | 1.333333 |
| 868.9198 | 35.13158 | 380.8767 | 2.666667 |
| 953.046 | 28.10526 | 463.726 | 0 |
| 481.1428 | 6.227848 | 10.90529 | 1 |
| 580.8004 | 17.64557 | 336.9735 | 1 |
| 395.4158 | 4.151899 | 165.7604 | 5 |
| 647.2389 | 10.37975 | 273.7228 | 0 |
| 549.7244 | 43.59494 | 775.3663 | 0 |
| 234.6777 | 0 | 3.271588 | 0 |
| 1634.912 | 23.6308 | 394.2776 | 2.15873 |
| 1565.386 | 32.87764 | 312.7029 | 3.238095 |
| 1276.748 | 38.01477 | 590.8935 | 4.31746 |
| 1118.735 | 17.46624 | 249.9532 | 0 |
| 348.6828 | 11.30169 | 164.1952 | 2.15873 |
| 1742.361 | 34.93249 | 559.5186 | 2.15873 |
|  |  |  |  |


| 1469.524 | 35.95992 | 705.9347 | 1.079365 |
| ---: | ---: | ---: | ---: |
| 1289.389 | 24.65823 | 338.8487 | 2.15873 |
| 741.6094 | 18.49367 | 371.2694 | 2.15873 |
| 1438.975 | 41.09705 | 375.4527 | 5.396825 |
| 292.8514 | 6.164557 | 81.57468 | 0 |
| 793.2271 | 32.87764 | 635.8641 | 3.238095 |
| 1286.229 | 47.2616 | 1071.975 | 1.079365 |
| 782.6929 | 19.5211 | 384.8651 | 1.079365 |
| 888.0351 | 46.23418 | 1044.783 | 0 |
| 534.0852 | 22.60338 | 599.2601 | 1.079365 |
| 860.6461 | 36.98734 | 603.4434 | 1.079365 |
| 1371.556 | 44.17932 | 1022.821 | 4.31746 |
| 1175.619 | 42.12447 | 507.2272 | 1.079365 |
| 497.2154 | 24.65823 | 511.4105 | 2.15873 |
| 325.5075 | 22.60338 | 406.8276 | 0 |
| 543.566 | 18.49367 | 302.2446 | 1.079365 |
| 573.0618 | 24.65823 | 501.998 | 0 |
| 810.0819 | 25.68565 | 751.9512 | 1.079365 |
| 1634.912 | 41.09705 | 966.3462 | 6.47619 |
| 1567.493 | 39.04219 | 478.9898 | 1.079365 |
| 889.0886 | 10.27426 | 206.0284 | 1.079365 |
| 599.3974 | 14.38397 | 167.3327 | 2.15873 |
| 545.6728 | 3.082278 | 12.54995 | 0 |
| 342.3623 | 5.137131 | 67.9789 | 0 |
| 168.5476 | 1.027426 | 4.183317 | 0 |
| 413.995 | 2.054852 | 8.366634 | 0 |
| 434.0101 | 2.054852 | 19.87075 | 0 |
| 555.1536 | 3.082278 | 6.274975 | 0 |
| 697.3657 | 3.082278 | 20.91658 | 1.079365 |
| 1276.748 | 15.41139 | 312.7029 | 0 |
| 153.7997 | 0 | 4.183317 | 0 |
| 1015.499 | 7.191983 | 20.91658 | 1.079365 |
| 516.177 | 16.43882 | 266.6864 | 2.15873 |
| 672.0835 | 9.246835 | 453.8899 | 0 |
| 1001.805 | 15.41139 | 403.6901 | 4.31746 |
| 320.2404 | 1.027426 | 4.183317 | 0 |
| 615.1987 | 4.109705 | 49.15397 | 3.238095 |
| 1231.451 | 32.87764 | 769.7303 | 1.079365 |
| 1386.304 | 55.48101 | 1157.733 | 2.15873 |
| 1434.318 | 35.60709 | 499.4097 | 1.119403 |
| 547.8163 | 17.99596 | 374.9169 | 1.074074 |
| 760.7971 | 26.46465 | 517.3434 | 2.148148 |
| 679.3358 | 11.64444 | 68.09763 | 0 |
| 1164.507 | 43.40202 | 544.572 | 1.074074 |
| 1541.626 | 52.36337 | 487.7462 | 4.477612 |
| 609.8507 | 17.80355 | 185.5556 | 0 |
| 1399.257 | 27.22895 | 100.7302 | 4.477612 |


| 760.7197 | 27.22895 | 406.1018 | 3.358209 |
| ---: | ---: | ---: | ---: |
| 1211.202 | 48.1743 | 318.0954 | 5.597015 |
| 1534.189 | 46.07976 | 526.978 | 6.716418 |
| 941.3376 | 13.61448 | 37.11113 | 1.119403 |
| 1534.189 | 50.26883 | 271.4414 | 5.597015 |
| 1495.941 | 24.08715 | 331.8795 | 1.119403 |
| 925.0361 | 15.87879 | 428.3268 | 1.074074 |
| 848.7445 | 22.2303 | 301.6091 | 0 |
| 1420.506 | 72.26145 | 721.0162 | 6.716418 |
| 1155.954 | 23.03988 | 115.5747 | 3.358209 |
| 671.4733 | 5.236337 | 120.8762 | 2.238806 |
| 1523.564 | 9.425406 | 45.59367 | 1.119403 |
| 662.9736 | 4.189069 | 120.8762 | 2.238806 |
| 1004.023 | 12.56721 | 164.3493 | 2.238806 |
| 851.0287 | 8.378139 | 55.13653 | 2.238806 |
| 1825.302 | 37.70162 | 346.724 | 1.119403 |
| 1782.804 | 11.51994 | 69.98098 | 1.119403 |
| 1623.435 | 25.13442 | 550.305 | 2.238806 |
| 625.7876 | 5.236337 | 9.542861 | 0 |
| 1059.27 | 5.236337 | 9.542861 | 0 |
| 1069.895 | 11.51994 | 29.6889 | 0 |
| 1523.564 | 17.80355 | 44.53335 | 2.238806 |
| 694.042 | 13.76162 | 355.019 | 0 |
| 837.2167 | 28.27622 | 488.8066 | 3.358209 |
| 689.5351 | 17.80355 | 335.0605 | 2.238806 |
| 692.7225 | 6.283604 | 13.78413 | 1.119403 |
| 1125.143 | 12.56721 | 119.8159 | 2.238806 |
| 1563.938 | 17.80355 | 249.1747 | 2.238806 |
| 1142.142 | 10.47267 | 27.56827 | 2.238806 |
| 787.2812 | 24.08715 | 331.8795 | 1.119403 |
| 949.407 | 45.51919 | 674.4315 | 1.074074 |
| 1145.434 | 46.57778 | 697.4711 | 1.074074 |
| 920.7977 | 27.52323 | 464.9807 | 2.148148 |
| 528.7434 | 25.40606 | 428.3268 | 1.074074 |
| 1293.779 | 40.22626 | 541.4302 | 2.148148 |
| 960.0031 | 40.22626 | 529.9104 | 5.37037 |
| 738.5454 | 37.05051 | 756.1173 | 5.37037 |
| 868.877 | 49.75354 | 781.2514 | 1.074074 |
| 891.1287 | 47.63636 | 610.549 | 3.222222 |
| 547.8163 | 12.70303 | 393.7674 | 1.074074 |
| 408 | 16 | 672 | 3 |
| 957.4593 | 5.859375 | 93.25844 | 4 |
| 1793.081 | 14.0625 | 122.0419 | 2 |
| 1648.255 | 21.09375 | 331.5856 | 1 |
| 1180.445 | 14.0625 | 199.1816 | 0 |
| 1095.389 | 10.54688 | 80.59371 | 2 |
| 1080.446 | 4.6875 | 37.99418 | 0 |
|  |  |  |  |


| 1414.925 | 4.6875 | 124.3446 | 0 |
| :---: | :---: | :---: | :---: |
| 523.4007 | 33.38462 | 1310.176 | 6.5 |
| 563.6623 | 60.30769 | 1383.696 | 2.6 |
| 649.9371 | 46.30769 | 1411.128 | 3.9 |
| 954.2224 | 28.06299 | 293.1685 | 1.12 |
| 681.4346 | 3.11811 | 17.73617 | 2.24 |
| 622.598 | 15.59055 | 141.8894 | 2.24 |
| 931.7575 | 14.55118 | 138.7595 | 1.12 |
| 417.2049 | 9.354331 | 193.0113 | 3.36 |
| 758.457 | 6.23622 | 17.73617 | 0 |
| 496.3668 | 8.314961 | 8.346434 | 0 |
| 855.8048 | 7.275591 | 20.86608 | 1.12 |
| 651.4814 | 14.55118 | 208.6608 | 1.12 |
| 732.7829 | 19.74803 | 273.3457 | 1.12 |
| 382.9727 | 9.354331 | 208.6608 | 1.12 |
| 685.7136 | 10.3937 | 183.6215 | 1.12 |
| 617.2492 | 3.11811 | 16.69287 | 0 |
| 551.9941 | 16.62992 | 310.9047 | 6.72 |
| 417.2049 | 20.7874 | 487.2231 | 1.12 |
| 554.1336 | 18.70866 | 235.7868 | 3.36 |
| 647.2024 | 22.86614 | 398.5422 | 1.12 |
| 1110.407 | 3.11811 | 19.82278 | 2.24 |
| 1051.57 | 9.354331 | 23.996 | 2.24 |
| 1536.17 | 10.3937 | 36.51565 | 0 |
| 278.1366 | 20.7874 | 441.3177 | 1.12 |
| 335.9034 | 15.59055 | 506.0025 | 0 |
| 942.4551 | 18.70866 | 471.5735 | 0 |
| 426.8327 | 12.47244 | 461.1405 | 1.12 |
| 251.3927 | 21.82677 | 461.1405 | 0 |
| 562.6917 | 30.14173 | 508.0892 | 8.96 |
| 646.1326 | 34.29921 | 616.5928 | 0 |
| 1432.403 | 35.33858 | 852.3795 | 3.36 |
| 1258.033 | 23.90551 | 458.0106 | 5.6 |
| 1582.169 | 34.29921 | 161.7122 | 1.12 |
| 1612.122 | 29.10236 | 427.7547 | 2.24 |
| 1544.111 | 62.4 | 618.481 | 0 |
| 761.3476 | 40.56 | 592.3185 | 5.5 |
| 673.541 | 27.04 | 747.2004 | 5.5 |
| 652.5409 | 19.97343 | 194.1438 | 2.175 |
| 579.4479 | 26.28083 | 339.7516 | 6.525 |
| 862.2862 | 25.2296 | 546.5569 | 6.525 |
| 952.3284 | 35.74194 | 391.4529 | 5.4375 |
| 668.4307 | 50.4592 | 753.3623 | 5.4375 |
| 851.693 | 35.74194 | 371.4055 | 1.0875 |
| 836.8625 | 28.3833 | 257.4515 | 6.525 |
| 1411.014 | 32.58824 | 205.7502 | 3.2625 |
| 1758.471 | 59.9203 | 302.8221 | 1.0875 |


| 653.6002 | 32.58824 | 405.1696 | 5.4375 |
| ---: | ---: | ---: | ---: |
| 1743.64 | 66.2277 | 327.0901 | 8.7 |
| 1470.336 | 44.1518 | 236.3489 | 3.2625 |
| 921.6081 | 23.12713 | 91.79624 | 1.0875 |
| 1520.124 | 54.66414 | 295.4362 | 5.4375 |
| 1370.76 | 36.79317 | 221.5771 | 5.4375 |
| 2169.487 | 36.79317 | 77.02443 | 2.175 |
| 1836.86 | 33.63947 | 99.18215 | 4.35 |
| 649.3629 | 2.102467 | 23.21284 | 3.2625 |
| 797.6677 | 14.71727 | 80.18982 | 6.525 |
| 760.5915 | 12.6148 | 25.3231 | 2.175 |
| 1091.099 | 11.56357 | 30.59875 | 1.0875 |
| 1096.396 | 19.97343 | 60.14237 | 1.0875 |
| 883.4726 | 8.409867 | 28.48849 | 0 |
| 1034.955 | 31.537 | 178.3168 | 3.2625 |
| 1061.438 | 33.63947 | 214.1912 | 3.2625 |
| 637.7104 | 15.7685 | 260.6169 | 1.0875 |
| 327.3298 | 4.204934 | 4.220517 | 0 |
| 1752.115 | 64.12524 | 447.3748 | 1.0875 |
| 1521.183 | 43.10057 | 320.7593 | 4.35 |
| 1817.793 | 55.71537 | 906.356 | 4.35 |
| 1033.896 | 33.63947 | 377.7363 | 2.175 |
| 1101.692 | 32.58824 | 232.1284 | 1.0875 |
| 1066.735 | 32.58824 | 353.4683 | 0 |
| 1042.371 | 32.58824 | 502.2415 | 3.2625 |
| 1656.776 | 36.79317 | 158.2694 | 3.2625 |
| 1592.157 | 33.63947 | 123.4501 | 1.0875 |
| 2060.377 | 45.20304 | 180.4271 | 2.175 |
| 1374.997 | 22.0759 | 111.8437 | 0 |
| 814.6168 | 16.81973 | 102.3475 | 0 |
| 998.9384 | 12.6148 | 50.6462 | 0 |
| 1258.472 | 25.2296 | 88.63085 | 4.35 |
| 586.8631 | 2.102467 | 11.60642 | 2.175 |
| 1048.726 | 10.51233 | 29.54362 | 0 |
| 729.8712 | 12.6148 | 26.37823 | 3.2625 |
| 1202.328 | 10.51233 | 31.65388 | 1.0875 |
| 1269.065 | 24.17837 | 163.545 | 2.175 |
| 1619.7 | 35.74194 | 138.2219 | 6.525 |
| 673.7273 | 7.358634 | 20.04746 | 1.0875 |
| 759.5322 | 6.3074 | 21.10258 | 1.0875 |
| 838.9812 | 13.66603 | 36.92952 | 3.2625 |
| 1059.32 | 17.87097 | 37.98465 | 1.0875 |
| 976.6927 | 19.97343 | 70.69366 | 0 |
| 1533.895 | 18.9222 | 94.96163 | 1.0875 |
| 2066.733 | 45.20304 | 215.2464 | 7.6125 |
| 1719.276 | 57.81784 | 208.9156 | 7.6125 |
| 827.3287 | 8.409867 | 18.99233 | 2.175 |


| 1011.65 | 6.3074 | 83.35521 | 1.0875 |
| :---: | :---: | :---: | :---: |
| 873.9387 | 2.102467 | 63.30775 | 3.2625 |
| 947.0318 | 4.204934 | 73.85905 | 0 |
| 1377.116 | 18.9222 | 161.4348 | 1.0875 |
| 805.0829 | 6.3074 | 41.15004 | 0 |
| 423.7279 | 4.204934 | 25.3231 | 1.0875 |
| 1080.506 | 13.66603 | 102.3475 | 2.175 |
| 1084.743 | 4.204934 | 68.5834 | 0 |
| 1199.15 | 16.81973 | 104.4578 | 2.175 |
| 1007.413 | 7.358634 | 89.68598 | 0 |
| 1070.972 | 3.1537 | 45.37056 | 0 |
| 1170.306 | 17.17002 | 252.7535 | 1.15625 |
| 1030.39 | 28.97441 | 407.3917 | 1.15625 |
| 725.6113 | 20.3894 | 764.6593 | 1.15625 |
| 800.4501 | 23.60878 | 498.0417 | 1.15625 |
| 601.9645 | 30.04753 | 765.7258 | 0 |
| 754.8961 | 18.24314 | 535.3682 | 25 |
| 481.5716 | 25.75503 | 469.247 | 2.3125 |
| 921.9277 | 6.438757 | 66.12117 | 0 |
| 1060.759 | 26.82815 | 271.95 | 2.3125 |
| 1390.484 | 56.87569 | 503.3741 | 2.3125 |
| 1544.5 | 51.51005 | 722.0005 | 3.46875 |
| 938.197 | 27.90128 | 735.8646 | 2.3125 |
| 579.1875 | 31.12066 | 841.4452 | 1.15625 |
| 1080.282 | 31.12066 | 760.3934 | 1.15625 |
| 1014.12 | 52.58318 | 646.2811 | 0 |
| 981.5818 | 27.90128 | 879.8381 | 9.25 |
| 1236.468 | 64.38757 | 618.5529 | 2.3125 |
| 1049.913 | 33.26691 | 542.8335 | 0 |
| 1099.805 | 8.585009 | 135.4417 | 2.3125 |
| 1686.585 | 4.292505 | 91.71646 | 2.3125 |
| 649.3213 | 18.49724 | 664.2927 | 3 |
| 262.5611 | 11.30387 | 333.2247 | 0 |
| 242.9508 | 11.30387 | 435.6725 | 1 |
| 404.1916 | 21.58011 | 622.2352 | 1 |
| 618.8163 | 33.9116 | 684.7822 | 1 |
| 305.0503 | 12.33149 | 355.8711 | 2 |
| 382.4023 | 21.58011 | 583.4129 | 1 |
| 147.0778 | 9.248619 | 205.9739 | 1 |
| 472.828 | 22.60773 | 855.169 | 0 |
| 630.8004 | 23.63536 | 830.3659 | 0 |
| 995.1623 | 38 | 804.4845 | 6.071429 |
| 1096.89 | 53.83333 | 1053.183 | 3.642857 |
| 1074.775 | 49.61111 | 839.086 | 1.214286 |
| 938.7697 | 38 | 693.111 | 2.428571 |
| 1311.403 | 48.55556 | 547.136 | 3.642857 |
| 904.3629 | 18.02 | 272.0144 | 4.428571 |


| 1068.692 | 49.82 | 1470.813 | 1.107143 |
| ---: | ---: | ---: | ---: |
| 980.4617 | 32.86 | 724.655 | 1.107143 |
| 488.5765 | 16.96 | 834.3209 | 3.321429 |
| 540.412 | 18.02 | 727.8805 | 0 |
| 1265.005 | 27.56 | 526.8263 | 5.535714 |
| 997.005 | 15.9 | 394.5822 | 3.321429 |
| 350.2404 | 5.257353 | 137.5917 | 0 |
| 1495.182 | 5.291471 | 175.7046 | 1.107143 |
| 1126.042 | 28.62 | 512.8493 | 1.107143 |
| 488.5765 | 7.42 | 260.1877 | 1.107143 |
| 418.2808 | 14.72059 | 424.3286 | 0 |
| 304.5084 | 8.411765 | 720.5184 | 1.2 |
| 654.7488 | 7.360294 | 28.3586 | 0 |
| 1121.218 | 2.102941 | 57.8917 | 1.107143 |
| 177.351 | 3.154412 | 223.7178 | 0 |
| 816.4841 | 22.08088 | 1014.608 | 2.4 |
| 677.0571 | 27.33824 | 849.7075 | 0 |
| 689.2013 | 21.055 | 1126.377 | 2.307143 |
| 983.7964 | 27.33824 | 525.1592 | 1.2 |
| 286.7868 | 5.3 | 124.7181 | 0 |
| 301.1622 | 6.308824 | 231.07 | 0 |
| 587.8359 | 22.26 | 507.4735 | 1.107143 |
| 639.6713 | 5.3 | 25.80374 | 0 |
| 1167.952 | 16.96 | 799.9159 | 2.214286 |
| 1282.651 | 22.26 | 493.4965 | 1.107143 |
| 1583.738 | 23.32 | 206.4299 | 2.214286 |
| 1116.745 | 53.47126 | 1335.428 | 1.114754 |
| 1016.127 | 55.61011 | 847.0429 | 2.229508 |
| 643.5103 | 28.87448 | 676.9803 | 0 |
| 880.1275 | 58.81838 | 1033.458 | 3.344262 |
| 1105.688 | 41.70758 | 622.473 | 1.114754 |
| 995.119 | 52.40183 | 1089.055 | 2.229508 |
| 630.2421 | 21.3885 | 703.1438 | 3.344262 |
| 1132.224 | 54.54068 | 908.0911 | 2.229508 |
| 815.9976 | 42.77701 | 1037.818 | 4.459016 |
| 820.4204 | 47.05471 | 1310.355 | 7.803279 |
| 1274.858 | 62.02666 | 1018.196 | 4.459016 |
| 1092.42 | 48.12413 | 666.0788 | 2.229508 |
| 1186.403 | 54.54068 | 1014.925 | 4.459016 |
| 995.119 | 39.56873 | 902.6404 | 1.114754 |
| 691.0549 | 35.29103 | 549.4333 | 1.114754 |
| 1169.818 | 57.74896 | 940.7954 | 2.229508 |
| 727.5426 | 51.33241 | 714.0452 | 1.114754 |
| 1156.549 | 54.54068 | 1089.055 | 3.344262 |
| 505.2993 | 22.45793 | 552.7037 | 0 |
| 811.5749 | 23.52735 | 716.2255 | 2.229508 |
| 1309.134 | 34.22161 | 320.5027 | 0 |
|  |  |  |  |


| 714.2743 | 34.22161 | 827.4203 | 3.344262 |
| :---: | :---: | :---: | :---: |
| 894.5015 | 37.42988 | 888.4685 | 4 |
| 06.5345 | 16.04138 | 587.5883 | 2.229508 |
| 1394.272 | 60.95723 | 1101.047 | 2.229508 |
| 874.599 | 31.01333 | 835.0513 | 3. |
| 9 | 50 | 95 |  |
| 716.4857 | 37 | 71 |  |
| 1137.753 | 41.70758 | 537 |  |
| 773.9815 | 38.4993 | 974.5899 | 2.229508 |
| 8 | 66.30436 | 13 |  |
| 277.5276 | 13 | 6 |  |
| 306.2755 | 10.69425 | 751.1101 |  |
| 162.5361 | 10.69425 | 449.1399 |  |
| 808.2578 | 28.87448 | 1174.087 |  |
| 1367.736 | 40 | 760 | 1.114754 |
| 760.7132 | 34.22161 | 600 | . |
| 10 | 5 | 12 | 1.114754 |
| 1215.151 | 63.09608 | 921.1728 | 3.344262 |
| 785.0384 | 37 | 59 | 54 |
| 1815.539 | 42.77701 | 480.7 | 754 |
| 10 | 50 | 7 |  |
| 1090 | 47 | 46 | 2.229508 |
| 1115.639 | 58.8183 | 954.9673 | 2.229508 |
| 1260 | 32. | 42 | 3.344262 |
| 10 | 22 | 4 | 1.114754 |
| 1049 | 60 | 12 | 2.229508 |
| 106 | 48 | 1036.728 | 2.229508 |
| 922.1436 | 39.56873 | 104 | 2.229508 |
| 782.82 | 32. | 31 | 3.344262 |
| 1.5 | 43 | 77 | 2. |
| 1206.305 | 50 | 1038.909 | 6.688525 |
| 8.14 | 48.12413 | 715 | 1.114754 |
| 765.136 | 33.15218 | 565.7854 |  |
| 1240.582 | 36.36046 | 458.9512 | 4.459016 |
| 466.6003 | 19.2496 | 474.2132 | 2.229508 |
| 548.4212 | 26.73563 | 591.9489 | 4.459016 |
| 1037.135 | 34.22161 | 751.1101 | 1.114754 |
| 709.8516 | 31.01333 | 550.5234 | 1.114754 |
| 877.9161 | 36.36046 | 1254.757 |  |
| 1450.662 | 26.73563 | 160.2514 | 5.57377 |
| 1040.452 | 43.84643 | 969.1392 | 1.114754 |
| 1064.777 | 51.33241 | 1150.103 | 3.344262 |
| 975.2167 | 34.22161 | 710.7748 | 0 |
| 966.3712 | 36.36046 | 727.127 | 2.229508 |
| 741.9165 | 49.19356 | 914.632 |  |
| 529.6245 | 35.29103 | 303.0604 | 0 |
| 875.7048 | 38.49931 | 857.944 | . 2 |


| 883 | 23.52735 | 357.5677 | 1.114754 |
| :---: | :---: | :---: | :---: |
| 930.9891 | 55.61011 | 808.8879 | 0 |
| 591.543 | 12.8331 | 366.2888 | 2.229508 |
| 883.4446 | 37.42988 | 984.4013 | 5.57377 |
| 1079.151 | 27.80505 | 385.9115 | 1.114754 |
| 1038.241 | 33.15218 | 426.2468 | 0 |
| 909.9811 | 55.61011 | 1157.734 | 9 |
| 1124.485 | 25.6662 | 356.4775 | 0 |
| 887.8673 | 40.63816 | 660.6281 | 2.229508 |
| 936.5176 | 43.84643 | 601.7602 | 4.459016 |
| 1162.078 | 26.73563 | 402.2636 | 1.114754 |
| 978.5337 | 33.15218 | 417.5257 | 2 |
| 1193.037 | 38.49931 | 630.104 | 2.229508 |
| 695.4776 | 34.22161 | 752.2003 | 4.459016 |
| 859.1194 | 54.54068 | 981.1308 | 1.114754 |
| 1069.2 | 41.70758 | 583.2278 | 0 |
| 1052.615 | 64.16551 | 1154.464 | 2 |
| 1087.997 | 28.87448 | 896.0995 | 4 |
| 855.8024 | 39.56873 | 781.6342 | 0 |
| 813.7862 | 29.9439 | 770.7328 | 29508 |
| 933.2005 | 31.01333 | 832.871 | 2.229508 |
| 525.2017 | 40.63816 | 621.3829 | 2 |
| 1180.875 | 40.63816 | 539.6219 | 54 |
| 640.1933 | 42.77701 | 719.4959 | 0 |
| 1426.337 | 19.24965 | 203.8572 | 2.229508 |
| 528.5188 | 12.8331 | 464.4019 | 0 |
| 573.852 | 32.08275 | 492.7457 | 4 |
| 767.3474 | 28.87448 | 358.6578 | 0 |
| 1097.948 | 43.84643 | 509.0979 | 2.229508 |
| 725.3312 | 20.31908 | 309.6013 | 2.229508 |
| 702.1118 | 13.90253 | 367.379 | 0 |
| 333.9177 | 20.31908 | 524.3599 | 114754 |
| 608.0773 | 22.92308 | 505.5409 | 8 |
| 1095.402 | 36.46853 | 1049.558 |  |
| 860.3647 | 31.25874 | 747.0889 | 1.4 |
| 1285.156 | 58.34965 | 1410.812 | 1.4 |
| 2346.571 | 56 | 846.9481 |  |
| 2183.429 | 58 | 700.0519 | 5 |
| 1148.014 | 37.57895 | 801.1917 | 5.357143 |
| 842.0256 | 47.52632 | 627.2559 | 5.357143 |
| 1035.222 | 39.78947 | 491.3686 | 4.285714 |
| 969.3345 | 38.68421 | 641.3882 |  |
| 486.9007 | 12.15789 | 357.6555 |  |
| 760.5032 | 34.26316 | 738.14 |  |

LocalityCoc LocalityNar PrecinctNa GE19SLLD GE19SLLI GE19SLLL GE19SLLR GE19SLLW GE19SLUD GE19SLUI

| 1 ACCOMACI 101 - CHIN | 421.4247 | 0 | 0 | 896.9026 | 1 | 619.766 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ACCOMACI 201 - ATLA | 110.2364 | 0 | 0 | 438.509 | 0 | 225.6757 | 0 |
| 1 ACCOMACl 202 - GREE | 196.3586 | 0 | 0 | 518.0476 | 0 | 252.622 | 0 |
| 1 ACCOMACI 301 - NEW | 393.8655 | 0 | 0 | 454.2074 | 0 | 492.8936 | 0 |
| 1 ACCOMACI 401 - BLOX | 91.86368 | 0 | 0 | 277.3386 | 0 | 166.1692 | 0 |
| 1 ACCOMACI 402 - PARK | 151.5751 | 0 | 0 | 467.8127 | 0 | 326.7245 | 0 |
| 1 ACCOMACI 403 - SAXIS | 22.96592 | 0 | 0 | 133.9598 | 0 | 51.64717 | 0 |
| 1 ACCOMACI 501 - MAPF | 239.9939 | 0 | 0 | 236.5228 | 0 | 299.7781 | 0 |
| 1 ACCOMACI 502 - RUE | 272.1462 | 0 | 0 | 145.472 | 1 | 314.3741 | 0 |
| 1 ACCOMACI 601 - ACCC | 370.8996 | 0 | 0 | 543.1651 | 0 | 514.2262 | 0 |
| 1 ACCOMACI 602 - TANE | 8.038072 | 0 | 0 | 170.5894 | 0 | 44.91058 | 0 |
| 1 ACCOMACI 701 - NAN[ | 615.4867 | 0 | 0 | 1000.512 | 0 | 924.0352 | 0 |
| 1 ACCOMACI 801 - BOBT | 167.6512 | 0 | 0 | 358.9704 | 0 | 245.8854 | 0 |
| 1 ACCOMACI 802 - MELF | 334.1542 | 0 | 0 | 370.4825 | 0 | 423.2822 | 0 |
| 1 ACCOMACI $803-\mathrm{WACI}$ | 124.016 | 0 | 0 | 305.5958 | 0 | 204.3431 | 0 |
| 1 ACCOMACI 901 - PAIN ${ }^{-}$ | 792.3243 | 0 | 0 | 604.9122 | 1 | 920.6669 | 0 |
| 3 ALBEMARL 101 - WOO | 1166.987 | 0 | 0 | 0 | 89.17899 | 1128.954 | 191.3176 |
| 3 ALBEMARL 103 - BRAN | 448.2679 | 0 | 0 | 0 | 20.7393 | 430.41 | 0 |
| 3 ALBEMARL 104 - AGNC | 900.7949 | 0 | 0 | 0 | 49.77432 | 841.403 | 0 |
| 3 ALBEMARL 105 - DUNL | 1505.584 | 0 | 0 | 0 | 72.58755 | 1420.677 | 0 |
| 3 ALBEMARL 106 - NORT | 908.8569 | 0 | 0 | 886.6953 | 0 | 1164.341 | 591.8232 |
| 3 ALBEMARL 201 -JACK | 1139.465 | 26.99363 | 0 | 675.3099 | 3 | 1328.413 | 432.0415 |
| 3 ALBEMARL 202 - UNIV | 1041.344 | 0 | 0 | 0 | 21.77626 | 956.1545 | 162.9353 |
| 3 ALBEMARL 203 - GEOR | 1094.583 | 0 | 0 | 0 | 51.84825 | 1035.573 | 0 |
| 3 ALBEMARL 301 - IVY | 1460.686 | 32.18471 | 0 | 741.9942 | 1 | 1636.516 | 568.6969 |
| 3 ALBEMARL 302 - RED - | 1082.635 | 0 | 0 | 547.4574 | 2 | 1117.123 | 487.7548 |
| 3 ALBEMARL 304 - EAST | 362.4584 | 9.343949 | 0 | 194.7602 | 1 | 427.1038 | 132.4507 |
| 3 ALBEMARL 305-COUN | 1117.771 | 0 | 0 | 402.0228 | 1 | 1134.293 | 355.3042 |
| 3 ALBEMARL 306 - PORT | 499.5933 | 0 | 0 | 281.5198 | 1 | 536.5626 | 230.2119 |
| 3 ALBEMARL 307 - YELLC | 215.9558 | 3.11465 | 0 | 158.7719 | 0 | 242.5263 | 128.2459 |
| 3 ALBEMARL 401 - SCOT | 332.8513 | 0 | 0 | 523.0035 | 3.333333 | 502.2226 | 314.3075 |
| 3 ALBEMARL 402 - MON | 335.0126 | 0 | 0 | 449.6363 | 0 | 470.0288 | 282.7717 |
| 3 ALBEMARL 405 - MOU | 1335.221 | 0 | 0 | 0 | 53.92218 | 1261.995 | 331.1267 |
| 3 ALBEMARL 406 - STON | 724.0596 | 0 | 0 | 1012.468 | 1.111111 | 993.7139 | 705.3524 |
| 3 ALBEMARL 407-BISCL | 595.2061 | 0 | 0 | 0 | 23.85019 | 560.1713 | 134.5531 |
| 3 ALBEMARL 501 -KESW | 413.9027 | 0 | 0 | 401.4235 | 2.222222 | 457.378 | 0 |
| 3 ALBEMARL 502-STON | 449.5653 | 0 | 0 | 495.7528 | 0 | 540.9628 | 203.932 |
| 3 ALBEMARL 503 - HOLL | 679.7514 | 0 | 0 | 615.2366 | 1.111111 | 886.4014 | 380.5329 |
| 3 ALBEMARL 504 - FREE | 926.3494 | 0 | 0 | 0 | 69.47665 | 853.2689 | 0 |
| 3 ALBEMARL 506 - BAKE | 811.5951 | 0 | 0 | 928.6194 | 1.111111 | 1078.491 | 616.0007 |
| 3 ALBEMARL 507 - PANT | 871.6992 | 0 | 0 | 81.75205 | 79.8463 | 843.5604 | 0 |
| 3 ALBEMARL 601 - CROZ | 1134.039 | 38.41401 | 0 | 708.1228 | 2 | 1298.481 | 550.8266 |
| 3 ALBEMARL 602 - FREE | 395.531 | 0 | 0 | 473.7426 | 0 | 526.9045 | 320.6147 |
| 3 ALBEMARL 603 - EARL' | 814.8372 | 0 | 0 | 1038.67 | 1.111111 | 1111.758 | 688.5332 |
| 3 ALBEMARL 604 - BROV | 922.4241 | 19.72611 | 0 | 511.2456 | 0 | 1020.542 | 412.0687 |
| 3 ALBEMARL 606 - MECF | 1094.972 | 33.22293 | 0 | 629.7953 | 1 | 1219.07 | 525.5979 |


| 5 ALLEGHAN 101 - ARRI7 | 0 | 0 | 0 | 445.3558 | 4.049383 | 215.5921 | 263.8125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 103-DAM | 0 | 0 | 0 | 140.1469 | 2.024691 | 57.28292 | 98.92968 |
| 5 ALLEGHAN 201-HUM | 0 | 0 | 0 | 244.9976 | 3.037037 | 118.7319 | 156.6387 |
| 5 ALLEGHAN 202 - DOLL | 0 | 0 | 0 | 328.0477 | 3.037037 | 159.3507 | 207.134 |
| 5 ALLEGHAN 301 - CALL/ | 0 | 0 | 0 | 227.3495 | 0 | 99.98473 | 147.364 |
| 5 ALLEGHAN 302 - GRIFF | 0 | 0 | 0 | 397.6021 | 6.074074 | 216.6336 | 253.5073 |
| 5 ALLEGHAN 401 - LOW | 0 | 0 | 0 | 303.1326 | 2.024691 | 163.5167 | 175.188 |
| 5 ALLEGHAN 402 - JACK | 0 | 0 | 0 | 391.3733 | 5.061728 | 209.343 | 233.9275 |
| 5 ALLEGHAN 501 - IRON | 0 | 0 | 0 | 164.0238 | 4.049383 | 99.98473 | 81.41088 |
| 5 ALLEGHAN 502 - PETEf | 0 | 0 | 0 | 467.1565 | 5.061728 | 231.2147 | 296.789 |
| 5 ALLEGHAN 601 - DISTF | 0 | 0 | 0 | 475.4615 | 22.2716 | 356.1956 | 240.1106 |
| 5 ALLEGHAN' 701 - DISTF | 0 | 0 | 0 | 336.3527 | 25.30864 | 255.1694 | 175.188 |
| 7 AMELIA CC 101 - NUM | 224.2686 | 0 | 0 | 662.6333 | 1.2 | 246.7173 | 0 |
| 7 AMELIA CC 201 - NUM | 316.1119 | 0 | 0 | 775.2167 | 0 | 359.8409 | 0 |
| 7 AMELIA CC 301 - NUM | 208.2494 | 0 | 0 | 844.9111 | 1.2 | 234.8662 | 0 |
| 7 AMELIA CC 401 - NUM | 230.6763 | 0 | 0 | 784.8667 | 3.6 | 260.7231 |  |
| 7 AMELIA CC501-NUM | 356.6938 | 0 | 0 | 792.3722 | 0 | 387.8525 | 0 |
| 9 AMHERST ( 101 - WRIG | 310.5194 | 0 | 0 | 308.6559 | 3 | 286.2177 |  |
| 9 AMHERST ( 102 - NEW | 283.7742 | 6.692308 | 0 | 572.1048 | 1 | 267.2069 | 0 |
| 9 AMHERST (103-COOL | 94.93918 | 1.115385 | 0 | 310.9265 | 0 | 92.94154 | 0 |
| 9 AMHERST ( 201 - COUF | 522.6871 | 11.15385 | 0 | 952.4716 | 0 | 499.5608 | 0 |
| 9 AMHERST ( 202 - TEMF | 121.0214 | 4.461538 | 0 | 413.5323 | 0 | 117.2331 | 0 |
| 9 AMHERST ( 301 - MON | 145.017 | 8.923077 | 0 | 428.0422 | 0 | 145.7492 | 0 |
| 9 AMHERST ( 302 -ELON | 308.6602 | 8.923077 | 0 | 1159.595 | 2 | 291.4985 | 0 |
| 9 AMHERST ( 303 - PLEA! | 93.89589 | 5.576923 | 0 | 271.5425 | 0 | 90.82923 | 0 |
| 9 AMHERST ( 401 - AMEI | 440.6944 | 6.692308 | 0 | 1030.27 | 2 | 420.3492 | 0 |
| 9 AMHERST ( 402 -LONC | 76.16 | 4.461538 | 0 | 269.4696 | 0 | 73.93077 | 0 |
| 9 AMHERST ( 501 - MADI | 483.6312 | 0 | 0 | 1003.39 | 2 | 460.4831 | 0 |
| 11 APPOMAT 101 - VERA | 76.19078 | 0 | 0 | 333.6429 | 0 | 67.81572 |  |
| 11 APPOMAT 102 - PAMF | 198.9426 | 0 | 0 | 581.8155 | 0 | 196.0298 | 0 |
| 11 APPOMAT 201 - CHAP | 98.4131 | 0 | 0 | 163.7321 | 0 | 94.30623 | 0 |
| 11 APPOMAT1202-SPOU | 175.6621 | 0 | 0 | 801.1548 | 1 | 145.168 | 0 |
| 11 APPOMAT1301-US 41 | 103.7041 | 0 | 0 | 479.869 | 1 | 90.06775 | 0 |
| 11 APPOMATl 302 - STON | 137.5667 | 0 | 0 | 466.4821 | 0 | 117.6179 | 0 |
| 11 APPOMAT7401-COUF | 227.5141 | 0 | 0 | 744.5179 | 1 | 203.4472 | 0 |
| 11 APPOMAT1501-OAKV | 204.2336 | 0 | 0 | 540.625 | 0 | 176.9566 | 0 |
| 11 APPOMAT1502-AGEE | 86.77284 | 0 | 0 | 213.1607 | 1 | 81.59079 | 0 |
| 13 ARLINGTOI 001 - ARLIN | 753.9605 | 132.4928 | 0 | 0 | 3.505263 | 820.5303 | 0 |
| 13 ARLINGTOI002-ASHT | 1134.158 | 0 | 0 | 0 | 57.90609 | 1127.986 | 0 |
| 13 ARLINGTOI 003 - AURC | 678.731 | 0 | 0 | 0 | 50.56684 | 673.5856 | 0 |
| 13 ARLINGTOI004-BALL؛ | 996.5823 | 0 | 0 | 0 | 34.31472 | 991.0567 | 0 |
| 13 ARLINGTOI 005 - BARC | 995.4638 | 0 | 0 | 0 | 42.8934 | 986.5672 | 0 |
| 13 ARLINGTOI 006 -CRYS | 658.4877 | 0 | 0 | 0 | 33.25455 | 630.6821 | 0 |
| 13 ARLINGTOIO07-CHER | 1109.151 | 0 | 0 | 0 | 47.2 | 1093.193 | 0 |
| 13 ARLINGTOIO08-HUM | 951.2486 | 250.1464 | 0 | 0 | 11.68421 | 1098.805 | 0 |
| 13 ARLINGTOI009-COLU | 1192.26 | 202.449 | 0 | 0 | 16.35789 | 1272.09 | 0 |
| 13 ARLINGTOI010-WILSI | 1114.798 | 0 | 0 | 0 | 60.07273 | 1116.763 | 0 |


| 13 ARLINGTOI 011 - EAST | 834.4 | 0 | 0 | 0 | 28.95305 | 793.4568 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 ARLINGTOI 012 - FAIRL | 1063.02 | 0 | 0 | 0 | 48.45989 | 1052.209 | 0 |
| 13 ARLINGTOI013-GLEN | 738.2091 | 0 | 0 | 0 | 31.09772 | 740.7671 | 0 |
| 13 ARLINGTOI 014 - CLAR | 720.3131 | 0 | 0 | 0 | 21.4467 | 714.9525 | 0 |
| 13 ARLINGTOIO15-LYON | 591.6858 | 0 | 0 | 0 | 26.80838 | 589.2466 | 0 |
| 13 ARLINGTOIO16-LYON | 986.0374 | 0 | 0 | 0 | 45.05455 | 976.4658 | 0 |
| 13 ARLINGTOI017-OVER | 1314.236 | 0 | 0 | 0 | 40.74873 | 1235.004 | 0 |
| 13 ARLINGTOI018-PARK | 1254.955 | 0 | 0 | 0 | 73.99112 | 1253.692 | 0 |
| 13 ARLINGTOI019-ROSS | 941.9876 | 0 | 0 | 0 | 45.05455 | 939.4274 | 0 |
| 13 ARLINGTOIO20-THRIF | 1035.735 | 0 | 0 | 0 | 69.72727 | 1048.298 | 0 |
| 13 ARLINGTOIO21-VIRGI | 470.2922 | 119.7735 | 0 | 0 | 8.178947 | 509.4796 | 0 |
| 13 ARLINGTOIO22-ABINI | 1058.69 | 0 | 0 | 0 | 51.62032 | 1054.355 | 0 |
| 13 ARLINGTOIO23-WEST | 1185.609 | 0 | 0 | 0 | 39.6764 | 1117.701 | 0 |
| 13 ARLINGTOIO24-WOO | 1402.816 | 0 | 0 | 0 | 48.27273 | 1341.241 | 0 |
| 13 ARLINGTOI 025 - ARLIN | 1008.886 | 0 | 0 | 0 | 39.6764 | 1011.259 | 0 |
| 13 ARLINGTOI 026 - FILLN | 1092.016 | 203.5089 | 0 | 0 | 11.68421 | 1241.346 | 0 |
| 13 ARLINGTOIO27-JEFFE | 1062.145 | 111.2939 | 0 | 0 | 21.33523 | 1133.598 | 0 |
| 13 ARLINGTOIO28-WAKI | 1066.422 | 170.6507 | 0 | 0 | 3.505263 | 1149.815 | 0 |
| 13 ARLINGTOIO29-DOM | 1268.377 | 0 | 0 | 0 | 42.8934 | 1176.352 | 0 |
| 13 ARLINGTOI030-GLEB | 849.9385 | 154.7516 | 0 | 0 | 4.673684 | 915.9907 | 0 |
| 13 ARLINGTOIO31-LEXIN | 1221.401 | 0 | 0 | 0 | 34.31472 | 1155.326 | 0 |
| 13 ARLINGTOI032-OAKR | 364.8044 | 0 | 0 | 0 | 21.06952 | 364.6801 | 0 |
| 13 ARLINGTOI033-ROCK | 1208.545 | 0 | 0 | 0 | 52.56364 | 1121.021 | 0 |
| 13 ARLINGTOI 034 - YORK | 998.4617 | 0 | 0 | 0 | 51.49091 | 943.9591 | 0 |
| 13 ARLINGTOI 035 - MADI | 1104.633 | 0 | 0 | 0 | 72.94545 | 1081.969 | 0 |
| 13 ARLINGTOI 036 - MAR | 1154.33 | 0 | 0 | 0 | 57.92727 | 1142.577 | 0 |
| 13 ARLINGTOI037-NOTT | 1035.73 | 0 | 0 | 0 | 45.03807 | 976.0515 | 0 |
| 13 ARLINGTOI 038 - ARLIN | 787.0196 | 107.0542 | 0 | 0 | 5.842105 | 866.4731 | 0 |
| 13 ARLINGTOI 039 - ASHL. | 662.1512 | 0 | 0 | 0 | 24.66371 | 631.8882 | 0 |
| 13 ARLINGTOI 040 - VIRGI | 1077.114 | 0 | 0 | 0 | 75.06345 | 1087.581 | 0 |
| 13 ARLINGTOI 041 - NAVY | 874.666 | 0 | 0 | 0 | 55.76142 | 884.4311 | 0 |
| 13 ARLINGTOI 042 -SHIRL | 757.7539 | 0 | 0 | 0 | 25.28342 | 752.9572 | 0 |
| 13 ARLINGTOI 043 - CAMI | 585.4658 | 49.81729 | 0 | 0 | 12.85263 | 644.2429 | 0 |
| 13 ARLINGTOI 044 - DAW: | 726.2566 | 0 | 0 | 0 | 24.67273 | 722.8092 | 0 |
| 13 ARLINGTOI 045 - BUCK | 751.6311 | 0 | 0 | 0 | 17.15736 | 744.1343 | 0 |
| 13 ARLINGTOI 046 - CENT | 932.8279 | 0 | 0 | 0 | 42.8934 | 947.2841 | 0 |
| 13 ARLINGTOI 047 - FOUR | 704.9051 | 89.03516 | 0 | 0 | 3.505263 | 745.4491 | 0 |
| 13 ARLINGTOI 048 - AUSA | 600.6338 | 0 | 0 | 0 | 21.4467 | 597.1032 | 0 |
| 13 ARLINGTOIO49-MON | 599.5153 | 0 | 0 | 0 | 18.2297 | 591.4913 | 0 |
| 13 ARLINGTOI050-CRYS* | 695.7606 | 0 | 0 | 0 | 40.76364 | 665.0049 | 0 |
| 13 ARLINGTOI 051 - TAYL( | 315.4166 | 0 | 0 | 0 | 5.361675 | 314.2649 | 0 |
| 13 ARLINGTOI052-GUNS | 486.2885 | 85.85533 | 0 | 0 | 5.842105 | 530.9314 | 0 |
| 13 ARLINGTOI 053 - MET | 763.5583 | 162.1712 | 0 | 0 | 11.68421 | 816.2399 | 0 |
| 13 ARLINGTOI 054 -GARF | 448.518 | 0 | 0 | 0 | 15.01269 | 442.2155 | 0 |
| 15 AUGUSTA (101-JOLIV | 221.6751 | 0 | 0 | 479.299 | 2.210526 | 196.3907 | 0 |
| 15 AUGUSTA (102-STUA | 216.4715 | 0 | 0 | 502.9554 | 1.105263 | 183.8551 | 0 |
| 15 AUGUSTA (103-VERO | 346.649 | 36.96121 | 0 | 915.8673 | 3.051724 | 263.2471 | 0 |


| 15 AUGUSTA ( 201 - CRIM | 275.6486 | 22.17672 | 0 | 880.5617 | 12.2069 | 238.1759 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA (202-NEW | 167.0597 | 17.95259 | 0 | 713.3796 | 22.37931 | 147.293 | 0 |
| 15 AUGUSTA ( 203 - WEYE | 279.8251 | 25.34483 | 0 | 935.5968 | 9.155172 | 263.2471 | 0 |
| 15 AUGUSTA (301-FORT | 506.3998 | 57.02586 | 0 | 1477.641 | 4.068966 | 394.8706 | 0 |
| 15 AUGUSTA (302-NORT | 96.78773 | 0 | 0 | 409.3584 | 0 | 72.07956 | 0 |
| 15 AUGUSTA (303-MOU | 124.8874 | 0 | 0 | 561.5821 | 1.105263 | 78.34735 | 0 |
| 15 AUGUSTA (304-CHUR | 168.598 | 0 | 0 | 502.9554 | 2.210526 | 120.1326 | 0 |
| 15 AUGUSTA (401-BUFF, | 175.8831 | 0 | 0 | 555.4109 | 3.315789 | 136.8467 | 0 |
| 15 AUGUSTA ( 402 - CHUR | 169.6387 | 0 | 0 | 598.6095 | 2.210526 | 115.9541 | 0 |
| 15 AUGUSTA (403-CRAIC | 67.21932 | 8 | 0 | 398.8215 | 0 | 74.16882 | 0 |
| 15 AUGUSTA ( 404 - DEER | 61.40297 | 0 | 0 | 208.7933 | 0 | 42.82988 | 0 |
| 15 AUGUSTA ( 405 -CEDA | 297.6483 | 0 | 0 | 638.7225 | 2.210526 | 226.685 | 0 |
| 15 AUGUSTA (501-GREE | 226.8652 | 20 | 0 | 931.2687 | 1 | 173.4088 | 0 |
| 15 AUGUSTA ( 502 - MIDC | 135.4889 | 7 | 0 | 487.22 | 0 | 110.7309 | 0 |
| 15 AUGUSTA (503-SPOT | 107.1308 | 7 | 0 | 486.1921 | 0 | 87.74903 | 0 |
| 15 AUGUSTA (504-WHIT | 241.5092 | 8 | 0 | 969.5262 | 1.105263 | 206.837 | 0 |
| 15 AUGUSTA (601-SHER. | 184.2089 | 0 | 0 | 566.7248 | 3.315789 | 152.5162 | 0 |
| 15 AUGUSTA ( 602 -RIDGI | 386.5111 | 23 | 0 | 1396.903 | 2 | 333.2374 | 0 |
| 15 AUGUSTA (603-LYND | 334.0738 | 0 | 0 | 888.6574 | 2.210526 | 290.4075 | 0 |
| 15 AUGUSTA (801-DOOI | 206.7364 | 16.89655 | 0 | 674.9589 | 0 | 170.2749 | 0 |
| 15 AUGUSTA ( 802 - FISHE | 464.6349 | 31.68103 | 0 | 1166.121 | 4.068966 | 395.9153 | 0 |
| 15 AUGUSTA ( 803 - WILSI | 427.0465 | 36.96121 | 0 | 807.8738 | 4.068966 | 369.7995 | 0 |
| 17 BATH COUI 101 - WARI | 111.8182 | 5 | 0 | 149.8457 | 0 | 127.7876 | 137.28 |
| 17 BATH COUI 102 - MOU | 11.71429 | 1 | 0 | 46.10638 | 0 | 26.62242 | 32.24 |
| 17 BATH COUI201-HOT | 85.19481 | 2 | 0 | 130.984 | 0 | 123.528 | 96.72 |
| 17 BATH COUI 301 -FAIR\ | 45.79221 | 5 | 0 | 191.7606 | 0 | 91.58112 | 150.8 |
| 17 BATH COUI 302 -BURN | 23.42857 | 1 | 0 | 35.62766 | 0 | 29.81711 | 32.24 |
| 17 BATH COUI401-MILLE | 101.1688 | 1 | 0 | 210.6223 | 0 | 160.7994 | 154.96 |
| 17 BATH COUI 501 - HEAL | 112.8831 | 6 | 0 | 220.0532 | 0 | 161.8643 | 175.76 |
| 19 BEDFORD ( 101 -GOOI | 0 | 0 | 0 | 722.6639 | 22.98214 | 0 | 0 |
| 19 BEDFORD ( 102 - HARC | 0 | 0 | 0 | 303.3532 | 12.53571 | 0 | 0 |
| 19 BEDFORD (103-CHAN | 148.5012 | 0 | 0 | 501.614 | 0 | 0 | 0 |
| 19 BEDFORD ( 104 - STEW | 0 | 0 | 0 | 459.6888 | 21.9375 | 0 | 0 |
| 19 BEDFORD ( 201 - BEDF | 0 | 0 | 0 | 367.544 | 14.625 | 0 | 0 |
| 19 BEDFORD ( 202 - STAU | 124.4482 | 0 | 0 | 431.5734 | 2 | 0 | 0 |
| 19 BEDFORD ( 203 -MON | 289.6819 | 0 | 0 | 781.7762 | 1 | 0 | 0 |
| 19 BEDFORD ( 204 - Quak | 74.2506 | 0 | 0 | 309.0025 | 0 | 0 | 0 |
| 19 BEDFORD ( $205-$ SAUN | 189.2867 | 0 | 0 | 675.6854 | 0 | 196.3056 | 0 |
| 19 BEDFORD ( 301 - NEW | 217.5229 | 0 | 0 | 881.687 | 0 | 0 | 0 |
| 19 BEDFORD ( 302 - BEDF | 0 | 0 | 0 | 691.6039 | 18.80357 | 0 | 0 |
| 19 BEDFORD ( 303 - BETH | 118.1735 | 0 | 0 | 401.7032 | 0 | 114.6 | 0 |
| 19 BEDFORD ( 304 - RIVEF | 106.6699 | 0 | 0 | 349.1728 | 0 | 0 | 0 |
| 19 BEDFORD ( 305 - HUDL | 69.02169 | 0 | 0 | 328.5726 | 0 | 71.09444 | 0 |
| 19 BEDFORD ( 306 -FORE | 103.5325 | 0 | 0 | 550.0244 | 0 | 0 | 0 |
| 19 BEDFORD ( 401 -FORE | 274.1362 | 0 | 0 | 889.0276 | 2 | 0 | 0 |
| 19 BEDFORD ( 402 -THON | 178.8289 | 0 | 0 | 474.8338 | 2 | 0 | 0 |
| 19 BEDFORD ( 403 -KNIGI | 357.6578 | 0 | 0 | 985.7179 | 1 | 0 | 0 |


| 19 BEDFORD ( 404 -FORE | 192.4241 | 0 | 0 | 845.6367 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD ( 502 -BIG IS | 65.91826 | 0 | 0 | 218.9011 | 0 | 0 | 0 |
| 19 BEDFORD ( $503-$ SEDA | 100.4469 | 0 | 0 | 307.7006 | 0 | 0 | 0 |
| 19 BEDFORD (504-SUCK | 130.7902 | 0 | 0 | 538.9923 | 1 | 0 | 0 |
| 19 BEDFORD (505-BOON | 336.9155 | 0 | 0 | 782.6747 | 1 | 0 | 0 |
| 19 BEDFORD (506-BOON | 327.4986 | 0 | 0 | 1080.05 | 0 | 0 | 0 |
| 19 BEDFORD ( 601 - MON | 0 | 0 | 0 | 551.8336 | 16.71429 | 0 | 0 |
| 19 BEDFORD (602-SHAD | 0 | 0 | 0 | 566.3283 | 22.98214 | 0 | 0 |
| 19 BEDFORD (603-THAX | 41.85286 | 0 | 0 | 177.599 | 1 | 0 | 0 |
| 19 BEDFORD ( 604 - BEDF | 1.046322 | 0 | 0 | 920.4046 | 21.89286 | 0 | 0 |
| 19 BEDFORD ( $701-\mathrm{GOO}$ | 0 | 0 | 0 | 1021.876 | 25.07143 | 0 | 0 |
| 19 BEDFORD ( 702 -LIBER | 155.9019 | 0 | 0 | 559.6434 | 1 | 0 | 0 |
| 19 BEDFORD ( 703 -THAX | 100.4469 | 0 | 0 | 419.2163 | 1 | 0 | 0 |
| 19 BEDFORD ( 704 -BEDF | 1.046322 | 0 | 0 | 934.8993 | 58.45536 | 0 | 0 |
| 21 BLAND COI 101 - BAST | 0 | 0 | 0 | 180.5413 | 3.111111 | 0 | 62.61745 |
| 21 BLAND COI 102 -CERE! | 0 | 0 | 0 | 219.1542 | 2.074074 | 0 | 76.18456 |
| 21 BLAND COI 201 - DAVI! | 0 | 0 | 0 | 63.65908 | 0 | 0 | 22.95973 |
| 21 BLAND COI 202 - SEDD | 0 | 0 | 0 | 412.2186 | 10.37037 | 0 | 163.849 |
| 21 BLAND COI 301 - HOLL | 0 | 0 | 0 | 243.1568 | 2.074074 | 0 | 91.83893 |
| 21 BLAND COI 302 - MECF | 0 | 0 | 0 | 123.1438 | 1.037037 | 0 | 60.5302 |
| 21 BLAND COI 401 -ROCK | 0 | 0 | 0 | 362.1262 | 9.333333 | 0 | 144.0201 |
| 23 BOTETOUR 101 -DALE' | 0 | 0 | 0 | 869.0359 | 36.11556 | 0 | 0 |
| 23 BOTETOUR 102-GREE | 0 | 0 | 0 | 1009.371 | 28.68 | 0 | 0 |
| 23 BOTETOUR 201 - BLUE | 0 | 0 | 0 | 864.8778 | 28.68 | 0 | 0 |
| 23 BOTETOUR 202 -RAINI | 0 | 0 | 0 | 901.2609 | 28.68 | 0 | 0 |
| 23 BOTETOUR 301 - BUCH | 0 | 0 | 0 | 850.3246 | 29.74222 | 0 | 0 |
| 23 BOTETOUR 302 - MILL | 0 | 0 | 0 | 833.6923 | 24.43111 | 0 | 0 |
| 23 BOTETOUR 403 -EAGL | 0 | 0 | 0 | 598.7615 | 9.56 | 0 | 0 |
| 23 BOTETOUR 406 - FINC | 0 | 0 | 0 | 1221.432 | 35.05333 | 0 | 0 |
| 23 BOTETOUR501-TROU | 0 | 0 | 0 | 572.3298 | 15.70634 | 0 | 0 |
| 23 BOTETOUR $502-\mathrm{CLOV}$ | 0 | 0 | 0 | 1040.915 | 44.35144 | 0 | 0 |
| 25 BRUNSWIC 101-BROC | 152.1898 | 0 | 0 | 111.9751 | 0 | 133.4486 | 0 |
| 25 BRUNSWIC 102-ROCK | 188.1235 | 0 | 0 | 228.257 | 0 | 154.2999 | 0 |
| 25 BRUNSWIC 103-TILLN | 177.5548 | 0 | 0 | 289.628 | 0 | 166.4216 | 0 |
| 25 BRUNSWIC 201 - DRON | 85.60677 | 0 | 0 | 72.13782 | 0 | 118.9106 | 0 |
| 25 BRUNSWIC 202 -EDGE | 347.7114 | 0 | 0 | 129.2021 | 0 | 403.2151 | 0 |
| 25 BRUNSWIC 203 -FITZH | 256.8203 | 0 | 0 | 133.5088 | 0 | 334.0307 | 0 |
| 25 BRUNSWIC 301 - ALBEI | 60.2418 | 0 | 0 | 66.7544 | 0 | 53.17092 | 0 |
| 25 BRUNSWIC 302 - DANI | 236.7397 | 0 | 0 | 226.1036 | 1.285714 | 212.6837 | 0 |
| 25 BRUNSWIC $303-E L M C$ | 114.1424 | 0 | 0 | 99.05492 | 1.285714 | 105.2993 | 0 |
| 25 BRUNSWIC 304 -SEYM | 112.0286 | 0 | 0 | 99.05492 | 0 | 106.3418 | 0 |
| 25 BRUNSWIC 401 - STUR | 498.8444 | 0 | 0 | 313.315 | 1.285714 | 462.8998 | 0 |
| 25 BRUNSWIC 402 - KING' | 203.9766 | 0 | 0 | 83.98135 | 1.285714 | 186.6195 | 0 |
| 25 BRUNSWIC 501 -TOTA | 595.0199 | 0 | 0 | 225.0269 | 3.857143 | 702.6584 | 0 |
| 27 BUCHANAP 102 - BLAC | 0 | 0 | 0 | 318.3099 | 2.330097 | 0 | 100.3873 |
| 27 BUCHANAP 103 -HURL | 0 | 0 | 0 | 628.5173 | 11.65049 | 0 | 246.8346 |
| 27 BUCHANAP 201-GRAS | 0 | 0 | 0 | 62.50448 | 2.330097 | 0 | 35.4308 |


| 27 BUCHANA「 202 - BULL | 0 | 0 | 0 | 332.1997 | 4.660194 | 0 | 159.4386 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANAP 203-ROCK | 0 | 0 | 0 | 376.1844 | 4.660194 | 0 | 155.8955 |
| 27 BUCHANAT 301 -SLATE | 0 | 0 | 0 | 429.4289 | 13.98058 | 0 | 206.6797 |
| 27 BUCHANAT 302 - NORT | 0 | 0 | 0 | 379.6569 | 13.98058 | 0 | 166.5247 |
| 27 BUCHANAT 403 - SOUT | 0 | 0 | 0 | 562.5403 | 13.98058 | 0 | 236.2053 |
| 27 BUCHANAT 404 - OAKV | 0 | 0 | 0 | 56.71703 | 2.330097 | 0 | 24.80156 |
| 27 BUCHANA 501 - PRAT | 0 | 0 | 0 | 341.4597 | 9.320388 | 0 | 190.1453 |
| 27 BUCHANAP 502 -FOX | 0 | 0 | 0 | 81.02433 | 2.330097 | 0 | 62.59441 |
| 27 BUCHANAR 503 -VANS | 0 | 0 | 0 | 381.9718 | 5.825243 | 0 | 153.5335 |
| 27 BUCHANAT 601 - COU | 0 | 0 | 0 | 231.4981 | 6.990291 | 0 | 112.1975 |
| 27 BUCHANAT 602-GARC | 0 | 0 | 0 | 298.6325 | 4.660194 | 0 | 139.3611 |
| 27 BUCHANAT 603 - HURF | 0 | 0 | 0 | 175.9385 | 5.825243 | 0 | 121.6457 |
| 27 BUCHANAP 701 - WHIT | 0 | 0 | 0 | 431.7439 | 11.65049 | 0 | 273.9982 |
| 27 BUCHANAP $702-\mathrm{CONT}$ | 0 | 0 | 0 | 335.6722 | 3.495146 | 0 | 191.3263 |
| 29 BUCKINGH. 101 - NEW | 247.4815 | 0 | 0 | 365.1468 | 0 | 225.4323 | 0 |
| 29 BUCKINGH. 102 - GEOI | 60.31062 | 0 | 0 | 104.4784 | 0 | 60.53275 | 0 |
| 29 BUCKINGH. 201 - WHIT | 161.1749 | 0 | 0 | 224.7869 | 0 | 147.1572 | 0 |
| 29 BUCKINGH. 301 -CURL | 183.0115 | 0 | 0 | 306.0479 | 2 | 177.4236 | 0 |
| 29 BUCKINGH. 302 -NEW | 89.4261 | 0 | 0 | 256.447 | 0 | 86.62445 | 0 |
| 29 BUCKINGH. 401 - MAYS | 308.832 | 0 | 0 | 496.0086 | 0 | 275.5284 | 0 |
| 29 BUCKINGH. 501 -WRIG | 64.46998 | 0 | 0 | 210.0122 | 0 | 63.66376 | 0 |
| 29 BUCKINGH. 502 -GLEN | 229.8043 | 0 | 0 | 202.6248 | 0 | 214.9956 | 0 |
| 29 BUCKINGH. 601 -SLATE | 293.2344 | 0 | 0 | 262.779 | 0 | 275.5284 | 0 |
| 29 BUCKINGH. 701 -GOLL | 163.2546 | 0 | 0 | 260.6684 | 0 | 146.1135 | 0 |
| 31 CAMPBELL 101 - BROC | 282.7382 | 0 | 0 | 1002.888 | 1.1 | 0 | 0 |
| 31 CAMPBELL 102 - NEW | 253.5116 | 0 | 0 | 911.8512 | 3.3 | 0 | 0 |
| 31 CAMPBELL 201 - WALk | 236.8324 | 0 | 0 | 658.3378 | 1.1 | 0 | 0 |
| 31 CAMPBELL 202 - BEDF | 305.4015 | 0 | 0 | 1027.203 | 3 | 0 | 0 |
| 31 CAMPBELL 301 - EVIN( | 143.841 | 0 | 0 | 343.0879 | 2 | 0 | 0 |
| 31 CAMPBELL 302-OTTE | 117.7828 | 0 | 0 | 352.3605 | 0 | 0 | 0 |
| 31 CAMPBELL 303 - ALTA' | 465.9196 | 0 | 0 | 789.2052 | 2 | 0 | 0 |
| 31 CAMPBELL 401 -THRE | 209.5075 | 0 | 0 | 759.3267 | 1 | 181.2285 | 0 |
| 31 CAMPBELL 402 - COUF | 382.5336 | 0 | 0 | 1185.868 | 5 | 0 | 0 |
| 31 CAMPBELL 501 -SPRIN | 253.4671 | 0 | 0 | 938.2918 | 5.4 | 0 | 0 |
| 31 CAMPBELL 502 - YELLC | 268.9201 | 0 | 0 | 588.2979 | 1 | 0 | 0 |
| 31 CAMPBELL 601 - KING! | 235.7149 | 0 | 0 | 610.5651 | 1.1 | 0 | 0 |
| 31 CAMPBELL 602 -CONC | 327.2903 | 0 | 0 | 1046.779 | 3 | 12.57077 | 0 |
| 31 CAMPBELL 701 - BROC | 248.4541 | 0 | 0 | 562.4 | 0 | 257.7007 | 0 |
| 31 CAMPBELL 702 -GLAD | 348.3457 | 0 | 0 | 724.5253 | 2 | 335.2204 | 0 |
| 31 CAMPBELL 703 -MORI | 122.7397 | 0 | 0 | 355.012 | 0 | 116.2796 | 0 |
| 33 CAROLINE 101 - BOW | 284.4063 | 0 | 0 | 636.3168 | 0 | 278.9798 | 0 |
| 33 CAROLINE 102 -SPAR | 239.494 | 0 | 0 | 446.1998 | 0 | 229.871 | 0 |
| 33 CAROLINE 201 - NORT | 346.8981 | 0 | 0 | 314.7605 | 0 | 350.0309 | 0 |
| 33 CAROLINE 202 - SOUT | 361.5705 | 0 | 0 | 447.7287 | 0 | 363.6142 | 0 |
| 33 CAROLINE 301 -PORT | 125.4723 | 0 | 0 | 235.3042 | 0 | 121.2047 | 0 |
| 33 CAROLINE 302 -WOO | 287.1873 | 0 | 0 | 559.4636 | 0 | 340.6271 |  |
| 33 CAROLINE 401 - DAW | 687.5079 | 0 | 0 | 439.4182 | 2 | 699.0169 | 0 |


| 33 CAROLINE 402 - CARN | 228.4706 | 0 | 0 | 165.1714 | 1 | 229.871 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 CAROLINE 501 - WEST | 462.1814 | 0 | 0 | 288.7902 | 1 | 454.5177 | 0 |
| 33 CAROLINE 502 - MILFI | 243.1066 | 0 | 0 | 383.579 | 1 | 239.2749 | 0 |
| 33 CAROLINE 601 -CHILE | 345.85 | 0 | 0 | 382.2834 | 0 | 346.8963 | 0 |
| 33 CAROLINE 602 -LAKE | 236.8549 | 0 | 0 | 293.9843 | 0 | 235.0954 | 0 |
| 35 CARROLL C 101 - MT B | 62.37254 | 0 | 0 | 232.5034 | 0 | 0 | 65.9717 |
| 35 CARROLL C 102 -ST PA | 68.71551 | 0 | 0 | 371.5902 | 1 | 0 | 61.78302 |
| 35 CARROLL C $103-\mathrm{LAME}$ | 29.60053 | 0 | 0 | 195.1368 | 2 | 0 | 29.32075 |
| 35 CARROLL C 105 -FANC | 91.97306 | 0 | 0 | 348.755 | 1 | 0 | 82.72642 |
| 35 CARROLL C 201 - HILLS | 241.0329 | 0 | 0 | 795.0785 | 0 | 0 | 210.4811 |
| 35 CARROLL C 202 -LAUR | 93.03022 | 0 | 0 | 297.8949 | 0 | 0 | 78.53774 |
| 35 CARROLL C 203 -GLAD | 113.1163 | 0 | 0 | 441.1336 | 0 | 0 | 113.0943 |
| 35 CARROLL C 301 - HILLS | 212.4895 | 0 | 0 | 997.4809 | 4 | 207.4387 | 0 |
| 35 CARROLL C 302 -SYLV t | 71.88699 | 0 | 0 | 335.2615 | 0 | 70.57194 | 0 |
| 35 CARROLL C 303 -DUGS | 43.34363 | 0 | 0 | 212.7821 | 0 | 40.63233 | 0 |
| 35 CARROLL C 401 - OAKL | 130.0309 | 0 | 0 | 609.2834 | 0 | 0 | 114.1415 |
| 35 CARROLL C 402 - Woo | 143.774 | 0 | 0 | 612.3973 | 0 | 0 | 131.9434 |
| 35 CARROLL C 406 - WOO | 26.42904 | 0 | 0 | 102.7582 | 0 | 23.52398 | 0 |
| 35 CARROLL C 501 -VAUG | 42.28647 | 0 | 0 | 194.0988 | 0 | 39.56306 | 0 |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 102.5447 | 0 | 0 | 566.7269 | 0 | 90.8881 | 0 |
| 35 CARROLL C $503-$ WOO | 72.94415 | 0 | 0 | 314.5023 | 0 | 65.22558 | 0 |
| 35 CARROLL C 504 -LAUR | 63.4297 | 0 | 0 | 317.6162 | 0 | 64.15631 | 0 |
| 36 CHARLES C 101 - PREC | 735.1895 | 0 | 0 | 0 | 69.66851 | 603.0616 | 0 |
| 36 CHARLES C 201 - PREC | 795.7216 | 0 | 0 | 0 | 55.73481 | 695.4123 | 0 |
| 36 CHARLES C 301 - PREC | 734.0889 | 0 | 0 | 0 | 68.59669 | 617.5261 | 0 |
| 37 CHARLOTTI 101 - COUN | 217.9877 | 0 | 0 | 417.3295 | 0 | 223.661 | 0 |
| 37 CHARLOTTI201-RED ( | 208.3232 | 0 | 0 | 391.5684 | 1 | 206.3732 | 0 |
| 37 CHARLOTTI 302 - DRAK | 168.5915 | 0 | 0 | 328.7114 | 0 | 173.9585 | 0 |
| 37 CHARLOTT। 401 - KEYSI | 167.5176 | 0 | 0 | 411.1468 | 0 | 169.6366 | 0 |
| 37 CHARLOTTI501-CULLI | 170.7391 | 0 | 0 | 358.5942 | 0 | 171.7976 | 0 |
| 37 CHARLOTTI602-PHEN | 163.2223 | 0 | 0 | 445.1514 | 1 | 166.3951 | 0 |
| 37 CHARLOTTI 702 - BACC | 212.6185 | 0 | 0 | 321.4983 | 0 | 217.178 | 0 |
| 41 CHESTERFII 101 - BELL | 624.0963 | 0 | 0 | 0 | 79.20918 | 490.3532 | 335.5009 |
| 41 CHESTERFII 102 - SOUT | 664.8021 | 0 | 0 | 919.8142 | 4.108108 | 720.8069 | 0 |
| 41 CHESTERFII 103 - ENON | 760.9817 | 0 | 0 | 1341.708 | 1.027027 | 857.0703 | 1016.058 |
| 41 CHESTERFII 104 - NORT | 640.493 | 0 | 0 | 1244.265 | 4.108108 | 714.4281 | 0 |
| 41 CHESTERFII 105 - DREV | 624.0963 | 0 | 0 | 0 | 87.65816 | 538.5503 | 325.9454 |
| 41 CHESTERFII 106 - HARR | 1254.563 | 0 | 0 | 1090.071 | 4.108108 | 1210.166 | 956.6021 |
| 41 CHESTERFII 107 - WELL | 788.4616 | 0 | 0 | 778.469 | 1.027027 | 816.4892 | 0 |
| 41 CHESTERFII 108 - ECOF | 884.6413 | 0 | 0 | 1662.947 | 2.054054 | 962.139 | 0 |
| 41 CHESTERFII 109 -ELIZA | 1109.765 | 0 | 0 | 1388.823 | 3.081081 | 1129.489 | 1116.921 |
| 41 CHESTERFII 110 - DUTC | 553.8256 | 0 | 0 | 659.6106 | 2.054054 | 506.0696 | 622.163 |
| 41 CHESTERFII 111 - IRON | 505.1955 | 24.58621 | 0 | 889.2689 | 2 | 564.5258 | 0 |
| 41 CHESTERFII 112 - CARV | 736.6726 | 0 | 0 | 738.8496 | 1.027027 | 710.3834 | 629.595 |
| 41 CHESTERFII 113 -IRON | 742.9345 | 23.51724 | 0 | 727.1854 | 2 | 790.974 | 0 |
| 41 CHESTERFII 201 -GATE | 527.4835 | 21.37931 | 0 | 789.6095 | 2 | 562.3995 | 0 |
| 41 CHESTERFII 202 - BEUL. | 1349.765 | 0 | 0 | 0 | 110.8929 | 1204.534 |  |

$\left.\begin{array}{lrrrrrrr}41 \text { CHESTERFII203 - BIRD } & 196.347 & 5.344828 & 0 & 306.6445 & 0 & 207.3117 & 0 \\ 41 \text { CHESTERFII204 - JACO } & 625.735 & 0 & 0 & 479.6163 & 1.027027 & 628.314 & 0 \\ 41 \text { CHESTERFII205 - FALLI } & 1278.56 & 0 & 0 & 0 & 87.65816 & 1182.208 & 0 \\ 41 \text { CHESTERFII206 - BELM } & 807.6759 & 11.75862 & 0 & 152.2271 & 1 & 799.9135 & 0 \\ 41 \text { CHESTERFII207 - CHIPF } & 412.8593 & 8.551724 & 0 & 170.8448 & 0 & 406.3221 & 0 \\ 41 \text { CHESTERFII208 - MEA[ } & 1188.506 & 0 & 0 & 0 & 45.41327 & 1061.011 & 0 \\ 41 \text { CHESTERFII209 - SALEI } & 850.3812 & 6.413793 & 0 & 1007.429 & 15.40541 & 920.6767 & 0 \\ 41 \text { CHESTERFII210 - FIVE I } & 1501.789 & 52.37931 & 0 & 846.5577 & 0 & 1547.928 & 0 \\ 41 \text { CHESTERFII211 - NASH } & 807.6759 & 22.44828 & 0 & 1918.718 & 1 & 964.2653 & 0 \\ 41 \text { CHESTERFII212 - ST. LI } & 464.289 & 0 & 0 & 555.1795 & 1.027027 & 483.7273 & 0 \\ 41 \text { CHESTERFII213 - SOUT } & 736.5665 & 19.24138 & 0 & 192.7479 & 1 & 736.754 & 0 \\ 41 \text { CHESTERFII214 - HOPK } & 154.9769 & 0 & 0 & 0 & 3.168367 & 138.3047 & 27.6045 \\ 41 \text { CHESTERFII215 - Nortr } & 475.4781 & 8.551724 & 0 & 201.5092 & 0 & 484.7905 & 0 \\ 41 \text { CHESTERFII216 - RIDGI } & 1288.461 & 26.72414 & 0 & 307.7396 & 2 & 1299.153 & 0 \\ 41 \text { CHESTERFII301 - ETTRI } & 1306.503 & 12.82759 & 0 & 361.4024 & 4 & 1245.79 & 362.0436 \\ 41 \text { CHESTERFII302 - DEER } & 289.1254 & 0 & 0 & 441.8347 & 0 & 293.4258 & 0 \\ 41 \text { CHESTERFII303 - MATC } & 1048.599 & 13.89655 & 0 & 0 & 1192.628 & 1 & 1136.823\end{array}\right) 835.567$

| 41 CHESTERFII417-EDGE | 448.5409 | 0 | 0 | 496.8728 | 0 | 477.3485 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII501-HUGI | 747.0832 | 0 | 0 | 595.0601 | 0 | 724.59 | 0 |
| 41 CHESTERFII502-CRES | 520.2147 | 0 | 0 | 470.1709 | 3.081081 | 506.046 | 0 |
| 41 CHESTERFII503-MIDL | 799.898 | 0 | 0 | 1120.087 | 2 | 789.3045 | 0 |
| 41 CHESTERFII504-ROBII | 1274.707 | 0 | 0 | 1641.938 | 3 | 1224.271 | 0 |
| 41 CHESTERFIII505-BON, | 1114.839 | 0 | 0 | 934.9341 | 4 | 1096.964 | 0 |
| 41 CHESTERFII506-GREE | 1015.319 | 0 | 0 | 798.8094 | 2 | 981.3262 | 0 |
| 41 CHESTERFIII507-SALIS | 990.9681 | 0 | 0 | 1619.779 | 1 | 964.3519 | 0 |
| 41 CHESTERFII508-BELG | 862.8622 | 0 | 0 | 857.9023 | 3 | 829.6185 | 0 |
| 41 CHESTERFII 509 - CRAN | 722.0515 | 0 | 0 | 452.6938 | 1 | 708.6766 | 0 |
| 41 CHESTERFII510-SYCAI | 897.8002 | 0 | 0 | 1158.643 | 1 | 936.6237 | 0 |
| 41 CHESTERFII511-BLAC | 577.006 | 0 | 0 | 829.4111 | 3 | 548.4818 | 0 |
| 41 CHESTERFII513-BEAU | 492.7795 | 0 | 0 | 184.71 | 0 | 482.7064 | 0 |
| 41 CHESTERFII514-WATr | 940.1852 | 0 | 0 | 1307.663 | 3.081081 | 902.8201 | 0 |
| 41 CHESTERFII515-DAVI! | 1123.954 | 25.65517 | 0 | 258.4575 | 1 | 1101.207 | 0 |
| 41 CHESTERFII516-POCC | 690.1023 | 0 | 0 | 211.9967 | 2.054054 | 698.481 | 0 |
| 41 CHESTERFII517-ROSE | 360.9687 | 0 | 0 | 599.8571 | 1 | 372.098 | 0 |
| 41 CHESTERFII518-MIDL | 772.1312 | 0 | 0 | 1332.426 | 1 | 763.8431 | 0 |
| 43 CLARKE CO 101 - RUSS | 397.4611 | 0 | 0 | 778.1423 | 0 | 376.0365 | 0 |
| 43 CLARKE CO 201 - BERR | 458.3624 | 0 | 0 | 448.5271 | 1 | 453.6142 | 0 |
| 43 CLARKE CO 301 - MILLI | 345.5763 | 0 | 0 | 460.5751 | 0 | 327.5504 | 0 |
| 43 CLARKE CO 302 - PINE | 134.6239 | 0 | 0 | 194.014 | 1 | 127.1413 | 0 |
| 43 CLARKE CO 401 - WHIT | 469.2148 | 0 | 0 | 663.1734 | 0 | 444.9944 | 0 |
| 43 CLARKE CO 501 - BUCK | 289.5483 | 0 | 0 | 407.8467 | 1 | 275.8319 | 0 |
| 43 CLARKE CO 502 - BLUE | 128.2133 | 0 | 0 | 162.7214 | 0 | 122.8314 | 0 |
| 45 CRAIG COU 101 - COUF | 63.08943 | 0 | 0 | 310.3594 | 0 | 0 | 0 |
| 45 CRAIG COU 201 - AMM | 63.08943 | 0 | 0 | 355.1429 | 2 | 0 | 0 |
| 45 CRAIG COU 301 - GIVEI | 65.19241 | 0 | 0 | 149.9724 | 0 | 0 | 0 |
| 45 CRAIG COU 303 - MAR | 55.729 | 0 | 0 | 133.3088 | 0 | 0 | 0 |
| 45 CRAIG COU 401 - BARB | 35.75068 | 0 | 0 | 161.4286 | 0 | 0 | 0 |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 8.411924 | 0 | 0 | 20.82949 | 0 | 0 | 0 |
| 45 CRAIG COU 403 - CRAIC | 34.69919 | 0 | 0 | 130.1843 | 0 | 0 | 0 |
| 45 CRAIG COU501-CRAIC | 62.03794 | 0 | 0 | 320.7742 | 1 | 0 | 0 |
| 47 CULPEPER 101-WEST | 1020.023 | 0 | 0 | 0 | 817.966 | 907.1218 | 0 |
| 47 CULPEPER 201 - EAST | 877.7338 | 0 | 0 | 49.3962 | 499.664 | 797.5695 | 0 |
| 47 CULPEPER 302 -EGGB | 252.5604 | 0 | 0 | 614.8251 | 56.3125 | 254.1634 | 0 |
| 47 CULPEPER 303 -CARD | 283.5793 | 0 | 0 | 0 | 490.1389 | 213.2388 | 0 |
| 47 CULPEPER 304 - WILL | 184.3805 | 0 | 0 | 0 | 152.7012 | 155.8444 | 0 |
| 47 CULPEPER 401 - ELDO | 376.3087 | 0 | 0 | 0 | 611.8727 | 326.32 | 0 |
| 47 CULPEPER 402 - BROV | 589.8019 | 0 | 0 | 0 | 1003.77 | 525.4386 | 0 |
| 47 CULPEPER 501 - JEFFE | 427.4099 | 0 | 0 | 805.053 | 27.625 | 395.2272 | 0 |
| 47 CULPEPER 502 - RIXEY | 333.5093 | 0 | 0 | 805.053 | 32.9375 | 313.7056 | 0 |
| 47 CULPEPER 601 - MITC | 85.18162 | 0 | 0 | 0 | 126.0052 | 74.16043 | 0 |
| 47 CULPEPER 602 - PEAR | 598.4279 | 0 | 0 | 0 | 811.5589 | 536.4045 | 0 |
| 47 CULPEPER 603 - SOUT | 213.4932 | 0 | 0 | 0 | 190.0756 | 199.9107 | 0 |
| 47 CULPEPER 702 - BRAN | 410.1334 | 0 | 0 | 879.6728 | 81.87125 | 383.393 | 0 |
| 47 CULPEPER 703 -LIGNI | 198.3977 | 0 | 0 | 0 | 414.3222 | 159.3449 | 0 |


| 47 CULPEPER 704 - RICH $/$ | 111.0596 | 0 | 0 | 0 | 223.1787 | 86.15709 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 CUMBERLA 101 - PREC | 233.3045 | 0 | 0 | 441.683 | 2 | 222.9981 | 0 |
| 49 CUMBERLA 201 - PREC | 211.9982 | 0 | 0 | 474.206 | 1 | 212.3284 | 0 |
| 49 CUMBERLA 301 - PREC | 304.6808 | 0 | 0 | 278.019 | 0 | 311.5572 | 0 |
| 49 CUMBERLA 401 - PREC | 194.9531 | 0 | 0 | 437.4865 | 1 | 190.9888 | 0 |
| 49 CUMBERLA 501 - PREC | 213.0635 | 0 | 0 | 354.6054 | 1 | 209.1274 | 0 |
| 51 DICKENSOP 101 - SOUT | 665.5177 | 0 | 0 | 607.7066 | 1 | 0 | 403.2289 |
| 51 DICKENSOP 201 - NORA | 223.8895 | 0 | 0 | 151.9267 | 0 | 0 | 143.0056 |
| 51 DICKENSOP 202-FRYIN | 72.57956 | 0 | 0 | 69.05757 | 0 | 0 | 51.5758 |
| 51 DICKENSOP 203-CLINC | 284.1674 | 0 | 0 | 226.739 | 1 | 0 | 186.3762 |
| 51 DICKENSOP 301 - WEST | 46.74616 | 0 | 0 | 134.6623 | 0 | 0 | 56.2645 |
| 51 DICKENSOP 302 - HERA | 121.786 | 0 | 0 | 158.8324 | 0 | 0 | 82.0524 |
| 51 DICKENSOP 303 -RIDGI | 269.4055 | 0 | 0 | 318.8158 | 0 | 0 | 172.31 |
| 51 DICKENSOP 401 - HAYS | 629.843 | 0 | 0 | 430.4588 | 1 | 0 | 403.2289 |
| 51 DICKENSOP 501 -TARP | 170.9925 | 0 | 0 | 139.2661 | 1 | 0 | 99.63506 |
| 51 DICKENSOP 502 - NORT | 476.0727 | 0 | 0 | 461.5348 | 1 | 0 | 281.3225 |
| 53 DINWIDDIE 101 - WHIT | 91.55391 | 208.7192 | 0 | 0 | 10.33333 | 69.71889 | 0 |
| 53 DINWIDDIE 102-ROCK | 146.4863 | 333.9507 | 0 | 0 | 2.066667 | 129.4779 | 0 |
| 53 DINWIDDIE 103-CHUR | 187.4162 | 551.0187 | 0 | 0 | 18.6 | 158.2508 | 0 |
| 53 DINWIDDIE 201 - ROHC | 282.2015 | 130.4495 | 0 | 0 | 2.066667 | 269.6883 | 104.914 |
| 53 DINWIDDIE 202-SUTH | 466.3864 | 570.847 | 0 | 0 | 8.266667 | 442.6491 | 518.2752 |
| 53 DINWIDDIE 301 - REAN | 114.1731 | 202.4576 | 0 | 0 | 1.033333 | 115.0915 | 0 |
| 53 DINWIDDIE 302 - NEW | 255.2739 | 313.0788 | 0 | 0 | 2.066667 | 260.133 | 288.5135 |
| 53 DINWIDDIE 303-LITTL | 431.9191 | 339.1687 | 0 | 0 | 3.1 | 412.7801 | 0 |
| 53 DINWIDDIE 401 - DIN | 368.3699 | 473.7926 | 0 | 0 | 7.233333 | 341.9546 | 0 |
| 53 DINWIDDIE 402 - MCKE | 206.8041 | 232.7219 | 0 | 0 | 2.066667 | 189.237 | 0 |
| 53 DINWIDDIE 403-CHER | 207.8812 | 156.5394 | 0 | 0 | 2.066667 | 189.237 | 0 |
| 53 DINWIDDIE 501 -EDGE | 105.5563 | 35.48226 | 0 | 0 | 1.033333 | 99.92465 | 40.91646 |
| 53 DINWIDDIE 502-CHES | 781.9781 | 305.7736 | 0 | 0 | 2.066667 | 747.8571 | 328.3808 |
| 57 ESSEX COU 101 - GREA | 356.203 | 0 | 0 | 404.3612 | 3 | 351.0598 | 0 |
| 57 ESSEX COU 201 - NORT | 435.1222 | 0 | 0 | 318.3946 | 1 | 431.0887 | 0 |
| 57 ESSEX COU 301 - SOUT | 333.807 | 0 | 0 | 635.728 | 0 | 327.5847 | 0 |
| 57 ESSEX COU 401 - CENT | 366.8678 | 0 | 0 | 545.5162 | 2 | 370.2668 | 0 |
| 59 FAIRFAX C 104 - CHAP | 890.1942 | 0 | 0 | 458.7207 | 2.355556 | 975.6598 | 0 |
| 59 FAIRFAX CC 105 - FAIR | 1549.896 | 353.7019 | 151.0508 | 0 | 43.79843 | 1710.43 | 0 |
| 59 FAIRFAX CC 106 - HERI7 | 1023.601 | 0 | 0 | 0 | 49.36275 | 1033.957 | 0 |
| 59 FAIRFAX C( 108 - KING! | 764.5707 | 0 | 0 | 424.6626 | 3.533333 | 878.8638 | 0 |
| 59 FAIRFAX CC 109 - LITTL | 440.438 | 134.5369 | 31.74256 | 0 | 7.861257 | 503.9243 | 0 |
| 59 FAIRFAX C ( 110 - NORT | 1183.677 | 0 | 0 | 622.6256 | 5.888889 | 1332.214 | 0 |
| 59 FAIRFAX C ( 113 - CANT | 1455.5 | 0 | 0 | 659.8767 | 2.355556 | 1660.508 | 0 |
| 59 FAIRFAX CC 114 - OLDE | 709.1609 | 244.1194 | 54.72855 | 0 | 23.58377 | 842.4638 | 0 |
| 59 FAIRFAX C ( 115 - RAVE | 551.2273 | 0 | 0 | 323.5524 | 2.355556 | 631.3346 | 0 |
| 59 FAIRFAX C( 116 - WAKI | 932.4297 | 0 | 0 | 355.4819 | 2.355556 | 1011.179 | 0 |
| 59 FAIRFAX CC 117 - WOO | 877.5309 | 264.7339 | 94.1331 | 0 | 22.46073 | 1036.708 | 0 |
| 59 FAIRFAX C 118 - LAKE | 1169.669 | 247.3743 | 146.6725 | 0 | 26.95288 | 1319.946 | 0 |
| 59 FAIRFAX C 119 - LAUR | 1256.642 | 390.591 | 163.0911 | 0 | 30.32199 | 1470.704 | 0 |
| 59 FAIRFAX CC 120 - SIDEE | 1229.591 | 0 | 0 | 0 | 130.1103 | 1230.952 |  |


| 59 FAIRFAX C( 121 - VILLA | 666.7114 | 0 | 0 | 0 | 77.39321 | 697.0583 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX C( 123 - ROBII | 1213.156 | 360.2117 | 147.7671 | 0 | 29.19895 | 1451.835 | 0 |
| 59 FAIRFAX C( $125-$ SIGN, | 1023.6 | 308.1329 | 93.03853 | 0 | 20.21466 | 1129.653 | 0 |
| 59 FAIRFAX CC 126 - BON | 818.4341 | 196.3805 | 73.33625 | 0 | 11.23037 | 935.7009 | 0 |
| 59 FAIRFAX C( 127 - BURK | 1349.19 | 295.1132 | 164.1856 | 0 | 32.56806 | 1482.739 | 0 |
| 59 FAIRFAX C( 128 - CARD | 745.8891 | 0 | 0 | 370.7533 | 2.608696 | 812.8025 | 0 |
| 59 FAIRFAX CC 129 - KEEN | 596.7113 | 0 | 0 | 305.4564 | 1.304348 | 636.7678 | 0 |
| 59 FAIRFAX C( $130-\mathrm{TERR}$, | 816.204 | 197.4655 | 103.9842 | 0 | 23.58377 | 907.4626 | 0 |
| 59 FAIRFAX C( 131 - EAGL | 1020.833 | 0 | 0 | 0 | 114.4074 | 1029.558 | 0 |
| 59 FAIRFAX CC 132 - MON | 1127.944 | 0 | 0 | 0 | 77.39321 | 1132.953 | 0 |
| 59 FAIRFAX CC 133 - DANE | 229.5878 | 0 | 0 | 105.3674 | 1.177778 | 251.0126 | 0 |
| 59 FAIRFAX CC 134 - UNIV | 610.9699 | 0 | 0 | 0 | 19.06789 | 624.9105 | 0 |
| 59 FAIRFAX CC 201 - Arms | 1306.894 | 0 | 0 | 0 | 119.9672 | 1243.258 | 0 |
| 59 FAIRFAX CC 202 - FLINT | 1088.709 | 0 | 0 | 0 | 124.2904 | 1005.427 | 0 |
| 59 FAIRFAX CC 203 - FLOR | 1192.668 | 0 | 0 | 0 | 144.1861 | 1164.357 | 0 |
| 59 FAIRFAX CC 204 - MADI | 268.7537 | 0 | 0 | 0 | 18.74323 | 263.0618 | 0 |
| 59 FAIRFAX CC 208 -REST | 1290.281 | 0 | 0 | 0 | 82.13974 | 1250.021 | 0 |
| 59 FAIRFAX CC 209 - REST | 1301.356 | 0 | 0 | 0 | 81.05895 | 1253.402 | 0 |
| 59 FAIRFAX C( 213 - VIEN | 1460.229 | 0 | 0 | 0 | 117.9721 | 1444.065 | 0 |
| 59 FAIRFAX CC 214 - VIEN | 1135.485 | 0 | 0 | 0 | 70.56276 | 1116.625 | 0 |
| 59 FAIRFAX CC 216 - VIEN | 555.4244 | 0 | 0 | 0 | 39.69155 | 544.993 | 0 |
| 59 FAIRFAX CC 218 - VIEN | 810.7405 | 0 | 0 | 0 | 50.71698 | 802.505 | 0 |
| 59 FAIRFAX CC 219 - WEST | 1206.645 | 0 | 0 | 586.0544 | 0 | 1194.79 | 0 |
| 59 FAIRFAX CC 220 - DOG | 1414.325 | 0 | 0 | 0 | 112.4017 | 1344.702 | 0 |
| 59 FAIRFAX CC 221 - HUN1 | 1208.323 | 0 | 0 | 0 | 101.5939 | 1157.594 | 0 |
| 59 FAIRFAX CC 222 -REST | 938.084 | 0 | 0 | 0 | 47.55459 | 920.8899 | 0 |
| 59 FAIRFAX CC 223 - GLAD | 1571.595 | 0 | 0 | 0 | 104.8362 | 1529.556 | 0 |
| 59 FAIRFAX CC 224 - SOUT | 1995.782 | 0 | 0 | 0 | 112.4017 | 1956.75 | 0 |
| 59 FAIRFAX CC 225 - HUG | 1402.142 | 0 | 0 | 0 | 78.89738 | 1362.737 | 0 |
| 59 FAIRFAX CC 226 - WOLI | 1244.933 | 0 | 0 | 630.5367 | 1.076923 | 1219.587 | 0 |
| 59 FAIRFAX CC 227 - SUNR | 646.8017 | 0 | 0 | 0 | 68.08952 | 616.5567 | 0 |
| 59 FAIRFAX CC $229-$ FOX | 1526.441 | 0 | 0 | 0 | 210.3166 | 1501.377 | 0 |
| 59 FAIRFAX CC 233 - NORT | 1150.731 | 0 | 0 | 0 | 110.2402 | 1098.981 | 0 |
| 59 FAIRFAX CC 234 - ALDR | 1054.375 | 0 | 0 | 0 | 79.97817 | 1011.063 | 0 |
| 59 FAIRFAX CC 235 - FRYIN | 935.869 | 0 | 0 | 0 | 85.3821 | 835.2464 | 0 |
| 59 FAIRFAX CC 236 - STUA | 495.767 | 0 | 0 | 0 | 111.6629 | 513.9851 | 0 |
| 59 FAIRFAX C( 237 - MCN, | 959.1272 | 0 | 0 | 0 | 60.52402 | 848.1293 | 0 |
| 59 FAIRFAX C( 238 - CAMI | 1056.591 | 0 | 0 | 0 | 84.30131 | 988.5196 | 0 |
| 59 FAIRFAX CC $240-\mathrm{COLV}$ | 701.9427 | 0 | 0 | 526.0033 | 0 | 806.3846 | 0 |
| 59 FAIRFAX CC 301 - CHAII | 972.2777 | 0 | 0 | 538.2359 | 2.153846 | 1063.643 | 0 |
| 59 FAIRFAX CC 302 - CHES | 988.806 | 0 | 0 | 0 | 97.08793 | 958.6633 | 0 |
| 59 FAIRFAX CC 303 - CHUR | 482.6581 | 0 | 0 | 304.7038 | 3.230769 | 568.7377 | 0 |
| 59 FAIRFAX CC 304 - COOF | 565.0349 | 0 | 0 | 389.2202 | 0 | 624.1117 | 0 |
| 59 FAIRFAX CC 305 - EL NII | 914.9434 | 0 | 0 | 0 | 67.84458 | 817.1912 | 0 |
| 59 FAIRFAX CC 306 -GREA | 581.2782 | 0 | 0 | 534.8997 | 0 | 691.022 | 0 |
| 59 FAIRFAX CC 307 - HAYC | 1023.355 | 0 | 0 | 0 | 71.35378 | 899.4739 | 0 |
| 59 FAIRFAX CC 309 - KENN | 1012.886 | 0 | 0 | 713.941 | 1.076923 | 1161.701 | 0 |


| 59 FAIRFAX CC 310 - KIRBY | 783.8968 | 0 | 0 | 0 | 71.35378 | 695.4579 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 311 - LANG | 583.5987 | 0 | 0 | 415.9096 | 0 | 628.7262 | 0 |
| 59 FAIRFAX CC 312 -LONG | 955.4487 | 0 | 0 | 0 | 83.05112 | 861.1504 | 0 |
| 59 FAIRFAX CC 314 - MCLE | 826.7848 | 0 | 0 | 0 | 70.18405 | 737.1628 | 0 |
| 59 FAIRFAX CC 315 - PIMN | 1015.426 | 0 | 0 | 0 | 95.28058 | 984.0109 | 0 |
| 59 FAIRFAX C( 316 - SALO | 303.9818 | 0 | 0 | 164.5845 | 1.076923 | 333.3979 | 0 |
| 59 FAIRFAX CC 317 - WEST | 770.2857 | 0 | 0 | 0 | 72.54317 | 730.3999 | 0 |
| 59 FAIRFAX CC 318 - WEST | 531.3343 | 0 | 0 | 0 | 38.60123 | 471.153 | 0 |
| 59 FAIRFAX CC 319 - HERN | 1239.418 | 0 | 0 | 0 | 261.2695 | 1172.351 | 0 |
| 59 FAIRFAX CC 320 - HERN | 1290.516 | 0 | 0 | 0 | 104.0742 | 1212.073 | 0 |
| 59 FAIRFAX CC 321 - CLEAI | 1318.784 | 0 | 0 | 0 | 199.4755 | 1398.195 | 0 |
| 59 FAIRFAX CC 322 - FORE | 772.7171 | 0 | 0 | 959.7058 | 1.076923 | 978.2749 | 0 |
| 59 FAIRFAX CC $323-\mathrm{SHOL}$ | 747.1919 | 0 | 0 | 454.8316 | 0 | 866.3732 | 0 |
| 59 FAIRFAX CC 324 - HERN | 1088.296 | 0 | 0 | 0 | 102.9901 | 1026.344 | 0 |
| 59 FAIRFAX CC 325 - HUTC | 659.9355 | 0 | 0 | 0 | 42.28013 | 623.7508 | 0 |
| 59 FAIRFAX CC 327 - SUGA | 1167.662 | 0 | 0 | 0 | 137.6815 | 1262.067 | 0 |
| 59 FAIRFAX CC 328 - HICKC | 887.5805 | 0 | 0 | 820.6986 | 2.153846 | 1102.867 | 0 |
| 59 FAIRFAX CC 329 - SENEI | 893.3816 | 0 | 0 | 994.1796 | 1.076923 | 1130.554 | 0 |
| 59 FAIRFAX CC 331 - SPRIN | 650.8923 | 0 | 0 | 451.4954 | 1.076923 | 759.086 | 0 |
| 59 FAIRFAX CC 332 - COAT | 1012.191 | 0 | 0 | 0 | 82.39205 | 952.2667 | 0 |
| 59 FAIRFAX CC 333 - SALO | 600.4316 | 0 | 0 | 0 | 72.52352 | 587.1957 | 0 |
| 59 FAIRFAX CC 401 - BUSH | 1155.319 | 357.9445 | 0 | 0 | 28.88889 | 1124.094 | 0 |
| 59 FAIRFAX CC 402 - CAMI | 354.2978 | 112.0617 | 0 | 0 | 14.44444 | 384.9144 | 0 |
| 59 FAIRFAX CC 403 - FORE | 414.7742 | 0 | 0 | 154.326 | 0 | 424.2902 | 0 |
| 59 FAIRFAX CC 404 - FRAN | 1030.985 | 246.9708 | 0 | 0 | 27.77778 | 1110.162 | 0 |
| 59 FAIRFAX CC 405 -GRO\ | 546.9818 | 0 | 0 | 155.4672 | 1.125 | 591.3177 | 0 |
| 59 FAIRFAX CC 406 - HAYF | 759.5106 | 0 | 0 | 468.6225 | 1.125 | 907.0591 | 0 |
| 59 FAIRFAX CC 408 - MOU | 901.1488 | 144.701 | 0 | 0 | 15.55556 | 958.381 | 0 |
| 59 FAIRFAX CC 409 - PION | 1024.481 | 0 | 0 | 383.1542 | 4.711111 | 1063.481 | 0 |
| 59 FAIRFAX CC 410 - ROSE | 1243.343 | 444.9827 | 0 | 0 | 24.44444 | 1346.337 | 0 |
| 59 FAIRFAX CC 411 - VIRGI | 715.1974 | 209.9796 | 0 | 0 | 18.88889 | 800.8437 | 0 |
| 59 FAIRFAX CC 413 - FAIRF | 662.1948 | 0 | 0 | 113.269 | 1.125 | 707.9777 | 0 |
| 59 FAIRFAX CC 415 - CRES | 694.1782 | 0 | 0 | 376.7683 | 4.711111 | 799.7629 | 0 |
| 59 FAIRFAX CC 417 - GARF | 872.8668 | 0 | 0 | 447.0132 | 3.533333 | 892.6625 | 0 |
| 59 FAIRFAX CC 418 - LYNB | 505.7429 | 0 | 0 | 218.185 | 0 | 577.0029 | 0 |
| 59 FAIRFAX CC 419 - LANE | 1044.404 | 87.03818 | 0 | 201.1559 | 9.022222 | 1056.868 | 0 |
| 59 FAIRFAX CC 420 - VILLA | 1246.644 | 322.0413 | 0 | 0 | 13.33333 | 1349.479 | 0 |
| 59 FAIRFAX CC 421 - KING: | 1015.58 | 273.0823 | 0 | 0 | 12.22222 | 1028.215 | 0 |
| 59 FAIRFAX CC 422 - VAN I | 1153.118 | 294.8418 | 0 | 0 | 14.44444 | 1160.461 | 0 |
| 59 FAIRFAX CC 423 - CLERI | 864.8387 | 261.1146 | 0 | 0 | 23.33333 | 952.8025 | 0 |
| 59 FAIRFAX CC 424 - HUN7 | 918.7536 | 267.6424 | 0 | 0 | 21.11111 | 1028.174 | 0 |
| 59 FAIRFAX CC 426 - GREE | 800.3084 | 0 | 0 | 388.4758 | 1.177778 | 807.8045 | 0 |
| 59 FAIRFAX CC 427 - ISLAN | 870.3403 | 243.7069 | 0 | 0 | 12.22222 | 857.3968 | 0 |
| 59 FAIRFAX CC 428 - PINE | 976.5136 | 0 | 0 | 172.1244 | 2.25 | 1035.93 | 0 |
| 59 FAIRFAX CC 429 - HYBL. | 866.8935 | 0 | 0 | 175.4558 | 0 | 919.5955 | 0 |
| 59 FAIRFAX CC501-BAILE | 1151.857 | 73.53659 | 0 | 0 | 48.17429 | 1174.652 | 0 |
| 59 FAIRFAX CC502-BARC | 595.1681 | 0 | 0 | 0 | 41.6841 | 566.1365 | 0 |


| 59 FAIRFAX CC503-BELVI | 706.6931 | 0 | 0 | 0 | 46.0719 | 703.971 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC504-BRIST | 735.4025 | 0 | 0 | 0 | 39.4902 | 743.5694 | 0 |
| 59 FAIRFAX CC505-GLEN | 784.1672 | 248.0488 | 0 | 0 | 13.96296 | 911.6863 | 0 |
| 59 FAIRFAX CC506-HOLN | 177.7775 | 0 | 0 | 0 | 17.5512 | 177.1214 | 0 |
| 59 FAIRFAX CC507-LINCC | 1073.29 | 0 | 0 | 0 | 61.42919 | 1055.122 | 0 |
| 59 FAIRFAX CC508-MASC | 1082.124 | 0 | 0 | 0 | 73.49564 | 1083.455 | 0 |
| 59 FAIRFAX CC509-PLAZ | 373.413 | 53.78049 | 0 | 0 | 1.074074 | 394.4483 | 0 |
| 59 FAIRFAX CC510-PARK | 722.152 | 0 | 0 | 0 | 52.65359 | 705.2257 | 0 |
| 59 FAIRFAX CC511-RAVE | 1037.955 | 0 | 0 | 0 | 88.85294 | 1002.964 | 0 |
| 59 FAIRFAX CC512-SLEEF | 543.2703 | 0 | 0 | 0 | 55.94444 | 535.7108 | 0 |
| 59 FAIRFAX CC513-SAIN 7 | 902.1379 | 0 | 0 | 0 | 61.42919 | 898.663 | 0 |
| 59 FAIRFAX CC514-CROS | 420.3563 | 65.85366 | 0 | 0 | 2.148148 | 461.8196 | 0 |
| 59 FAIRFAX CC515-WEST | 552.104 | 0 | 0 | 0 | 42.78105 | 544.4038 | 0 |
| 59 FAIRFAX CC516-WEY/ | 866.1621 | 0 | 0 | 183.0626 | 26.40763 | 908.4264 | 0 |
| 59 FAIRFAX CC517-WILLS | 455.5638 | 127.3171 | 0 | 0 | 4.296296 | 520.4979 | 0 |
| 59 FAIRFAX CC518-COLU | 820.4265 | 0 | 0 | 0 | 80.07734 | 810.6666 | 0 |
| 59 FAIRFAX CC519-HUM | 589.647 | 0 | 0 | 0 | 44.97495 | 584.0759 | 0 |
| 59 FAIRFAX CC520-SKYLI | 750.0266 | 151.4634 | 0 | 0 | 3.222222 | 820.409 | 0 |
| 59 FAIRFAX CC521-BROC | 586.3344 | 0 | 0 | 0 | 61.42919 | 580.2628 | 0 |
| 59 FAIRFAX CC522-CAMI | 506.4702 | 0 | 0 | 216.0564 | 16.24101 | 582.7319 | 0 |
| 59 FAIRFAX CC523-POE | 836.9896 | 0 | 0 | 0 | 91.04684 | 825.8422 | 0 |
| 59 FAIRFAX CC525-WALI | 1043.753 | 0 | 0 | 0 | 76.8741 | 1056.209 | 0 |
| 59 FAIRFAX CC526-BREN | 1085.127 | 0 | 0 | 286.3013 | 1.177778 | 1172.479 | 0 |
| 59 FAIRFAX CC527-EDSA | 614.0391 | 0 | 0 | 294.8159 | 4.711111 | 722.6119 | 0 |
| 59 FAIRFAX CC528-RIDGI | 421.272 | 0 | 0 | 237.3427 | 0 | 501.7044 | 0 |
| 59 FAIRFAX CC530-HOLI | 643.7532 | 0 | 0 | 0 | 29.61765 | 632.4212 | 0 |
| 59 FAIRFAX CC601-BELLE | 617.4519 | 0 | 0 | 352.0221 | 1.125 | 691.7302 | 0 |
| 59 FAIRFAX CC 602 - BELLE | 780.3373 | 0 | 0 | 0 | 80.88235 | 785.4485 | 0 |
| 59 FAIRFAX CC 604 - BUCK | 1148.774 | 0 | 0 | 293.1667 | 1.125 | 1222.065 | 0 |
| 59 FAIRFAX CC 605 -FORT | 769.5777 | 0 | 0 | 455.2968 | 1.125 | 870.2412 | 0 |
| 59 FAIRFAX CC 606 - HOLL | 997.7664 | 0 | 0 | 434.1976 | 4.5 | 1109.976 | 0 |
| 59 FAIRFAX CC 607 - HUN7 | 1154.219 | 220.8594 | 0 | 0 | 30 | 1246.23 | 0 |
| 59 FAIRFAX CC 608 - KIRKS | 809.8463 | 0 | 0 | 240.9741 | 1.125 | 866.4141 | 0 |
| 59 FAIRFAX CC 609 - MARI | 743.8505 | 0 | 0 | 384.2261 | 0 | 807.7623 | 0 |
| 59 FAIRFAX CC 610 - SHER' | 683.4476 | 0 | 0 | 248.7475 | 4.5 | 737.8923 | 0 |
| 59 FAIRFAX CC 611 - STRA | 1002.241 | 0 | 0 | 598.5487 | 1.125 | 1157.804 | 0 |
| 59 FAIRFAX CC612-WAYI | 492.1718 | 0 | 0 | 286.5038 | 1.125 | 552.2685 | 0 |
| 59 FAIRFAX CC 613 -WEST | 905.0863 | 0 | 0 | 892.0213 | 1.304348 | 1078.876 | 0 |
| 59 FAIRFAX CC 614 - RIVEF | 663.3133 | 0 | 0 | 458.6282 | 1.125 | 766.4817 | 0 |
| 59 FAIRFAX CC615-WOO | 868.0121 | 0 | 0 | 453.0758 | 1.125 | 968.771 | 0 |
| 59 FAIRFAX CC616-GUNS | 603.3909 | 0 | 0 | 569.964 | 1.304348 | 744.54 | 0 |
| 59 FAIRFAX CC 617 - LORT | 686.5895 | 145.789 | 0 | 0 | 6.666667 | 697.5992 | 0 |
| 59 FAIRFAX CC618-NEWI | 1696.619 | 0 | 0 | 794.6294 | 5.217391 | 1686.14 | 0 |
| 59 FAIRFAX CC619-BELVI | 982.5712 | 293.7539 | 0 | 0 | 32.22222 | 1074.708 | 0 |
| 59 FAIRFAX CC 621 - GROS | 691.6627 | 0 | 0 | 0 | 44.11765 | 700.6557 | 0 |
| 59 FAIRFAX CC 622 -LORT | 1050.79 | 213.2436 | 0 | 0 | 20 | 1045.848 | 0 |
| 59 FAIRFAX CC 623 - ALBA | 845.7928 | 0 | 0 | 370.3824 | 5.888889 | 881.642 | 0 |


| 59 FAIRFAX CC 626 - SARA | 1053.721 | 0 | 0 | 540.6731 | 3.533333 | 1064.583 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 627 - WOO | 1117.454 | 0 | 0 | 378.6737 | 3.375 | 1233.144 | 0 |
| 59 FAIRFAX CC 628 -LAUR | 1321.448 | 0 | 0 | 432.7299 | 1.304348 | 1326.871 | 0 |
| 59 FAIRFAX CC629-SOUT | 909.5394 | 0 | 0 | 616.4465 | 1.304348 | 919.1118 | 0 |
| 59 FAIRFAX CC630- ARMY | 224.462 | 77.24639 | 0 | 0 | 7.777778 | 216.0023 | 0 |
| 59 FAIRFAX CC 701 - BLAK | 1395.28 | 0 | 0 | 0 | 111.3568 | 1391.897 | 0 |
| 59 FAIRFAX CC 703 - FORT | 629.7385 | 0 | 0 | 0 | 37.89568 | 629.1613 | 0 |
| 59 FAIRFAX CC704-FREEI | 772.667 | 0 | 0 | 0 | 55.12715 | 724.7641 | 0 |
| 59 FAIRFAX CC 705 -GRAF | 1246.403 | 0 | 0 | 0 | 88.78417 | 1239.85 | 0 |
| 59 FAIRFAX CC 707 - MAN | 825.1243 | 197.4655 | 65.67426 | 0 | 19.09162 | 935.7009 | 0 |
| 59 FAIRFAX CC708-MARS | 1542.75 | 0 | 0 | 0 | 100.6942 | 1544.108 | 0 |
| 59 FAIRFAX CC 709 - MOS | 1083.133 | 0 | 0 | 0 | 68.42008 | 1102.196 | 0 |
| 59 FAIRFAX CC710-PINE | 793.1655 | 0 | 0 | 0 | 57.38489 | 799.7629 | 0 |
| 59 FAIRFAX CC711-PRICE | 666.7896 | 189.8706 | 67.8634 | 0 | 11.23037 | 783.6356 | 0 |
| 59 FAIRFAX CC712-SHRE' | 557.8306 | 0 | 0 | 0 | 37.89568 | 557.4435 | 0 |
| 59 FAIRFAX CC713-TIMB | 1049.201 | 0 | 0 | 0 | 54.13669 | 1052.949 | 0 |
| 59 FAIRFAX CC714-WALk | 1009.979 | 0 | 0 | 0 | 76.8741 | 1035.598 | 0 |
| 59 FAIRFAX CC717-WOO | 676.5876 | 0 | 0 | 0 | 56.30216 | 686.3717 | 0 |
| 59 FAIRFAX CC718-PINE | 701.6464 | 0 | 0 | 0 | 63.88129 | 730.3573 | 0 |
| 59 FAIRFAX CC720-THOR | 1157.881 | 0 | 0 | 0 | 116.8696 | 1137.715 | 0 |
| 59 FAIRFAX CC721-MERF | 1105.856 | 0 | 0 | 0 | 44.39209 | 1099.674 | 0 |
| 59 FAIRFAX CC 723 -GALLI | 577.4419 | 0 | 0 | 0 | 23.82014 | 563.9633 | 0 |
| 59 FAIRFAX CC726-MAG، | 1096.291 | 0 | 0 | 0 | 67.25513 | 1034.733 | 0 |
| 59 FAIRFAX CC727-OAKT | 830.897 | 0 | 0 | 0 | 71.6653 | 818.0445 | 0 |
| 59 FAIRFAX CC729-NOTT | 1200.433 | 0 | 0 | 0 | 89.30599 | 1186.553 | 0 |
| 59 FAIRFAX CC730-PEND | 1057.098 | 0 | 0 | 0 | 99.22888 | 1054.467 | 0 |
| 59 FAIRFAX CC731-TYSO | 716.6767 | 0 | 0 | 0 | 66.15258 | 662.7702 | 0 |
| 59 FAIRFAX CC732-OAK I | 1123.167 | 0 | 0 | 0 | 134.5103 | 1121.065 | 0 |
| 59 FAIRFAX CC733-KILMI | 1369.524 | 0 | 0 | 0 | 91.51107 | 1357.488 | 0 |
| 59 FAIRFAX CC734-HUN7 | 694.2805 | 0 | 0 | 0 | 51.81952 | 691.5085 | 0 |
| 59 FAIRFAX CC735-ROTC | 396.4118 | 0 | 0 | 0 | 19.84578 | 370.8357 | 0 |
| 59 FAIRFAX CC 801 - BURK | 1364.8 | 320.0676 | 129.1594 | 0 | 31.44503 | 1473.939 | 0 |
| 59 FAIRFAX CC 802 - CEDA | 385.2137 | 0 | 0 | 0 | 34.17884 | 379.4844 | 0 |
| 59 FAIRFAX CC 803 -CLIFT | 992.0883 | 0 | 0 | 1402.091 | 3.230769 | 1102.053 | 0 |
| 59 FAIRFAX CC 804 - COLC | 516.5969 | 0 | 0 | 543.9437 | 3.230769 | 637.9737 | 0 |
| 59 FAIRFAX CC 805 - FAIRF | 495.4887 | 0 | 0 | 515.7893 | 1.076923 | 634.6739 | 0 |
| 59 FAIRFAX CC 806 - SYDEI | 1087.662 | 0 | 0 | 700.5577 | 2.608696 | 1095.44 | 0 |
| 59 FAIRFAX CC 807 - HUN7 | 685.7726 | 0 | 0 | 491.3864 | 0 | 817.2663 | 0 |
| 59 FAIRFAX CC 811 - POHII | 619.9583 | 130.197 | 53.63398 | 0 | 15.72251 | 687.4717 | 0 |
| 59 FAIRFAX CC 812 -VALLI | 935.1445 | 0 | 0 | 536.7622 | 1.304348 | 1072.456 | 0 |
| 59 FAIRFAX CC 815 - WOO | 748.7878 | 0 | 0 | 822.1095 | 0 | 776.947 | 0 |
| 59 FAIRFAX CC 824 - ORAN | 1334.807 | 0 | 0 | 888.7011 | 2.608696 | 1579.535 | 0 |
| 59 FAIRFAX CC 825 -CHER | 934.3975 | 248.4593 | 99.60595 | 0 | 24.70681 | 1021.858 | 0 |
| 59 FAIRFAX CC 827 -IRVIN | 898.4067 | 0 | 0 | 516.8411 | 1.304348 | 1012.743 | 0 |
| 59 FAIRFAX CC $833-$ WHIT | 941.0877 | 234.3546 | 119.3082 | 0 | 25.82984 | 984.4595 | 0 |
| 59 FAIRFAX CC 838 - SANG | 663.5073 | 0 | 0 | 565.5371 | 1.304348 | 837.0655 | 0 |
| 59 FAIRFAX CC 839 - SILVE | 1017.526 | 0 | 0 | 875.4204 | 1.304348 | 1035.929 | 0 |


| 59 FAIRFAX CC 840 - WEST | 997.4875 | 0 | 0 | 558.8967 | 2.608696 | 1001.766 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 841 - POPE | 433.2748 | 0 | 0 | 511.2845 | 1.076923 | 616.0308 | 0 |
| 59 FAIRFAX CC 842 - PARK | 735.9217 | 258.2241 | 116.0245 | 0 | 29.19895 | 855.7648 | 0 |
| 59 FAIRFAX CC 843 - FAIR I | 1020.581 | 0 | 0 | 0 | 119.6173 | 1014.158 | 0 |
| 59 FAIRFAX CC 844 -CENT | 771.5472 | 0 | 0 | 0 | 37.48646 | 764.7662 | 0 |
| 59 FAIRFAX CC 845 -FOUN | 968.5425 | 0 | 0 | 1053.603 | 1.304348 | 990.7452 | 0 |
| 59 FAIRFAX CC 846 - GREE | 1032.744 | 0 | 0 | 0 | 84.17511 | 1056.687 | 0 |
| 59 FAIRFAX CC 847 -GREE | 780.6392 | 0 | 0 | 0 | 104.1113 | 798.0652 | 0 |
| 59 FAIRFAX CC 848 - FAIR I | 827.3779 | 0 | 0 | 0 | 66.1768 | 828.2659 | 0 |
| 59 FAIRFAX CC 849 - NEW | 1413.143 | 0 | 0 | 1390.829 | 3.230769 | 1487.771 | 0 |
| 59 FAIRFAX CC $850-$ SOUT | 810.4586 | 0 | 0 | 739.2931 | 1.304348 | 813.3147 | 0 |
| 59 FAIRFAX CC 851 - WILL | 835.4427 | 0 | 0 | 578.8552 | 0 | 966.8602 | 0 |
| 59 FAIRFAX CC901-CENT | 1059.857 | 0 | 0 | 480.8778 | 4.307692 | 1201.151 | 0 |
| 59 FAIRFAX CC902-BROC | 1242.831 | 0 | 0 | 0 | 104.1113 | 1071.434 | 0 |
| 59 FAIRFAX CC903-CUB F | 1233.985 | 0 | 0 | 0 | 136.2308 | 1250.931 | 0 |
| 59 FAIRFAX CC904-STON | 420.1741 | 0 | 0 | 0 | 78.63727 | 419.0827 | 0 |
| 59 FAIRFAX CC 905 - FRAN | 348.3022 | 0 | 0 | 0 | 48.73296 | 302.75 | 0 |
| 59 FAIRFAX CC 908 - HIDD | 814.9165 | 0 | 0 | 0 | 84.17511 | 746.1801 | 0 |
| 59 FAIRFAX CC909-OAK I | 744.7377 | 0 | 0 | 0 | 92.14901 | 730.3999 | 0 |
| 59 FAIRFAX CC910-LONL | 1126.852 | 0 | 0 | 0 | 113.2857 | 1138.453 | 0 |
| 59 FAIRFAX CC 911 - NAVY | 1049.329 | 0 | 0 | 0 | 91.92808 | 946.8146 | 0 |
| 59 FAIRFAX CC913-ROCK | 1220.716 | 0 | 0 | 0 | 159.4897 | 1233.172 | 0 |
| 59 FAIRFAX CC 914 - VALE | 797.225 | 0 | 0 | 0 | 98.57348 | 747.3073 | 0 |
| 59 FAIRFAX CC 915 - VIRGI | 734.3453 | 0 | 0 | 853.6425 | 0 | 939.3613 | 0 |
| 59 FAIRFAX CC 916 - WAPI | 1395.42 | 0 | 0 | 0 | 335.5929 | 1309.76 | 0 |
| 59 FAIRFAX CC917-STON | 640.2126 | 0 | 0 | 0 | 69.77674 | 651.5497 | 0 |
| 59 FAIRFAX CC918-CENT | 1454.248 | 0 | 0 | 647.552 | 3.230769 | 1616.933 | 0 |
| 59 FAIRFAX CC919-GREE | 1412.032 | 0 | 0 | 686.9682 | 2.153846 | 1585.035 | 0 |
| 59 FAIRFAX CC $920-\mathrm{CHAN}$ | 924.3829 | 0 | 0 | 0 | 71.99187 | 837.4801 | 0 |
| 59 FAIRFAX CC 921 - DEER | 996.5321 | 0 | 0 | 881.7969 | 0 | 1279.79 | 0 |
| 59 FAIRFAX CC 923 - BULL | 561.0354 | 0 | 0 | 791.7027 | 3.230769 | 771.0682 | 0 |
| 59 FAIRFAX CC 924 - SPINE | 668.7986 | 0 | 0 | 225.2355 | 1.076923 | 735.8697 | 0 |
| 59 FAIRFAX CC925-OLD I | 594.3642 | 0 | 0 | 382.9003 | 2.153846 | 702.8711 | 0 |
| 59 FAIRFAX CC926-POW | 1256.915 | 0 | 0 | 0 | 93.09618 | 1264.948 | 0 |
| 59 FAIRFAX CC 927 - ARMI | 570.7844 | 0 | 0 | 0 | 69.38278 | 554.5629 | 0 |
| 59 FAIRFAX CC 928 - POPL | 942.0745 | 0 | 0 | 0 | 79.74484 | 955.6802 | 0 |
| 59 FAIRFAX CC 929 - DIFFII | 237.013 | 0 | 0 | 0 | 31.34279 | 217.5419 | 0 |
| 59 FAIRFAX CC930-LEES | 747.4675 | 0 | 0 | 0 | 104.1113 | 676.2962 | 0 |
| 59 FAIRFAX CC931-CARS | 832.8016 | 0 | 0 | 0 | 79.13974 | 753.6542 | 0 |
| 59 FAIRFAX CC932-STON | 501.673 | 0 | 0 | 0 | 33.64922 | 509.4741 | 0 |
| 59 FAIRFAX CC933-COMI | 249.9662 | 0 | 0 | 164.4219 | 0 | 258.9823 | 0 |
| 61 FAUQUIER 101 - KETTI | 170.6635 | 0 | 0 | 499.9927 | 0 | 162.5943 | 0 |
| 61 FAUQUIER 102-CATLI | 342.4281 | 0 | 0 | 1091.474 | 1 | 330.6817 | 0 |
| 61 FAUQUIER 103 -CASA | 255.4448 | 0 | 0 | 448.9297 | 3 | 242.7929 | 0 |
| 61 FAUQUIER 104 -LOIS | 161.3068 | 0 | 0 | 401.9011 | 2 | 168.0874 | 0 |
| 61 FAUQUIER 105-OPAL | 151.8693 | 0 | 0 | 411.9317 | 1 | 137.3263 | 0 |
| 61 FAUQUIER 106-BALD | 310.3417 | 0 | 0 | 524.1804 | 1 | 288.9345 | 0 |


| 61 FAUQUIER 201 - COUF | 729.6332 | 0 | 0 | 803.7433 | 0 | 688.8286 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 202 - AIRLII | 528.2412 | 0 | 0 | 721.1452 | 2 | 493.276 | 0 |
| 61 FAUQUIER 203 -WARI | 663.603 | 0 | 0 | 720.0862 | 0 | 625.1092 | 0 |
| 61 FAUQUIER 301 - MORI | 229.8359 | 0 | 0 | 635.3963 | 1 | 227.4123 | 0 |
| 61 FAUQUIER 302 - REMI | 443.8573 | 0 | 0 | 800.7026 | 4 | 438.3455 | 0 |
| 61 FAUQUIER 303 - BEALI | 567.8593 | 0 | 0 | 869.3982 | 1 | 549.3051 | 0 |
| 61 FAUQUIER 401 - MAR | 576.6633 | 0 | 0 | 776.2106 | 1 | 535.0232 | 0 |
| 61 FAUQUIER 402 -LEED! | 593.1709 | 0 | 0 | 701.0251 | 1 | 562.4884 | 0 |
| 61 FAUQUIER 403 - WATE | 515.0352 | 0 | 0 | 1025.064 | 0 | 484.4871 | 0 |
| 61 FAUQUIER 404 - SPRIN | 265.2211 | 0 | 0 | 442.6412 | 2 | 242.7929 | 0 |
| 61 FAUQUIER 501 -THE F | 583.2663 | 0 | 0 | 601.4838 | 0 | 556.9954 | 0 |
| 61 FAUQUIER 502 - NEW | 462.4431 | 0 | 0 | 909.5613 | 2 | 436.1482 | 0 |
| 61 FAUQUIER 503-BROA | 428.0955 | 0 | 0 | 756.0905 | 0 | 413.0774 | 0 |
| 61 FAUQUIER 504 - VINT | 752.0205 | 0 | 0 | 1451.043 | 4 | 716.2938 | 0 |
| 63 FLOYD COL 101 - LOCU | 284.404 | 0 | 0 | 608.5673 | 0 | 286.394 | 0 |
| 63 FLOYD COL 201 - LITTL | 447.0786 | 0 | 0 | 682.2692 | 0 | 447.3519 | 0 |
| 63 FLOYD COL 301 - COUF | 366.2946 | 0 | 0 | 543.2885 | 2 | 387.409 | 0 |
| 63 FLOYD COL 401 - BURK | 305.4299 | 0 | 0 | 574.875 | 0 | 300.8247 | 0 |
| 63 FLOYD COL 501 - INDIA | 215.7929 | 0 | 0 | 657 | 0 | 212.0204 | 0 |
| 65 FLUVANNA 101 - PALN | 748.2027 | 0 | 0 | 997.0971 | 2 | 807.9941 | 0 |
| 65 FLUVANNA 201 - COLU | 509.3683 | 0 | 0 | 677.2037 | 1 | 505.9609 | 0 |
| 65 FLUVANNA 301 - FORK | 608.9538 | 0 | 0 | 827.5901 | 3 | 611.7827 | 0 |
| 65 FLUVANNA 401 - CUNN | 574.3325 | 0 | 0 | 1233.027 | 2 | 623.3966 | 10 |
| 65 FLUVANNA 501 - RIVAI | 941.1426 | 0 | 0 | 1139.082 | 0 | 1032.866 | 0 |
| 67 FRANKLIN (102-BURA | 297.1913 | 0 | 0 | 813.2368 | 0 | 292.945 | 0 |
| 67 FRANKLIN (103-SCRU | 0 | 0 | 0 | 1705.572 | 83.06513 | 507.1413 | 0 |
| 67 FRANKLIN (201-GLAD | 0 | 0 | 0 | 938.3239 | 41.53257 | 156.4473 | 52.37154 |
| 67 FRANKLIN ( 202 - PENH | 0 | 0 | 0 | 706.0758 | 25.95785 | 185.8468 | 21.99605 |
| 67 FRANKLIN ( 203 - HODC | 0 | 0 | 0 | 154.4865 | 7.268199 | 17.84969 | 27.2332 |
| 67 FRANKLIN (204-DUDL | 24.93913 | 0 | 0 | 493.0268 | 19.72797 | 142.7976 | 0 |
| 67 FRANKLIN (301-SNOV | 0 | 0 | 0 | 389.8451 | 24.91954 | 0 | 65.98814 |
| 67 FRANKLIN (302-FORK | 0 | 0 | 0 | 370.1455 | 7.268199 | 0 | 62.84585 |
| 67 FRANKLIN (303-SONT | 0 | 0 | 0 | 684.3025 | 35.30268 | 0 | 206.3439 |
| 67 FRANKLIN (304-DICKI | 0 | 0 | 0 | 269.5737 | 10.38314 | 0 | 94.26877 |
| 67 FRANKLIN (401-HENR | 0 | 0 | 0 | 693.6339 | 20.76628 | 74.54872 | 34.56522 |
| 67 FRANKLIN ( 402 - FERRI | 0 | 0 | 0 | 417.8393 | 28.03448 | 141.7476 | 0 |
| 67 FRANKLIN (403-ENDII | 0 | 0 | 0 | 412.6552 | 19.72797 | 104.9982 | 0 |
| 67 FRANKLIN (501- WAIC | 0 | 0 | 0 | 551.5893 | 21.8046 | 155.3973 | 5.237154 |
| 67 FRANKLIN (502-CALL/ | 0 | 0 | 0 | 690.5235 | 28.03448 | 171.1471 | 0 |
| 67 FRANKLIN (503-BOW | 0 | 0 | 0 | 343.1881 | 21.8046 | 113.3981 | 0 |
| 67 FRANKLIN (504-GOGC | 0 | 0 | 0 | 618.9828 | 21.8046 | 148.0475 | 0 |
| 67 FRANKLIN (601-BOO | 0 | 0 | 0 | 796.2793 | 34.26437 | 213.1464 | 0 |
| 67 FRANKLIN (602-BONE | 216.1391 | 0 | 0 | 646.2604 | 0 | 212.0964 | 0 |
| 67 FRANKLIN (603-COOF | 134.0478 | 0 | 0 | 497.837 | 2 | 130.1978 | 0 |
| 67 FRANKLIN (701-ROCK | 44.68261 | 0 | 0 | 817.2286 | 30.11111 | 131.2478 | 133.0237 |
| 67 FRANKLIN (702-ROCK | 0 | 0 | 0 | 615.8723 | 34.26437 | 2.099964 | 195.8696 |
| 67 FRANKLIN (703-ROCK | 0 | 0 | 0 | 521.5215 | 25.95785 | 18.89968 | 160.2569 |


| 69 FREDERICK 101 - RUSS | 212.643 | 0 | 0 | 824.9645 | 0 | 217.0074 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 69 FREDERICK 102 -GORE | 243.3228 | 0 | 0 | 818.7696 | 4.444444 | 250.7173 | 0 |
| 69 FREDERICK 103 - KERN | 447.5024 | 0 | 0 | 949.8966 | 1.111111 | 432.9614 | 0 |
| 69 FREDERICK 104 -CEDA | 211.5851 | 0 | 0 | 544.1256 | 0 | 198.0456 | 0 |
| 69 FREDERICK 201 - GAIN | 126.951 | 0 | 0 | 608.1403 | 1.111111 | 139.0533 | 0 |
| 69 FREDERICK 202 - ALBIN | 324.7831 | 0 | 0 | 821.8671 | 0 | 312.8699 | 0 |
| 69 FREDERICK 203 -REDL, | 410.475 | 0 | 0 | 971.579 | 0 | 402.4118 | 0 |
| 69 FREDERICK 204 - NAIN | 327.9569 | 0 | 0 | 913.7592 | 3.333333 | 338.1523 | 0 |
| 69 FREDERICK 301 - CLEAI | 155.0618 | 0 | 0 | 550.6832 | 2 | 150.6411 | 0 |
| 69 FREDERICK 302 - NEFF' | 597.1974 | 0 | 0 | 803.8115 | 0 | 590.9765 | 0 |
| 69 FREDERICK 303 -WHIT | 476.0664 | 0 | 0 | 1162.591 | 0 | 472.9919 | 0 |
| 69 FREDERICK 401 - CARP | 442.7973 | 0 | 0 | 873.9213 | 1 | 427.6942 | 0 |
| 69 FREDERICK 402 -SHEN | 196.682 | 0 | 0 | 477.0631 | 0 | 179.0838 | 0 |
| 69 FREDERICK 403 - PARK | 419.6583 | 0 | 0 | 780.1753 | 1 | 384.5034 | 0 |
| 69 FREDERICK 404 - ARMI | 362.8624 | 0 | 0 | 821.8402 | 1 | 440.3354 | 0 |
| 69 FREDERICK 501 - STEPY | 467.603 | 0 | 0 | 852.8419 | 0 | 458.2438 | 0 |
| 69 FREDERICK 502 - NEW | 500.3987 | 0 | 0 | 1018.041 | 0 | 498.2743 | 0 |
| 69 FREDERICK 503 -CANT | 615.7126 | 0 | 0 | 998.4239 | 0 | 615.2055 | 0 |
| 69 FREDERICK 601 - MILLf | 240.9744 | 0 | 0 | 495.9248 | 1 | 234.9158 | 0 |
| 69 FREDERICK 602 - ASH - | 393.9407 | 0 | 0 | 576.5126 | 0 | 382.3966 | 0 |
| 69 FREDERICK 603 -GREE | 698.8257 | 0 | 0 | 1092.068 | 1 | 680.5184 | 0 |
| 71 GILES COUI 101 - GLEN | 16.33089 | 0 | 0 | 78.96233 | 0 | 33.18886 | 57.8832 |
| 71 GILES COUI 102 - RICH | 72.94463 | 0 | 0 | 301.1097 | 0 | 133.826 | 213.6416 |
| 71 GILES COUI 103 - NARR | 276.5364 | 0 | 0 | 968.6045 | 1 | 458.2203 | 706.175 |
| 71 GILES COUI 201 - PEAR | 389.7638 | 0 | 0 | 1289.718 | 0 | 659.4947 | 910.3449 |
| 71 GILES COUI 202 - STAFI | 58.79119 | 0 | 0 | 225.3058 | 0 | 104.9196 | 165.2302 |
| 71 GILES COUI 203 - WHIT | 21.77452 | 0 | 0 | 171.6115 | 0 | 49.24798 | 121.0285 |
| 71 GILES COUI301-EGGL | 163.3089 | 0 | 0 | 352.6984 | 0 | 206.6274 | 274.6821 |
| 71 GILES COUI 302 - PEME | 357.1021 | 0 | 0 | 910.6988 | 0 | 546.0102 | 650.3967 |
| 71 GILES COUI303-NEWI | 275.4476 | 0 | 0 | 424.2909 | 1 | 325.4649 | 333.6177 |
| 73 GLOUCESTI 101 - HARC | 210.0039 | 0 | 0 | 634.1237 | 0 | 225.9485 | 0 |
| 73 GLOUCEST1 102 - SALEI | 181.7944 | 0 | 0 | 515.3546 | 0 | 202 | 0 |
| 73 GLOUCEST1 103 -PEASI | 124.3306 | 0 | 0 | 424.4704 | 1 | 134.3196 | 0 |
| 73 GLOUCESTI 201 - COUF | 337.4689 | 0 | 0 | 678.533 | 0 | 352.9794 | 0 |
| 73 GLOUCESTI 202 - BOTE | 449.262 | 0 | 0 | 914.0057 | 1 | 467.5155 | 0 |
| 73 GLOUCESTI301-WHIT | 269.5572 | 0 | 0 | 744.6306 | 0 | 292.5876 | 0 |
| 73 GLOUCESTI302-ROAN | 324.9314 | 0 | 0 | 954.2839 | 3 | 339.4433 | 0 |
| 73 GLOUCEST1401-HAYE | 381.3503 | 0 | 0 | 839.6459 | 3 | 414.4124 | 0 |
| 73 GLOUCEST1402-SARA | 330.1553 | 0 | 0 | 698.1557 | 1 | 334.2371 | 0 |
| 73 GLOUCESTI501-ACHII | 335.3793 | 0 | 0 | 1267.215 | 1 | 360.268 | 0 |
| 73 GLOUCESTI502-WALk | 297.7667 | 0 | 0 | 711.5818 | 0 | 310.2887 | 0 |
| 75 GOOCHLAP 101 - FIFE | 273.2045 | 0 | 0 | 473.504 | 0 | 269.9572 | 0 |
| 75 GOOCHLAR 102 -HADE | 393.0856 | 0 | 0 | 736.7531 | 0 | 395.0594 | 0 |
| 75 GOOCHLAR 201 -THRE | 170.8889 | 0 | 0 | 206.6966 | 0 | 166.8029 | 0 |
| 75 GOOCHLAR 202 -SAND | 610.1551 | 0 | 0 | 947.8234 | 3 | 622.2185 | 0 |
| 75 GOOCHLAR 301 -GOO( | 410.4893 | 0 | 0 | 716.3496 | 3 | 396.1568 | 0 |
| 75 GOOCHLAR 302-GOOC | 146.9427 | 0 | 0 | 344.8459 | 0 | 151.4394 |  |


| 75 GOOCHLAP 401 - SHAL | 519.7324 | 0 | 0 | 1056.804 | 0 | 527.8432 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 75 GOOCHLAP 402 - CENT | 367.4541 | 0 | 0 | 794.7506 | 0 | 363.2352 | 0 |
| 75 GOOCHLAP 501 - MAN, | 477.8007 | 0 | 0 | 1235.085 | 0 | 475.1686 | 0 |
| 75 GOOCHLAP 502 - BLAIR | 333.2467 | 0 | 0 | 702.3877 | 0 | 328.1188 | 0 |
| 77 GRAYSON (101-BRIDI | 0 | 0 | 0 | 188.1913 | 3 | 0 | 57.10714 |
| 77 GRAYSON (102-FLATF | 0 | 0 | 0 | 97.81697 | 1 | 0 | 42.30159 |
| 77 GRAYSON (103-GRAN | 0 | 0 | 0 | 195.6339 | 5 | 0 | 69.79762 |
| 77 GRAYSON (104-MOU | 0 | 0 | 0 | 99.94343 | 1 | 0 | 25.38095 |
| 77 GRAYSON ( 105 - MOU | 0 | 0 | 0 | 140.3461 | 0 | 0 | 31.72619 |
| 77 GRAYSON (106-RUGE | 0 | 0 | 0 | 158.421 | 1 | 0 | 37.01389 |
| 77 GRAYSON (107-TROU | 0 | 0 | 0 | 85.05824 | 1 | 0 | 34.89881 |
| 77 GRAYSON (108-COMI | 0 | 0 | 0 | 137.1564 | 2 | 0 | 28.55357 |
| 77 GRAYSON ( 202 - ELK C | 0 | 0 | 0 | 342.3594 | 5 | 0 | 86.71825 |
| 77 GRAYSON ( 203 - INDEI | 0 | 0 | 0 | 927.1348 | 10 | 0 | 204.1052 |
| 77 GRAYSON (301-BAYM | 0 | 0 | 0 | 462.5042 | 1 | 0 | 95.17857 |
| 77 GRAYSON ( 302 - FAIR | 0 | 0 | 0 | 575.2063 | 7 | 0 | 108.9266 |
| 77 GRAYSON ( 401 - FRIES | 0 | 0 | 0 | 251.985 | 3 | 0 | 85.66071 |
| 77 GRAYSON ( 402 - PROV | 0 | 0 | 0 | 599.6606 | 5 | 0 | 108.9266 |
| 77 GRAYSON ( 403 - OLDT | 0 | 0 | 0 | 211.5824 | 1 | 0 | 49.70437 |
| 79 GREENE CC 101 - DYKE | 179.1283 | 0 | 0 | 558.6834 | 0 | 189.6892 | 0 |
| 79 GREENE CC 102 - SWIF | 208.2636 | 0 | 0 | 646.6733 | 1.5 | 249.7038 | 0 |
| 79 GREENE CC 201 - RUCK | 470.4815 | 0 | 0 | 1111.006 | 1.5 | 514.4113 | 0 |
| 79 GREENE CC 301 - STAN | 375.522 | 0 | 0 | 1145.99 | 3 | 422.2459 | 0 |
| 79 GREENE CC 401 - MIDV | 608.6046 | 0 | 0 | 1298.647 | 0 | 671.9498 | 0 |
| 81 GREENSVIL 101 - PREC | 202 | 0 | 0 | 135 | 0 | 262 | 0 |
| 81 GREENSVIL 102 - PREC | 62 | 0 | 0 | 102 | 1 | 123 | 0 |
| 81 GREENSVIL 103 - PREC | 162 | 0 | 0 | 45 | 1 | 174 | 0 |
| 81 GREENSVIL 201 - PREC | 304 | 0 | 0 | 123 | 2 | 352 | 0 |
| 81 GREENSVIL 202 - PREC | 202 | 0 | 0 | 334 | 0 | 364 | 0 |
| 81 GREENSVIL 302 - PREC | 554 | 0 | 0 | 312 | 1 | 690 | 0 |
| 81 GREENSVIL 401 - PREC | 71 | 0 | 0 | 165 | 0 | 153 | 0 |
| 81 GREENSVIL 402 - PREC | 216 | 0 | 0 | 179 | 0 | 310 | 0 |
| 81 GREENSVIL 403 - PREC | 76 | 0 | 0 | 120 | 1 | 152 | 0 |
| 83 HALIFAX C( 101 - CHILC | 131.042 | 0 | 0 | 351.718 | 0 | 0 | 123.2733 |
| 83 HALIFAX C( 102 -LIBER | 66.56099 | 0 | 0 | 208.7347 | 0 | 0 | 69.99414 |
| 83 HALIFAX C( 103 - REPU | 158.0824 | 0 | 0 | 360.0674 | 1 | 0 | 133.7201 |
| 83 HALIFAX C( 201 - CLAY! | 89.44134 | 0 | 0 | 299.5343 | 1 | 78.69762 | 14.62564 |
| 83 HALIFAX C( 202 - CROS | 88.40132 | 0 | 0 | 250.4817 | 4 | 98.63435 | 0 |
| 83 HALIFAX C( $203-\mathrm{CLOV}$ | 169.5225 | 0 | 0 | 338.1503 | 0 | 199.3673 | 0 |
| 83 HALIFAX C( 302 - MEAL | 95.68143 | 0 | 0 | 113.7604 | 2 | 0 | 88.79853 |
| 83 HALIFAX C( 304 - VERN | 82.16123 | 0 | 0 | 301.6217 | 0 | 0 | 65.81538 |
| 83 HALIFAX C( $305-$ SINAI | 198.643 | 0 | 0 | 410.1637 | 0 | 0 | 216.2505 |
| 83 HALIFAX C( 401 - COUF | 203.843 | 0 | 0 | 478.0025 | 1 | 0 | 199.5355 |
| 83 HALIFAX C( 403 -CENT | 138.3221 | 0 | 0 | 545.8413 | 0 | 157.3952 | 0 |
| 83 HALIFAX C( $502-$ DAN | 213.2032 | 0 | 0 | 657.5144 | 1 | 258.1282 | 0 |
| 83 HALIFAX C( $503-$ SCOT | 58.24087 | 0 | 0 | 410.1637 | 1 | 75.54971 |  |
| 83 HALIFAX C(601-BLAC | 114.4017 | 0 | 0 | 385.1156 | 1 | 114.3739 | 12.53626 |


| 83 HALIFAX C 603 - MT C | 194.4829 | 0 | 0 | 447.736 | 1 | 0 | 148.3458 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 HALIFAX C(605-UNIO | 46.8007 | 0 | 0 | 183.6866 | 0 | 0 | 48.05568 |
| 83 HALIFAX C(701-HYCC | 124.8019 | 0 | 0 | 602.1997 | 0 | 154.2473 | 0 |
| 83 HALIFAX C( 702 - MIDV | 59.28089 | 0 | 0 | 422.6878 | 3 | 60.85949 | 0 |
| 83 HALIFAX C( 703 - VIRGI | 50.96076 | 0 | 0 | 263.0058 | 0 | 64.0074 | 0 |
| 83 HALIFAX C( 801 - SOUT | 393.1259 | 0 | 0 | 401.8144 | 2 | 15.73952 | 305.0491 |
| 85 HANOVER 1101 -ASHL | 592.6704 | 0 | 0 | 433.0243 | 4 | 636.6039 | 0 |
| 85 HANOVER 104 -SLIDII | 504.8282 | 0 | 0 | 600.613 | 3 | 490.0972 | 0 |
| 85 HANOVER 105 -BERK | 529.17 | 0 | 0 | 327.891 | 2 | 562.2094 | 0 |
| 85 HANOVER 106 -KERSI | 265.6434 | 0 | 0 | 427.8197 | 0 | 258.7208 | 0 |
| 85 HANOVER $1107-\mathrm{CHICl}$ | 374.6524 | 0 | 0 | 513.1754 | 1 | 355.4782 | 0 |
| 85 HANOVER 1201 -BEAV | 342.9022 | 0 | 0 | 1089.847 | 3 | 339.7026 | 0 |
| 85 HANOVER 1202 - BLUN | 262.4683 | 0 | 0 | 492.357 | 1 | 267.1345 | 0 |
| 85 HANOVER 1203 - WILN | 387.3525 | 0 | 0 | 849.3938 | 1 | 367.8548 | 0 |
| 85 HANOVER 1206 - COUF | 478.3697 | 0 | 0 | 554.8124 | 3 | 465.9078 | 0 |
| 85 HANOVER $1208-$ OAK I | 300.5686 | 0 | 0 | 726.5648 | 6 | 292.3756 | 0 |
| 85 HANOVER 1209 -WEST | 87.84223 | 0 | 0 | 221.7168 | 1 | 96.46912 | 0 |
| 85 HANOVER $1210-\mathrm{OAK}$ I | 112.184 | 0 | 0 | 266.4765 | 1 | 148.7889 | 0 |
| 85 HANOVER 1301 - CLAY | 355.9748 | 0 | 0 | 816.5398 | 173.9893 | 361.7885 | 0 |
| 85 HANOVER $1303-$ SHAD | 370.6758 | 0 | 0 | 736.751 | 201.0774 | 390.1847 | 0 |
| 85 HANOVER1304-ATLEI | 1167.349 | 0 | 0 | 1552.017 | 6 | 1108.503 | 0 |
| 85 HANOVER $1305-\mathrm{COOL}$ | 472.0197 | 0 | 0 | 784.8566 | 1 | 468.0113 | 0 |
| 85 HANOVER 1401 - BATT | 261.4682 | 0 | 0 | 964.719 | 200.0356 | 303.9444 | 0 |
| 85 HANOVER 1403 -COLD | 439.9806 | 0 | 0 | 970.9363 | 200.0356 | 442.7702 | 0 |
| 85 HANOVER 1404 - BLAC | 219.4653 | 0 | 0 | 1155.383 | 242.7515 | 261.876 | 0 |
| 85 HANOVER 1405 - PEBB | 240.4667 | 0 | 0 | 410.3423 | 143.7756 | 269.2379 | 0 |
| 85 HANOVER 1406 - BEAV | 91.35635 | 0 | 0 | 161.65 | 29.17185 | 94.65396 | 0 |
| 85 HANOVER1502-RURA | 364.3753 | 0 | 0 | 792.7068 | 177.1148 | 388.0812 | 0 |
| 85 HANOVER 1503 -NEWI | 366.4755 | 0 | 0 | 530.5436 | 102.1015 | 378.6158 | 0 |
| 85 HANOVER 1504 - STUD | 136.5095 | 0 | 0 | 610.3324 | 170.8637 | 171.4288 | 0 |
| 85 HANOVER 1505 -TOTO | 144.9101 | 0 | 0 | 467.3343 | 110.4363 | 158.8083 | 0 |
| 85 HANOVER 1506 -GEOR | 268.8187 | 0 | 0 | 566.8112 | 192.7426 | 300.7893 | 0 |
| 85 HANOVER 1507 -LAUR | 311.8717 | 0 | 0 | 751.2581 | 137.5244 | 337.5991 | 0 |
| 85 HANOVER 1601 -VILLA | 499.8348 | 0 | 0 | 1117.043 | 278.1744 | 542.6827 | 0 |
| 85 HANOVER 1602 -LEE D | 401.1279 | 0 | 0 | 894.2561 | 221.9144 | 408.0637 | 0 |
| 85 HANOVER 1603 -MECF | 328.6729 | 0 | 0 | 427.958 | 82.3063 | 329.1854 | 0 |
| 85 HANOVER 1604 -HANC | 231.0161 | 0 | 0 | 527.435 | 148.9848 | 251.3589 | 0 |
| 85 HANOVER 1701 -FARR | 398.9942 | 0 | 0 | 936.8314 | 1 | 393.2972 | 0 |
| 85 HANOVER 1702 -MON | 455.0862 | 0 | 0 | 757.7925 | 0 | 456.9032 | 0 |
| 85 HANOVER $1703-\mathrm{ROCK}$ | 396.8775 | 0 | 0 | 951.4044 | 0 | 379.5159 | 0 |
| 85 HANOVER 1704 -ELMC | 500.5949 | 0 | 0 | 812.9615 | 0 | 565.3978 | 0 |
| 85 HANOVER $1705-$ SOUT | 225.4264 | 0 | 0 | 545.4441 | 2 | 210.9599 | 0 |
| 87 HENRICO C 101 - COAL | 1182.771 | 0 | 0 | 1030.523 | 2 | 1099.707 | 0 |
| 87 HENRICO C 102 - DUM | 1125.334 | 0 | 0 | 402.0522 | 0 | 1097.576 | 0 |
| 87 HENRICO C 103 -GLEN | 1096.616 | 0 | 0 | 1319.366 | 2 | 1101.838 | 0 |
| 87 HENRICO C 105 - GREE | 1010.05 | 0 | 0 | 591.0231 | 10.11628 | 1001.671 | 0 |
| 87 HENRICO C 106 - HERN | 848.787 | 0 | 0 | 684.5468 | 0 | 881.2033 |  |


| 87 HENRICO C 108 - HUNC | 1139.212 | 0 | 0 | 1071.454 | 3.069767 | 1134.872 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 109 - HUN7 | 229.7469 | 0 | 0 | 351.2667 | 0 | 262.2645 | 0 |
| 87 HENRICO C 110 - JOHN | 1185.883 | 0 | 0 | 486.064 | 3.069767 | 1178.562 | 0 |
| 87 HENRICO C 111 -LAKE | 1316.79 | 0 | 0 | 848.5417 | 3 | 1268.073 | 0 |
| 87 HENRICO C 112 -LONG | 702.1956 | 0 | 0 | 713.2462 | 3.069767 | 693.7106 | 0 |
| 87 HENRICO C 113 - MAU | 359.5113 | 0 | 0 | 333.2801 | 0 | 349.5193 | 0 |
| 87 HENRICO C 114 - MON | 340.395 | 0 | 0 | 302.5664 | 0 | 342.0601 | 0 |
| 87 HENRICO C 115 - STAPI | 979.043 | 0 | 0 | 1273.276 | 1.023256 | 1077.092 | 0 |
| 87 HENRICO C 117 - WEST | 748.8672 | 0 | 0 | 548.407 | 0 | 749.1223 | 0 |
| 87 HENRICO C 201 - ADAn | 980.2154 | 0 | 0 | 0 | 9.45 | 963.0352 | 0 |
| 87 HENRICO C 202 - AZALI | 1190.571 | 0 | 0 | 0 | 16.48053 | 1156.062 | 0 |
| 87 HENRICO C 203 - BELM | 1031.828 | 0 | 0 | 0 | 43.2614 | 918.5539 | 0 |
| 87 HENRICO C 204 - BROC | 255.8683 | 0 | 0 | 0 | 17.51057 | 197.1374 | 0 |
| 87 HENRICO C 205 -CANT | 284.066 | 0 | 0 | 0 | 12.3604 | 258.0683 | 0 |
| 87 HENRICO C 206 -CENT | 1203.103 | 0 | 0 | 0 | 6.1802 | 1184.386 | 0 |
| 87 HENRICO C 207 - CHAN | 1227.123 | 0 | 0 | 0 | 51.50167 | 1159.209 | 0 |
| 87 HENRICO C 208 - FAIRF | 976.477 | 0 | 0 | 0 | 7.210234 | 963.0352 | 0 |
| 87 HENRICO C 209 -GLEN | 767.6049 | 0 | 0 | 0 | 18.5406 | 745.8802 | 0 |
| 87 HENRICO C 210 - GREE | 712.6407 | 0 | 0 | 169.2851 | 0 | 725.9481 | 0 |
| 87 HENRICO C 211 - HIGH | 471.0065 | 0 | 0 | 0 | 2.060067 | 461.5855 | 0 |
| 87 HENRICO C 212 - HOLL | 454.2968 | 0 | 0 | 0 | 13.39043 | 393.2093 | 0 |
| 87 HENRICO C 213 - HUNC | 726.8748 | 0 | 0 | 0 | 30.901 | 676.6424 | 0 |
| 87 HENRICO C 214 -LONG | 642.2816 | 0 | 0 | 0 | 41.20133 | 578.0309 | 0 |
| 87 HENRICO C 215 - MAPI | 1343.047 | 0 | 0 | 0 | 7.210234 | 1314.47 | 0 |
| 87 HENRICO C 216 - MOO | 404.1675 | 0 | 0 | 0 | 41.20133 | 304.7638 | 0 |
| 87 HENRICO C 217 - MOU | 285.0563 | 0 | 0 | 178.8074 | 0 | 301.0796 | 0 |
| 87 HENRICO C 218 - OAKV | 43.60936 | 0 | 0 | 47.61144 | 0 | 36.23066 | 0 |
| 87 HENRICO C 219 - RANL | 161.6737 | 0 | 0 | 41.26325 | 0 | 176.2417 | 0 |
| 87 HENRICO C 220 - RATC | 1461.06 | 0 | 0 | 0 | 8.240267 | 1433.013 | 0 |
| 87 HENRICO C 221 - STRA | 125.5099 | 0 | 0 | 89.93273 | 1 | 124.6761 | 0 |
| 87 HENRICO C 222 - WILD | 1025.562 | 0 | 0 | 0 | 21.6307 | 978.7711 | 0 |
| 87 HENRICO C 223 - YELLC | 1139.397 | 0 | 0 | 0 | 76.22247 | 1033.322 | 0 |
| 87 HENRICO C 224 - ESSE> | 227.6706 | 0 | 0 | 0 | 0 | 218.2041 | 0 |
| 87 HENRICO C 301 -CAUS | 615.8891 | 0 | 0 | 574.0611 | 0 | 594.6091 | 0 |
| 87 HENRICO C 302 - CEDA | 730.8349 | 0 | 0 | 890.7652 | 1.023256 | 696.9075 | 0 |
| 87 HENRICO C 303 -INNSI | 924.3057 | 0 | 0 | 739.5644 | 1 | 882.3232 | 0 |
| 87 HENRICO C 304 - JACKS | 386.1015 | 0 | 0 | 537.8404 | 4.093023 | 384.6844 | 0 |
| 87 HENRICO C 305 - NUCK | 868.0898 | 0 | 0 | 1137.647 | 4.8 | 871.6671 | 0 |
| 87 HENRICO C 306 - POCA | 791.3503 | 0 | 0 | 639.0514 | 1 | 751.2535 | 0 |
| 87 HENRICO C 307 - RIDGI | 426.4088 | 0 | 0 | 439.571 | 0 | 423.0463 | 0 |
| 87 HENRICO C 308 - RIVEF | 790.1565 | 0 | 0 | 931.278 | 1.2 | 819.4524 | 0 |
| 87 HENRICO C 309 - SADL | 849.6889 | 0 | 0 | 825.4748 | 0 | 878.0608 | 0 |
| 87 HENRICO C $310-$ SHAD | 747.9427 | 0 | 0 | 1077.936 | 2.4 | 758.7127 | 0 |
| 87 HENRICO C 311 -SHOR | 484.918 | 0 | 0 | 525.8735 | 0 | 485.9171 | 0 |
| 87 HENRICO C 312 -SPRIN | 569.6058 | 0 | 0 | 436.401 | 1.023256 | 559.4441 | 0 |
| 87 HENRICO C 313 - STON | 1107.252 | 0 | 0 | 1071.787 | 6 | 1043.23 | 0 |
| 87 HENRICO C 314 -THRE | 781.7494 | 0 | 0 | 799.8924 | 4.093023 | 777.8937 | 0 |


| 87 HENRICO C 315 - TUCK | 1087.236 | 0 | 0 | 408.9278 | 4.093023 | 1067.739 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 316 - COLO | 677.5863 | 0 | 0 | 507.0175 | 0 | 684.1202 | 0 |
| 87 HENRICO C 401 - QUIO | 917.5214 | 0 | 0 | 776.6458 | 1.023256 | 901.5042 | 0 |
| 87 HENRICO C 402 - CRES | 773.2637 | 0 | 0 | 469.1575 | 3.069767 | 773.6312 | 0 |
| 87 HENRICO C 403 - DERB | 532.8345 | 0 | 0 | 793.7896 | 2.046512 | 524.279 | 0 |
| 87 HENRICO C 404 - FREEI | 568.1086 | 0 | 0 | 515.9532 | 5.093023 | 563.7065 | 0 |
| 87 HENRICO C 405 - GAYT | 845.5961 | 0 | 0 | 1086.599 | 3 | 783.2217 | 0 |
| 87 HENRICO C 406 - GOD | 804.114 | 0 | 0 | 701.4753 | 2 | 744.8598 | 0 |
| 87 HENRICO C 407 - LAKEI | 517.9941 | 0 | 0 | 623.1809 | 1 | 490.1796 | 0 |
| 87 HENRICO C 408 - LAUD | 702.0043 | 0 | 0 | 603.0783 | 5 | 650.0207 | 0 |
| 87 HENRICO C 409 - MAYE | 715.8317 | 0 | 0 | 843.2516 | 2 | 658.5456 | 0 |
| 87 HENRICO C 410 - MOO | 370.1477 | 0 | 0 | 648.5737 | 0 | 330.3384 | 0 |
| 87 HENRICO C 411 - PEME | 669.3133 | 0 | 0 | 556.8603 | 2.046512 | 666.0048 | 0 |
| 87 HENRICO C 412 - PINCI | 879.3355 | 0 | 0 | 794.609 | 1.023256 | 862.0767 | 0 |
| 87 HENRICO C 413 - RIDGI | 906.2237 | 0 | 0 | 924.72 | 1 | 820.518 | 0 |
| 87 HENRICO C 414 - ROLLI | 624.412 | 0 | 0 | 607.2123 | 4 | 597.806 | 0 |
| 87 HENRICO C 415 - SKIPV | 452.9267 | 0 | 0 | 339.1882 | 1.023256 | 457.1457 | 0 |
| 87 HENRICO C 416 - SPOT | 342.612 | 0 | 0 | 352.9248 | 0 | 335.6664 | 0 |
| 87 HENRICO C 417 - TUCK | 825.2389 | 0 | 0 | 1493.062 | 0 | 805.5995 | 0 |
| 87 HENRICO C 418 - WELE | 567.9853 | 0 | 0 | 481.4046 | 2 | 531.7383 | 0 |
| 87 HENRICO C 419 - WEST | 705.7288 | 0 | 0 | 830.7125 | 3.6 | 672.3985 | 0 |
| 87 HENRICO C501-ANTIC | 468.9178 | 0 | 0 | 0 | 113.3037 | 341.9929 | 0 |
| 87 HENRICO C502-CEDA | 572.3095 | 0 | 0 | 0 | 11.33037 | 549.7064 | 0 |
| 87 HENRICO C503-CHICl | 703.8989 | 0 | 0 | 0 | 91.67297 | 590.6196 | 0 |
| 87 HENRICO C504-DON/ | 632.8824 | 0 | 0 | 0 | 45.32147 | 565.4422 | 0 |
| 87 HENRICO C505-DORE | 989.6912 | 0 | 0 | 0 | 102.9 | 843.4426 | 0 |
| 87 HENRICO C506-EANE | 926.5194 | 0 | 0 | 0 | 46.2 | 849.7369 | 0 |
| 87 HENRICO C507-ELKO | 158.7428 | 0 | 0 | 0 | 49.4416 | 102.8077 | 0 |
| 87 HENRICO C508-HIGH | 736.2741 | 0 | 0 | 0 | 30.901 | 703.9179 | 0 |
| 87 HENRICO C509-LABU | 762.1168 | 0 | 0 | 0 | 27.8708 | 700.7707 | 0 |
| 87 HENRICO C510-MEHI | 920.2022 | 0 | 0 | 0 | 40.95 | 869.669 | 0 |
| 87 HENRICO C511-MON | 1619.303 | 0 | 0 | 0 | 31.5 | 1535.821 | 0 |
| 87 HENRICO C512-NINE | 387.4577 | 0 | 0 | 0 | 18.5406 | 332.5514 | 0 |
| 87 HENRICO C513-PLEA! | 1185.349 | 0 | 0 | 0 | 53.56174 | 1181.239 | 0 |
| 87 HENRICO C514-ROLF | 1575.083 | 0 | 0 | 0 | 39.9 | 1547.36 | 0 |
| 87 HENRICO C515-SAND | 479.3614 | 0 | 0 | 0 | 72.10234 | 370.3175 | 0 |
| 87 HENRICO C516-SULLI | 1526.651 | 0 | 0 | 0 | 53.55 | 1412.032 | 0 |
| 87 HENRICO C517-TOWI | 310.5946 | 0 | 0 | 0 | 42 | 262.2645 | 0 |
| 87 HENRICO C518-WHIT | 725.4226 | 0 | 0 | 0 | 92.4 | 581.1781 | 0 |
| 89 HENRY COI 101 - BASSI | 0 | 0 | 0 | 203.5943 | 15.60811 | 0 | 79.89744 |
| 89 HENRY COI 102 -GUN | 0 | 0 | 0 | 542.9183 | 5.202703 | 0 | 87.16084 |
| 89 HENRY COI 103 - SCOT | 0 | 0 | 0 | 916.1746 | 11.44595 | 0 | 160.8325 |
| 89 HENRY COI 201 - FIELD | 0 | 0 | 65.52 | 252.8628 | 0 | 0 | 72.63403 |
| 89 HENRY COI 202 - HORS | 0 | 0 | 0 | 578.9072 | 16.64865 | 0 | 171.2088 |
| 89 HENRY COI 203 - HORS | 49.17776 | 0 | 199.68 | 227.6427 | 2.153846 | 0 | 261.4825 |
| 89 HENRY COI 204 - SPEN | 0 | 0 | 0 | 561.4268 | 12.48649 | 0 | 117.2521 |
| 89 HENRY COI 302 - AXTO | 0 | 0 | 133.12 | 243.4589 | 0 | 0 | 161.8701 |


| 89 HENRY COI 303 -IRISB | 258.4448 | 0 | 0 | 458.6078 | 1 | 0 | 229.316 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 304 - MOU | 413.3024 | 0 | 0 | 493.0034 | 1 | 0 | 355.9068 |
| 89 HENRY COI 305 - MOU | 0 | 0 | 101.92 | 273.7606 | 2.153846 | 0 | 107.9134 |
| 89 HENRY COI 401 - COLLI | 0 | 0 | 69.68 | 371.98 | 2.153846 | 0 | 75.74692 |
| 89 HENRY COI 402 - DANI | 0 | 0 | 125.84 | 310.3317 | 1.076923 | 0 | 105.8382 |
| 89 HENRY COL 404 - COLLI | 0 | 0 | 166.4 | 646.7855 | 1.076923 | 0 | 172.2464 |
| 89 HENRY COI 405 - MOU | 0 | 0 | 114.4 | 318.6908 | 1.076923 | 0 | 125.5531 |
| 89 HENRY COI 501 - BASSI | 0 | 0 | 0 | 253.9788 | 15.60811 | 0 | 80.93506 |
| 89 HENRY COI 502 - FIGSE | 0 | 0 | 88.4 | 436.7631 | 2.153846 | 0 | 89.2361 |
| 89 HENRY COI 503 - STAN | 0 | 0 | 93.6 | 656.1895 | 1.076923 | 0 | 83.01032 |
| 89 HENRY COI $504-$ OAK I | 0 | 0 | 45.76 | 235.0998 | 0 | 0 | 49.80619 |
| 89 HENRY COI 505 - DYER | 0 | 0 | 69.68 | 273.7606 | 1.076923 | 0 | 75.74692 |
| 89 HENRY COI 601 - FONT | 141.2553 | 0 | 0 | 552.4139 | 0 | 0 | 140.0799 |
| 89 HENRY COI 602 - HILLC | 85.79949 | 0 | 0 | 179.274 | 0 | 0 | 63.29537 |
| 89 HENRY COI 603 -RIDG\| | 162.182 | 0 | 0 | 590.9787 | 1 | 0 | 141.1175 |
| 89 HENRY COI 604 -RIDG\| | 131.8382 | 0 | 0 | 453.3963 | 0 | 0 | 107.9134 |
| 91 HIGHLAND 001 - MON | 150 | 0 | 0 | 279 | 0 | 231 | 201 |
| 91 HIGHLAND $003-$ WILSI | 28 | 0 | 0 | 66 | 0 | 35 | 59 |
| 91 HIGHLAND 005 - BLUE | 96 | 0 | 0 | 139 | 0 | 131 | 105 |
| 91 HIGHLAND 007 - MILL | 56 | 0 | 0 | 92 | 0 | 77 | 71 |
| 91 HIGHLAND 008 - MCD | 70 | 0 | 0 | 207 | 0 | 134 | 146 |
| 91 HIGHLAND $010-$ HEAD | 16 | 0 | 0 | 65 | 0 | 26 | 53 |
| 93 ISLE OF WII 101 - SMIT। | 544.552 | 0 | 0 | 975.0249 | 0 | 571.0793 | 0 |
| 93 ISLE OF WII 102 - CYPR | 466.3118 | 0 | 0 | 789.9459 | 0 | 489.3468 | 0 |
| 93 ISLE OF WII 201 - BART | 566.4593 | 0 | 0 | 970.8891 | 1 | 586.7971 | 0 |
| 93 ISLE OF WII 202 - CARR | 619.6627 | 0 | 0 | 851.9836 | 0 | 630.8068 | 0 |
| 93 ISLE OF WII301-RUSH | 559.1569 | 0 | 0 | 502.5049 | 3 | 582.2516 | 0 |
| 93 ISLE OF WII302-PONS | 665.5636 | 0 | 0 | 399.1088 | 1 | 802.2745 | 0 |
| 93 ISLE OF WII 401 - COUF | 105.3635 | 0 | 0 | 340.1731 | 0 | 210.9608 | 0 |
| 93 ISLE OF WII 402 - WINE | 271.2328 | 0 | 0 | 583.1538 | 0 | 355.2335 | 0 |
| 93 ISLE OF WII403-LONE | 376.5963 | 0 | 0 | 490.0974 | 0 | 450.2021 | 0 |
| 93 ISLE OF WII501-WALT | 124.1412 | 0 | 0 | 387.7352 | 0 | 118.6181 | 0 |
| 93 ISLE OF WII502-CAMI | 128.314 | 0 | 0 | 108.5659 | 0 | 173.549 | 0 |
| 93 ISLE OF WII503-CARR | 114.7523 | 0 | 0 | 224.3695 | 0 | 114.5278 | 0 |
| 93 ISLE OF WII504-ZUNI | 155.4373 | 0 | 0 | 430.1276 | 0 | 164.8168 | 0 |
| 93 ISLE OF WII505-RAYN | 83.45625 | 0 | 0 | 253.3204 | 0 | 140.5359 | 0 |
| 95 JAMES CIT 101 - BERK | 1017.109 | 0 | 0 | 1056.055 | 3 | 979.141 | 0 |
| 95 JAMES CIT) 102 - BERK | 682.1244 | 0 | 21.62437 | 555.1188 | 0 | 676.7592 | 0 |
| 95 JAMES CIT) 103 - BERK | 1116.501 | 0 | 16.21827 | 1485.696 | 0 | 1134.209 | 0 |
| 95 JAMES CIT) 104- BERKE | 383.8981 | 0 | 0 | 277.6836 | 1 | 378.8079 | 0 |
| 95 JAMES CIT 201 - JAME | 372.8665 | 0 | 0 | 231.5817 | 1 | 424.3384 | 0 |
| 95 JAMES CIT\202-JAME | 1000.813 | 0 | 15.13706 | 632.5772 | 0 | 1179.427 | 0 |
| 95 JAMES CIT 203 - JAME | 749.7911 | 0 | 7.568528 | 683.1403 | 2.307692 | 741.0015 | 0 |
| 95 JAMES CIT 204 - JAME | 1043.377 | 0 | 23.7868 | 1227.501 | 1.153846 | 1098.765 | 0 |
| 95 JAMES CIT) 301 - POW | 971.3451 | 0 | 14.05584 | 1189.848 | 0 | 1006.832 | 0 |
| 95 JAMES CIT 302 - POW | 331.7853 | 0 | 11.8934 | 205.48 | 0 | 382.8617 | 0 |
| 95 JAMES CIT 303 - POW | 245.5648 | 0 | 7.568528 | 477.6603 | 0 | 249.2157 | 0 |


| 95 JAMES CIT\304-POW | 970.2537 | 0 | 18.38071 | 629.3498 | 1.153846 | 1129.442 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 JAMES CIT\401-STON | 888.3988 | 0 | 29.19289 | 1008.035 | 3.461538 | 892.7462 | 0 |
| 95 JAMES CIT\402-STON | 1399.174 | 0 | 29.19289 | 1453.421 | 6.923077 | 1415.545 | 0 |
| 95 JAMES CIT\403-STON | 726.8717 | 0 | 18.38071 | 1024.173 | 0 | 721.0642 | 0 |
| 95 JAMES CIT\501-ROBE | 558.1966 | 0 | 0 | 214.4275 | 1 | 618.9598 | 0 |
| 95 JAMES CIT\502-ROBE | 907.8968 | 0 | 0 | 1197.577 | 0 | 822.9658 | 0 |
| 95 JAMES CIT\503-ROBE | 201.8774 | 0 | 0 | 105.0695 | 1 | 233.9711 | 0 |
| 95 JAMES CIT\504-ROBE | 1103.155 | 0 | 0 | 915.6053 | 0 | 1110.948 | 0 |
| 97 KING \& QU 101 - OWEI | 190.2727 | 0 | 0 | 268.56 | 1 | 258.0195 | 0 |
| 97 KING \& QU 201 - CLAR | 151.5909 | 0 | 0 | 340.6636 | 3 | 163.6221 | 0 |
| 97 KING \& QU 301 - SHAC | 159.9545 | 0 | 0 | 346.9335 | 2 | 195.0879 | 0 |
| 97 KING \& QU 401 - COUF | 228.9545 | 0 | 0 | 304.0893 | 0 | 242.2866 | 0 |
| 97 KING \& QU 501 - OLDN | 97.22727 | 0 | 0 | 342.7536 | 3 | 106.9837 | 0 |
| 99 KING GEOR 101 - COUF | 482.9596 | 0 | 0 | 1024.682 | 0 | 469.9849 | 0 |
| 99 KING GEOR 102 - PASS, | 226.8282 | 0 | 0 | 487.5851 | 1 | 217.4961 | 0 |
| 99 KING GEOR 201 - MON | 582.8074 | 0 | 0 | 1421.854 | 3 | 565.0526 | 0 |
| 99 KING GEOR 301 - DAHL | 773.8206 | 0 | 0 | 1021.453 | 1 | 749.7604 | 0 |
| 99 KING GEOR 401 - SHILC | 643.5843 | 0 | 0 | 1359.426 | 1 | 632.706 | 0 |
| 101 KING WILLI 101 - WEST | 264.1788 | 0 | 0 | 745.0126 | 1 | 340.8851 | 0 |
| 101 KING WILLI 201 - SWEE | 103.8212 | 0 | 0 | 312.9874 | 3 | 131.1891 | 0 |
| 101 KING WILLI 202 - COUF | 274.9453 | 0 | 0 | 318.0839 | 172.819 | 304.7306 | 0 |
| 101 KING WILLI 301 - AYLE ${ }^{-}$ | 241.6186 | 0 | 0 | 571.3157 | 310.4714 | 276.84 | 0 |
| 101 KING WILLI 401 - MAN | 311.3964 | 0 | 0 | 612.4916 | 309.4667 | 370.8417 | 0 |
| 101 KING WILLI 501 - MAN | 428.0398 | 0 | 0 | 634.1089 | 262.2429 | 454.5135 | 0 |
| 103 LANCASTEF 101 - PREC | 361.704 | 0 | 0 | 681.3461 | 0 | 358.8826 | 0 |
| 103 LANCASTEF 201 - PREC | 495.3064 | 0 | 0 | 384.2096 | 0 | 477.7895 | 0 |
| 103 LANCASTEF 301 - PREC | 261.7738 | 0 | 0 | 487.6087 | 2 | 259.4332 | 0 |
| 103 LANCASTEF 302 - PREC | 140.1196 | 0 | 0 | 272.1031 | 2 | 144.8502 | 0 |
| 103 LANCASTEF 401 - PREC | 503.996 | 0 | 0 | 338.4962 | 0 | 501.5709 | 0 |
| 103 LANCASTEF501-PREC | 417.1001 | 0 | 0 | 729.2363 | 1 | 393.4737 | 0 |
| 105 LEE COUNT 101 - ELYD, | 0 | 0 | 0 | 279.9302 | 2.165289 | 0 | 29.91453 |
| 105 LEE COUNT 102 - EWIN | 0 | 0 | 0 | 328.0099 | 7.578512 | 0 | 22.4359 |
| 105 LEE COUNT 103 - ROSE | 0 | 0 | 0 | 585.5029 | 9.743802 | 0 | 42.73504 |
| 105 LEE COUNT 201 - BLAC | 0 | 0 | 0 | 80.1327 | 5.413223 | 0 | 21.36752 |
| 105 LEE COUNT 202 - FLAT | 0 | 0 | 0 | 490.4121 | 10.82645 | 0 | 57.69231 |
| 105 LEE COUNT 203 - JONE | 0 | 0 | 0 | 759.658 | 12.99174 | 0 | 87.60684 |
| 105 LEE COUNT 301 - BEN + | 0 | 0 | 0 | 696.6203 | 22.73554 | 0 | 117.5214 |
| 105 LEE COUNT 302 - WOO | 0 | 0 | 0 | 445.5378 | 10.82645 | 0 | 57.69231 |
| 105 LEE COUNT 401 - STICK | 0 | 0 | 0 | 272.4512 | 5.413223 | 0 | 42.73504 |
| 105 LEE COUNT 402 - JASPE | 0 | 0 | 0 | 134.6229 | 5.413223 | 0 | 23.50427 |
| 105 LEE COUNT 403 - SEMII | 0 | 0 | 0 | 222.2347 | 3.247934 | 0 | 22.4359 |
| 105 LEE COUNT 404 - DRYD | 0 | 0 | 0 | 484.0015 | 8.661157 | 0 | 72.64957 |
| 105 LEE COUNT 501 - SAIN7 | 0 | 0 | 0 | 190.1816 | 5.413223 | 0 | 48.07692 |
| 105 LEE COUNT 502 - PENN | 0 | 0 | 0 | 484.0015 | 14.07438 | 0 | 73.71795 |
| 105 LEE COUNT 503 - ROBE | 0 | 0 | 0 | 72.65365 | 2.165289 | 0 | 10.68376 |
| 105 LEE COUNT 504 - KEOK | 0 | 0 | 0 | 110.0489 | 4.330579 | 0 | 19.23077 |
| 107 LOUDOUN 107 - LITTL | 914.9338 | 0 | 0 | 0 | 91.96262 | 766.6835 | 0 |


| 107 LOUDOUN 108 - MERC | 695.786 | 0 | 0 | 471.7575 | 1.15 | 735.4123 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 112 - FREEI | 604.2912 | 0 | 0 | 346.9427 | 0 | 646.9903 | 0 |
| 107 LOUDOUN 114 - DULL | 758.6731 | 0 | 0 | 0 | 81.86916 | 677.1831 | 0 |
| 107 LOUDOUN 117-CART | 342.5735 | 0 | 0 | 122.6993 | 0 | 346.2975 | 0 |
| 107 LOUDOUN 118-MOO | 985.7324 | 0 | 0 | 0 | 71.24244 | 881.3701 | 0 |
| 107 LOUDOUN 119 - ARCC | 587.2689 | 0 | 0 | 363.8668 | 1.15 | 616.7974 | 0 |
| 107 LOUDOUN 120 - LUNS | 825.5809 | 0 | 0 | 509.8366 | 4.6 | 883.1417 | 0 |
| 107 LOUDOUN 121-TOWI | 500.0297 | 0 | 0 | 328.9609 | 1.15 | 532.6887 | 0 |
| 107 LOUDOUN 122 - HUTC | 774.514 | 0 | 0 | 594.4567 | 0 | 857.2621 | 0 |
| 107 LOUDOUN 123 - CARD | 574.3931 | 0 | 0 | 0 | 66.16822 | 502.4958 | 0 |
| 107 LOUDOUN 124 - LIBER | 540.4576 | 0 | 0 | 345.885 | 0 | 576.8997 | 0 |
| 107 LOUDOUN 125 -ROCK | 760.6834 | 0 | 0 | 258.0915 | 1.15 | 751.38 | 0 |
| 107 LOUDOUN 126-GOSHE | 777.7057 | 0 | 0 | 447.4292 | 2.3 | 802.2679 | 0 |
| 107 LOUDOUN 207 - RIVEF | 579.1244 | 0 | 0 | 395.3614 | 0 | 572.8872 | 0 |
| 107 LOUDOUN 208 - ALGO | 619.5725 | 0 | 0 | 0 | 63.57018 | 518.3774 | 0 |
| 107 LOUDOUN 209 - POTC | 820.4262 | 0 | 0 | 518.9118 | 0 | 926.4851 | 0 |
| 107 LOUDOUN 210 - CASC | 879.8394 | 0 | 0 | 520.4141 | 1.15 | 888.1889 | 0 |
| 107 LOUDOUN 213 - COUN | 295.7622 | 0 | 0 | 188.2799 | 1.15 | 299.2694 | 0 |
| 107 LOUDOUN 214 - SUGA | 970.5695 | 0 | 0 | 718.7412 | 0 | 1122.947 | 0 |
| 107 LOUDOUN 215 -SUGA | 860.1069 | 0 | 0 | 525.3579 | 3.3 | 999.4874 | 0 |
| 107 LOUDOUN 216 - LOWI | 741.0647 | 0 | 0 | 540.3988 | 2.2 | 823.423 | 0 |
| 107 LOUDOUN 217 -SOUT | 915.8745 | 0 | 0 | 597.3395 | 2.2 | 1031.694 | 0 |
| 107 LOUDOUN 218 - UNIV | 610.9823 | 0 | 0 | 0 | 46.03358 | 553.6484 | 0 |
| 107 LOUDOUN 219 - GALIL | 668.9665 | 0 | 0 | 0 | 72.33848 | 575.0248 | 0 |
| 107 LOUDOUN 301 - PURC | 841.7049 | 0 | 0 | 892.4962 | 5.192308 | 845.4006 | 0 |
| 107 LOUDOUN 302 -ROUN | 603.0772 | 0 | 0 | 861.6103 | 4.153846 | 602.7793 | 0 |
| 107 LOUDOUN 303 - HILLS | 595.4845 | 0 | 0 | 750.8471 | 2.076923 | 598.466 | 0 |
| 107 LOUDOUN 305 - PHILC | 302.1936 | 0 | 0 | 397.7105 | 0 | 306.2421 | 0 |
| 107 LOUDOUN 307 - MIDC | 386.3762 | 0 | 0 | 321.1863 | 0 | 351.0602 | 0 |
| 107 LOUDOUN 308-ST LO | 418.7541 | 0 | 0 | 367.5319 | 0 | 377.8997 | 0 |
| 107 LOUDOUN 309 - ALDIE | 251.4683 | 0 | 0 | 303.9414 | 0 | 234.0401 | 0 |
| 107 LOUDOUN 310 - MOU | 785.302 | 0 | 0 | 940.4227 | 2.076923 | 780.7016 | 0 |
| 107 LOUDOUN 311-ROUN | 578.1298 | 0 | 0 | 922.3171 | 1.038462 | 590.9178 | 0 |
| 107 LOUDOUN 312 - BRIAF | 983.2086 | 0 | 0 | 508.7246 | 1.058824 | 986.6602 | 0 |
| 107 LOUDOUN 313 - PINEE | 885.1589 | 0 | 0 | 585.9947 | 0 | 938.1359 | 0 |
| 107 LOUDOUN 314 -LEGA | 791.5363 | 0 | 0 | 386.0796 | 0 | 774.894 | 0 |
| 107 LOUDOUN 315 - FIREF | 207.1722 | 0 | 0 | 308.8591 | 1.038462 | 203.8019 | 0 |
| 107 LOUDOUN 316 - CREIG | 1003.715 | 0 | 0 | 510.8802 | 1.058824 | 997.2085 | 0 |
| 107 LOUDOUN 318 - MADI | 793.2583 | 0 | 0 | 848.2335 | 1.058824 | 802.2679 | 0 |
| 107 LOUDOUN 319 - JOHN | 1062.829 | 0 | 0 | 631.4781 | 2.3 | 1085.865 | 0 |
| 107 LOUDOUN 320-STON | 1135.174 | 0 | 0 | 360.6935 | 0 | 1128.673 | 0 |
| 107 LOUDOUN 321 - BRAN | 590.3569 | 0 | 0 | 285.6187 | 0 | 583.5754 | 0 |
| 107 LOUDOUN 322-BUFFA | 619.1857 | 0 | 0 | 312.0369 | 1.15 | 640.5204 | 0 |
| 107 LOUDOUN 401 - WEST | 812.4187 | 0 | 0 | 1070.356 | 2.076923 | 787.1715 | 0 |
| 107 LOUDOUN 402 - WATE | 731.0684 | 0 | 0 | 930.8374 | 3.115385 | 712.7676 | 0 |
| 107 LOUDOUN 403 - LUCK | 826.5195 | 0 | 0 | 921.2521 | 1.038462 | 824.9126 | 0 |
| 107 LOUDOUN 407 - HARP | 494.3025 | 0 | 0 | 402.0217 | 0 | 490.5881 | 0 |


| 107 LOUDOUN 408 - EVER | 828.874 | 0 | 0 | 745.8419 | 2.117647 | 842.1657 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 409 - CLAR | 641.0407 | 0 | 0 | 994.7393 | 1.038462 | 643.7553 | 0 |
| 107 LOUDOUN 411 - EAST | 547.759 | 0 | 0 | 762.5624 | 0 | 525.1404 | 0 |
| 107 LOUDOUN 413 - TUSC | 31.45547 | 0 | 0 | 37.2761 | 0 | 30.99576 | 0 |
| 107 LOUDOUN 414 -RED F | 472.7172 | 0 | 0 | 335.1977 | 1.058824 | 471.3493 | 0 |
| 107 LOUDOUN 416 - HAMI | 919.8012 | 0 | 0 | 1124.673 | 2.076923 | 900.3948 | 0 |
| 107 LOUDOUN 420 - RIVEF | 619.497 | 0 | 0 | 726.4414 | 2.117647 | 625.2593 | 0 |
| 107 LOUDOUN 421 - BETM | 62.91093 | 0 | 0 | 128.8688 | 1.038462 | 59.30744 | 0 |
| 107 LOUDOUN 422 - SYCO | 501.8573 | 0 | 0 | 644.5281 | 1.058824 | 518.6705 | 0 |
| 107 LOUDOUN 501 - WEST | 862.3312 | 0 | 0 | 668.2399 | 0 | 863.606 | 0 |
| 107 LOUDOUN 502 -EAST | 947.5929 | 0 | 0 | 408.4886 | 2.117647 | 933.0793 | 0 |
| 107 LOUDOUN 503 - DRY | 430.626 | 0 | 0 | 357.8317 | 0 | 427.5277 | 0 |
| 107 LOUDOUN 504 - SMAF | 919.5321 | 0 | 0 | 684.407 | 1.058824 | 908.4964 | 0 |
| 107 LOUDOUN 505 - COOL | 870.9653 | 0 | 0 | 773.8649 | 3.176471 | 888.5333 | 0 |
| 107 LOUDOUN 506-BRAN | 501.8573 | 0 | 0 | 261.9069 | 1.058824 | 497.001 | 0 |
| 107 LOUDOUN 507-GREE | 425.1911 | 0 | 0 | 379.1512 | 0 | 413.6331 | 0 |
| 107 LOUDOUN 508-BALLS | 809.1647 | 0 | 0 | 599.6126 | 0 | 794.1328 | 0 |
| 107 LOUDOUN 509-TOLB | 1033.934 | 0 | 0 | 529.2029 | 1.058824 | 1024.998 | 0 |
| 107 LOUDOUN 510 - HERI7 | 445.7999 | 0 | 0 | 444.1181 | 1.038462 | 446.4233 | 0 |
| 107 LOUDOUN 615 -HILLS | 897.6822 | 0 | 0 | 0 | 69.05037 | 786.0932 | 0 |
| 107 LOUDOUN 616 -EAGL | 1008.282 | 0 | 0 | 0 | 56.99396 | 907.943 | 0 |
| 107 LOUDOUN 617 - OAK ( | 331.9346 | 0 | 0 | 85.67793 | 0 | 345.2286 | 0 |
| 107 LOUDOUN 619 -RIDGI | 346.8291 | 0 | 0 | 125.8725 | 0 | 361.2609 | 0 |
| 107 LOUDOUN 620 -RUSS | 1182.235 | 0 | 0 | 0 | 94.25923 | 1042.733 | 0 |
| 107 LOUDOUN 621 - DOM | 1198.341 | 0 | 0 | 0 | 108.5077 | 1081.552 | 0 |
| 107 LOUDOUN 622 -FARN | 1089.889 | 0 | 0 | 0 | 66.85829 | 968.3503 | 0 |
| 107 LOUDOUN 623 - WELL | 1448.533 | 0 | 0 | 0 | 89.87508 | 1281.041 | 0 |
| 107 LOUDOUN 625 - MILL | 434.8819 | 0 | 0 | 0 | 43.8415 | 352.6097 | 0 |
| 107 LOUDOUN 626 - ASHB | 714.0654 | 0 | 0 | 0 | 35.0732 | 581.4377 | 0 |
| 107 LOUDOUN 627 - ASHB | 315.6921 | 0 | 0 | 0 | 23.01679 | 280.3624 | 0 |
| 107 LOUDOUN 628 - MOO | 925.6005 | 0 | 0 | 0 | 52.60981 | 817.6468 | 0 |
| 107 LOUDOUN 629 - DISCC | 179.7979 | 0 | 0 | 108.9485 | 0 | 179.5617 | 0 |
| 107 LOUDOUN 701 - SULL) | 691.2583 | 0 | 0 | 0 | 94.11765 | 655.1863 | 0 |
| 107 LOUDOUN 702 - PARK | 552.1604 | 0 | 0 | 390.3106 | 3.45 | 589.9883 | 0 |
| 107 LOUDOUN 703 -ROLLI | 823.4531 | 0 | 0 | 287.7086 | 1.15 | 849.7114 | 0 |
| 107 LOUDOUN 705 - FORE | 898.7417 | 0 | 0 | 0 | 105.8824 | 829.4038 | 0 |
| 107 LOUDOUN 707 - CLAU | 602.1634 | 0 | 0 | 295.1129 | 0 | 613.5023 | 0 |
| 107 LOUDOUN 708 - SENE | 648.8338 | 0 | 0 | 431.8893 | 3.3 | 699.9632 | 0 |
| 107 LOUDOUN 709 - MIRR | 730.8944 | 0 | 0 | 398.7726 | 1.15 | 752.4488 | 0 |
| 107 LOUDOUN 710 - STERI | 489.3907 | 0 | 0 | 360.6935 | 0 | 502.3451 | 0 |
| 107 LOUDOUN 808 - STON | 1177.939 | 0 | 0 | 0 | 101.9315 | 996.365 | 0 |
| 107 LOUDOUN 810 - CEDA | 982.511 | 0 | 0 | 0 | 73.43452 | 885.2983 | 0 |
| 107 LOUDOUN 813 - SELDI | 703.3276 | 0 | 0 | 0 | 64.66622 | 630.6034 | 0 |
| 107 LOUDOUN 814 - NEW | 885.8706 | 0 | 0 | 0 | 99.73942 | 773.1534 | 0 |
| 107 LOUDOUN 815 - BELM | 1090.963 | 0 | 0 | 0 | 60.28207 | 943.7675 | 0 |
| 107 LOUDOUN 817 - SAND | 1192.972 | 0 | 0 | 0 | 123.8522 | 1006.07 | 0 |
| 107 LOUDOUN 818 - BROA | 768.8283 | 0 | 0 | 0 | 64.66622 | 648.0686 | 0 |

| 107 LOUDOUN 819 - HERI7 | 740.9099 | 0 | 0 | 0 | 81.10678 | 662.0867 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 820 - BELM | 818.2223 | 0 | 0 | 0 | 69.05037 | 708.4543 | 0 |
| 107 LOUDOUN 822 -RIVEF | 552.5827 | 0 | 0 | 432.2003 | 0 | 550.442 | 0 |
| 109 LOUISA CO 101 - ZION | 661.5561 | 0 | 0 | 837.2439 | 1 | 672.9713 | 0 |
| 109 LOUISA CO 102 - MECr | 260.3196 | 0 | 0 | 435.5788 | 4 | 257.0902 | 0 |
| 109 LOUISA CO 201 - LOUIs | 315.1804 | 0 | 0 | 578.6521 | 1 | 320.8226 | 0 |
| 109 LOUISA CO 202 - LOUIS | 275.3794 | 0 | 0 | 493.8679 | 2 | 276.534 | 0 |
| 109 LOUISA CO 301 - PATR | 803.5486 | 0 | 0 | 713.247 | 1 | 795.0351 | 0 |
| 109 LOUISA CO 302 - PATR | 164.5822 | 0 | 0 | 242.6947 | 2 | 162.0316 | 0 |
| 109 LOUISA CO 401 - MINE | 413.0692 | 0 | 0 | 963.3604 | 1 | 416.9614 | 0 |
| 109 LOUISA CO 402 - YANC | 195.7019 | 0 | 0 | 226.6773 | 1 | 192.2486 | 0 |
| 109 LOUISA CO 501 - FRED | 221.5944 | 0 | 0 | 223.6183 | 3 | 217.1224 | 0 |
| 109 LOUISA CO 502 - CUCK | 200.0804 | 0 | 0 | 469.4925 | 0 | 201.9994 | 0 |
| 109 LOUISA CO 503 - ELK C | 157.0523 | 0 | 0 | 462.0738 | 0 | 148.0277 | 0 |
| 109 LOUISA CO 601 - BUMI | 168.885 | 0 | 0 | 619.9844 | 1 | 159.7949 | 0 |
| 109 LOUISA CO 602 - LOCU | 264.6224 | 0 | 0 | 720.6656 | 0 | 250.2051 | 0 |
| 109 LOUISA CO 701 - SHEL` | 263.3953 | 0 | 0 | 682.4164 | 0 | 247.0513 | 0 |
| 109 LOUISA CO 702 - SOUT | 248.0327 | 0 | 0 | 511.4269 | 0 | 233.1046 | 0 |
| 111 LUNENBUR 101 - PLYM | 84.23333 | 0 | 0 | 340.4112 | 0 | 95.4112 | 0 |
| 111 LUNENBUR 201 - BROV | 123.0399 | 0 | 0 | 309.1455 | 0 | 115.6159 | 0 |
| 111 LUNENBUR 301 -ROSE | 71.71844 | 0 | 0 | 234.966 | 0 | 43.7769 | 0 |
| 111 LUNENBUR 302 - FLAT | 83.28546 | 0 | 0 | 183.3116 | 0 | 89.79878 | 0 |
| 111 LUNENBUR 401 - ARRC | 36.575 | 0 | 0 | 167.587 | 0 | 38.16448 | 0 |
| 111 LUNENBUR 402 - PLEA! | 90.88333 | 0 | 0 | 254.5228 | 0 | 89.79878 | 0 |
| 111 LUNENBUR 501 -REED | 135.2167 | 0 | 0 | 131.9748 | 0 | 139.1881 | 0 |
| 111 LUNENBUR 502 - PEOP | 193.1216 | 0 | 0 | 139.3597 | 1 | 203.1697 | 0 |
| 111 LUNENBUR601-HOUP | 326.1617 | 0 | 0 | 193.073 | 0 | 280.6212 | 0 |
| 111 LUNENBUR 701 - MEHI | 87.55833 | 0 | 0 | 124.6429 | 0 | 86.43132 | 0 |
| 111 LUNENBUR 702 - VICTC | 102.2062 | 0 | 0 | 198.0057 | 0 | 101.0236 | 0 |
| 113 MADISON 1001 - OAK I | 283.2392 | 0 | 0 | 0 | 311.6216 | 243.45 | 0 |
| 113 MADISON (002-RADI, | 353.2288 | 0 | 0 | 0 | 481.7905 | 308.1507 | 0 |
| 113 MADISON 1003 - ROCF | 153.1023 | 0 | 0 | 0 | 271.2066 | 125.0149 | 0 |
| 113 MADISON 1004 - GRAV | 13.12305 | 0 | 0 | 0 | 36.16087 | 10.96622 | 0 |
| 113 MADISON 1005 - MADI | 371.8198 | 0 | 0 | 0 | 579.6375 | 307.0541 | 0 |
| 113 MADISON (006-WOLI | 184.8163 | 0 | 0 | 0 | 346.719 | 165.5899 | 0 |
| 113 MADISON (007-BRIGI | 270.1161 | 0 | 0 | 0 | 674.2939 | 248.9331 | 0 |
| 113 MADISON 1008 - CRIGI | 169.5061 | 0 | 0 | 0 | 315.8759 | 137.0777 | 0 |
| 113 MADISON 1009 - ETLAI | 94.04853 | 0 | 0 | 0 | 195.6941 | 76.76351 | 0 |
| 115 MATHEWS 001 - CHES, | 238.4026 | 0 | 0 | 647.5592 | 0 | 281.1761 | 0 |
| 115 MATHEWS 002 - WEST | 393.9318 | 0 | 0 | 917.0959 | 1.333333 | 474.6981 | 0 |
| 115 MATHEWS 003 - PIANI | 433.6656 | 0 | 0 | 1023.345 | 2.666667 | 511.1258 | 0 |
| 117 MECKLENB 101 - WRIG | 107.0474 | 0 | 0 | 157.4126 | 1 | 117.3476 | 0 |
| 117 MECKLENB 102 - PEAR | 36.03577 | 0 | 0 | 75.05768 | 1 | 37.0015 | 0 |
| 117 MECKLENB 103 - SOUT | 197.1369 | 0 | 0 | 247.0649 | 1 | 196.6366 | 0 |
| 117 MECKLENB 201 - BOYD | 103.8678 | 0 | 0 | 148.0304 | 2 | 116.2904 | 0 |
| 117 MECKLENB 202 - BLUE: | 60.41291 | 0 | 0 | 45.86858 | 0 | 60.25959 | 0 |
| 117 MECKLENB 203 - CHAS | 152.6221 | 0 | 0 | 74.01521 | 0 | 153.2919 | 0 |

| 117 MECKLENB 301 - BRAC | 129.3048 | 0 | 0 | 431.5817 | 1 | 131.091 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 MECKLENB 302 - LACR | 118.7061 | 0 | 0 | 231.4278 | 0 | 121.5764 | 0 |
| 117 MECKLENB 401 - AMEF | 439.8484 | 0 | 0 | 274.169 | 1 | 449.304 | 0 |
| 117 MECKLENB 402 - PARK | 72.07154 | 0 | 0 | 55.25079 | 1 | 74.00301 | 0 |
| 117 MECKLENB 501 - SOUT | 276.6275 | 0 | 0 | 566.06 | 0 | 289.6689 | 0 |
| 117 MECKLENB 601 - BASK | 127.1851 | 0 | 0 | 230.3854 | 1 | 134.2626 | 0 |
| 117 MECKLENB 602 - UNIO | 22.25739 | 0 | 0 | 192.8565 | 0 | 24.31527 | 0 |
| 117 MECKLENB 603 - SMITI | 49.81415 | 0 | 0 | 100.0769 | 1 | 50.74492 | 0 |
| 117 MECKLENB 604 - LAKE | 59.35303 | 0 | 0 | 142.8181 | 0 | 62.37397 | 0 |
| 117 MECKLENB 701 - CHAS | 128.2449 | 0 | 0 | 243.9375 | 0 | 132.1482 | 0 |
| 117 MECKLENB 702 - SUNS | 112.3468 | 0 | 0 | 212.6634 | 0 | 120.5192 | 0 |
| 117 MECKLENB 801 - FINCF | 41.33515 | 0 | 0 | 89.65223 | 0 | 44.40181 | 0 |
| 117 MECKLENB 802 - BLUE: | 117.6462 | 0 | 0 | 390.9254 | 0 | 120.5192 | 0 |
| 117 MECKLENB 803 - CHAS | 107.0474 | 0 | 0 | 211.621 | 1 | 116.2904 | 0 |
| 117 MECKLENB 901 - AVER | 8.479005 | 0 | 0 | 88.60976 | 1 | 11.62904 | 0 |
| 117 MECKLENB 902 - BUFF. | 40.27527 | 0 | 0 | 174.0921 | 0 | 40.17306 | 0 |
| 117 MECKLENB 903 - CLAR | 218.3344 | 0 | 0 | 550.423 | 1 | 206.1512 | 0 |
| 119 MIDDLESE) 101 - SALU | 90.94545 | 0 | 0 | 218.7378 | 0 | 112.2718 | 0 |
| 119 MIDDLESE) 102 - URBA | 143.0727 | 0 | 0 | 426.9086 | 0 | 167.307 | 0 |
| 119 MIDDLESE) 201 - NEW | 244 | 0 | 0 | 830.5697 | 0 | 260.8669 | 0 |
| 119 MIDDLESE) 302 - CHUR | 305 | 0 | 0 | 520.9553 | 1 | 348.9232 | 0 |
| 119 MIDDLESE) 401- HARN | 313.8727 | 0 | 0 | 486.0841 | 0 | 344.5204 | 0 |
| 119 MIDDLESE> 501 - WILTI | 306.1091 | 0 | 0 | 684.7445 | 1 | 329.1106 | 0 |
| 121 MONTGON 101 - PREC | 797.6648 | 0 | 0 | 509.3694 | 0 | 862.02 | 409.1619 |
| 121 MONTGON 102 - PREC | 899.3416 | 0 | 0 | 198.4273 | 1 | 894.4504 | 182.3101 |
| 121 MONTGON 103 - PREC | 1348.488 | 0 | 0 | 473.7322 | 3 | 1357.183 | 353.2259 |
| 121 MONTGON 201 - PREC | 84.9806 | 0 | 0 | 70.63505 | 1 | 92.06039 | 61.11532 |
| 121 MONTGON 202 - PREC | 614.8006 | 0 | 0 | 621.6637 | 2 | 746.9445 | 467.1697 |
| 121 MONTGON 203 - PREC | 369.8208 | 0 | 0 | 497.518 | 4 | 439.4458 | 235.1386 |
| 121 MONTGON 204 - PREC | 731.2676 | 0 | 0 | 834.659 | 0 | 835.1852 | 335.6164 |
| 121 MONTGON 301 - PREC | 228.3364 | 0 | 0 | 656.9955 | 0 | 221.7988 | 0 |
| 121 MONTGON 302 - PREC | 290.8451 | 0 | 0 | 709.5118 | 0 | 333.7347 | 0 |
| 121 MONTGON 303 - PREC | 116.1079 | 0 | 0 | 234.6605 | 0 | 129.3142 | 134.6609 |
| 121 MONTGON 304 - PREC | 380.7789 | 0 | 0 | 584.1149 | 0 | 448.3289 | 356.3334 |
| 121 MONTGON 401 - PREC | 244.1021 | 0 | 0 | 428.1894 | 1 | 258.0743 | 0 |
| 121 MONTGON 402 - PREC | 269.0317 | 0 | 0 | 782.9453 | 0 | 287.0948 | 0 |
| 121 MONTGON 403 - PREC | 189.06 | 0 | 0 | 520.249 | 0 | 207.2886 | 0 |
| 121 MONTGON 404 - PREC | 103.8732 | 0 | 0 | 334.0704 | 1 | 102.6079 | 0 |
| 121 MONTGON 405 - PREC | 384.331 | 0 | 0 | 670.2094 | 1 | 448.415 | 203.0272 |
| 121 MONTGON 501 - PREC | 594.2083 | 0 | 0 | 441.6349 | 4 | 688.3606 | 318.0069 |
| 121 MONTGON 502 - PREC | 356.8016 | 0 | 0 | 467.7813 | 1 | 424.7332 | 370.8354 |
| 121 MONTGON 503 - PREC | 312.068 | 0 | 0 | 86.9159 | 0 | 329.5343 | 72.50971 |
| 121 MONTGON 601 - PREC | 1128.112 | 0 | 0 | 311.6659 | 0 | 1123.555 | 277.6086 |
| 121 MONTGON 602 - PREC | 966.493 | 0 | 0 | 234.7791 | 0 | 953.0343 | 224.7801 |
| 121 MONTGON 603 - PREC | 123.83 | 0 | 0 | 46.74989 | 0 | 115.0755 | 56.97191 |
| 121 MONTGON 701 - PREC | 1347.928 | 0 | 0 | 411.1669 | 1 | 1364.168 | 361.5127 |
| 121 MONTGON 702 - PREC | 567.7291 | 0 | 0 | 116.3553 | 0 | 557.593 | 116.0155 |


| 125 NELSON CC 101 - ROCK | 691.8561 | 0 | 0 | 578.4489 | 0 | 738.5309 | 493.4679 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 125 NELSON CC 201 - LOVIT | 322.1809 | 0 | 0 | 370.4149 | 0 | 377.167 | 302.7156 |
| 125 NELSON CC 202 - SCHU | 216.5307 | 0 | 0 | 171.2782 | 1 | 249.6887 | 132.6972 |
| 125 NELSON CC 301 - SHIPN | 444.5679 | 0 | 0 | 475.6582 | 0 | 523.6089 | 380.4679 |
| 125 NELSON CC 302 - GLAD | 52.3021 | 0 | 0 | 90.79809 | 0 | 73.74773 | 61.16514 |
| 125 NELSON CC 401 - ROSE | 429.3546 | 0 | 0 | 618.9507 | 0 | 536.2514 | 479.9908 |
| 125 NELSON CC 402 - MON | 36.13381 | 0 | 0 | 47.77136 | 0 | 35.82033 | 47.68807 |
| 125 NELSON CC 501 - FABE | 259.4184 | 0 | 0 | 189.8506 | 0 | 264.4383 | 178.3119 |
| 125 NELSON CC 502 - NELL | 637.6554 | 0 | 0 | 480.8291 | 0 | 683.7468 | 409.4954 |
| 127 NEW KENT 102 - TUNS | 77.33159 | 0 | 0 | 215.4324 | 157.1486 | 108.1561 | 0 |
| 127 NEW KENT 103 - SOUT | 262.7155 | 0 | 0 | 679.6007 | 338.2337 | 344.6151 | 0 |
| 127 NEW KENT 201 - QUIN | 381.3613 | 0 | 0 | 517.2459 | 309.0936 | 448.5298 | 0 |
| 127 NEW KENT 202 - KENT | 140.8918 | 0 | 0 | 404.8464 | 189.4109 | 196.1655 | 0 |
| 127 NEW KENT 301 - WATr | 358.0558 | 0 | 0 | 326.7912 | 195.6552 | 400.8139 | 0 |
| 127 NEW KENT 302 - CUMI | 287.0803 | 0 | 0 | 446.4758 | 174.8408 | 319.1666 | 0 |
| 127 NEW KENT 401 - PROV | 408.904 | 0 | 0 | 538.0606 | 300.7678 | 502.6079 | 0 |
| 127 NEW KENT 403 - MOU | 137.7138 | 0 | 0 | 224.799 | 110.3162 | 185.562 | 0 |
| 127 NEW KENT 501 - ELTH, | 192.7993 | 0 | 0 | 334.0763 | 81.1761 | 218.433 | 0 |
| 127 NEW KENT $502-\mathrm{CHICl}$ | 181.1466 | 0 | 0 | 553.6717 | 111.357 | 209.9501 | 0 |
| 131 NORTHAM 101 - PREC | 533.8563 | 0 | 0 | 617.3786 | 0 | 647.4961 | 0 |
| 131 NORTHAM 201 - PREC | 488.2832 | 0 | 0 | 316.3791 | 0 | 582.0925 | 0 |
| 131 NORTHAM 301 - PREC | 424.2639 | 0 | 0 | 291.1127 | 0 | 485.0771 | 0 |
| 131 NORTHAM 401 - PREC | 380.8609 | 0 | 0 | 589.9151 | 2 | 557.0211 | 0 |
| 131 NORTHAM 501 - PREC | 302.7356 | 0 | 0 | 515.2145 | 0 | 415.3132 | 0 |
| 133 NORTHUM 101-1A | 309.9247 | 0 | 0 | 594.9856 | 0 | 307.6893 | 0 |
| 133 NORTHUM 201-2A | 368.2381 | 0 | 0 | 762.5266 | 2 | 362.557 | 0 |
| 133 NORTHUM 301-3A | 607.9708 | 0 | 0 | 255.6075 | 0 | 584.1794 | 0 |
| 133 NORTHUM 401-4A | 448.149 | 0 | 0 | 926.8458 | 2 | 426.0314 | 0 |
| 133 NORTHUM 501-5A | 374.7174 | 0 | 0 | 886.0345 | 0 | 376.5429 | 0 |
| 135 NOTTOWA 101 - PREC | 159.2359 | 0 | 0 | 371.8212 | 0 | 167.6518 | 0 |
| 135 NOTTOWA 102 - PREC | 122.9002 | 0 | 0 | 295.1131 | 0 | 131.5748 | 0 |
| 135 NOTTOWA 201 - PREC | 210.5334 | 0 | 0 | 435.7446 | 2.285714 | 216.4618 | 0 |
| 135 NOTTOWA 202 - PREC | 69.46533 | 0 | 0 | 271.6745 | 0 | 72.15394 | 0 |
| 135 NOTTOWA 301 - PREC | 250.0752 | 0 | 0 | 205.6203 | 0 | 256.7831 | 0 |
| 135 NOTTOWA 302 - PREC | 99.38885 | 0 | 0 | 232.2551 | 0 | 102.9255 | 0 |
| 135 NOTTOWA 401 - PREC | 289.617 | 0 | 0 | 150.22 | 2.285714 | 315.1429 | 0 |
| 135 NOTTOWA 402 - PREC | 119.6941 | 0 | 0 | 352.6441 | 0 | 123.0861 | 0 |
| 135 NOTTOWA 501 - PREC | 328.0901 | 0 | 0 | 633.9072 | 3.428571 | 351.2199 | 0 |
| 137 ORANGE C101-ONE | 531.5848 | 0 | 0 | 0 | 661.5434 | 489.1491 | 0 |
| 137 ORANGE C102-ONE I | 561.176 | 0 | 0 | 0 | 583.2851 | 524.0129 | 0 |
| 137 ORANGE CI201-TWO | 385.7424 | 0 | 0 | 0 | 773.1919 | 357.0894 | 0 |
| 137 ORANGE Cl202-TWO | 272.6618 | 0 | 0 | 0 | 677.195 | 234.538 | 0 |
| 137 ORANGE Cl301-THRE | 666.8588 | 0 | 0 | 0 | 723.1065 | 635.9995 | 0 |
| 137 ORANGE C1302-THRE | 164.8653 | 0 | 0 | 0 | 303.6421 | 160.5846 | 0 |
| 137 ORANGE C1401-FOUR | 299.0825 | 0 | 0 | 0 | 800.3214 | 265.1759 | 0 |
| 137 ORANGE C1402-FOUR | 469.2319 | 0 | 0 | 0 | 575.981 | 418.3651 | 0 |
| 137 ORANGE CI501-FIVE ! | 599.2218 | 0 | 0 | 0 | 686.586 | 557.8202 | 0 |


| 137 ORANGE CI502-FIVE I | 661.5747 | 0 | 0 | 0 | 796.1476 | 622.2653 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 139 PAGE COUI 101 - WEST | 436.0142 | 0 | 0 | 987.1009 | 4 | 437.6755 | 0 |
| 139 PAGE COUI 201 - EAST | 444.5426 | 0 | 0 | 1153.175 | 3 | 465.363 | 0 |
| 139 PAGE COUI 301 - MARI | 332.6074 | 0 | 0 | 1420.969 | 3 | 340.7692 | 0 |
| 139 PAGE COUI 401 - NEWI | 262.2481 | 0 | 0 | 1025.505 | 2 | 266.226 | 0 |
| 139 PAGE COUI501-SHEN | 251.5877 | 0 | 0 | 1155.251 | 1 | 261.9663 | 0 |
| 141 PATRICK C( 101 - ARAR | 0 | 0 | 0 | 160.1409 | 3.235294 | 0 | 33.55066 |
| 141 PATRICK C( 102 - CLAU | 0 | 0 | 0 | 206.9353 | 3.235294 | 0 | 34.59912 |
| 141 PATRICK C( 103 - WILLI | 0 | 0 | 0 | 179.8985 | 2.156863 | 0 | 24.11454 |
| 141 PATRICK C( 201 - DRY F | 0 | 0 | 0 | 169.4997 | 6.470588 | 0 | 25.163 |
| 141 PATRICK C( 202 - PATR | 0 | 0 | 0 | 499.1403 | 8.627451 | 0 | 69.19824 |
| 141 PATRICK C( 203 - RUSS | 0 | 0 | 0 | 362.9166 | 6.470588 | 0 | 60.81057 |
| 141 PATRICK C( 301 - CRITZ | 0 | 0 | 0 | 481.4625 | 14.01961 | 0 | 96.45815 |
| 141 PATRICK C( 302 - LIBER | 0 | 0 | 0 | 362.9166 | 16.17647 | 0 | 47.18062 |
| 141 PATRICK C( 401 - MEAI | 0 | 0 | 0 | 326.521 | 14.01961 | 0 | 115.3304 |
| 141 PATRICK C( 402 - STUA | 0 | 0 | 0 | 510.579 | 11.86275 | 0 | 84.92511 |
| 141 PATRICK C( 501 - STUA | 0 | 0 | 0 | 179.8985 | 4.313725 | 0 | 26.21145 |
| 141 PATRICK C( 502 - ELAN | 0 | 0 | 0 | 245.4107 | 9.705882 | 0 | 39.84141 |
| 141 PATRICK C( $503-$ WOO | 0 | 0 | 0 | 330.6805 | 9.705882 | 0 | 56.61674 |
| 143 PITTSYLVAI 103 -TWIN | 0 | 0 | 165.8423 | 1179.79 | 2.040816 | 194.0789 | 0 |
| 143 PITTSYLVAI 105 - CHAT | 0 | 0 | 72.42482 | 415.3607 | 2.040816 | 0 | 93.56604 |
| 143 PITTSYLVAI 106 -TUNS | 0 | 0 | 94.46715 | 438.1486 | 1.020408 | 110.1529 | 0 |
| 143 PITTSYLVAI 108 -WEST | 0 | 0 | 69.27591 | 252.7382 | 0 | 84.97508 | 0 |
| 143 PITTSYLVAI 201 -CALL/ | 0 | 0 | 81.87153 | 405.0026 | 1.020408 | 109.1038 | 0 |
| 143 PITTSYLVAI 202-BEARS | 0 | 0 | 38.8365 | 105.6529 | 0 | 50.35561 | 0 |
| 143 PITTSYLVAI 204 -SAND | 0 | 0 | 57.72993 | 271.3828 | 0 | 84.97508 | 0 |
| 143 PITTSYLVAI 206 - CLIM | 0 | 0 | 51.43212 | 312.8153 | 1.020408 | 62.94451 | 0 |
| 143 PITTSYLVAI 207 -GRET | 0 | 0 | 168.9912 | 698.1375 | 1.020408 | 144.7724 | 33.33962 |
| 143 PITTSYLVAI 301 -CENT | 0 | 0 | 150.0978 | 200.9476 | 2.040816 | 71.33711 | 124.7547 |
| 143 PITTSYLVAI 305 -RICEV | 0 | 0 | 128.0555 | 256.8815 | 1.020408 | 7.343526 | 151.6415 |
| 143 PITTSYLVAI 307 -EAST | 19.63233 | 0 | 143.8 | 143.8285 | 29.59184 | 5.245376 | 173.1509 |
| 143 PITTSYLVAI308-MT A | 0 | 0 | 76.62336 | 127.4049 | 0 | 46.15931 | 60.22642 |
| 143 PITTSYLVAI 309 -EAST | 0 | 0 | 83.9708 | 169.8732 | 0 | 4.1963 | 96.79245 |
| 143 PITTSYLVAI 402 - KEELI | 78.52932 | 0 | 1.049635 | 434.0947 | 1 | 78.68063 | 1.075472 |
| 143 PITTSYLVAI 404 -KENT | 169.458 | 0 | 0 | 789.134 | 0 | 83.92601 | 72.0566 |
| 143 PITTSYLVAI 405 -RING | 256.2536 | 0 | 0 | 762.5914 | 5 | 188.8335 | 64.5283 |
| 143 PITTSYLVAI 501 -HURT | 0 | 0 | 193.1328 | 554.1596 | 3.061224 | 234.9928 | 0 |
| 143 PITTSYLVAI502-MOTI | 0 | 0 | 183.6861 | 591.4488 | 0 | 236.0419 | 0 |
| 143 PITTSYLVAI 503 -RENA | 0 | 0 | 88.16934 | 326.2809 | 1.020408 | 91.26954 | 15.0566 |
| 143 PITTSYLVAI 603 - STON | 133.2932 | 0 | 0 | 553.3126 | 2 | 146.8705 | 0 |
| 143 PITTSYLVAI 604 - SWAr | 0 | 0 | 128.0555 | 356.3194 | 2.040816 | 153.165 | 0 |
| 143 PITTSYLVAI 605 - WHIT | 0 | 0 | 92.36788 | 426.7547 | 1.020408 | 122.7418 | 0 |
| 143 PITTSYLVAI 606 -BROS | 224.2219 | 0 |  | 307.2825 | 0 | 0 | 208.6415 |
| 143 PITTSYLVAI 607 - DRY F | 0 | 0 | 27.29051 | 239.2726 | 2.040816 | 44.06116 | 0 |
| 143 PITTSYLVAI 702 -BACH | 99.19493 | 0 | 0 | 696.2347 | 1 | 28.32503 | 67.75472 |
| 143 PITTSYLVAI 703 -FERR' | 32.0317 | 0 | 0 | 108.2124 | 0 | 0 | 33.33962 |
| 143 PITTSYLVAI 704 - MT H | 291.3851 | 0 | 0 | 776.1466 | 2 | 304.2318 | 1.075472 |


| 143 PITTSYLVAI 705 - MT C | 0 | 0 | 59.8292 | 427.7905 | 0 | 90.22046 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 145 POWHATAI 101 - SUBL | 303.7506 | 0 | 0 | 1145.845 | 0 | 334.9758 | 0 |
| 145 POWHATAI 102 - MAN, | 269.2824 | 0 | 0 | 831.3201 | 0 | 275.7357 | 0 |
| 145 POWHATAI 103 - FLAT | 158.3381 | 0 | 0 | 613.1648 | 0 | 158.3326 | 0 |
| 145 POWHATAI 201 - POW | 159.4152 | 0 | 0 | 889.5655 | 1.1 | 168.0264 | 0 |
| 145 POWHATAI 202 -GRAC | 280.0537 | 0 | 0 | 1053.712 | 0 | 276.8128 | 0 |
| 145 POWHATAI 301 - BETH | 256.3569 | 0 | 0 | 929.8077 | 2.2 | 284.3524 | 0 |
| 145 POWHATAI302-LEE'S | 228.3515 | 0 | 0 | 822.8481 | 1.1 | 239.1145 | 0 |
| 145 POWHATAI 401 - POW | 348.99 | 0 | 0 | 1539.796 | 0 | 356.5176 | 0 |
| 145 POWHATAI 402 - MT ZI | 151.8753 | 0 | 0 | 539.0343 | 5.5 | 160.4868 | 0 |
| 145 POWHATAI501-SMITI | 373.764 | 0 | 0 | 692.5903 | 0 | 383.4449 | 0 |
| 145 POWHATAI502-PINE | 190.652 | 0 | 0 | 410.8945 | 1.1 | 197.1079 | 0 |
| 145 POWHATAI503-TOBA | 86.17038 | 0 | 0 | 402.4225 | 0 | 99.09251 | 0 |
| 147 PRINCE ED 101 - FARN | 339.1563 | 0 | 0 | 369.2807 | 1 | 329.6328 | 0 |
| 147 PRINCE ED 201 - LOCK | 417.9077 | 0 | 0 | 587.492 | 2 | 427.2629 | 0 |
| 147 PRINCE ED 301 - LEIGF | 278.2551 | 0 | 0 | 285.3533 | 1 | 289.741 | 0 |
| 147 PRINCE ED 302 - MT P | 181.6534 | 0 | 0 | 127.9893 | 1 | 181.613 | 0 |
| 147 PRINCE ED 401 - HAMI | 276.1551 | 0 | 0 | 339.9061 | 0 | 279.2431 | 0 |
| 147 PRINCE ED 501 - DARL | 143.8527 | 0 | 0 | 273.8132 | 0 | 149.0696 | 0 |
| 147 PRINCE ED 502 - BUFF, | 96.60178 | 0 | 0 | 161.5603 | 0 | 98.67989 | 0 |
| 147 PRINCE ED 601 - PROS | 451.5083 | 0 | 0 | 419.6371 | 1 | 431.4621 | 0 |
| 147 PRINCE ED 701 - WEST | 310.8057 | 0 | 0 | 308.4333 | 1 | 303.3882 | 0 |
| 147 PRINCE ED' 801 - CENT | 212.1039 | 0 | 0 | 75.53469 | 0 | 208.9074 | 0 |
| 149 PRINCE GEI 101 - RICH/ | 255.1785 | 9 | 0 | 446.9454 | 2 | 264.5964 | 0 |
| 149 PRINCE GE 102 - TEMF | 383.1849 | 0 | 0 | 1345.023 | 1 | 420.5577 | 0 |
| 149 PRINCE GEI 103 - UNIO | 426.4647 | 0 | 0 | 613.3724 | 3 | 477.068 | 494.1661 |
| 149 PRINCE GE 104 - RIVES | 344.1274 | 0 | 0 | 299.3592 | 1 | 345.9259 | 256.9664 |
| 149 PRINCE GEI 105 - HARR | 85.50406 | 0 | 0 | 333.9007 | 0 | 84.97202 | 0 |
| 149 PRINCE GEI 201 - BLAN | 517.2468 | 0 | 0 | 999.6087 | 3 | 570.0655 | 0 |
| 149 PRINCE GEI 202 - BLAC | 323.0153 | 0 | 0 | 716.9968 | 1 | 329.1321 | 0 |
| 149 PRINCE GEI 203 - BRAN | 133.0063 | 0 | 0 | 334.9474 | 0 | 137.6762 | 0 |
| 149 PRINCE GEI 204 - COUF | 646.0307 | 0 | 0 | 618.606 | 1 | 605.1122 | 573.2327 |
| 149 PRINCE GEI 205 - JEFFE | 458.2414 | 0 | 0 | 240.2401 | 1 | 439.8939 | 222.6348 |
| 153 PRINCE WI 101 - BREN | 392.0404 | 0 | 0 | 1045.245 | 2.266667 | 397.465 | 0 |
| 153 PRINCE WI 102 - CEDA | 976.2274 | 0 | 0 | 956.5364 | 6.2 | 1134.058 | 0 |
| 153 PRINCE WI 103 - GLEN | 656.2457 | 0 | 0 | 771.6963 | 3.225 | 684.5106 | 0 |
| 153 PRINCE WI 104 - NOKE | 623.9044 | 0 | 0 | 962.1644 | 1.133333 | 670.3985 | 0 |
| 153 PRINCE WI 105 - LIME: | 1010.126 | 0 | 0 | 924.6757 | 7.525 | 1054.67 | 0 |
| 153 PRINCE WI 106 - WEST | 537.8991 | 0 | 0 | 204.3409 | 2.066667 | 580.7938 | 0 |
| 153 PRINCE WI 107 - MARS | 1071.469 | 0 | 0 | 1001.823 | 5.166667 | 1365.212 | 0 |
| 153 PRINCE WI 108 - VICTC | 1071.469 | 0 | 0 | 849.3955 | 6.2 | 1241.085 | 0 |
| 153 PRINCE WI 109-CHRIS | 883.1503 | 0 | 0 | 609.7091 | 3.1 | 961.8252 | 0 |
| 153 PRINCE WI 110 - BUCK | 614.8103 | 0 | 0 | 576.7891 | 2.15 | 666.6558 | 0 |
| 153 PRINCE WI 111 - BRIST | 432.9168 | 0 | 0 | 432.9818 | 0 | 471.5264 | 0 |
| 153 PRINCE WI 112 - BURK | 855.5831 | 0 | 0 | 787.5608 | 0 | 873.0244 | 0 |
| 153 PRINCE WI 114 - PINEY | 598.5075 | 0 | 0 | 620.7545 | 4.133333 | 659.4536 | 0 |
| 153 PRINCE WI 201 - SAUN | 763.0099 | 0 | 0 | 357.3157 | 3.315789 | 860.355 | 0 |


| 153 PRINCE WI 202 - MAR؛ | 775.12 | 0 | 0 | 922.8694 | 2.266667 | 766.956 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 153 PRINCE WI 203 - BENN | 843.447 | 0 | 0 | 874.5928 | 2.266667 | 862.5341 | 0 |
| 153 PRINCE WI 204 - ELLIS | 569.6089 | 0 | 0 | 492.4799 | 6.283333 | 708.6551 | 0 |
| 153 PRINCE WI 205 - BUCK | 921.8551 | 0 | 0 | 840.9115 | 3.4 | 1062.983 | 0 |
| 153 PRINCE WI 206 - COLE: | 558.9377 | 0 | 0 | 748.8491 | 0 | 579.8455 | 0 |
| 153 PRINCE WI 207 - SPRIG | 1079.461 | 0 | 0 | 728.924 | 7.736842 | 1289.439 | 0 |
| 153 PRINCE WI 208 - HYLTI | 435.5331 | 0 | 0 | 715.7308 | 0 | 456.91 | 0 |
| 153 PRINCE WI 209 - INDEI | 381.505 | 0 | 0 | 772.9013 | 2.210526 | 386.9748 | 0 |
| 153 PRINCE WI 210 - PENN | 699.9323 | 0 | 0 | 860.3055 | 1.133333 | 862.5221 | 0 |
| 153 PRINCE WI 211 - SIGN, | 708.8797 | 0 | 0 | 710.5045 | 2.15 | 766.8336 | 0 |
| 153 PRINCE WI 212 - YORK | 929.4947 | 0 | 0 | 606.2518 | 5.375 | 1030.654 | 0 |
| 153 PRINCE WI 213 - SARA | 566.7444 | 0 | 0 | 315.5372 | 4.421053 | 665.3123 | 0 |
| 153 PRINCE WI 214 - LUCA | 342.7554 | 0 | 0 | 617.4917 | 1.133333 | 352.0072 | 0 |
| 153 PRINCE WI 215 - ROSA | 779.5492 | 0 | 0 | 381.5032 | 4.421053 | 905.8649 | 0 |
| 153 PRINCE WI 301 - DUM | 578.7219 | 0 | 0 | 253.4154 | 3.654545 | 681.8729 | 0 |
| 153 PRINCE WI 302 - POTC | 712.1076 | 0 | 0 | 142.4782 | 4.872727 | 768.2515 | 0 |
| 153 PRINCE WI 303 - GRAF | 445.3362 | 0 | 0 | 164.2306 | 3.654545 | 499.3845 | 0 |
| 153 PRINCE WI 304 - QUAT | 65.30699 | 0 | 0 | 64.7901 | 0 | 85.23412 | 0 |
| 153 PRINCE WI 305 - PATT | 723.3158 | 0 | 0 | 653.0631 | 1.105263 | 911.3494 | 0 |
| 153 PRINCE WI 306 - WASt | 931.7101 | 0 | 0 | 699.2393 | 1.105263 | 1132.084 | 0 |
| 153 PRINCE WI 307 - HENL | 693.5452 | 0 | 0 | 705.8359 | 1.105263 | 887.309 | 0 |
| 153 PRINCE WI 308 - MON | 452.0724 | 0 | 0 | 454.0658 | 3.315789 | 596.6388 | 0 |
| 153 PRINCE WI 309 - ASHL | 602.0281 | 0 | 0 | 527.7278 | 1.105263 | 770.3853 | 0 |
| 153 PRINCE WI 310 - FORE | 797.191 | 0 | 0 | 367.2106 | 3.315789 | 889.7859 | 0 |
| 153 PRINCE WI 311 - SWAr | 1459.237 | 0 | 0 | 389.8387 | 3.157895 | 1566.886 | 0 |
| 153 PRINCE WI 312 - TRIAR | 866.1885 | 0 | 0 | 364.7733 | 7.309091 | 988.9343 | 0 |
| 153 PRINCE WI 313 - CARD | 635.7335 | 0 | 0 | 299.0954 | 2.436364 | 716.8408 | 0 |
| 153 PRINCE WI 314 - CABII | 652.7484 | 0 | 0 | 432.0771 | 1.105263 | 770.3853 | 0 |
| 153 PRINCE WI 315 - WILLI | 456.0931 | 0 | 0 | 94.6229 | 2.436364 | 497.3589 | 0 |
| 153 PRINCE WI 401 - EVER | 670.7684 | 0 | 0 | 957.974 | 1.25 | 592.1804 | 0 |
| 153 PRINCE WI 402 - BATT | 701.2588 | 0 | 0 | 1168.124 | 1.166667 | 681.0937 | 0 |
| 153 PRINCE WI 403 - BULL | 703.1318 | 0 | 0 | 575.7966 | 2.241667 | 693.5801 | 0 |
| 153 PRINCE WI 404 - BEN L | 685.3624 | 0 | 0 | 292.3607 | 3.225 | 706.9044 | 0 |
| 153 PRINCE WI 405 - UNIT | 907.0972 | 0 | 0 | 421.5433 | 4.3 | 966.7206 | 0 |
| 153 PRINCE WI 406 - ALVE' | 396.8491 | 0 | 0 | 485.4519 | 0 | 345.0136 | 0 |
| 153 PRINCE WI 407 - HERIT | 857.8228 | 0 | 0 | 1116.183 | 3.225 | 895.2168 | 0 |
| 153 PRINCE WI 408 - SUDL | 508.5652 | 0 | 0 | 425.6465 | 1.075 | 602.4652 | 0 |
| 153 PRINCE WI 409 - TYLEF | 776.0721 | 0 | 0 | 607.385 | 4.3 | 813.2389 | 0 |
| 153 PRINCE WI 410 - MOU | 859.6466 | 0 | 0 | 904.2365 | 1.166667 | 792.5989 | 0 |
| 153 PRINCE WI 411 - MULI | 759.274 | 0 | 0 | 254.9657 | 2.15 | 790.4332 | 0 |
| 153 PRINCE WI 412 - CATH | 401.4102 | 0 | 0 | 757.7672 | 1.166667 | 404.3282 | 0 |
| 153 PRINCE WI 413 - REAG | 958.2914 | 0 | 0 | 989.6137 | 6.083333 | 878.8523 | 0 |
| 153 PRINCE WI 501 - LAKE | 836.7263 | 0 | 0 | 501.8524 | 2.266667 | 839.7896 | 0 |
| 153 PRINCE WI 502 - OCCC | 482.9854 | 0 | 0 | 268.642 | 3.654545 | 552.929 | 0 |
| 153 PRINCE WI 503 - OLD E | 798.6424 | 0 | 0 | 293.0279 | 2.266667 | 788.3511 | 0 |
| 153 PRINCE WI 504-ROCK | 683.2705 | 0 | 0 | 428.8761 | 0 | 700.011 | 0 |
| 153 PRINCE WI 505 - MOH | 880.4108 | 0 | 0 | 568.0924 | 3.4 | 892.3463 | 0 |

153 PRINCE WI 506 - BETH 1110.577
153 PRINCE WI 507-CHINI 779.6004 153 PRINCE WI 508 - SPRIN 750.4774 153 PRINCE WI 509 - MC C 838.9666 153 PRINCE WI 510 - YATE! 505.0628 153 PRINCE WI 511 - WEST 977.8609 153 PRINCE WI 512 - YORK 886.3696 153 PRINCE WI 513 - LYNN 753.8378 153 PRINCE WI 514 - ANTII 1010.344 153 PRINCE WI 601 - DALE 628.2037 153 PRINCE WI 602 - BEVIL 1225.006 153 PRINCE WI 603 - HAMI 632.5065 153 PRINCE WI 604 -GIDEI 627.128 153 PRINCE WI 605 -MINN 624.6022 153 PRINCE WI 606 - BEL A 595.933 153 PRINCE WI 607 - KERR' 980.1011 153 PRINCE WI 608 - ENTE 800.4989 153 PRINCE WI 609 - KING 1041.534 153 PRINCE WI 610 - FITZG 867.0072 153 PRINCE WI 611 - NEAB 611.9516 153 PRINCE WI 701 - BELM 721.5887 153 PRINCE WI 702 -LIBRA 822.9038 153 PRINCE WI 703 -LYNN 370.0378 153 PRINCE WI 704 - PORT 716.2357 153 PRINCE WI 705 - POTC 414.3247 153 PRINCE WI 706 - RIPPC 781.5427 153 PRINCE WI 707 - KILBY 594.8573 153 PRINCE WI 708 - RIVEF 939.9924 153 PRINCE WI 709 - FREEI 943.1608 153 PRINCE WI 710 - POW 766.5542 153 PRINCE WI 711 - GRAY 741.1513 153 PRINCE WI 712 -LEESY 863.9794 155 PULASKI C( 101 - BELSF 124.224 155 PULASKI C( 102 -NEW 531.2425 155 PULASKI C( 103 -WEST 130.1731 155 PULASKI C( 201 - DRAP 140.7563 155 PULASKI C( 202 -SOUT 32.80786 155 PULASKI C( 203 - NEWI 256.113 155 PULASKI C( 301 - DUBL 209.547 155 PULASKI C( 302 -HIWA 41.2744 155 PULASKI C( 304 -SNOV 124.8815 155 PULASKI C( 401 - MAS§ 298.4457 155 PULASKI C( 402 - WALk 74.08226 155 PULASKI C(501 - ROBII 407.4524 157 RAPPAHAN 101 - WASł 369.1366 157 RAPPAHAN 201 - AMIS 211.0965 157 RAPPAHAN 301 -SPERI 333.0131

| 0 | 0 | 599.3178 | 3.4 | 1195.463 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 455.8212 | 2.266667 | 847.9702 | 0 |
| 0 | 0 | 248.1194 | 1.133333 | 740.2673 | 0 |
| 0 | 0 | 857.7521 | 2.266667 | 868.8635 | 0 |
| 0 | 0 | 599.4528 | 1.075 | 509.9122 | 0 |
| 0 | 0 | 562.4788 | 0 | 990.7504 | 0 |
| 0 | 0 | 220.7868 | 3.654545 | 986.7305 | 0 |
| 0 | 0 | 641.0687 | 1.133333 | 787.2329 | 0 |
| 0 | 0 | 551.2517 | 0 | 1004.169 | 0 |
| 0 | 0 | 196.8591 | 3.654545 | 714.0729 | 0 |
| 0 | 0 | 498.0431 | 2.210526 | 1405.391 | 0 |
| 0 | 0 | 182.7201 | 3.654545 | 707.5715 | 0 |
| 0 | 0 | 250.1525 | 2.436364 | 719.4908 | 0 |
| 0 | 0 | 319.0151 | 3.541627 | 736.9462 | 0 |
| 0 | 0 | 328.4611 | 3.654545 | 688.0673 | 0 |
| 0 | 0 | 341.3045 | 2.266667 | 1046.729 | 0 |
| 0 | 0 | 301.2446 | 1.105263 | 882.0264 | 0 |
| 0 | 0 | 495.9606 | 1.105263 | 1221.184 | 0 |
| 0 | 0 | 319.7601 | 3.654545 | 996.8848 | 0 |
| 0 | 0 | 252.8696 | 2.210526 | 693.4851 | 0 |
| 0 | 0 | 395.3294 | 1.052632 | 834.8573 | 0 |
| 0 | 0 | 229.4877 | 0 | 911.2828 | 0 |
| 0 | 0 | 118.5505 | 2.436364 | 434.9126 | 0 |
| 0 | 0 | 120.7951 | 5.263158 | 768.2515 | 0 |
| 0 | 0 | 248.179 | 0 | 500.4773 | 0 |
| 0 | 0 | 340.4225 | 2.105263 | 878.5671 | 0 |
| 0 | 0 | 234.9258 | 4.872727 | 685.1512 | 0 |
| 0 | 0 | 177.8982 | 4.210526 | 1018.438 | 0 |
| 0 | 0 | 161.1106 | 3.654545 | 1009.888 | 0 |
| 0 | 0 | 96.63607 | 1.052632 | 813.7614 | 0 |
| 0 | 0 | 256.6782 | 4.872727 | 846.2685 | 0 |
| 0 | 0 | 410.7033 | 3.157895 | 985.6561 | 0 |
| 0 | 0 | 271.4175 | 1 | 0 | 127.8535 |
| 0 | 0 | 0 | 491.3841 | 2 | 2 |


| 157 RAPPAHAN 401 - SCRA | 284.4722 | 0 | 0 | 309.8768 | 2 | 270.2908 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 157 RAPPAHAN 501 - CHES | 69.9892 | 0 | 0 | 173.6558 | 0 | 71.24819 | 0 |
| 157 RAPPAHAN 502 - FLINT | 195.2924 | 0 | 0 | 167.4167 | 1 | 187.7333 | 0 |
| 159 RICHMONL 101 - PREC | 264.8276 | 0 | 0 | 233.9066 | 0 | 267.8684 | 0 |
| 159 RICHMONL 201 - PREC | 101.3793 | 0 | 0 | 382.1867 | 0 | 111.8684 | 0 |
| 159 RICHMONL 301 - PREC | 133.4483 | 0 | 0 | 322.6658 | 0 | 134.4474 | 0 |
| 159 RICHMONL 401 - PREC | 125.1724 | 0 | 0 | 389.4963 | 0 | 126.2368 | 0 |
| 159 RICHMONL 501 - PREC | 95.17241 | 0 | 0 | 371.7445 | 0 | 100.5789 | 0 |
| 161 ROANOKE 101-CATA | 81.83453 | 0 | 0 | 241.9143 | 0 | 125.3933 | 178.1048 |
| 161 ROANOKE 102 - MASC | 74.49041 | 0 | 0 | 236.7006 | 1.058824 | 76.40388 | 0 |
| 161 ROANOKE 103 -GLEN | 266.4868 | 0 | 0 | 766.4094 | 1.058824 | 268.9835 | 0 |
| 161 ROANOKE 104-NORT | 0 | 0 | 0 | 444.9603 | 28.27286 | 264.7212 | 32.10028 |
| 161 ROANOKE 105-PETEF | 0 | 0 | 0 | 953.043 | 53.40429 | 420.7447 | 0 |
| 161 ROANOKE 106-GREE | 306.3549 | 0 | 0 | 800.8196 | 2.117647 | 307.7088 | 0 |
| 161 ROANOKE 107-BENN | 86.03118 | 0 | 0 | 319.0766 | 0 | 129.573 | 225.7375 |
| 161 ROANOKE 108-WILD | 163.6691 | 0 | 0 | 425.4354 | 0 | 172.6937 | 0 |
| 161 ROANOKE 201 - PLAN | 0 | 0 | 0 | 663.3014 | 37.69714 | 0 | 0 |
| 161 ROANOKE 1202 - BURL | 0 | 0 | 0 | 381.8381 | 16.75429 | 207.9438 | 236.0924 |
| 161 ROANOKE 203 - MOU | 0 | 0 | 0 | 971.6692 | 50.26286 | 0 | 0 |
| 161 ROANOKE 204 - BOTE | 0 | 0 | 0 | 776.0936 | 39.79143 | 458.7303 | 459.7589 |
| 161 ROANOKE 1205 - ORC | 0 | 0 | 0 | 1029.618 | 53.40429 | 0 | 0 |
| 161 ROANOKE 206 - HOLL | 0 | 0 | 0 | 260.7675 | 32.46143 | 0 | 0 |
| 161 ROANOKE 301 -BENT | 111.211 | 0 | 0 | 224.1878 | 1.058824 | 106.7561 | 0 |
| 161 ROANOKE 302 - POAG | 369.3046 | 0 | 0 | 984.3408 | 2.117647 | 373.6464 | 0 |
| 161 ROANOKE 303 - WINL | 0 | 0 | 0 | 578.4485 | 29.32 | 256.424 | 0 |
| 161 ROANOKE 304 - OAK ( | 521.4329 | 0 | 0 | 982.2553 | 9.529412 | 539.0137 | 0 |
| 161 ROANOKE 305 -CASTI | 600.1199 | 0 | 0 | 999.9818 | 1.058824 | 610.1844 | 0 |
| 161 ROANOKE 306 -GARS | 0 | 0 | 0 | 437.7168 | 31.41429 | 304.0787 | 250.5893 |
| 161 ROANOKE 401 - SOUT | 0 | 0 | 0 | 578.4485 | 29.32 | 205.1392 | 0 |
| 161 ROANOKE 402 - BONS | 0 | 0 | 0 | 212.1323 | 7.33 | 61.75108 | 0 |
| 161 ROANOKE 403 - NORT | 0 | 0 | 0 | 531.8828 | 34.55571 | 166.4139 | 0 |
| 161 ROANOKE 404 - SOUT | 0 | 0 | 0 | 600.1791 | 45.02714 | 236.538 | 0 |
| 161 ROANOKE 405 - NORT | 0 | 0 | 0 | 655.023 | 31.41429 | 197.8128 | 0 |
| 161 ROANOKE 406 - MOU | 0 | 0 | 0 | 831.9724 | 40.83857 | 241.7712 | 0 |
| 161 ROANOKE 501 - COTT | 307.4041 | 0 | 0 | 499.4695 | 0 | 305.6155 | 0 |
| 161 ROANOKE 502 - PENN | 264.3885 | 0 | 0 | 413.9653 | 0 | 266.8903 | 0 |
| 161 ROANOKE 503 - CAVE | 347.2722 | 0 | 0 | 596.4438 | 0 | 341.2009 | 0 |
| 161 ROANOKE 504 - OGDE | 0 | 0 | 0 | 407.7079 | 48.16857 | 356.3258 | 218.489 |
| 161 ROANOKE 505 - CLEAI | 0 | 0 | 0 | 472.8997 | 24.08429 | 169.5538 | 0 |
| 161 ROANOKE 506 - MOU | 0 | 0 | 0 | 439.7864 | 31.41429 | 323.9326 | 237.1279 |
| 161 ROANOKE 1507-HUN7 | 0 | 0 | 0 | 907.5122 | 68.06429 | 495.0553 | 0 |
| 163 ROCKBRID 101 - AIRP( | 353.78 | 9.284211 | 0 | 381.5023 | 2 | 470.5017 | 257.7917 |
| 163 ROCKBRID 102 - BEN $\subseteq$ | 164.6724 | 5.157895 | 0 | 296.0291 | 0 | 221.4749 | 226.6072 |
| 163 ROCKBRID 103 - PLAN | 75.43058 | 6.189474 | 0 | 162.6075 | 0 | 108.0882 | 128.8958 |
| 163 ROCKBRID 104 - EFFIN | 97.74103 | 15.47368 | 0 | 201.1747 | 0 | 171.6696 | 135.1327 |
| 163 ROCKBRID 201 - COLLI | 228.4165 | 6.189474 | 0 | 244.9536 | 0 | 278.6981 | 186.0674 |
| 163 ROCKBRID( 202 - HIGH | 381.4025 | 2.063158 | 0 | 472.1872 | 6 | 464.1436 | 372.1348 |

163 ROCKBRID( 203 - VO-TI 135.9875 163 ROCKBRID 301 - MAU 159.3604 163 ROCKBRID( 302 -NATL 113.6771 163 ROCKBRID(303-FALLI 61.61934 163 ROCKBRID( 401 -FAIRF 151.9236 163 ROCKBRID( 402 - MOU 183.7956 163 ROCKBRID(403 -VESU 31.87207 163 ROCKBRID(501-GOSF 36.12168 163 ROCKBRID(502-MEAL 209.2933 163 ROCKBRID(503-ROCK 147.6739 163 ROCKBRID(504-ROCK 191.2324 165 ROCKINGH 101 - BROA 339.4715 165 ROCKINGH 102 -TIMB 135.16 165 ROCKINGH 103 -FULK: 83.82014 165 ROCKINGH 104 - BERG 29.33705 165 ROCKINGH 105 -LACE' 82.61134 165 ROCKINGH 106-TENT 83.68421 165 ROCKINGH 107 - PLAIN 98.70445 165 ROCKINGH 108 - LITTL 79.62913 165 ROCKINGH 201-SINGI 187.5476 165 ROCKINGH 202 -EDON 389.7636 165 ROCKINGH 203 -DAYT 187.5476 165 ROCKINGH 204 - MT C 205.3593 165 ROCKINGH 205 -SILVE 344.7103 165 ROCKINGH 301 - KEEZI 140.3987 165 ROCKINGH 302 -PORT 186.5034 165 ROCKINGH 303 - MELR 126.778 165 ROCKINGH 304 -GROT 169.4517 165 ROCKINGH 305 -MASS 466.7913 165 ROCKINGH 306-CROS 80.44097 165 ROCKINGH 307-CROS 531.8011 165 ROCKINGH 401 - WEST 221.4928 165 ROCKINGH 402 -MON 159.8601 165 ROCKINGH 403 - MT C 43.69508 165 ROCKINGH 404 - NORT 221.6726 165 ROCKINGH 405 - OTTO 144.9398 165 ROCKINGH 406 - EAST 377.2697 165 ROCKINGH 501 - ELKT( 178.4139 165 ROCKINGH 502 -SWIF 152.6316 165 ROCKINGH 503 - MCG, 243.3855 165 ROCKINGH 504-SOUT 70.12802 165 ROCKINGH 505 - STON 372.9996 167 RUSSELL C( 101 - MOCI 126.079 167 RUSSELL C(102-COPP 154.3381 167 RUSSELL C(103-SOUT 124.9921 167 RUSSELL C( 201 - NORT 314.1106 167 RUSSELL C( 202 - DANT 79.34281
4.126316
7.221053
7.221053
2.063158
5.157895
7.221053
1.031579
2.063158
5.157895
4.126316
8.252632

0
0
0
0
0
0
0
0
0
0
0
6.356436
12.71287
13.77228
14.83168
11.65347
7.415842
5.29703
11.65347
13.77228
9.534653

0
0
0
0
0
0
0
0
0
0
$0 \quad 105.2779$

$$
\begin{array}{ll}
0 & 230.3607
\end{array}
$$

$$
\begin{array}{rr}
0 & 245.996 \\
0 &
\end{array}
$$

$$
0 \quad 145.9298
$$

$$
0 \quad 320.0033
$$

$$
0 \quad 386.714
$$

$$
0 \quad 146.9722
$$

$$
0 \quad 142.8028
$$

$$
0 \quad 202.217
$$

$$
0 \quad 158.4381
$$

$$
0 \quad 315.8338
$$

$$
0 \quad 932.2654
$$

$$
0 \quad 418.2317
$$

$$
554.2086
$$

$$
0 \quad 243.1101
$$

$$
423.2137
$$

$$
330.086
$$

$$
437.7003
$$

$$
322.4299
$$

$$
606.7451
$$

$$
841.6141
$$

$$
401.7497
$$

```
663.4021
```

0787.0174
407.9305
534.6337
367.7555
498.2994
0617.6836

### 225.0232

$0 \quad 788.974$
0474.2466

## $0 \quad 713.191$

### 85.12614

0532.5575
0750.5634
$0 \quad 582.3874$
0520.6218
0956.3486
$0 \quad 749.7364$
$0 \quad 415.2701$
$0 \quad 542.8772$
$0 \quad 368.6041$
$0 \quad 294.4596$
$0 \quad 212.9006$
0599.5112
$0 \quad 111.2167$

| 0 | 150.4758 | 86.27706 |
| ---: | ---: | ---: |
| 2 | 216.1765 | 159.0408 |
| 0 | 169.5502 | 177.7515 |
| 0 | 92.19291 | 106.0272 |
| 0 | 227.833 | 229.7257 |
| 0 | 263.8625 | 300.4105 |
| 0 | 62.52163 | 99.79033 |
| 0 | 74.1782 | 97.71137 |
| 0 | 256.4446 | 143.4486 |
| 0 | 187.5649 | 117.4615 |
| 0 | 259.6237 | 229.7257 |
| 0 | 352.7438 | 0 |
| 1.125 | 136.4783 | 0 |
| 1.125 | 92.38528 | 0 |
| 0 | 33.59465 | 0 |
| 2 | 77.68763 | 0 |
| 0 | 85.03645 | 0 |
| 2 | 100.7839 | 0 |
| 0 | 76.63779 | 0 |
| 1.125 | 181.6211 | 0 |
| 1.125 | 396.8368 | 0 |
| 3.375 | 194.2191 | 0 |
| 0 | 202.6177 | 0 |
| 1.125 | 341.1957 | 0 |
| 0 | 137.1187 | 0 |
| 0 | 170.871 | 0 |
| 0 | 122.8304 | 0 |
| 0 | 160.3234 | 0 |
| 1 | 435.6156 | 0 |
| 0 | 70.66887 | 0 |
| 1 | 513.6678 | 0 |
| 0 | 223.6144 | 0 |
| 0 | 146.6115 | 0 |
| 0 | 34.80706 | 0 |
| 1 | 215.1709 | 0 |
| 1 | 145.9268 | 0 |
| 1 | 374.7903 | 0 |
| 0 | 176.1448 | 0 |
| 1 | 161.3782 | 0 |
| 1 | 233.1018 | 0 |
| 0 | 62.2308 | 0 |
| 0 | 352.2896 | 0 |
| 0 | 0 | 100.2051 |
| 0 | 0 | 101.2711 |
| 0 | 0 | 116.1953 |
| 1 | 0 | 257.9749 |
| 1 | 0 | 79.9509 |
|  |  |  |


| 167 RUSSELL C( 301 - COOk | 53.2575 | 0 | 0 | 100.6247 | 0 | 0 | 36.24441 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 167 RUSSELL C( 302 - DAUC | 90.21169 | 0 | 0 | 169.4731 | 1 | 0 | 49.03655 |
| 167 RUSSELL C( 303 - NEW | 55.43128 | 0 | 0 | 337.6406 | 3.315789 | 0 | 133.2515 |
| 167 RUSSELL C( 304 - CLEVI | 133.6872 | 0 | 0 | 167.3547 | 0 | 0 | 85.28096 |
| 167 RUSSELL C( 401 - DRILL | 0 | 0 | 0 | 54.22785 | 4.421053 | 0 | 27.71631 |
| 167 RUSSELL C( 402 - SWOI | 0 | 0 | 0 | 574.1772 | 13.26316 | 0 | 221.7305 |
| 167 RUSSELL C(403-HON/ | 114.1232 | 0 | 0 | 200.1901 | 1 | 0 | 92.74304 |
| 167 RUSSELL C( 501 - WEST | 446.7109 | 0 | 0 | 696.9583 | 3 | 0 | 243.0507 |
| 167 RUSSELL C(601-EAST | 183.684 | 0 | 0 | 428.9789 | 1 | 0 | 164.1658 |
| 167 RUSSELL C( 602 - ELK G | 188.0316 | 0 | 0 | 584.6823 | 0 | 0 | 245.1828 |
| 169 SCOTT COL 101 - WEBE | 0 | 0 | 0 | 428.2331 | 31.01942 | 0 | 69.76932 |
| 169 SCOTT COL 102 - YUM, | 0 | 0 | 0 | 573.1079 | 53.76699 | 0 | 102.5398 |
| 169 SCOTT COL 202 - WEBE | 0 | 0 | 0 | 344.0778 | 19.64563 | 0 | 57.08399 |
| 169 SCOTT COL 203 - HILTC | 0 | 0 | 0 | 523.0409 | 55.83495 | 0 | 79.28331 |
| 169 SCOTT COL 204 - CLAR | 0 | 0 | 0 | 119.3087 | 6.203883 | 0 | 19.028 |
| 169 SCOTT COL 301 - NICKı | 0 | 0 | 0 | 397.3406 | 16.54369 | 0 | 40.17021 |
| 169 SCOTT COL 302 - SNOV | 0 | 0 | 0 | 304.6633 | 13.44175 | 0 | 41.22732 |
| 169 SCOTT COL 303 - TWIN | 0 | 0 | 0 | 296.1413 | 16.54369 | 0 | 57.08399 |
| 169 SCOTT COL 304 - COPP | 0 | 0 | 0 | 99.06884 | 5.169903 | 0 | 26.42777 |
| 169 SCOTT COL 401 - GATE | 0 | 0 | 0 | 1025.842 | 78.58252 | 0 | 181.8231 |
| 169 SCOTT COL 501 - DUNC | 0 | 0 | 0 | 205.5945 | 18.61165 | 0 | 47.56999 |
| 169 SCOTT COL 502 - FORT | 0 | 0 | 0 | 255.6615 | 26.8835 | 0 | 43.34155 |
| 169 SCOTT COL 503 - MAN | 0 | 0 | 0 | 145.9401 | 8.271845 | 0 | 13.74244 |
| 169 SCOTT COL 504 - RYE C | 0 | 0 | 0 | 351.5346 | 20.67961 | 0 | 35.94177 |
| 169 SCOTT COL 601 - CLINC | 0 | 0 | 0 | 233.2911 | 11.37379 | 0 | 30.65622 |
| 169 SCOTT COL 602 - DUFF | 0 | 0 | 0 | 517.7146 | 35.15534 | 0 | 70.82643 |
| 169 SCOTT COL 603 - FAIR\} | 0 | 0 | 0 | 121.4392 | 8.271845 | 0 | 27.48488 |
| 171 SHENANDC 101 - ORK^ | 220.5903 | 0 | 0 | 464.0052 | 1 | 230.3797 | 0 |
| 171 SHENANDC 103 - NEW | 375.5416 | 0 | 0 | 1058.512 | 0 | 382.5375 | 0 |
| 171 SHENANDC 201 - CONI | 235.655 | 0 | 0 | 894.8671 | 0 | 256.0966 | 0 |
| 171 SHENANDC 202 - MT Jt | 203.3735 | 0 | 0 | 726.0438 | 1 | 220.7359 | 0 |
| 171 SHENANDC 302 -EDINI | 286.2294 | 0 | 0 | 805.7947 | 0 | 285.028 | 0 |
| 171 SHENANDC 303 - ST LU | 171.092 | 0 | 0 | 888.6527 | 0 | 183.2323 | 0 |
| 171 SHENANDC 304 -FORT | 153.8752 | 0 | 0 | 462.9694 | 1 | 159.6585 | 0 |
| 171 SHENANDC 401 - WOO | 703.7369 | 0 | 0 | 1386.837 | 2 | 721.1422 | 0 |
| 171 SHENANDC 501 - CEDA | 25.82521 | 0 | 0 | 61.10782 | 0 | 24.64528 | 0 |
| 171 SHENANDC503-TOM! | 361.5529 | 0 | 0 | 1009.833 | 3 | 372.8937 | 0 |
| 171 SHENANDC 504 -LEBAI | 208.7538 | 0 | 0 | 687.7219 | 0 | 217.5213 | 0 |
| 171 SHENANDC 601 - STRA: | 562.7743 | 0 | 0 | 1178.656 | 1 | 586.1289 | 0 |
| 173 SMYTH COI 101 - SALT | 191.9331 | 0 | 0 | 769.7259 | 1 | 0 | 315.3191 |
| 173 SMYTH COI 201 - SEVEI | 21.90541 | 0 | 0 | 713.5775 | 9 | 0 | 286.2443 |
| 173 SMYTH COI 202 - RICH | 76.14736 | 0 | 0 | 245.6135 | 0 | 0 | 159.6809 |
| 173 SMYTH COI 301 - CHILL | 0 | 0 | 0 | 853.6997 | 12 | 0 | 363.5511 |
| 173 SMYTH COI 302 - ST CL | 0 | 0 | 0 | 263.6274 | 1 | 0 | 82.53029 |
| 173 SMYTH COI 401 - EAST | 299.3739 | 0 | 0 | 471.7012 | 5 | 0 | 426.2324 |
| 173 SMYTH COI 402 - WEST | 149.1654 | 0 | 0 | 205.5343 | 1 | 0 | 186.999 |
| 173 SMYTH COI 501 - ATKIN | 210.7091 | 0 | 0 | 574.4684 | 2 | 0 | 370.864 |


| 173 SMYTH COI 502 - WAS | 250.3475 | 0 | 0 | 344.2699 | 2 | 0 | 346.8361 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 173 SMYTH COI 601 - ROYA | 248.2613 | 0 | 0 | 489.1716 | 2 | 0 | 365.6405 |
| 173 SMYTH COI 602 -ROYA | 0 | 0 | 0 | 391.3219 | 8 | 0 | 172.3734 |
| 173 SMYTH COI 701 - ADW | 0 | 0 | 0 | 749.6904 | 8 | 0 | 323.853 |
| 173 SMYTH COI 702 - SUGA | 173.157 | 0 | 0 | 356.602 | 2 | 0 | 207.8928 |
| 173 SMYTH COI703-KONN | 0 | 0 | 0 | 68.99623 | 1 | 0 | 22.98312 |
| 175 SOUTHAMI 101 - BERLI | 93.72356 | 0 | 0 | 386.6047 | 0 | 87.69345 | 0 |
| 175 SOUTHAMI 102 - IVOR | 259.0561 | 0 | 0 | 413.6254 | 0 | 251.4583 | 0 |
| 175 SOUTHAMI 201 - BOYK | 408.5926 | 0 | 0 | 309.6994 | 2 | 571.4545 | 0 |
| 175 SOUTHAMI 202 - BRAN | 93.72356 | 0 | 0 | 157.9675 | 0 | 160.5912 | 0 |
| 175 SOUTHAMI301-CAPR | 286.436 | 0 | 0 | 308.6602 | 1 | 429.6337 | 0 |
| 175 SOUTHAMI 302 -SEBRI | 208.5086 | 0 | 0 | 318.0135 | 0 | 327.4393 | 0 |
| 175 SOUTHAMI 401 - DREV | 213.774 | 0 | 0 | 199.5379 | 1 | 309.7117 | 0 |
| 175 SOUTHAMI501-HUN7 | 231.6762 | 0 | 0 | 637.0663 | 0 | 236.6667 | 0 |
| 175 SOUTHAMI502-FORK | 167.4387 | 0 | 0 | 199.5379 | 0 | 202.209 | 0 |
| 175 SOUTHAMI601-COUF | 323.2936 | 0 | 0 | 448.9602 | 2 | 554.7697 | 0 |
| 175 SOUTHAMI 602 - SEDLI | 63.18442 | 0 | 0 | 274.3646 | 0 | 61.27976 | 0 |
| 175 SOUTHAMI701-BLAC | 208.5086 | 0 | 0 | 123.6719 | 0 | 249.2293 | 0 |
| 175 SOUTHAMI702-NEW! | 200.084 | 0 | 0 | 378.2906 | 0 | 410.8633 | 0 |
| 177 SPOTSYLVA 101 - PART | 240.938 | 0 | 0 | 681.6163 | 1 | 241.2096 | 0 |
| 177 SPOTSYLVf 102 - BLAYI | 285.5946 | 0 | 0 | 690.9394 | 2 | 287.3541 | 0 |
| 177 SPOTSYLVf 103 -TRAV | 523.4495 | 0 | 0 | 870.9118 | 1.08 | 565.5983 | 0 |
| 177 SPOTSYLVA 104 - MASS | 475.8632 | 0 | 0 | 757.4069 | 2.16 | 499.1991 | 0 |
| 177 SPOTSYLVf 201 - WILD | 541.4766 | 0 | 0 | 735.5326 | 0 | 536.8585 | 0 |
| 177 SPOTSYLVf 202 - WILD | 433.1261 | 0 | 0 | 764.3043 | 4 | 427.6498 | 0 |
| 177 SPOTSYLVA 203 - NI RII | 428.9344 | 0 | 0 | 870.6945 | 2 | 432.9354 | 0 |
| 177 SPOTSYLVA 204 - CHAN | 730.7144 | 0 | 0 | 864.5471 | 0 | 767.5482 | 0 |
| 177 SPOTSYLVf 301 - PLAN | 666.7594 | 0 | 0 | 897.9365 | 5 | 684.6275 | 0 |
| 177 SPOTSYLVf 302 - HAZE | 788.857 | 0 | 0 | 832.9749 | 2 | 790.9361 | 0 |
| 177 SPOTSYLVf 303 - RIVEF | 918.3867 | 0 | 0 | 1326.473 | 1 | 892.7008 | 0 |
| 177 SPOTSYLVf 401 - SUMI | 693.7028 | 0 | 0 | 839.088 | 1.08 | 718.3852 | 0 |
| 177 SPOTSYLVA 402 - PARK | 818.4847 | 0 | 0 | 689.5161 | 3.24 | 844.6577 | 0 |
| 177 SPOTSYLVf 403 -LEE H | 833.2893 | 0 | 0 | 918.6476 | 2.16 | 869.4034 | 0 |
| 177 SPOTSYLVf 501 - BELM | 273.8182 | 0 | 0 | 751.7983 | 3 | 280.6547 | 0 |
| 177 SPOTSYLVA 502 - BROK | 239.6492 | 0 | 0 | 650.6461 | 1 | 236.0051 | 0 |
| 177 SPOTSYLVA 503 - POST | 169.1958 | 0 | 0 | 824.2369 | 0 | 217.9327 | 0 |
| 177 SPOTSYLVA 504 - COUF | 492.7828 | 0 | 0 | 984.4168 | 0 | 577.2558 | 0 |
| 177 SPOTSYLVA $505-\mathrm{BROC}$ | 448.3689 | 0 | 0 | 1223.095 | 3.24 | 471.605 | 0 |
| 177 SPOTSYLVA 601 - SALEI | 719.0822 | 0 | 0 | 928.1947 | 3.24 | 768.6113 | 0 |
| 177 SPOTSYLVA 602 -SMITI | 978.1632 | 0 | 0 | 1015.18 | 2.16 | 1019.5 | 0 |
| 177 SPOTSYLVA 603 - PIEDN | 419.8171 | 0 | 0 | 586.6191 | 2.16 | 443.3069 | 0 |
| 177 SPOTSYLVA 701 - BATT | 547.7714 | 0 | 0 | 614.1997 | 1.08 | 593.3468 | 0 |
| 177 SPOTSYLVA 702 - BREN | 741.4839 | 0 | 0 | 759.5901 | 5.32 | 767.5338 | 0 |
| 177 SPOTSYLVA 703 - FAIR\ | 370.1158 | 0 | 0 | 335.2109 | 1.08 | 395.468 | 0 |
| 177 SPOTSYLVA 704 -GAYL | 1015.175 | 0 | 0 | 1260.223 | 0 | 1073.717 | 0 |
| 179 STAFFORD 101 - HART | 749.9978 | 0 | 0 | 1742.722 | 52 | 737.2955 | 0 |
| 179 STAFFORD 102 -ROCK | 797.5724 | 0 | 0 | 862.6632 | 0 | 777.3774 | 0 |


| 179 STAFFORD 103 - SIMP: | 630.2774 | 0 | 0 | 868.9221 | 22.48 | 612.067 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 179 STAFFORD 104 - COLLI | 775.5052 | 0 | 0 | 1028.077 | 2 | 756.2007 | 0 |
| 179 STAFFORD 201 -ROCK | 561.7254 | 0 | 0 | 729.4936 | 1 | 594.8956 | 0 |
| 179 STAFFORD 202 -ROSE | 851.4137 | 0 | 0 | 923.054 | 2 | 807.7192 | 0 |
| 179 STAFFORD 203 - RUBY | 355.1018 | 0 | 0 | 888.7126 | 0 | 333.0842 | 0 |
| 179 STAFFORD 204 - STEF/ | 743.4296 | 0 | 0 | 1163.443 | 2 | 719.8326 | 0 |
| 179 STAFFORD 301 - GRIFF | 766.232 | 0 | 0 | 350.2573 | 37.048 | 787.3388 | 0 |
| 179 STAFFORD 302 - WIDE | 870.1033 | 0 | 0 | 675.38 | 1 | 1030.5 | 0 |
| 179 STAFFORD 303 - HARB | 464.2955 | 0 | 0 | 595.0543 | 7.168 | 427.9238 | 0 |
| 179 STAFFORD 304 - BARR | 408.6656 | 0 | 0 | 322.9947 | 34.024 | 482.1416 | 0 |
| 179 STAFFORD 401 - AQUI | 405.7357 | 0 | 0 | 175.6927 | 2.048 | 399.6745 | 0 |
| 179 STAFFORD 402 -COUF | 1295.635 | 0 | 0 | 747.7396 | 5.12 | 1268.077 | 0 |
| 179 STAFFORD 403 - BROC | 861.6655 | 0 | 0 | 1262.268 | 4.096 | 817.1356 | 0 |
| 179 STAFFORD 404 -GOVE | 550.0437 | 0 | 0 | 710.0912 | 5.12 | 500.1163 | 0 |
| 179 STAFFORD 501 -GRAF | 958.9166 | 0 | 0 | 1303.054 | 6.144 | 890.3744 | 0 |
| 179 STAFFORD 502 - FALM | 772.7801 | 0 | 0 | 858.5934 | 6.144 | 721.9252 | 0 |
| 179 STAFFORD 503 - DREV | 710.3798 | 0 | 0 | 826.2667 | 3.048 | 671.7043 | 0 |
| 179 STAFFORD 504-GAYL | 818.7913 | 0 | 0 | 613.8786 | 2.048 | 777.3774 | 0 |
| 179 STAFFORD 601 - FERR' | 601.2836 | 0 | 0 | 912.9744 | 8.192 | 538.8282 | 0 |
| 179 STAFFORD 602 - CHAT | 875.2597 | 0 | 0 | 898.3334 | 12.288 | 808.7654 | 0 |
| 179 STAFFORD 603 -WHIT | 646.2491 | 0 | 0 | 1348.023 | 18.432 | 577.5401 | 0 |
| 179 STAFFORD 604 -ENGL | 555.2723 | 0 | 0 | 255.1727 | 4.096 | 540.9207 | 0 |
| 179 STAFFORD 701 - WOO | 1017.118 | 0 | 0 | 976.7122 | 6 | 996.0475 | 0 |
| 179 STAFFORD 702 - WHIT | 744.8849 | 0 | 0 | 501.7226 | 21.456 | 729.2491 | 0 |
| 179 STAFFORD 703 - HAMI | 1102.664 | 0 | 0 | 1094.703 | 6.048 | 1082.888 | 0 |
| 181 SURRY COL 101 - SURR | 249 | 0 | 0 | 419 | 1 | 415 | 0 |
| 181 SURRY COL 201 - BACC | 392 | 0 | 0 | 202 | 1 | 480 | 0 |
| 181 SURRY COL 301 - DENL | 161 | 0 | 0 | 179 | 1 | 244 | 0 |
| 181 SURRY COL 302 - WALI | 156 | 0 | 0 | 129 | 0 | 220 | 0 |
| 181 SURRY COL 401 - CARS | 324 | 0 | 0 | 273 | 1 | 463 | 0 |
| 181 SURRY COL 501 - CLAR | 189 | 0 | 0 | 211 | 1 | 277 | 0 |
| 181 SURRY COL 502 - SPRIN | 157 | 0 | 0 | 39 | 0 | 175 | 0 |
| 183 SUSSEX CO 101 - WAVI | 367.2497 | 0 | 0 | 186.5516 | 1.25 | 436.3896 | 0 |
| 183 SUSSEX CO 201 - STON | 300.0699 | 0 | 0 | 178.1673 | 1.25 | 386.079 | 0 |
| 183 SUSSEX CO 202 - LITTL | 72.77814 | 0 | 0 | 57.64235 | 0 | 108.2771 | 0 |
| 183 SUSSEX CO 301 - COUF | 114.2057 | 0 | 0 | 340.6139 | 1.25 | 277.8019 | 0 |
| 183 SUSSEX CO 302 - WAKI | 20.15395 | 0 | 0 | 115.2847 | 0 | 61.24766 | 0 |
| 183 SUSSEX CO 401 - MARs | 260.8816 | 0 | 0 | 240.0018 | 1.25 | 344.5181 | 0 |
| 183 SUSSEX CO 402 - WEST | 43.66688 | 0 | 0 | 14.6726 | 0 | 49.21687 | 0 |
| 183 SUSSEX CO 501 - HENR | 240.7277 | 0 | 0 | 154.0623 | 0 | 298.5823 | 0 |
| 183 SUSSEX CO 502 - YALE | 109.727 | 0 | 0 | 94.32384 | 0 | 144.3695 | 0 |
| 183 SUSSEX CO 601 - BLAC | 123.163 | 0 | 0 | 266.2028 | 0 | 223.1165 | 0 |
| 183 SUSSEX CO 602 - NEW ${ }^{\prime}$ | 78.37646 | 0 | 0 | 119.4769 | 0 | 121.4016 | 0 |
| 185 TAZEWELL 101 - INDIA | 0 | 0 | 0 | 265.519 | 1.101266 | 0 | 106.075 |
| 185 TAZEWELL 102 - TIP T | 0 | 0 | 0 | 207.5684 | 2.202532 | 0 | 82.1561 |
| 185 TAZEWELL 103 - MUN | 0 | 0 | 0 | 480.463 | 4.405063 | 0 | 191.3509 |
| 185 TAZEWELL 104 - FALLS | 0 | 0 | 0 | 223.3731 | 0 | 0 | 62.39704 |


| 185 TAZEWELL 106 - POCA | 0 | 0 | 0 | 81.13081 | 1.101266 | 0 | 29.11862 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 185 TAZEWELL 107 - AMO | 0 | 0 | 0 | 32.66305 | 2.202532 | 0 | 13.51936 |
| 185 TAZEWELL 109 - BISHC | 0 | 0 | 0 | 81.13081 | 1.101266 | 0 | 41.59803 |
| 185 TAZEWELL 112 - BANL | 0 | 0 | 0 | 103.2574 | 6.607595 | 0 | 50.95758 |
| 185 TAZEWELL 203 - BURK | 0 | 0 | 0 | 83.2381 | 1.101266 | 0 | 48.87768 |
| 185 TAZEWELL 204 - CLEAI | 0 | 0 | 0 | 290.8065 | 5.506329 | 0 | 115.4345 |
| 185 TAZEWELL 207 - FREEs | 0 | 0 | 0 | 93.77457 | 1.101266 | 0 | 30.15857 |
| 185 TAZEWELL 209 - JEFFE | 0 | 0 | 0 | 1332.863 | 45.1519 | 0 | 538.6945 |
| 185 TAZEWELL 214 - THON | 0 | 0 | 0 | 326.6305 | 2.202532 | 0 | 146.633 |
| 185 TAZEWELL 301 - CEDA | 0 | 0 | 0 | 1123.188 | 24.22785 | 0 | 590.692 |
| 185 TAZEWELL 302 - BAPT | 0 | 0 | 0 | 202.3002 | 2.202532 | 0 | 110.2348 |
| 185 TAZEWELL 303 - PAIN ${ }^{-}$ | 0 | 0 | 0 | 787.0742 | 17.62025 | 0 | 388.9416 |
| 185 TAZEWELL 401 - RICHI | 0 | 0 | 0 | 1612.08 | 26.43038 | 0 | 890.1978 |
| 185 TAZEWELL 402 - JEWE | 0 | 0 | 0 | 124.3303 | 1.101266 | 0 | 79.03625 |
| 185 TAZEWELL 501 - SPRIN | 0 | 0 | 0 | 633.2418 | 9.911392 | 0 | 240.2286 |
| 185 TAZEWELL 502 - GRAF | 0 | 0 | 0 | 1146.368 | 18.72152 | 0 | 460.6982 |
| 187 WARREN C 101 - FORK | 273.9141 | 0 | 0 | 491.9613 | 0 | 295.8492 | 0 |
| 187 WARREN C 102 - OTTE | 426.7667 | 0 | 0 | 1116.765 | 5 | 459.5105 | 0 |
| 187 WARREN C 201 - HAPP | 483.2886 | 0 | 0 | 876.1898 | 3 | 470.0016 | 0 |
| 187 WARREN C 202 - LINDE | 412.2791 | 0 | 0 | 678.8404 | 1 | 400.7603 | 0 |
| 187 WARREN C 301 - NORT | 353.6794 | 0 | 0 | 617.5949 | 5 | 393.4165 | 0 |
| 187 WARREN C 302 - RIVEF | 322.1946 | 0 | 0 | 853.2152 | 0 | 365.0905 | 0 |
| 187 WARREN C 401 - EAST | 497.0666 | 0 | 0 | 1085.938 | 4 | 483.64 | 0 |
| 187 WARREN C 402 - TOW | 251.8785 | 0 | 0 | 537.6709 | 1 | 274.867 | 0 |
| 187 WARREN C 501 -SOUT | 514.7658 | 0 | 0 | 801.9031 | 3 | 493.082 | 0 |
| 187 WARREN C 502 - BENT | 139.5 | 0 | 0 | 425.533 | 0 | 163.6613 | 0 |
| 187 WARREN C504-BROV | 144.6667 | 0 | 0 | 339.3885 | 0 | 152.1211 | 0 |
| 191 WASHINGT 101 - EAST | 676.1746 | 0 | 0 | 1008.259 | 2.333333 | 0 | 438.0267 |
| 191 WASHINGT 102 - WEST | 358.3616 | 0 | 0 | 527.8344 | 0 | 0 | 223.2868 |
| 191 WASHINGT 201 - CLINC | 0 | 0 | 0 | 453.364 | 15.55851 | 0 | 123.9295 |
| 191 WASHINGT 202 -GREE | 214.7978 | 0 | 0 | 746.9753 | 0 | 0 | 158.117 |
| 191 WASHINGT 203 - HAYT | 0 | 0 | 0 | 293.4769 | 5.18617 | 0 | 67.30654 |
| 191 WASHINGT 204 WOOD | 307.9498 | 0 | 0 | 621.6014 | 1.166667 | 0 | 165.5955 |
| 191 WASHINGT 301 - WAT/ | 0 | 0 | 0 | 1320.12 | 28.00532 | 0 | 294.8668 |
| 191 WASHINGT 302 -SOUT | 587.4061 | 0 | 0 | 846.0101 | 0 | 0 | 384.6088 |
| 191 WASHINGT 401 - GLAD | 0 | 0 | 0 | 945.6479 | 22.81915 | 0 | 356.8315 |
| 191 WASHINGT 402 - MEAI | 0 | 0 | 0 | 1107.639 | 39.41489 | 0 | 361.1049 |
| 191 WASHINGT 501 -RHEA | 0 | 0 | 0 | 1307.498 | 30.07979 | 0 | 362.1733 |
| 191 WASHINGT 502 - DAM, | 0 | 0 | 0 | 606.9398 | 15.55851 | 0 | 247.859 |
| 191 WASHINGT 504-GREE | 0 | 0 | 0 | 107.2926 | 1.037234 | 0 | 40.5976 |
| 191 WASHINGT 601 - BURS | 233.4282 | 0 | 0 | 888.1526 | 1.166667 | 0 | 163.4587 |
| 191 WASHINGT 602 - MENI | 44.93218 | 0 | 0 | 215.9802 | 0 | 0 | 38.46088 |
| 191 WASHINGT 603 - VALLI | 181.9205 | 0 | 0 | 623.7086 | 2.333333 | 0 | 129.2713 |
| 191 WASHINGT 701 - HIGH | 0 | 0 | 0 | 808.9024 | 18.67021 | 0 | 147.4334 |
| 191 WASHINGT 702 - WALL | 126.0293 | 0 | 0 | 363.4788 | 0 | 0 | 103.6307 |
| 191 WASHINGT 703 - JOHN | 0 | 0 | 0 | 874.1195 | 18.67021 | 0 | 194.4411 |
| 193 WESTMOR 101 - PREC | 388.7429 | 0 | 0 | 268.8012 | 1 | 403.6752 | 0 |


| 193 WESTMOR 102 - PREC | 217.5237 | 0 | 0 | 170.3819 | 0 | 213.7743 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 193 WESTMOR 201 - PREC | 381.2049 | 0 | 0 | 425.4256 | 2 | 391.7386 | 0 |
| 193 WESTMOR 202 - PREC | 173.3729 | 0 | 0 | 265.6264 | 0 | 160.5971 | 0 |
| 193 WESTMOR 301 - PREC | 226.1385 | 0 | 0 | 339.7055 | 1 | 210.3108 | 0 |
| 193 WESTMOR 302 - PREC | 187.3719 | 0 | 0 | 225.4121 | 0 | 177.693 | 0 |
| 193 WESTMOR 401 - PREC | 270.2894 | 0 | 0 | 712.2175 | 0 | 258.5593 | 0 |
| 193 WESTMOR 501 - PREC | 425.3558 | 0 | 0 | 643.4298 | 2 | 409.6516 | 0 |
| 195 WISE COU 101 - APPA | 0 | 0 | 0 | 378.3277 | 14.79245 | 0 | 119.5082 |
| 195 WISE COUN 102 - DORC | 0 | 0 | 0 | 286.3586 | 8.45283 | 0 | 73.54351 |
| 195 WISE COUP 103 -GUES | 0 | 0 | 0 | 267.5467 | 4.226415 | 0 | 46.98613 |
| 195 WISE COUP 104 - WEST | 253.2625 | 0 | 0 | 608.1851 | 1 | 0 | 196.116 |
| 195 WISE COUN 201 - NORT | 126.1144 | 0 | 0 | 299.3981 | 0 | 0 | 68.06689 |
| 195 WISE COUR 202 - WISE | 0 | 0 | 0 | 1069.142 | 51.77358 | 0 | 231.8528 |
| 195 WISE COUP 203 - EAST | 0 | 0 | 0 | 182.8932 | 4.226415 | 0 | 41.87894 |
| 195 WISE COUN 301 - BIG S | 0 | 0 | 0 | 806.8205 | 23.24528 | 0 | 245.145 |
| 195 WISE COUN 302 - EAST | 0 | 0 | 0 | 875.7974 | 36.98113 | 0 | 130.8161 |
| 195 WISE COUN 401 - CLINC | 0 | 0 | 0 | 744.1142 | 24.30189 | 0 | 92.52843 |
| 195 WISE COUT 402 - SOUT | 187.1041 | 0 | 0 | 662.4314 | 0 | 0 | 112.7358 |
| 195 WISE COUN 403 - ST PA | 138.5191 | 0 | 0 | 216.9854 | 0 | 0 | 86.82219 |
| 197 WYTHE CO 101 - ROYA | 48.2536 | 0 | 0 | 287.7997 | 0 | 0 | 70.24684 |
| 197 WYTHE CO 102 -RURA | 237.072 | 0 | 0 | 912.9131 | 2.181818 | 0 | 344.0029 |
| 197 WYTHE CO 203 - WEST | 396.5187 | 0 | 0 | 905.6923 | 4.363636 | 13.83871 | 378.0933 |
| 197 WYTHE CO 303 - EAST | 394.4207 | 0 | 0 | 1033.603 | 2.181818 | 407.7097 | 0 |
| 197 WYTHE CO 401 - FORT | 124.83 | 0 | 0 | 606.5456 | 1.090909 | 123.4839 | 0 |
| 197 WYTHE CO 402 - MAX | 134.2709 | 0 | 0 | 576.631 | 0 | 123.4839 | 0 |
| 197 WYTHE CO 501 - JACKS | 89.16427 | 0 | 0 | 378.5752 | 1.090909 | 88.35484 | 0 |
| 197 WYTHE CO 502 - SHEFI | 131.1239 | 0 | 0 | 655.028 | 1.090909 | 120.2903 | 0 |
| 197 WYTHE CO 601 - HUD[ | 54.54755 | 0 | 0 | 309.4621 | 0 | 46.83871 | 0 |
| 197 WYTHE CO 602 -ZION | 124.83 | 0 | 0 | 451.8146 | 0 | 0 | 185.9475 |
| 197 WYTHE CO 603 EVER | 84.9683 | 0 | 0 | 324.9352 | 0 | 0 | 84.70943 |
| 199 YORK COUI 101 - QUEE | 714.6042 | 0 | 5.496183 | 602.4265 | 2.2 | 918.2141 | 0 |
| 199 YORK COUI 102 - WALL | 796.1326 | 0 | 16.48855 | 809.7859 | 1.1 | 799.0918 | 0 |
| 199 YORK COUI 103 - MAG | 1144.441 | 0 | 24.18321 | 548.1948 | 0 | 1283.881 | 0 |
| 199 YORK COUI 201 - COVE | 895.6994 | 0 | 0 | 1031.664 | 5 | 1226.732 | 0 |
| 199 YORK COUI 202 - KILN | 473.7584 | 0 | 0 | 551.489 | 0 | 653.8364 | 0 |
| 199 YORK COUI 301 - SEAFI | 497.5829 | 0 | 27.48092 | 1486.171 | 5.5 | 530.9402 | 0 |
| 199 YORK COUI 302 - YORK | 587.5712 | 0 | 23.08397 | 915.0476 | 0 | 592.0787 | 0 |
| 199 YORK COUI 303 -EDGE | 723.7514 | 0 | 10.99237 | 773.7923 | 0 | 983.9082 | 0 |
| 199 YORK COUI 401 - HARV | 607.0029 | 0 | 0 | 1284.361 | 2 | 604.95 | 0 |
| 199 YORK COUI 402 - DARE | 556.8693 | 0 | 28.58015 | 1267.31 | 0 | 579.2074 | 0 |
| 199 YORK COUI 403 - GRAF | 349.3667 | 0 | 7.694656 | 603.4312 | 2.2 | 370.0492 | 0 |
| 199 YORK COUI 501 - TABB | 792.1474 | 0 | 0 | 1250.677 | 4 | 846.8095 | 0 |
| 199 YORK COUI 502 - BETH | 893.0731 | 0 | 0 | 920.6503 | 0 | 1156.302 | 0 |
| 510 ALEXANDR 101 - LADR | 788.2208 | 0 | 0 | 0 | 87.94321 | 789.6642 | 0 |
| 510 ALEXANDR 102 - CITY I | 692.6789 | 0 | 0 | 0 | 150.4571 | 690.9562 | 0 |
| 510 ALEXANDR 103 - LYLES | 994.5044 | 0 | 0 | 0 | 144.0997 | 990.3344 | 0 |
| 510 ALEXANDR 104 - DURA | 876.1628 | 0 | 0 | 0 | 97.47922 | 884.0335 | 0 |


| 510 ALEXANDR 105 - LEE C | 655.7649 | 0 | 0 | 0 | 54.0374 | 658.4151 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 510 ALEXANDR 106 - CORA | 1131.303 | 0 | 0 | 0 | 90.06233 | 1124.838 | 0 |
| 510 ALEXANDR 107 - MT V | 1450.5 | 0 | 0 | 0 | 97.47922 | 1465.435 | 0 |
| 510 ALEXANDR 108 - GEOR | 1465.7 | 0 | 0 | 0 | 101.7175 | 1480.62 | 0 |
| 510 ALEXANDR 109 - FIRE I | 726.3357 | 0 | 0 | 0 | 103.8366 | 728.9208 | 0 |
| 510 ALEXANDR 110 - CHAR | 892.4483 | 0 | 0 | 0 | 70.9903 | 895.9652 | 0 |
| 510 ALEXANDR 111 - POTC | 414.7388 | 0 | 0 | 0 | 38.14404 | 417.6109 | 0 |
| 510 ALEXANDR 112 - ALEX | 605.8226 | 0 | 0 | 0 | 62.51385 | 604.1799 | 0 |
| 510 ALEXANDR 201 - MAU | 967.3619 | 0 | 0 | 0 | 97.47922 | 972.9792 | 0 |
| 510 ALEXANDR 202 - GEOR | 916.3338 | 0 | 0 | 0 | 129.2659 | 915.4899 | 0 |
| 510 ALEXANDR 203 - CHAR | 998.8473 | 0 | 0 | 0 | 77.34765 | 997.9273 | 0 |
| 510 ALEXANDR 204 - BLESS | 852.2773 | 0 | 0 | 0 | 127.1468 | 868.8476 | 0 |
| 510 ALEXANDR 205 - DOUC | 1009.493 | 0 | 0 | 0 | 124.0442 | 1015.283 | 0 |
| 510 ALEXANDR 206 - CHIN | 695.5717 | 0 | 0 | 0 | 78.06231 | 703.9727 | 0 |
| 510 ALEXANDR 207 - TEMF | 1207.306 | 0 | 0 | 0 | 189.2744 | 1181.168 | 0 |
| 510 ALEXANDR 208 - NOV/ | 800.9288 | 0 | 0 | 0 | 76.99296 | 813.5277 | 0 |
| 510 ALEXANDR 209 - JAME | 1215.907 | 0 | 0 | 0 | 80.20101 | 1153.275 | 0 |
| 510 ALEXANDR 210 - The + | 537.5361 | 0 | 0 | 0 | 55.60603 | 546.5786 | 0 |
| 510 ALEXANDR 302 - PATR | 786.9528 | 0 | 0 | 0 | 43.84322 | 765.9892 | 0 |
| 510 ALEXANDR 303 - CHAR | 926.7122 | 0 | 0 | 0 | 48.1206 | 899.0181 | 0 |
| 510 ALEXANDR 304 - SAML | 783.7276 | 0 | 0 | 0 | 37.42714 | 760.6251 | 0 |
| 510 ALEXANDR 305 - JOHN | 734.2743 | 0 | 0 | 0 | 51.32864 | 739.5521 | 0 |
| 510 ALEXANDR 306 - WILLI | 809.5294 | 0 | 0 | 0 | 57.74472 | 819.3289 | 0 |
| 510 ALEXANDR 307 - SOUT | 937.4629 | 0 | 0 | 0 | 74.85427 | 946.5404 | 0 |
| 510 ALEXANDR 308 - CAME | 1171.829 | 0 | 0 | 0 | 117.6281 | 1114.654 | 0 |
| 510 ALEXANDR 309 - OLYN | 669.77 | 0 | 0 | 0 | 28.87236 | 652.2709 | 0 |
| 520 BRISTOL Cl 001 - FIRST | 0 | 0 | 0 | 354.1491 | 27.74627 | 0 | 109.6992 |
| 520 BRISTOL Cl 002 - SECO | 0 | 0 | 0 | 591.6252 | 54.42537 | 0 | 221.5285 |
| 520 BRISTOL Cl 003 - THIRI | 0 | 0 | 0 | 250.8987 | 21.34328 | 0 | 105.439 |
| 520 BRISTOL Cl 004 - FOUR | 0 | 0 | 0 | 963.327 | 39.48507 | 0 | 218.3333 |
| 530 BUENA VIS 001 - FIRST | 258 | 9 | 0 | 542 | 1 | 419 | 360 |
| 530 BUENA VIS 002 - SECO | 228 | 15 | 0 | 340 | 0 | 310 | 256 |
| 540 CHARLOTTI 101 - Key R | 1770.532 | 0 | 0 | 0 | 52.92715 | 1766.964 | 213.824 |
| 540 CHARLOTTI 102 - CLAR | 1598.217 | 0 | 0 | 0 | 41.90066 | 1549.193 | 204.1048 |
| 540 CHARLOTTI 201 - CARV | 1306.36 | 0 | 0 | 0 | 20.95033 | 1296.923 | 106.912 |
| 540 CHARLOTTI 202 -WALk | 1870.69 | 0 | 0 | 0 | 51.8245 | 1834.883 | 321.816 |
| 540 CHARLOTTI301-BENJ, | 1195.432 | 0 | 0 | 0 | 28.66887 | 1155.696 | 116.6313 |
| 540 CHARLOTTI302-JOHN | 1627.296 | 0 | 0 | 0 | 58.4404 | 1568.598 | 288.3385 |
| 540 CHARLOTTI303-BUFC | 722.6441 | 0 | 0 | 0 | 15.43709 | 684.5772 | 83.15379 |
| 540 CHARLOTTI401-VENA | 575.0998 | 0 | 0 | 0 | 20.95033 | 534.7249 | 78.83412 |
| 540 CHARLOTTI 402 - ALUN | 933.7295 | 0 | 0 | 0 | 41.90066 | 917.4413 | 194.3855 |
| 550 CHESAPEAIO01-GREA | 0 | 0 | 0 | 809.3572 | 49.91623 | 322.4839 | 0 |
| 550 CHESAPEAIOO2-BETH | 223.017 | 0 | 0 | 895.748 | 0 | 205.8855 | 0 |
| 550 CHESAPEAI003-CAME | 1014.57 | 0 | 0 | 69.06228 | 1.05 | 1014.101 | 58.82126 |
| 550 CHESAPEAIO04-CHUR | 540.0105 | 0 | 0 | 0 | 133.0983 | 350.8457 | 0 |
| 550 CHESAPEAIO05-CRES | 963.4099 | 0 | 0 | 0 | 24.67081 | 938.3291 | 54.69345 |
| 550 CHESAPEAI 006 - DEEP | 630.3108 | 0 | 0 | 488.5898 | 4.2 | 611.3539 | 0 |


| 550 CHESAPEAI 007 - GREE | 604.98 | 0 | 0 | 0 | 128.4938 | 423.3258 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAI 008 - SOUT | 814.2367 | 0 | 0 | 0 | 91.48758 | 690.2532 | 307.5217 |
| 550 CHESAPEAI009-BELLS | 0 | 0 | 0 | 1024.7 | 75.91427 | 379.2075 | 0 |
| 550 CHESAPEAI010-OSCA | 333.5677 | 0 | 0 | 0 | 47.28571 | 272.9873 | 148.6011 |
| 550 CHESAPEAIO11-GENE | 302.5911 | 0 | 0 | 419.2588 | 17.7089 | 363.2911 | 334.3524 |
| 550 CHESAPEAIO12-GEOR | 895.0389 | 0 | 0 | 0 | 23.64286 | 851.1392 | 98.03544 |
| 550 CHESAPEAIO13-GILM | 0 | 0 | 0 | 569.0468 | 82.1538 | 488.8861 | 350.8637 |
| 550 CHESAPEAI 014 - GRAS | 0 | 0 | 0 | 1045.506 | 94.63285 | 515.7642 | 0 |
| 550 CHESAPEAIO15-GREE | 680.6025 | 0 | 0 | 0 | 68.87267 | 569.8481 | 284.8187 |
| 550 CHESAPEAI 016 - HICKI | 0 | 0 | 0 | 909.2265 | 61.35537 | 290.9709 | 0 |
| 550 CHESAPEAIO17-INDIA | 47.11626 | 0 | 0 | 671.1533 | 35.37749 | 207.9864 | 0 |
| 550 CHESAPEAIO18-INDIA | 512.7827 | 0 | 0 | 0 | 59.62112 | 456.7089 | 166.1443 |
| 550 CHESAPEAIO19-JOLLI | 299.45 | 0 | 0 | 579.2985 | 1.05 | 285.7187 | 0 |
| 550 CHESAPEAIO20-E W C | 630.3108 | 0 | 0 | 745.2541 | 3.15 | 584.0426 | 0 |
| 550 CHESAPEAI 021 - FELLC | 705.531 | 0 | 0 | 0 | 138.2572 | 482.1503 | 0 |
| 550 CHESAPEAIO22-NORF | 366.7173 | 0 | 0 | 0 | 77.09627 | 275.0633 | 241.4768 |
| 550 CHESAPEAIO23-OAK 1 | 0 | 0 | 0 | 610.659 | 97.75262 | 536.773 | 0 |
| 550 CHESAPEAIO24-OAKL | 546.9682 | 0 | 0 | 0 | 60.64907 | 435.9494 | 263.1478 |
| 550 CHESAPEAIO25-ST JU | 642.8752 | 0 | 0 | 249.4488 | 1.05 | 632.1266 | 228.0614 |
| 550 CHESAPEAIO26-JOHN | 330.46 | 0 | 0 | 0 | 29.81056 | 291.6709 | 90.81177 |
| 550 CHESAPEAIO27-SILVE | 647.5988 | 0 | 0 | 0 | 118.6536 | 457.9902 | 0 |
| 550 CHESAPEAI028-SUNR | 70.15087 | 0 | 0 | 128.8475 | 0 | 69.3288 | 0 |
| 550 CHESAPEAI029-TANE | 397.7951 | 0 | 0 | 0 | 104.8509 | 266.7595 | 383.8861 |
| 550 CHESAPEAIO30-SOUT | 495.172 | 0 | 0 | 0 | 5.139752 | 490.962 | 15.47928 |
| 550 CHESAPEAIO31-CARV | 948.9069 | 0 | 0 | 0 | 31.86646 | 899.9241 | 103.1952 |
| 550 CHESAPEAIO32-PROV | 1118.799 | 0 | 0 | 0 | 10.2795 | 1085.722 | 65.01297 |
| 550 CHESAPEAI 033 - WEST | 311.8133 | 0 | 0 | 0 | 69.90062 | 233.5443 | 227.0294 |
| 550 CHESAPEAI 034 - HICKI | 0 | 0 | 0 | 1010.136 | 77.99411 | 338.2405 | 0 |
| 550 CHESAPEAI035-TAYL( | 531.7345 | 0 | 0 | 0 | 37.14372 | 519.5623 | 0 |
| 550 CHESAPEAI 036 - GREA | 0 | 0 | 0 | 770.866 | 41.59686 | 265.7604 | 0 |
| 550 CHESAPEAI 037 - BRID | 0 | 0 | 0 | 853.0501 | 63.43521 | 368.7031 | 0 |
| 550 CHESAPEAI038-BAILE | 482.1159 | 0 | 0 | 7.215462 | 181.5915 | 319.3326 | 0 |
| 550 CHESAPEAI 039 - LAKE | 0 | 0 | 0 | 553.4422 | 68.63482 | 369.7536 | 0 |
| 550 CHESAPEAIO41-JOHN | 0 | 0 | 0 | 996.6121 | 186.1459 | 929.6361 | 0 |
| 550 CHESAPEAIO42-PARK | 704.4287 | 0 | 0 | 0 | 53.45342 | 608.2532 | 208.4543 |
| 550 CHESAPEAI 043 - PLEA! | 0 | 0 | 0 | 807.2766 | 39.51702 | 237.3986 | 0 |
| 550 CHESAPEAIO44-NANS | 565.9299 | 0 | 0 | 349.8567 | 2 | 643.2676 | 0 |
| 550 CHESAPEAIO45-SUNR | 338.19 | 0 | 0 | 136.063 | 0 | 353.9494 | 98.03544 |
| 550 CHESAPEAIO46-BELLS | 0 | 0 | 0 | 636.6666 | 71.75458 | 391.8127 | 0 |
| 550 CHESAPEAIO48-JOLLI | 1221.882 | 0 | 0 | 97.92412 | 3.15 | 1212.354 | 90.81177 |
| 550 CHESAPEAI 049 - WATE | 526.7609 | 0 | 0 | 547.6548 | 1 | 507.3607 | 0 |
| 550 CHESAPEAI 050 - RIVEF | 776.9435 | 0 | 0 | 0 | 80.18012 | 671.5696 | 309.5856 |
| 550 CHESAPEAIO51-COOF | 0 | 0 | 0 | 1100.643 | 69.67474 | 413.8719 | 0 |
| 550 CHESAPEAIO52-SHIPY | 0 | 0 | 0 | 372.4292 | 91.51309 | 428.578 | 0 |
| 550 CHESAPEAI053-FAIRV | 1094.972 | 0 | 0 | 0 | 141.8571 | 923.7975 | 491.2091 |
| 550 CHESAPEAI 054 - PUGF | 743.2204 | 0 | 0 | 20.14327 | 73.25567 | 740.1701 | 0 |
| 550 CHESAPEAI 055 -GEOR | 762.4405 | 0 | 0 | 0 | 35.97826 | 715.1646 | 119.7064 |


| 550 CHESAPEAI056-GREE | 610.1596 | 0 | 0 | 0 | 89.43168 | 540.7848 | 243.5407 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAI057-CYPR | 697.1773 | 0 | 0 | 0 | 67.84472 | 578.1519 | 282.7548 |
| 550 CHESAPEAI058-EXPR | 0 | 0 | 0 | 191.4161 | 41.59686 | 292.7089 | 62.94907 |
| 550 CHESAPEAI 059 - CLEAI | 104.6284 | 0 | 0 | 504.5479 | 115.1799 | 471.6459 | 0 |
| 550 CHESAPEAI 060 - PARK | 0 | 0 | 0 | 811.4379 | 72.7945 | 344.5431 | 0 |
| 550 CHESAPEAI061-CENT | 0 | 0 | 0 | 1052.789 | 69.67474 | 346.644 | 0 |
| 550 CHESAPEAI 062 - FENT | 0 | 0 | 0 | 885.2995 | 55.11584 | 332.9883 | 0 |
| 550 CHESAPEAI063-POPL | 0 | 0 | 0 | 586.732 | 36.39725 | 170.1707 | 0 |
| 550 CHESAPEAI064-DEEP | 565.3951 | 0 | 0 | 378.2963 | 2.1 | 547.2773 | 0 |
| 550 CHESAPEAI 065 - WATE | 655.2391 | 0 | 0 | 705.3452 | 3 | 613.4548 | 0 |
| 570 COLONIAL 001 - FIRST | 204.0109 | 3.3 | 0 | 580.3405 | 1 | 227.2517 | 0 |
| 570 COLONIAL 002 - SECO | 204.0109 | 9.9 | 0 | 671.3743 | 2 | 235.9089 | 0 |
| 570 COLONIAL 003 - THIRI | 251.8259 | 7.7 | 0 | 855.7177 | 0 | 318.1524 | 0 |
| 570 COLONIAL 004 - FOUR | 300.7035 | 5.5 | 0 | 1109.474 | 0 | 363.6027 | 0 |
| 570 COLONIAL 005 - FIFTH | 211.4488 | 6.6 | 0 | 1362.093 | 1 | 304.0844 | 0 |
| 580 COVINGTO 101 - PREC | 0 | 0 | 0 | 191.2659 | 6.166667 | 128.1248 | 103.2851 |
| 580 COVINGTO 201 - PREC | 0 | 0 | 0 | 216.0787 | 7.194444 | 140.7273 | 113.5113 |
| 580 COVINGTO 301 - PREC | 0 | 0 | 0 | 157.1482 | 8.222222 | 133.3758 | 81.80995 |
| 580 COVINGTO 401 - PREC | 0 | 0 | 0 | 359.7866 | 9.25 | 197.4383 | 210.6606 |
| 580 COVINGTO 501 - PREC | 0 | 0 | 0 | 296.7206 | 6.166667 | 174.3338 | 168.733 |
| 590 DANVILLE (001-WARI | 208.4898 | 0 | 0 | 54.76478 | 0 | 0 | 152.2016 |
| 590 DANVILLE (002-WARI | 176.1739 | 0 | 0 | 150.6031 | 0 | 0 | 146.9892 |
| 590 DANVILLE (003-WARI | 370.0694 | 0 | 0 | 258.0264 | 0 | 0 | 298.1483 |
| 590 DANVILLE (004-WARI | 488.9086 | 0 | 0 | 643.4862 | 4 | 0 | 433.6702 |
| 590 DANVILLE (006-WARI | 217.8718 | 0 | 0 | 54.76478 | 0 | 0 | 178.2635 |
| 590 DANVILLE (007-WARI | 349.2204 | 0 | 0 | 82.14717 | 0 | 0 | 290.8509 |
| 590 DANVILLE (008-WARI | 276.249 | 0 | 0 | 200.1021 | 1 | 0 | 225.1749 |
| 590 DANVILLE (009-WARI | 235.5935 | 0 | 0 | 244.3352 | 1 | 0 | 209.5378 |
| 590 DANVILLE (010-WARI | 318.9894 | 0 | 0 | 332.8014 | 0 | 0 | 257.4917 |
| 590 DANVILLE (011-WARI | 541.031 | 0 | 0 | 339.1204 | 1 | 0 | 450.3498 |
| 590 DANVILLE (012-WARI | 496.2057 | 0 | 0 | 463.3943 | 1 | 0 | 408.6507 |
| 590 DANVILLE (013-WARI | 444.0833 | 0 | 0 | 352.8116 | 1 | 0 | 353.3995 |
| 590 DANVILLE (014-WARI | 96.94776 | 0 | 0 | 12.63803 | 0 | 0 | 70.8884 |
| 590 DANVILLE (015-WARI | 318.9894 | 0 | 0 | 434.9587 | 2 | 0 | 279.3837 |
| 590 DANVILLE (016-WARI | 358.6024 | 0 | 0 | 642.433 | 1 | 364.81 | 0 |
| 590 DANVILLE (017-WARI | 210.5747 | 0 | 0 | 685.6129 | 0 | 230.19 | 0 |
| 595 EMPORIA ( 101 - PREC | 176.99 | 0 | 0 | 78.9791 | 1 | 211.5516 | 0 |
| 595 EMPORIA ( 201 - PREC | 146.4381 | 0 | 0 | 10.53055 | 0 | 144.1919 | 0 |
| 595 EMPORIA ( 301 - PREC | 105.3512 | 0 | 0 | 142.1624 | 2 | 157.8744 | 0 |
| 595 EMPORIA ( 401 - PREC | 148.5452 | 0 | 0 | 162.1704 | 0 | 223.1291 | 0 |
| 595 EMPORIA ( 501 - PREC | 116.9398 | 0 | 0 | 21.06109 | 0 | 127.352 | 0 |
| 595 EMPORIA ( 601 - DISTF | 106.4047 | 0 | 0 | 186.3907 | 0 | 197.8692 | 0 |
| 595 EMPORIA ( 701 - DISTF | 144.3311 | 0 | 0 | 53.70579 | 0 | 161.0318 | 0 |
| 600 FAIRFAX Cl 001 - ONE | 676.8568 | 0 | 0 | 0 | 71.51276 | 683.9163 | 0 |
| 600 FAIRFAX Cl 002 - TWO | 820.7988 | 0 | 0 | 0 | 74.76334 | 825.3029 | 0 |
| 600 FAIRFAX Cl 003 - THRE | 1047.15 | 0 | 0 | 0 | 95.35035 | 1059.851 | 0 |
| 600 FAIRFAX Cl 004 - FOUR | 901.0107 | 0 | 0 | 0 | 83.43155 | 906.4084 | 0 |


| 600 FAIRFAX Cl 005 - FIVE | 718.611 | 0 | 0 | 0 | 67.17865 | 716.7969 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600 FAIRFAX Cl 006 - SIX | 662.5725 | 0 | 0 | 0 | 74.76334 | 681.7243 | 0 |
| 610 FALLS CHU 001 - FIRST | 1334.247 | 0 | 0 | 0 | 60.1462 | 1332.888 | 0 |
| 610 FALLS CHU 002 - SECO | 1036.031 | 0 | 0 | 0 | 52.49123 | 1029.582 | 0 |
| 610 FALLS CHU 003 - THIRI | 1406.722 | 0 | 0 | 0 | 74.36257 | 1407.53 | 0 |
| 620 FRANKLIN (101-PREC | 179.9274 | 0 | 0 | 501.4945 | 1 | 188.8146 | 0 |
| 620 FRANKLIN (201-PREC | 206.0796 | 0 | 0 | 332.9337 | 0 | 202.5274 | 0 |
| 620 FRANKLIN (301- PREC | 344.1634 | 0 | 0 | 28.26796 | 1 | 347.7581 | 0 |
| 620 FRANKLIN (401-PREC | 250.0154 | 0 | 0 | 28.26796 | 0 | 259.2568 | 0 |
| 620 FRANKLIN (501-PREC | 292.905 | 0 | 0 | 9.422652 | 1 | 288.4102 | 0 |
| 620 FRANKLIN (601- PREC | 224.9092 | 0 | 0 | 236.6133 | 0 | 305.2329 | 0 |
| 630 FREDERICK 101 - PREC | 1065.347 | 0 | 0 | 743.597 | 1 | 1078.925 | 0 |
| 630 FREDERICK 201 - PREC | 1428.408 | 0 | 0 | 646.3714 | 6.454545 | 1378.095 | 0 |
| 630 FREDERICK 301 - PREC | 1003.359 | 0 | 0 | 624.4513 | 1 | 986.6271 | 0 |
| 630 FREDERICK 401 - PREC | 823.7122 | 0 | 0 | 206.851 | 5.454545 | 796.7279 | 0 |
| 630 FREDERICK 402 - PREC | 424.1736 | 0 | 0 | 168.7292 | 2.090909 | 411.6251 | 0 |
| 640 GALAX CIT 001 - EAST | 0 | 0 | 0 | 408.552 | 9 | 0 | 89.59276 |
| 640 GALAX CIT 003 - SOUT | 0 | 0 | 0 | 293.7437 | 6 | 0 | 61.08597 |
| 640 GALAX CIT 005 - WEST | 0 | 0 | 0 | 322.7043 | 6 | 0 | 74.32127 |
| 650 HAMPTON 101 - ABER | 872.6868 | 0 | 0 | 0 | 27.42978 | 881.3136 | 0 |
| 650 HAMPTON 102 - BASSI | 1033.877 | 0 | 0 | 0 | 17.2706 | 1043.986 | 0 |
| 650 HAMPTON 103 - CITY I | 521.5667 | 0 | 0 | 28.753 | 21.34499 | 534.3479 | 0 |
| 650 HAMPTON 104 - COOF | 1238.189 | 0 | 0 | 0 | 45.71629 | 1254.019 | 0 |
| 650 HAMPTON 105 - EAST | 670.4339 | 0 | 0 | 160.1953 | 1.021277 | 701.1385 | 0 |
| 650 HAMPTON 106 - ARM | 838.806 | 0 | 0 | 0 | 80.25749 | 840.1307 | 0 |
| 650 HAMPTON 107 - LIND | 992.8096 | 0 | 0 | 0 | 34.5412 | 1010.01 | 0 |
| 650 HAMPTON 108 - THON | 1131.935 | 0 | 0 | 112.9582 | 27.48872 | 1174.742 | 0 |
| 650 HAMPTON 109 - PHEN | 1159.133 | 0 | 0 | 0 | 23.3661 | 1162.387 | 0 |
| 650 HAMPTON 110 - PHOE | 234.1362 | 0 | 0 | 111.9313 | 1.021277 | 262.5409 | 0 |
| 650 HAMPTON 111 - HAM | 321.9759 | 0 | 0 | 56.47911 | 43.68446 | 332.5518 | 0 |
| 650 HAMPTON 112 - SMIT | 1231.536 | 0 | 0 | 369.6814 | 2.042553 | 1335.355 | 0 |
| 650 HAMPTON 115 - WYTt | 451.7438 | 0 | 0 | 0 | 60.95506 | 461.2482 | 0 |
| 650 HAMPTON 116-JONE | 514.687 | 0 | 0 | 101.6624 | 3.06383 | 529.2 | 0 |
| 650 HAMPTON 117 - KECO | 734.383 | 0 | 0 | 187.9214 | 6.12766 | 795.8591 | 0 |
| 650 HAMPTON 118 - MALL | 1266.936 | 0 | 0 | 0 | 29.46161 | 1270.492 | 0 |
| 650 HAMPTON 201 - BOOk | 740.5716 | 0 | 0 | 604.8399 | 3.06383 | 922.4965 | 0 |
| 650 HAMPTON 202 - BRYA | 845.7782 | 0 | 0 | 531.9305 | 4.085106 | 969.8568 | 0 |
| 650 HAMPTON 203 - BURB | 607.8007 | 0 | 0 | 0 | 79.24157 | 612.5953 | 0 |
| 650 HAMPTON 204 - FORR | 717.6566 | 0 | 0 | 0 | 82.28933 | 686.4501 | 0 |
| 650 HAMPTON 205 - ASBU | 867.4383 | 0 | 0 | 1103.91 | 3.06383 | 802 | 0 |
| 650 HAMPTON 208 - KRAF | 1175.56 | 0 | 0 | 0 | 133.0852 | 1154.474 | 0 |
| 650 HAMPTON 209 -LANG | 625.0507 | 0 | 0 | 425.1336 | 4.085106 | 742.3214 | 0 |
| 650 HAMPTON 210 - MACl | 1421.966 | 0 | 0 | 0 | 93.46442 | 1442.43 | 0 |
| 650 HAMPTON 212 - BETH | 1521.555 | 0 | 0 | 0 | 86.353 | 1537.151 | 0 |
| 650 HAMPTON 213 -PHILL | 1095.386 | 0 | 0 | 831.7832 | 5.106383 | 1316.823 | 0 |
| 650 HAMPTON 214 - TUCK | 886.0338 | 0 | 0 | 0 | 137.1489 | 867.3771 | 0 |
| 650 HAMPTON 215 - TYLEF | 273.3308 | 0 | 0 | 65.72114 | 1.021277 | 294.4576 | 0 |


| 650 HAMPTON 216 - SAND | 603.5996 | 0 | 0 | 0 | 79.1779 | 607.4475 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 650 HAMPTON 217 - SYMS | 342.437 | 0 | 0 | 271.0997 | 1.021277 | 410.7992 | 0 |
| 660 HARRISONI 101 - NORT | 963.7837 | 0 | 0 | 402.6614 | 2.095238 | 954.767 | 0 |
| 660 HARRISONI 102 - EAST | 578.4814 | 0 | 0 | 206.7139 | 3.142857 | 560.82 | 0 |
| 660 HARRISONI 103 - SOUT | 774.8272 | 0 | 0 | 403.7381 | 5.238095 | 777.3324 | 0 |
| 660 HARRISONI 104 - EAST | 633.3738 | 0 | 0 | 432.8072 | 4.190476 | 632.6387 | 0 |
| 660 HARRISONI 105 - Soutr | 354.6893 | 0 | 0 | 148.5756 | 0 | 356.9815 | 0 |
| 660 HARRISONI 201 - NORT | 896.2239 | 0 | 0 | 550.1604 | 2.095238 | 877.6674 | 0 |
| 660 HARRISONI 202 - SOUT | 956.3944 | 0 | 0 | 518.938 | 5.238095 | 948.43 | 0 |
| 660 HARRISONI203-WES | 934.2263 | 0 | 0 | 497.4053 | 0 | 928.363 | 0 |
| 670 HOPEWELL 101 - WARI | 241.568 | 0 | 0 | 309.2583 | 1 | 247.3561 | 263.5511 |
| 670 HOPEWELL 201 - WARI | 405.0429 | 0 | 0 | 75.45478 | 3 | 378.8619 | 85.73348 |
| 670 HOPEWELL 301 - WARI | 243.6505 | 0 | 0 | 713.1008 | 1 | 335.0267 | 515.4593 |
| 670 HOPEWELL 401 - WARI | 549.7754 | 0 | 0 | 578.1324 | 0 | 580.2954 | 462.5374 |
| 670 HOPEWELL 501 - WARI | 260.3103 | 0 | 0 | 479.2973 | 1 | 295.3662 | 356.6936 |
| 670 HOPEWELL 601 - WARI | 509.167 | 0 | 0 | 82.89399 | 1 | 486.3627 | 95.25942 |
| 670 HOPEWELL 701 - WARI | 340.4859 | 0 | 0 | 217.8624 | 1 | 375.7309 | 158.7657 |
| 678 LEXINGTON 001 - LEXIN | 1087 | 18 | 0 | 449 | 1 | 1159 | 375 |
| 680 LYNCHBUR 101 - FIRST | 554.4816 | 0 | 0 | 627.4312 | 6.162162 | 0 | 0 |
| 680 LYNCHBUR 102 - FIRST | 740.7038 | 0 | 0 | 993.6042 | 6.162162 | 658.8631 | 0 |
| 680 LYNCHBUR 103 - FIRST | 586.9136 | 0 | 0 | 664.46 | 3.081081 | 522.0785 | 0 |
| 680 LYNCHBUR 104 - FIRST | 310.7189 | 0 | 0 | 189.258 | 1.027027 | 290.2756 | 0 |
| 680 LYNCHBUR 105 - FIRST | 465.5553 | 0 | 0 | 354.8587 | 6.162162 | 439.5901 | 0 |
| 680 LYNCHBUR 201 - SECO | 878.1673 | 0 | 0 | 236.2142 | 2 | 808.1775 | 0 |
| 680 LYNCHBUR 202 - SECO | 734.9202 | 0 | 0 | 149.568 | 2 | 666.1722 | 0 |
| 680 LYNCHBUR 203 - SECO | 220.0608 | 0 | 0 | 84.58326 | 1 | 208.8314 | 0 |
| 680 LYNCHBUR 204 - SECO | 130.7909 | 0 | 0 | 128.9379 | 1 | 127.3872 | 0 |
| 680 LYNCHBUR 301 - THIRI | 267.8099 | 0 | 0 | 238.2772 | 0 | 258.9509 | 0 |
| 680 LYNCHBUR 302 - THIRI | 19.87764 | 0 | 0 | 161.4864 | 2.054054 | 0 | 0 |
| 680 LYNCHBUR 303 - THIRI | 225.251 | 0 | 0 | 308.4194 | 0 | 0 | 0 |
| 680 LYNCHBUR 304 - THIRI | 199.8226 | 0 | 0 | 331.2014 | 1.027027 | 0 | 0 |
| 680 LYNCHBUR 305 - THIRI | 356.7514 | 0 | 0 | 714.8602 | 3.081081 | 0 | 0 |
| 680 LYNCHBUR 401 - FOUR | 504.2644 | 0 | 0 | 1010.061 | 2.054054 | 0 | 0 |
| 680 LYNCHBUR 402 - FOUR | 243.7627 | 0 | 0 | 382.6302 | 2.054054 | 234.9353 | 0 |
| 680 LYNCHBUR 403 - FOUR | 487.5254 | 0 | 0 | 574.9739 | 1.027027 | 466.7382 | 0 |
| 680 LYNCHBUR 404 - FOUR | 625.6227 | 0 | 0 | 690.1744 | 4.108108 | 0 | 0 |
| 683 MANASSAS 001 - DEAN | 777.8081 | 0 | 0 | 446.2907 | 3.947368 | 930.8502 | 0 |
| 683 MANASSAS 002 - WEET | 902.0799 | 0 | 0 | 757.3419 | 1.315789 | 1142.154 | 0 |
| 683 MANASSAS003-METZ | 853.2589 | 0 | 0 | 819.3267 | 6.578947 | 1134.369 | 0 |
| 683 MANASSAS004-HAYD | 731.2062 | 0 | 0 | 755.0879 | 2.631579 | 938.6351 | 0 |
| 683 MANASSAS 005 - BALD | 746.7402 | 0 | 0 | 614.2133 | 3.947368 | 921.9532 | 0 |
| 683 MANASSAS006-ROUN | 626.9067 | 0 | 0 | 840.7396 | 6.578947 | 893.0379 | 0 |
| 685 MANASSAS 001 - PREC | 735.8445 | 0 | 0 | 332.5987 | 1 | 829.9397 | 0 |
| 685 MANASSAS 002 - PREC | 473.7479 | 0 | 0 | 326.9805 | 0 | 585.5808 | 0 |
| 685 MANASSAS 003 - PREC | 617.4076 | 0 | 0 | 376.4208 | 2 | 737.4796 | 0 |
| 690 MARTINSV 001 - PREC | 0 | 0 | 157.2894 | 38.86492 | 0 | 0 | 185.2403 |
| 690 MARTINSV 002 - PREC | 0 | 0 | 185.6015 | 254.7812 | 5.066667 | 0 | 191.5914 |


| 690 MARTINSV 003 - PREC | 0 | 0 | 136.3175 | 86.36649 | 0 | 0 | 135.4901 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 690 MARTINSV 004 - PREC | 0 | 0 | 209.7192 | 151.1414 | 2.533333 | 0 | 222.2884 |
| 690 MARTINSV 005 - PREC | 0 | 0 | 202.379 | 482.5728 | 10.13333 | 0 | 190.5329 |
| 690 MARTINSV 006 - PREC | 0 | 0 | 79.6933 | 17.2733 | 1.266667 | 0 | 87.85684 |
| 700 NEWPORT 101 - DENE | 1171.432 | 0 | 27.43784 | 321.6491 | 3 | 1247.205 | 0 |
| 700 NEWPORT 102 - EPES | 1111.728 | 0 | 32.51892 | 231.2174 | 2 | 1195.71 | 0 |
| 700 NEWPORT 103 - JENKI | 868.7948 | 0 | 38.61622 | 502.5124 | 0 | 1020.627 | 0 |
| 700 NEWPORT 104 - MCIN | 772.2215 | 0 | 16.25946 | 207.4231 | 1 | 852.7542 | 0 |
| 700 NEWPORT 105 - OYST | 224.3084 | 0 | 0 | 0 | 34.89688 | 235.8463 | 0 |
| 700 NEWPORT 106 -RESEI | 1210.548 | 0 | 31.5027 | 449.0755 | 1 | 1368.732 | 0 |
| 700 NEWPORT 107 - RICHI | 1068.313 | 0 | 0 | 559.3541 | 1 | 1222.487 | 0 |
| 700 NEWPORT 108 -LEE H | 917.3735 | 0 | 14.22703 | 251.424 | 3 | 994.8799 | 0 |
| 700 NEWPORT 109 - WINL | 523.9533 | 0 | 11.17838 | 277.4608 | 1 | 612.7884 | 0 |
| 700 NEWPORT 110-GREE | 979.7163 | 0 | 0 | 288.8972 | 3 | 1062.853 | 0 |
| 700 NEWPORT 201 - BLAN | 193.523 | 0 | 5.081081 | 59.6027 | 1 | 216.2782 | 0 |
| 700 NEWPORT 202 - BOUL | 593.6969 | 0 | 0 | 0 | 118.0336 | 601.4595 | 0 |
| 700 NEWPORT 203 - CHAR | 923.3518 | 0 | 53.85946 | 889.93 | 1 | 1193.65 | 0 |
| 700 NEWPORT 204 - WELL | 499.2482 | 0 | 13.21081 | 328.8425 | 1 | 603.5193 | 0 |
| 700 NEWPORT 205 - DEEP | 604.2447 | 0 | 20.32432 | 917.676 | 2 | 851.7243 | 0 |
| 700 NEWPORT 208 - HIDEI | 373.6641 | 0 | 9.145946 | 575.4743 | 1 | 560.2636 | 0 |
| 700 NEWPORT 209 - HILTC | 736.7193 | 0 | 0 | 0 | 143.693 | 754.9141 | 0 |
| 700 NEWPORT 210 - NELSI | 973.7913 | 0 | 20.32432 | 935.1458 | 2 | 1264.713 | 0 |
| 700 NEWPORT 211 - PALN | 803.7084 | 0 | 0 | 35.85603 | 99.55875 | 825.8474 | 0 |
| 700 NEWPORT 212 - RIVEF | 335.5771 | 0 | 20.32432 | 474.7663 | 3 | 502.5894 | 0 |
| 700 NEWPORT 213 -SANF | 248.08 | 0 | 14.22703 | 399.7491 | 1 | 360.4637 | 0 |
| 700 NEWPORT 215 - WAR' | 344.8411 | 0 | 13.21081 | 300.0688 | 4.026379 | 477.8719 | 0 |
| 700 NEWPORT 216 - YATE: | 411.7511 | 0 | 18.29189 | 447.0202 | 3 | 555.1142 | 0 |
| 700 NEWPORT 217 - RIVEF | 566.1577 | 0 | 16.25946 | 663.8508 | 0 | 772.4223 | 0 |
| 700 NEWPORT 218 - KILN | 1164.121 | 0 | 0 | 796.0039 | 2 | 1393.388 | 0 |
| 700 NEWPORT 219 - DEER | 963.0855 | 0 | 0 | 0 | 85.18945 | 950.1716 | 0 |
| 700 NEWPORT 302 - BRIAF | 595.7548 | 0 | 0 | 0 | 23.60671 | 587.2921 | 0 |
| 700 NEWPORT 303 - CARV | 385.8516 | 0 | 0 | 0 | 26.68585 | 386.2112 | 0 |
| 700 NEWPORT 304 -CHES | 331.3179 | 0 | 0 | 0 | 5.131894 | 330.159 | 0 |
| 700 NEWPORT 305 - DOW | 230.482 | 0 | 0 | 0 | 11.29017 | 230.6054 | 0 |
| 700 NEWPORT 306 - DUNE | 90.5465 | 0 | 0 | 0 | 2.052758 | 94.63455 | 0 |
| 700 NEWPORT 307 - HUN7 | 276.7842 | 0 | 0 | 0 | 5.131894 | 280.7894 | 0 |
| 700 NEWPORT 308 - JEFFE | 299.4208 | 0 | 0 | 0 | 4.105516 | 306.5027 | 0 |
| 700 NEWPORT 309 - MAG | 365.2728 | 0 | 0 | 0 | 4.105516 | 368.2147 | 0 |
| 700 NEWPORT 310 - MARS | 455.8193 | 0 | 0 | 0 | 3.079137 | 456.6685 | 0 |
| 700 NEWPORT 311 - NEWI | 851.1211 | 0 | 0 | 0 | 88.16307 | 879.4063 | 0 |
| 700 NEWPORT 312 - NEW! | 88.48863 | 0 | 0 | 0 | 1.026379 | 88.4538 | 0 |
| 700 NEWPORT 313 - REED | 689.3881 | 0 | 0 | 0 | 10.26379 | 697.3451 | 0 |
| 700 NEWPORT 314 - RIVEF | 376.5911 | 0 | 0 | 0 | 66.71463 | 382.0916 | 0 |
| 700 NEWPORT 315 -SEDG | 517.5556 | 0 | 0 | 0 | 82.11031 | 518.0379 | 0 |
| 700 NEWPORT 316 -SOUT | 676.0119 | 0 | 0 | 0 | 87.24221 | 685.0027 | 0 |
| 700 NEWPORT 317 -WASt | 203.7296 | 0 | 0 | 0 | 2.052758 | 201.5924 | 0 |
| 700 NEWPORT 318 - WILSI | 386.8805 | 0 | 0 | 0 | 10.26379 | 388.7853 | 0 |


| 700 NEWPORT 319 -SAUN | 804.6291 | 0 | 0 | 0 | 164.2206 | 821.7976 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 700 NEWPORT 320 - WATH | 974.4038 | 0 | 0 | 0 | 208.3549 | 974.1361 | 0 |
| 710 NORFOLK (101-GRAN | 1025.121 | 0 | 0 | 105.8615 | 77.00392 | 944.3208 | 0 |
| 710 NORFOLK (102-OCEA | 371.901 | 0 | 0 | 257.5284 | 0 | 367.8099 | 0 |
| 710 NORFOLK (103-NORT | 554.7694 | 0 | 0 | 378.6584 | 1 | 533.1177 | 0 |
| 710 NORFOLK (104-TITUS | 422.6351 | 0 | 0 | 0 | 9.247059 | 405.0041 | 0 |
| 710 NORFOLK (106-SECO | 839.5384 | 0 | 0 | 0 | 85.36343 | 717.0226 | 0 |
| 710 NORFOLK ( 201 -LARC | 868.3095 | 0 | 0 | 0 | 77.54919 | 766.6149 | 0 |
| 710 NORFOLK ( 203 - GHEN | 463.6504 | 0 | 0 | 0 | 25.84973 | 407.1439 | 38.86079 |
| 710 NORFOLK ( 207 - LAME | 796.8991 | 0 | 0 | 0 | 19.6458 | 744.9183 | 0 |
| 710 NORFOLK ( 208 -LARC | 587.8424 | 0 | 0 | 0 | 54.80143 | 512.4542 | 0 |
| 710 NORFOLK ( 210 - MAU | 925.2309 | 0 | 0 | 0 | 51.69946 | 853.4015 | 0 |
| 710 NORFOLK ( 211 - CHRY | 1115.659 | 0 | 0 | 0 | 67.2093 | 998.0458 | 0 |
| 710 NORFOLK ( 212 - PARK | 621.9953 | 0 | 0 | 0 | 4.135957 | 594.0749 | 0 |
| 710 NORFOLK ( 213 - TAYLI | 1158.091 | 0 | 0 | 0 | 66.17531 | 1064.169 | 0 |
| 710 NORFOLK ( 214 - STUA | 1032.864 | 0 | 0 | 0 | 62.03936 | 918.1239 | 221.9156 |
| 710 NORFOLK (215-SUBU | 643.1216 | 0 | 0 | 353.2109 | 1 | 638.5014 | 0 |
| 710 NORFOLK ( 217 - WESL | 535.2498 | 0 | 0 | 226.9914 | 2 | 526.9186 | 0 |
| 710 NORFOLK ( 218 - WILL) | 1045.316 | 0 | 0 | 0 | 148.2864 | 882.8626 | 351.7924 |
| 710 NORFOLK (301-BALLI | 733.7681 | 0 | 0 | 0 | 18.61181 | 714.441 | 60.33649 |
| 710 NORFOLK (302-TANN | 391.8822 | 0 | 0 | 0 | 15.25815 | 370.1445 | 41.92875 |
| 710 NORFOLK ( $303-$ BROA | 1003.886 | 0 | 0 | 0 | 14.47585 | 991.5324 | 35.79283 |
| 710 NORFOLK ( 304 - COLE | 464.9101 | 0 | 0 | 0 | 15.25815 | 440.4513 | 59.31384 |
| 710 NORFOLK ( 305 -LAFA | 669.3594 | 0 | 0 | 0 | 26.768 | 621.3879 | 107.3785 |
| 710 NORFOLK ( 306 - LINDE | 570.2486 | 0 | 0 | 0 | 11.37388 | 541.7758 | 44.99671 |
| 710 NORFOLK (309-NOR\} | 1185.932 | 0 | 0 | 0 | 70.1875 | 1110.434 | 209.6437 |
| 710 NORFOLK (310-ROSE | 1220.903 | 0 | 0 | 0 | 12.20652 | 1200.385 | 59.31384 |
| 710 NORFOLK (311-SHER' | 1048.105 | 0 | 0 | 0 | 106.8071 | 934.6667 | 319.0675 |
| 710 NORFOLK (313-UNIO | 398.4495 | 0 | 0 | 0 | 1.033989 | 389.7891 | 12.27183 |
| 710 NORFOLK ( 402 - BERK | 724.4537 | 0 | 0 | 0 | 4.135957 | 715.4749 | 17.38509 |
| 710 NORFOLK ( 404 - CAM | 674.7769 | 0 | 0 | 0 | 4.135957 | 655.5074 | 26.58896 |
| 710 NORFOLK ( 405 - CHES | 838.2964 | 0 | 0 | 0 | 10.33989 | 814.7316 | 41.92875 |
| 710 NORFOLK ( 406 - BARR | 525.5952 | 0 | 0 | 0 | 40.68841 | 441.1652 | 0 |
| 710 NORFOLK ( 408 - EASTI | 619.1944 | 0 | 0 | 0 | 67.13587 | 543.8437 | 236.2327 |
| 710 NORFOLK ( 409 - FAIRL | 470.0529 | 0 | 0 | 0 | 73.23913 | 416.6711 | 185.1001 |
| 710 NORFOLK ( 411 -RUFF | 372.5762 | 0 | 0 | 0 | 4.135957 | 369.1106 | 10.22652 |
| 710 NORFOLK ( 412 - INGLF | 795.0785 | 0 | 0 | 0 | 20.3442 | 754.764 | 79.76689 |
| 710 NORFOLK ( 413 - POPL | 1091.304 | 0 | 0 | 0 | 39.6712 | 1034.957 | 149.3072 |
| 710 NORFOLK ( 414 - YOUN | 640.6241 | 0 | 0 | 0 | 1.033989 | 618.2861 | 23.521 |
| 710 NORFOLK (415-LAKE | 490.6241 | 0 | 0 | 0 | 53.91214 | 430.1121 | 150.3299 |
| 710 NORFOLK ( 501 - BAYV | 751.8789 | 0 | 0 | 0 | 135.2889 | 577.5441 | 0 |
| 710 NORFOLK (503-EAST | 775.1701 | 0 | 0 | 514 | 22.32699 | 763.5154 | 0 |
| 710 NORFOLK ( 504 -LARR' | 734.3933 | 0 | 0 | 0 | 84.42844 | 630.236 | 0 |
| 710 NORFOLK ( $505-$ LITTL | 480.3385 | 0 | 0 | 0 | 66.11866 | 357.216 | 0 |
| 710 NORFOLK (506-OCEA | 837.2909 | 0 | 0 | 401.0521 | 3 | 804.8424 | 0 |
| 710 NORFOLK (507-PRETI | 698.5986 | 0 | 0 | 436.6786 | 2 | 687.0605 | 0 |
| 710 NORFOLK (509-TARR | 660.3369 | 0 | 0 | 0 | 120.0308 | 449.9198 | 0 |


| 710 NORFOLK ( 510 - THIRL | 731.3076 | 0 | 0 | 0 | 129.1857 | 521.7527 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 710 NORFOLK ( 511 - CROS | 633.8755 | 0 | 0 | 456.0187 | 1 | 603.3735 | 0 |
| 710 NORFOLK ( 512 - AZALI | 489.5955 | 0 | 0 | 0 | 50.86051 | 365.4043 | 0 |
| 720 NORTON C 001 -EAST | 0 | 0 | 0 | 559 | 29 | 0 | 178 |
| 730 PETERSBUF 101 - FIRST | 581.8853 | 85.15112 | 0 | 0 | 9.297297 | 548.2859 | 122.5483 |
| 730 PETERSBUF 201 -SECO | 1168.229 | 140.7832 | 0 | 0 | 6.972973 | 1108.88 | 211.6743 |
| 730 PETERSBUF 301 -THIRI | 1106.92 | 254.318 | 0 | 0 | 8.135135 | 1054.052 | 287.4315 |
| 730 PETERSBUF 401 -FOUR | 735.717 | 141.9185 | 0 | 0 | 6.972973 | 641.1588 | 229.4995 |
| 730 PETERSBUF 501 - FIFTH | 642.0803 | 82.88042 | 0 | 0 | 3.486486 | 610.9471 | 128.1187 |
| 730 PETERSBUF601-SIXTH | 658.8011 | 48.81997 | 0 | 0 | 8.135135 | 638.9209 | 80.21343 |
| 730 PETERSBUF701-SEVEI | 936.3671 | 110.1288 | 0 | 0 | 0 | 900.7554 | 151.5143 |
| 735 POQUOSOIOO1-CENT | 341.3047 | 0 | 0 | 1045.15 | 0 | 330.9898 | 0 |
| 735 POQUOSOI002-EASTI | 371.5469 | 0 | 0 | 1074.268 | 3 | 354.6319 | 0 |
| 735 POQUOSOI003-WEST | 393.1484 | 0 | 0 | 1212.582 | 1 | 365.3783 | 0 |
| 740 PORTSMOL 001 - EMAP | 498.7289 | 188.5927 | 0 | 163.1977 | 2.055556 | 627.4426 | 0 |
| 740 PORTSMOL 005 - HAMI | 457.9524 | 12.29952 | 0 | 13.25981 | 1.027778 | 470.0608 | 0 |
| 740 PORTSMOL 007-PARK | 398.3558 | 74.82209 | 0 | 81.59884 | 1.027778 | 471.1031 | 0 |
| 740 PORTSMOL 009 -THIRL | 630.4687 | 44.07329 | 0 | 77.5189 | 3.083333 | 660.7951 | 0 |
| 740 PORTSMOI 010 - PORT | 235.2495 | 83.02177 | 0 | 121.3783 | 1.027778 | 327.2707 | 0 |
| 740 PORTSMOL011-JOSEF | 561.4621 | 16.39936 | 0 | 18.35974 | 0 | 578.4562 | 0 |
| 740 PORTSMOI 013 - ST. M | 285.4361 | 16.39936 | 0 | 10.19986 | 0 | 300.1719 | 0 |
| 740 PORTSMOI 014 - BRIGI | 603.2843 | 23.57408 | 0 | 16.31977 | 0 | 629.5272 | 0 |
| 740 PORTSMOI 016 - CRAD | 319.9393 | 58.42273 | 0 | 123.4183 | 2.055556 | 399.1869 | 0 |
| 740 PORTSMOI 017 - VICTC | 395.2192 | 66.62241 | 0 | 152.9978 | 2.055556 | 490.9061 | 0 |
| 740 PORTSMOI 019 - VICTC | 223.7484 | 62.52257 | 0 | 111.1784 | 0 | 294.9606 | 0 |
| 740 PORTSMOL 020 - NOBL | 443.3146 | 51.24801 | 0 | 82.61883 | 4.111111 | 492.9906 | 0 |
| 740 PORTSMOL021-JOHN | 447.4968 | 5.124801 | 0 | 8.159884 | 0 | 452.3424 | 0 |
| 740 PORTSMOL022-ST. M | 271.8439 | 76.87201 | 0 | 182.5774 | 1.027778 | 368.9613 | 0 |
| 740 PORTSMOL 023 - WEST | 170.4252 | 119.9203 | 0 | 278.4561 | 0 | 328.313 | 0 |
| 740 PORTSMOL024-THE S | 303.2105 | 77.89697 | 0 | 120.3583 | 0 | 395.0179 | 0 |
| 740 PORTSMOL 025 -JOHN | 519.9312 | 0 | 0 | 0 | 97.76378 | 496.1174 | 0 |
| 740 PORTSMOL 026 - WILLI | 818.6683 | 20.4992 | 0 | 15.29978 | 1.027778 | 820.2614 | 0 |
| 740 PORTSMOL 027 - CAVA | 727.7051 | 28.69888 | 0 | 22.43968 | 0 | 742.0916 | 0 |
| 740 PORTSMOL 028 -LAKE | 1235.844 | 24.59904 | 0 | 40.79942 | 1.027778 | 1265.308 | 0 |
| 740 PORTSMOL 029 - WOO | 128.6031 | 69.69729 | 0 | 284.576 | 1.027778 | 151.5444 | 0 |
| 740 PORTSMOI 030 -THE F | 163.1063 | 80.97185 | 0 | 310.0756 | 2.055556 | 184.9887 | 0 |
| 740 PORTSMOL031-WEST | 501.8656 | 81.99681 | 0 | 278.4561 | 1.027778 | 640.9921 | 0 |
| 740 PORTSMOL 032 - HODC | 246.7506 | 84.04673 | 0 | 311.0956 | 1.027778 | 256.0578 | 0 |
| 740 PORTSMOL 033- PINEC | 118.1475 | 95.3213 | 0 | 303.9557 | 0 | 148.409 | 0 |
| 740 PORTSMOI 034-CHUR | 498.1377 | 0 | 0 | 0 | 61.48031 | 421.0745 | 0 |
| 740 PORTSMOI 035 -CHUR | 365.3612 | 136.3197 | 0 | 275.3961 | 19.16951 | 497.1597 | 0 |
| 740 PORTSMOI 036 -CHUR | 808.2127 | 211.1418 | 0 | 550.7922 | 7.194444 | 1072.489 | 0 |
| 740 PORTSMOL037-CHUR | 744.434 | 118.8954 | 0 | 281.516 | 4.111111 | 853.9297 | 0 |
| 740 PORTSMOL038-GRO\} | 865.5142 | 0 | 0 | 0 | 103.811 | 883.1596 | 0 |
| 740 PORTSMOL 039 - CHUR | 1114.583 | 0 | 0 | 0 | 102.8031 | 1114.911 | 0 |
| 750 RADFORD (001-EAST | 368.2932 | 0 | 0 | 207.1304 | 0 | 0 | 263.6117 |
| 750 RADFORD (002-CENT | 597.5477 | 0 | 0 | 569.3482 | 1 | 0 | 385.3601 |


| 750 RADFORD (003-WEST | 540.2341 | 0 | 0 | 626.5953 | 1 | 0 | 409.7098 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 RADFORD (004-NEW | 361.925 | 0 | 0 | 201.9261 | 0 | 0 | 258.3183 |
| 760 RICHMON[ 101 - ONE I | 299.4928 | 0 | 0 | 213.0424 | 1.15 | 313.1072 | 0 |
| 760 RICHMONL 102 - ONE I | 380.8881 | 0 | 0 | 404.367 | 0 | 385.6818 | 0 |
| 760 RICHMONL 104 - ONE I | 531.1563 | 0 | 0 | 645.3325 | 1.15 | 667.8893 | 0 |
| 760 RICHMON[ 105 - ONE I | 657.4233 | 0 | 0 | 439.5293 | 2.3 | 746.0304 | 0 |
| 760 RICHMONL 106 - ONE I | 371.4963 | 0 | 0 | 808.7339 | 1.15 | 490.3427 | 0 |
| 760 RICHMON[111-ONE I | 635.1174 | 0 | 0 | 402.1277 | 1.15 | 599.2582 | 0 |
| 760 RICHMON[112-ONE | 601.0727 | 0 | 0 | 313.3585 | 1.15 | 584.7433 | 0 |
| 760 RICHMON[ 113 -ONE I | 1145.795 | 0 | 0 | 243.0339 | 3.45 | 1128.016 | 0 |
| 760 RICHMONL 114 - ONE I | 1344.065 | 0 | 0 | 337.1448 | 0 | 1332.261 | 0 |
| 760 RICHMONL 115 - ONE I | 454.9787 | 0 | 0 | 440.5635 | 1.15 | 436.4839 | 0 |
| 760 RICHMONL 203 -TWO | 784.5142 | 0 | 160.8427 | 0 | 2.074074 | 758.9222 | 0 |
| 760 RICHMONL 204 -TWO | 1030.253 | 0 | 213.0909 | 0 | 2.074074 | 1035.001 | 0 |
| 760 RICHMONL 206 -TWO | 567.5646 | 0 | 63.51748 | 0 | 3.111111 | 571.888 | 0 |
| 760 RICHMONL 207 -TWO | 1164.578 | 0 | 0 | 262.6834 | 5.75 | 1201.48 | 0 |
| 760 RICHMON[ 208 -TWO | 921.2644 | 0 | 172.1119 | 0 | 4.148148 | 944.9032 | 0 |
| 760 RICHMON[ 213 -TWO | 1208.131 | 0 | 88.1049 | 0 | 5.185185 | 1216.936 | 0 |
| 760 RICHMONL 214 -TWO | 854.4316 | 0 | 112.6923 | 0 | 5.185185 | 893.7035 | 0 |
| 760 RICHMONL 215 -TWO | 521.2958 | 0 | 110.6434 | 0 | 5.185185 | 516.3159 | 0 |
| 760 RICHMONL 301 -THRE | 429.7863 | 0 | 31.75874 | 0 | 2.074074 | 430.7192 | 0 |
| 760 RICHMONL 302 -THRE | 563.4519 | 0 | 73.76224 | 0 | 1.037037 | 574.9793 | 0 |
| 760 RICHMON[303-THRE | 503.8164 | 0 | 40.97902 | 0 | 3.111111 | 506.971 | 0 |
| 760 RICHMON[304-THRE | 735.0479 | 0 | 34.83217 | 0 | 1.037037 | 728.5131 | 0 |
| 760 RICHMON[ 305 -THRE | 702.2584 | 0 | 58.3951 | 0 | 5.185185 | 712.0263 | 0 |
| 760 RICHMONL306-THRE | 508.9574 | 0 | 33.80769 | 0 | 3.111111 | 515.2144 | 0 |
| 760 RICHMON[307-THRE | 775.2604 | 0 | 138.3042 | 0 | 2.074074 | 772.3673 | 0 |
| 760 RICHMON[ 308 -THRE | 805.0217 | 0 | 148.549 | 0 | 5.185185 | 808.8866 | 0 |
| 760 RICHMONL 309 -THRE | 544.8879 | 0 | 141.3776 | 0 | 0 | 502.8378 | 0 |
| 760 RICHMON[310-THRE | 165.5397 | 0 | 16.39161 | 0 | 0 | 164.8686 | 0 |
| 760 RICHMON[ 402 - FOUR | 1693.659 | 0 | 0 | 0 | 50.99558 | 1467.042 | 0 |
| 760 RICHMON[ 404 -FOUR | 1266.383 | 0 | 0 | 0 | 39.77655 | 1151.861 | 0 |
| 760 RICHMON[ 409 -FOUR | 793.0821 | 0 | 0 | 501.5805 | 0 | 791.0623 | 0 |
| 760 RICHMON[ 410 -FOUR | 884.409 | 0 | 0 | 0 | 71.39381 | 766.1796 | 0 |
| 760 RICHMON[ 412 -FOUR | 891.616 | 0 | 0 | 0 | 22.43805 | 802.4669 | 0 |
| 760 RICHMON[ 413 -FOUR | 862.9985 | 0 | 0 | 373.3414 | 2.3 | 850.1587 | 0 |
| 760 RICHMON[ 414 -FOUR | 842.128 | 0 | 0 | 479.8626 | 2.3 | 837.7174 | 0 |
| 760 RICHMON[ 415 -FOUR | 640.7268 | 0 | 0 | 402.2986 | 0 | 616.8835 | 0 |
| 760 RICHMON[ 501 - FIVE I | 1252.998 | 0 | 0 | 0 | 30.59735 | 1189.115 | 0 |
| 760 RICHMON[ 503 - FIVE I | 1346.69 | 0 | 0 | 0 | 18.35841 | 1279.385 | 0 |
| 760 RICHMON[ 504 - FIVE I | 1302.418 | 0 | 0 | 0 | 24.47788 | 1235.484 | 0 |
| 760 RICHMON[ 505 - FIVE I | 708.012 | 0 | 36.88112 | 0 | 12.29031 | 697.7522 | 0 |
| 760 RICHMON[ 508 - FIVE I | 685.7001 | 0 | 0 | 0 | 15.29867 | 637.6191 | 0 |
| 760 RICHMON[ 509 - FIVE I | 693.9367 | 0 | 0 | 0 | 14.27876 | 520.4179 | 187.8159 |
| 760 RICHMON[510-FIVE I | 895.7343 | 0 | 0 | 0 | 11.21903 | 565.405 | 342.6092 |
| 760 RICHMON[602-SIXH | 288.9233 | 0 | 18.44056 | 0 | 1.037037 | 297.7939 | 0 |
| 760 RICHMON[603-SIXH | 672.4407 | 0 | 35.85664 | 0 | 4.148148 | 685.2351 | 0 |


| 760 RICHMON[ 604 - SIX H | 415.3915 | 0 | 103.472 | 0 | 1.037037 | 447.2061 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMON[606-SIXH | 761.7247 | 0 | 61.46853 | 0 | 1.037037 | 780.0346 | 0 |
| 760 RICHMON[607-SIXH | 661.1306 | 0 | 102.4476 | 0 | 3.111111 | 675.1006 | 0 |
| 760 RICHMON[609-SIXH | 1011.746 | 0 | 92.2028 | 0 | 4.148148 | 609.3695 | 357.0566 |
| 760 RICHMON[610-SIXH | 408.1941 | 0 | 21.51399 | 0 | 1.037037 | 397.7261 | 33.02257 |
| 760 RICHMON[701-SEVEI | 420.7505 | 0 | 0 | 0 | 8.194444 | 391.5915 | 35.08648 |
| 760 RICHMON[ 702 - SEVEI | 560.6578 | 0 | 0 | 0 | 3.083333 | 442.7131 | 122.8027 |
| 760 RICHMON[703-SEVEI | 702.6225 | 0 | 0 | 0 | 22.61111 | 505.0815 | 201.2313 |
| 760 RICHMON[705-SEVEI | 681.8779 | 0 | 52.24825 | 0 | 7.222222 | 396.7037 | 313.7145 |
| 760 RICHMON[706-SEVEI | 1013.803 | 0 | 97.32517 | 0 | 6.222222 | 801.5868 | 289.9795 |
| 760 RICHMON[707-SEVEI | 1390.122 | 0 | 182.3566 | 0 | 3.111111 | 735.1287 | 743.0079 |
| 760 RICHMON[ 708 - SEVEI | 980.8998 | 0 | 161.8671 | 0 | 2.074074 | 744.1261 | 328.1618 |
| 760 RICHMON[ 802 -EIGH ${ }^{-}$ | 520.2676 | 0 | 31.75874 | 0 | 1.037037 | 492.8123 | 61.91733 |
| 760 RICHMON[ 806 -EIGH ${ }^{-}$ | 669.2268 | 0 | 0 | 0 | 14.27876 | 632.8855 | 74.30079 |
| 760 RICHMON[810-EIGH ${ }^{-}$ | 550.8251 | 0 | 0 | 0 | 13.25885 | 479.5207 | 83.58839 |
| 760 RICHMON[ 811 -EIGH ${ }^{-}$ | 575.535 | 0 | 0 | 0 | 7.139381 | 524.5077 | 77.39666 |
| 760 RICHMON[ 812 - EIGH ${ }^{-}$ | 1017.72 | 0 | 0 | 1 | 31.61726 | 893.6057 | 191.9437 |
| 760 RICHMON[ 814 -EIGH ${ }^{-}$ | 547.7364 | 0 | 0 | 0 | 3.059735 | 507.1263 | 51.59777 |
| 760 RICHMONL 902 - NINE | 276.9569 | 0 | 0 | 0 | 4.079646 | 254.5856 | 24.76693 |
| 760 RICHMON[ 903 - NINE | 822.6342 | 0 | 0 | 0 | 17.3385 | 764.1061 | 0 |
| 760 RICHMON[ 908 - NINE | 695.9959 | 0 | 0 | 0 | 11.21903 | 659.3914 | 0 |
| 760 RICHMON[909-NINE | 888.5273 | 0 | 0 | 0 | 25.49779 | 856.3794 | 0 |
| 760 RICHMON[910-NINE | 731.0016 | 0 | 0 | 0 | 18.35841 | 681.1638 | 0 |
| 760 RICHMON[ 911 - NINE | 809.2496 | 0 | 0 | 0 | 7.139381 | 778.621 | 0 |
| 770 ROANOKE 1001 -Peters | 637.6584 | 0 | 0 | 0 | 22.62963 | 626.288 | 82.34403 |
| 770 ROANOKE 1002 - Granc | 632.4657 | 0 | 0 | 0 | 29.82997 | 570.1094 | 162.6295 |
| 770 ROANOKE 1003 -Prestc | 354.1393 | 0 | 0 | 113.0329 | 62.75098 | 369.3227 | 276.8818 |
| 770 ROANOKE 1004 - Willia | 434.1062 | 0 | 0 | 0 | 42.1734 | 368.2823 | 204.8308 |
| 770 ROANOKE 1005 - East ( | 141.2403 | 0 | 0 | 267.5459 | 49.38788 | 304.8212 | 273.7939 |
| 770 ROANOKE 1006 - Hollir | 393.6035 | 0 | 0 | 0 | 50.40236 | 343.314 | 165.7174 |
| 770 ROANOKE 1007 - Soutr | 115.277 | 0 | 0 | 157.6239 | 45.27104 | 218.4726 | 180.1276 |
| 770 ROANOKE 1008 -Linco | 434.1062 | 0 | 0 | 0 | 5.143098 | 429.6627 | 32.93761 |
| 770 ROANOKE 1009 - Highli | 589.8859 | 0 | 0 | 0 | 26.74411 | 543.0604 | 110.1351 |
| 770 ROANOKE 1010 - Old S | 878.5977 | 0 | 0 | 0 | 37.0303 | 822.9133 | 194.5378 |
| 770 ROANOKE 1011 -RALEI | 1110.19 | 0 | 0 | 7.258996 | 81.26236 | 1037.225 | 304.6729 |
| 770 ROANOKE 1012 -SOUT | 533.8052 | 0 | 0 | 124.4399 | 63.7829 | 576.3514 | 271.7353 |
| 770 ROANOKE 1013 -GARL | 69.58161 | 0 | 0 | 429.3178 | 31.89946 | 323.5475 | 312.9073 |
| 770 ROANOKE 1014 - Cryst | 809.0161 | 0 | 0 | 0 | 45.25926 | 741.7664 | 278.9404 |
| 770 ROANOKE 1015 - Granı | 367.6402 | 0 | 0 | 231.2509 | 90.54586 | 661.6598 | 267.6181 |
| 770 ROANOKE 1016 - Deye | 0 | 0 | 0 | 685.4567 | 98.79273 | 713.6771 | 394.222 |
| 770 ROANOKE 1017 -LEE-H | 753.9739 | 0 | 0 | 30.07299 | 50.40613 | 727.2015 | 241.8856 |
| 770 ROANOKE 1018 -Sumn | 635.5813 | 0 | 0 | 0 | 45.25926 | 576.3514 | 228.5047 |
| 770 ROANOKE 1019 - Fores | 540.0364 | 0 | 0 | 0 | 8.228956 | 531.6166 | 46.31851 |
| 770 ROANOKE 1020 - EURE | 838.095 | 0 | 0 | 0 | 7.200337 | 834.3571 | 44.25991 |
| 775 SALEM CIT'001-NORT | 346.4822 | 0 | 0 | 455.978 | 5.333333 | 336.3543 | 0 |
| 775 SALEM CIT' 002 - CONE | 96.88864 | 0 | 0 | 202.1889 | 0 | 95.65077 | 0 |
| 775 SALEM CIT 003 - BEVE | 117.9514 | 0 | 0 | 299.071 | 0 | 119.8262 | 0 |


| 775 SALEM CIT' 004 - WEST | 191.671 | 0 | 0 | 461.2434 | 1.333333 | 200.7615 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 775 SALEM CIT' 005 - NORT | 285.4002 | 0 | 0 | 455.978 | 1.333333 | 281.6968 | 0 |
| 775 SALEM CIT'006-SOUT | 144.2798 | 0 | 0 | 219.0379 | 0 | 147.155 | 0 |
| 775 SALEM CIT'007-SOUT | 153.7581 | 0 | 0 | 347.5121 | 1.333333 | 150.3083 | 0 |
| 775 SALEM CIT' 008 - EAST | 65.29452 | 0 | 0 | 124.2619 | 0 | 57.8109 | 0 |
| 775 SALEM CIT'009-SOUT | 216.9463 | 0 | 0 | 569.7093 | 2.666667 | 213.3748 | 0 |
| 775 SALEM CIT' 010 - HIDD | 244.3279 | 0 | 0 | 556.0194 | 0 | 248.0613 | 0 |
| 790 STAUNTON 101 - WARI | 651.8893 | 0 | 0 | 599.6146 | 1.133333 | 566.4914 | 0 |
| 790 STAUNTON 201 - WARI | 633.8696 | 0 | 0 | 763.6207 | 4.533333 | 574.9623 | 0 |
| 790 STAUNTON 301 - WARI | 702.7685 | 0 | 0 | 642.4442 | 7.933333 | 610.9636 | 0 |
| 790 STAUNTON 401 - WARI | 663.5491 | 0 | 0 | 617.3732 | 2.266667 | 538.961 | 0 |
| 790 STAUNTON 501 - WARI | 1005.924 | 0 | 0 | 466.9473 | 1.133333 | 910.6217 | 0 |
| 800 SUFFOLK C 101 - BELLE | 709.9835 | 0 | 0 | 264.4237 | 2.387097 | 802.9621 | 0 |
| 800 SUFFOLK C 102 - DRIVI | 622.4367 | 0 | 0 | 1513.091 | 0 | 766.3333 | 0 |
| 800 SUFFOLK C 104 - BENN | 636.3161 | 0 | 0 | 635.876 | 0 | 705.2758 | 0 |
| 800 SUFFOLK C 201 - EBEN | 264.7758 | 0 | 0 | 880.363 | 3.580645 | 336.7222 | 0 |
| 800 SUFFOLK C 202 - CHUC | 350.1874 | 0 | 0 | 709.3271 | 2.387097 | 590.6971 | 0 |
| 800 SUFFOLK C 203 - KING! | 905.3625 | 0 | 0 | 478.481 | 3.580645 | 1095.631 | 0 |
| 800 SUFFOLK C 204 - HILLP | 746.2834 | 0 | 0 | 366.2058 | 1.193548 | 882.2935 | 0 |
| 800 SUFFOLK C 301 - WHIT | 258.3699 | 0 | 0 | 149.0007 | 0 | 298.946 | 0 |
| 800 SUFFOLK C 302 - JOHN | 1200.032 | 0 | 0 | 150.05 | 0 | 1234.997 | 0 |
| 800 SUFFOLK C 304 - NANS | 854.1155 | 0 | 0 | 471.1359 | 1.193548 | 1006.651 | 0 |
| 800 SUFFOLK C 305 - SHOL | 341.6462 | 0 | 0 | 237.1419 | 0 | 425.6021 | 0 |
| 800 SUFFOLK C 401 - AIRPC | 294.6699 | 0 | 0 | 410.2765 | 4.774194 | 310.0083 | 0 |
| 800 SUFFOLK C 402 - WHA | 197.8662 | 0 | 0 | 577.904 | 6 | 200.2803 | 0 |
| 800 SUFFOLK C 403 - SOUT | 529.5516 | 0 | 0 | 54.56362 | 0 | 554.2476 | 0 |
| 800 SUFFOLK C 404 - BOOk | 806.0715 | 0 | 0 | 53.51432 | 1.193548 | 814.7546 | 0 |
| 800 SUFFOLK C 405 - PITTM | 135.4378 | 0 | 0 | 174.5003 | 0 | 138.4917 | 0 |
| 800 SUFFOLK C 501 - KILBY | 524.2134 | 0 | 0 | 953.8141 | 4.774194 | 553.9667 | 0 |
| 800 SUFFOLK C 502 - HOLL | 449.6959 | 0 | 0 | 798.5956 | 1 | 448.5 | 0 |
| 800 SUFFOLK C 504 - LAKE | 361.9315 | 0 | 0 | 1122.751 | 1.193548 | 453.5414 | 0 |
| 800 SUFFOLK C 601 - LAKE | 610.6926 | 0 | 0 | 614.89 | 3.580645 | 637.0618 | 0 |
| 800 SUFFOLK C 602 - OLDE | 179.3643 | 0 | 0 | 133.2612 | 0 | 228.3457 | 0 |
| 800 SUFFOLK C 603 - ELEPr | 193.2436 | 0 | 0 | 195.1699 | 1.193548 | 233.3966 | 0 |
| 800 SUFFOLK C 604 - WILR | 428.1254 | 0 | 0 | 443.8541 | 1.193548 | 573.5444 | 0 |
| 800 SUFFOLK C 605 - HOLL | 521.0105 | 0 | 0 | 30.42971 | 1.193548 | 528.5185 | 0 |
| 800 SUFFOLK C 702 - HARB | 844.5067 | 0 | 0 | 713.5243 | 3.580645 | 1034.524 | 0 |
| 800 SUFFOLK C 704 - BURB | 938.4594 | 0 | 0 | 407.1286 | 0 | 1032 | 0 |
| 800 SUFFOLK C 706 - HUN1 | 1146.65 | 0 | 0 | 185.7262 | 0 | 1230.708 | 0 |
| 810 VIRGINIA B 001 - NORT | 671.1607 | 0 | 0 | 1307.347 | 1 | 761.0702 | 0 |
| 810 VIRGINIA B 002 - SOUT | 675.4768 | 0 | 0 | 697.7473 | 3 | 713.1036 | 0 |
| 810 VIRGINIA B 003 - OCEA | 415.3082 | 0 | 0 | 521.9727 | 3.130435 | 438.095 | 0 |
| 810 VIRGINIA B 004 - LINKF | 535.2021 | 0 | 0 | 932.4537 | 1 | 586.2586 | 0 |
| 810 VIRGINIA B 005 - SEAT, | 724.5186 | 0 | 0 | 444.0289 | 1.083333 | 719.4992 | 0 |
| 810 VIRGINIA B 006 - ALAN | 625.8411 | 0 | 0 | 1056.71 | 1 | 710.9718 | 0 |
| 810 VIRGINIA B 007 - KING: | 419.7736 | 0 | 0 | 692.939 | 1.090909 | 422.5342 | 0 |
| 810 VIRGINIA B 008 -LONL | 717.5592 | 0 | 0 | 708.3675 | 1 | 750.411 | 0 |


| 810 VIRGINIA B 009 - TRAN | 510.3842 | 0 | 0 | 1008.919 | 1 | 577.7312 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 010 - GREA | 448.8792 | 0 | 0 | 1330.711 | 1 | 499.9187 | 0 |
| 810 VIRGINIA B 011 - CAPE | 874.0195 | 0 | 0 | 1132.114 | 1 | 985.9803 | 0 |
| 810 VIRGINIA B 012 - PLAZI | 724.0334 | 0 | 0 | 546.9404 | 1 | 746.1473 | 0 |
| 810 VIRGINIA B 013 - MT TI | 785.1507 | 0 | 0 | 882.9749 | 5.294118 | 773.7723 | 0 |
| 810 VIRGINIA B 014 - MALI | 625.8411 | 0 | 0 | 733.856 | 3 | 609.1622 | 0 |
| 810 VIRGINIA B 015 - OLD [ | 422.9298 | 0 | 0 | 492.2402 | 1.090909 | 421.4857 | 0 |
| 810 VIRGINIA B 016 - ARAE | 708.0393 | 0 | 0 | 836.5971 | 4.363636 | 706.6701 | 0 |
| 810 VIRGINIA B 017 - OCEA | 487.1058 | 0 | 0 | 643.2925 | 1.090909 | 490.6849 | 0 |
| 810 VIRGINIA B 018 -THOR | 756.4342 | 0 | 0 | 992.9309 | 2.181818 | 750.7059 | 0 |
| 810 VIRGINIA B 019 - LAKE | 316.6713 | 0 | 0 | 509.1412 | 2.181818 | 336.5595 | 0 |
| 810 VIRGINIA B 020 - BAYS | 535.5007 | 0 | 0 | 646.4614 | 0 | 550.4478 | 0 |
| 810 VIRGINIA B 021 - DAVII | 886.8902 | 0 | 0 | 266.19 | 3.272727 | 879.668 | 0 |
| 810 VIRGINIA B 022 - POIN | 476.102 | 0 | 0 | 705.335 | 1.058824 | 473.9093 | 0 |
| 810 VIRGINIA B 023 - ARRC | 579.4662 | 0 | 0 | 765.9415 | 1.058824 | 567.2233 | 0 |
| 810 VIRGINIA B 024 - LARK: | 476.102 | 0 | 0 | 502.6165 | 0 | 471.8124 | 0 |
| 810 VIRGINIA B 025 - AVAL | 899.9998 | 0 | 0 | 1028.222 | 3.176471 | 880.7164 | 0 |
| 810 VIRGINIA B 026 - FAIRF | 601.392 | 0 | 0 | 821.3234 | 1.058824 | 618.5985 | 0 |
| 810 VIRGINIA B 027 - EDWI | 660.9047 | 0 | 0 | 926.8624 | 3.176471 | 654.2465 | 0 |
| 810 VIRGINIA B 028 - THAL | 460.7486 | 0 | 0 | 662.7006 | 2 | 460.2792 | 0 |
| 810 VIRGINIA B 029 - HOLL | 655.0303 | 0 | 0 | 464.3251 | 0 | 682.1918 | 0 |
| 810 VIRGINIA B 030 - RED | 456.8552 | 0 | 0 | 825.3714 | 1.083333 | 500.9846 | 0 |
| 810 VIRGINIA B 031 - SIGM | 523.5023 | 0 | 0 | 1115.819 | 0 | 570.2697 | 0 |
| 810 VIRGINIA B 032 - CREE | 155.8682 | 0 | 0 | 629.9987 | 2.166667 | 174.7212 | 0 |
| 810 VIRGINIA B 033 - CAPP | 127.9195 | 0 | 0 | 771.0432 | 1.083333 | 213.1849 | 0 |
| 810 VIRGINIA B 034 - BLAC | 112.8701 | 0 | 0 | 347.9097 | 0 | 104.0007 | 0 |
| 810 VIRGINIA B 035 - COUF | 596.1512 | 0 | 0 | 1047.09 | 1.043478 | 607.5771 | 0 |
| 810 VIRGINIA B 036 - WINL | 901.3556 | 0 | 0 | 602.9254 | 2.05 | 884.9103 | 0 |
| 810 VIRGINIA B 037 - CHES, | 452.3876 | 0 | 0 | 500.6907 | 0 | 468 | 0 |
| 810 VIRGINIA B 038 - WITC | 734.3409 | 0 | 0 | 1245.389 | 5.454545 | 747.5605 | 0 |
| 810 VIRGINIA B 039 - PEME | 788.2059 | 0 | 0 | 763.7182 | 2.149733 | 780.0631 | 0 |
| 810 VIRGINIA B $040-$ BON | 448.9558 | 0 | 0 | 480.6727 | 2.117647 | 455.0368 | 0 |
| 810 VIRGINIA B 041 - COLLI | 1283.812 | 0 | 0 | 382.4483 | 3.058824 | 1255.021 | 0 |
| 810 VIRGINIA B 042 - BRAN | 711.0207 | 0 | 0 | 654.1329 | 2.117647 | 706.6701 | 0 |
| 810 VIRGINIA B 043 - BELL $/$ | 686.4491 | 0 | 0 | 365.9134 | 1.025 | 663.5247 | 0 |
| 810 VIRGINIA B 044 - CENT | 766.7782 | 0 | 0 | 765.0916 | 4.1 | 747.5605 | 0 |
| 810 VIRGINIA B 045 - TIMB | 779.2971 | 0 | 0 | 350.3205 | 1.025 | 801.5754 | 0 |
| 810 VIRGINIA B 046 -GREE | 617.1795 | 0 | 0 | 415.0626 | 1.043478 | 675.7963 | 0 |
| 810 VIRGINIA B 047 - KING! | 656.0542 | 0 | 0 | 1177.78 | 3 | 665.7797 | 0 |
| 810 VIRGINIA B 048 - WOLI | 629.0782 | 0 | 0 | 983.4307 | 3 | 689.6533 | 0 |
| 810 VIRGINIA B 049 - LYNN | 625.8411 | 0 | 0 | 1053.524 | 1 | 672.5985 | 0 |
| 810 VIRGINIA B $050-$ OCEA | 495.5535 | 0 | 0 | 219.4025 | 1.083333 | 491.3913 | 0 |
| 810 VIRGINIA B 051 - STRA | 511.1855 | 0 | 0 | 687.1271 | 1.025 | 495.9272 | 0 |
| 810 VIRGINIA B 052 - HOM | 858.2365 | 0 | 0 | 961.3454 | 2.117647 | 862.8924 | 0 |
| 810 VIRGINIA B $053-$ SHAN | 539.7911 | 0 | 0 | 685.4811 | 1.058824 | 542.06 | 0 |
| 810 VIRGINIA B 054 - CRON | 514.3152 | 0 | 0 | 431.4035 | 3.075 | 495.0435 | 0 |
| 810 VIRGINIA B 055 - MAG | 782.2513 | 0 | 0 | 383.6185 | 2.086957 | 805.8391 | 0 |

| 810 VIRGINIA B 056 - EDINI | 319.3948 | 0 | 0 | 402.5057 | 1 | 311.3962 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 057 - SHER | 342.3271 | 0 | 0 | 531.8748 | 1.058824 | 365.9167 | 0 |
| 810 VIRGINIA B 058 - GLEN | 652.0223 | 0 | 0 | 593.5697 | 4.1 | 630.2444 | 0 |
| 810 VIRGINIA B 059 - SHEL` | 413.4613 | 0 | 0 | 493.2965 | 0 | 419.3888 | 0 |
| 810 VIRGINIA B 060 - FOXF | 619.2823 | 0 | 0 | 1048.138 | 0 | 650.2141 | 0 |
| 810 VIRGINIA B 061 - BAKE | 909.2026 | 0 | 0 | 137.3202 | 5.363636 | 924.7523 | 0 |
| 810 VIRGINIA B 062 - LAND | 660.2874 | 0 | 0 | 794.4885 | 1.043478 | 696.0488 | 0 |
| 810 VIRGINIA B 063 - CULV | 722.3687 | 0 | 0 | 911.0429 | 2.166667 | 746.1473 | 0 |
| 810 VIRGINIA B 064 - ROSE | 589.4282 | 0 | 0 | 574.8582 | 5.125 | 568.884 | 0 |
| 810 VIRGINIA B 065 - COLO | 673.9303 | 0 | 0 | 580.0558 | 3.075 | 641.6648 | 0 |
| 810 VIRGINIA B 066 - HUN7 | 493.1127 | 0 | 0 | 767.2369 | 3.130435 | 520.1712 | 0 |
| 810 VIRGINIA B 067 - EASTI | 325.869 | 0 | 0 | 253.8228 | 2 | 342.1618 | 0 |
| 810 VIRGINIA B 068 - MAN | 618.6388 | 0 | 0 | 760.9335 | 2.05 | 581.9019 | 0 |
| 810 VIRGINIA B 069 - SHELI | 743.8094 | 0 | 0 | 353.8637 | 0 | 745.4636 | 0 |
| 810 VIRGINIA B 070 - CORP | 579.3999 | 0 | 0 | 610.148 | 1.083333 | 591.5882 | 0 |
| 810 VIRGINIA B 071 - ROUN | 406.8619 | 0 | 0 | 319.1347 | 2.05 | 404.5628 | 0 |
| 810 VIRGINIA B 072 - RUDE | 522.4274 | 0 | 0 | 846.2669 | 3.25 | 553.2149 | 0 |
| 810 VIRGINIA B 073 - DAHL | 693.7517 | 0 | 0 | 299.3837 | 1.025 | 715.2355 | 0 |
| 810 VIRGINIA B 074 - BUCK | 678.1614 | 0 | 0 | 377.3296 | 0 | 710.9718 | 0 |
| 810 VIRGINIA B 075 - COLO | 598.8652 | 0 | 0 | 1117.245 | 2 | 676.8622 | 0 |
| 810 VIRGINIA B 076 - VILLA | 674.4778 | 0 | 0 | 248.6959 | 5.294118 | 669.9736 | 0 |
| 810 VIRGINIA B 077 - BROC | 545.6834 | 0 | 0 | 526.1652 | 1.043478 | 563.8742 | 0 |
| 810 VIRGINIA B 078 - INDIA | 560.2176 | 0 | 0 | 501.0518 | 2.05 | 540.8038 | 0 |
| 810 VIRGINIA B 079 - PLEA! | 743.3873 | 0 | 0 | 297.8081 | 1.058824 | 738.1243 | 0 |
| 810 VIRGINIA B 080 - CHIM | 640.3106 | 0 | 0 | 311.2969 | 3.130435 | 664.0711 | 0 |
| 810 VIRGINIA B 081 - ROCK | 802.2282 | 0 | 0 | 547.128 | 2.086957 | 833.5531 | 0 |
| 810 VIRGINIA B 082 - SHELI | 491.0099 | 0 | 0 | 632.0271 | 1.043478 | 521.2372 | 0 |
| 810 VIRGINIA B 083 - STRA' | 567.7631 | 0 | 0 | 799.7292 | 0 | 590.5223 | 0 |
| 810 VIRGINIA B 084 -TALLI | 726.682 | 0 | 0 | 467.0885 | 2.117647 | 708.767 | 0 |
| 810 VIRGINIA B 085 - UPTC | 676.0586 | 0 | 0 | 942.276 | 0 | 703.5103 | 0 |
| 810 VIRGINIA B 086 - HAYG | 711.1954 | 0 | 0 | 882.0184 | 2.181818 | 738.1243 | 0 |
| 810 VIRGINIA B 087 - HILLC | 592.5579 | 0 | 0 | 628.9136 | 0 | 567.844 | 0 |
| 810 VIRGINIA B 088 - NORT | 469.9816 | 0 | 0 | 596.3905 | 4.173913 | 445.1231 | 0 |
| 810 VIRGINIA B 089 - LAKE | 660.3682 | 0 | 0 | 709.9967 | 4.1 | 637.471 | 0 |
| 810 VIRGINIA B 090 - LAKE | 345.0771 | 0 | 0 | 565.1256 | 2.181818 | 361.7228 | 0 |
| 810 VIRGINIA B 091 - LEXIN | 784.1066 | 0 | 0 | 449.3245 | 2.117647 | 771.6754 | 0 |
| 810 VIRGINIA B 092 - LITTL | 376.639 | 0 | 0 | 723.572 | 1.090909 | 379.5468 | 0 |
| 810 VIRGINIA B 093 - NEW | 877.4216 | 0 | 0 | 170.0658 | 4.363636 | 890.1527 | 0 |
| 810 VIRGINIA B 094 - PINE | 337.7384 | 0 | 0 | 386.5754 | 1 | 350.6892 | 0 |
| 810 VIRGINIA B 095 - DAM | 372.2002 | 0 | 0 | 407.7256 | 1.043478 | 381.601 | 0 |
| 810 VIRGINIA B 096 - HILLT | 478.0131 | 0 | 0 | 278.2493 | 0 | 497.7868 | 0 |
| 810 VIRGINIA B 097 - INDIA | 698.9679 | 0 | 0 | 365.9134 | 3.075 | 677.0448 | 0 |
| 810 VIRGINIA B 098 - INDEI | 478.8452 | 0 | 0 | 221.4192 | 2.05 | 496.7209 | 0 |
| 810 VIRGINIA B 099 - SALEI | 435.0293 | 0 | 0 | 288.9884 | 0 | 421.203 | 0 |
| 810 VIRGINIA B 100 - SAND | 196.7165 | 0 | 0 | 535.969 | 0 | 235.5694 | 0 |
| 820 WAYNESBC 001 - WARI | 353.8566 | 0 | 0 | 305.3811 | 0 | 317.6356 | 0 |
| 820 WAYNESBC 002 - WARI | 720.1657 | 0 | 0 | 820.8399 | 0 | 649.8035 | 0 |

| 820 WAYNESBC 003 - WARI | 520.9268 | 0 | 0 | 534.9294 | 1 | 463.997 | 0 |
| :--- | ---: | :--- | :--- | ---: | :--- | ---: | :--- |
| 820 WAYNESBC 004 - WARI | 772.0509 | 0 | 0 | 1110.85 | 0 | 670.564 | 0 |
| 830 WILLIAMSE 001 - STRYI | 1624.264 | 0 | 0 | 714.819 | 5 | 1856.857 | 0 |
| 830 WILLIAMSE 002 - MATC | 1485.736 | 0 | 0 | 562.181 | 2 | 1667.143 | 0 |
| 840 WINCHEST 101 - MERF 891.5202 | 0 | 0 | 759.1981 | 1 | 879.4132 | 0 |  |
| 840 WINCHEST 102 - OLD 1541.7782 | 0 | 0 | 563.3774 | 1 | 530.2187 | 0 |  |
| 840 WINCHEST 201 - VIRGI 602.9295 | 0 | 0 | 375.934 | 0 | 593.4164 | 0 |  |
| 840 WINCHEST 301 - WAR | 510.6662 | 0 | 0 | 460.7547 | 1 | 527.0052 | 0 |
| 840 WINCHEST 401 - FRED 241.3863 | 0 | 0 | 248.1792 | 0 | 248.5065 | 0 |  |
| 840 WINCHEST 402 - ROLLI 496.7195 | 0 | 0 | 589.5566 | 1 | 503.4399 | 0 |  |


| GE19SLUL | GE19SLUR | GE19SLUW |
| :---: | :---: | :---: |
| 0 | 691.5491 | 0 |
| 0 | 321.8203 | 0 |
| 0 | 457.2139 | 0 |
| 0 | 347.8575 | 0 |
| 0 | 201.0075 | 0 |
| 0 | 295.783 | 0 |
| 0 | 102.066 | 0 |
| 0 | 172.8873 | 0 |
| 0 | 94.77555 | 0 |
| 0 | 392.6416 | 2.333333 |
| 0 | 131.2277 | 0 |
| 0 | 694.6735 | 1.166667 |
| 0 | 278.0777 | 0 |
| 0 | 280.1607 | 0 |
| 0 | 226.0032 | 0 |
| 0 | 458.2554 | 3.5 |
| 0 | 294.9315 | 5.521978 |
| 0 | 157.5082 | 1.153846 |
| 0 | 309.7309 | 3.461538 |
| 0 | 495.7809 | 2.307692 |
| 0 | 0 | 7.5 |
| 0 | 45.45539 | 4.285714 |
| 0 | 0 | 4.285714 |
| 0 | 285.4176 | 2.307692 |
| 0 | 0 | 4.285714 |
| 0 | 0 | 3.214286 |
| 0 | 0 | 1.071429 |
| 0 | 0 | 6.428571 |
| 0 | 0 | 1.071429 |
| 0 | 0 | 1.071429 |
| 0 | 0 | 8.571429 |
| 0 | 0 | 1.071429 |
| 0 | 0 | 5.357143 |
| 0 | 0 | 7.5 |
| 0 | 0 | 5.357143 |
| 0 | 362.586 | 2.307692 |
| 0 | 179.7074 | 7.5 |
| 0 | 0 | 8.571429 |
| 0 | 378.4425 | 1.153846 |
| 0 | 0 | 15 |
| 0 | 452.4397 | 0 |
| 0 | 0 | 4.285714 |
| 0 | 0 | 2.142857 |
| 0 | 0 | 10.71429 |
| 0 | 0 | 2.142857 |
| 0 | 0 | 5.357143 |


| 0 | 0 | 1 |
| :---: | :---: | :---: |
| 0 | 0 | 0 |
| 0 | 0 | 2 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 643.387 | 1 |
| 0 | 739.7345 | 1 |
| 0 | 818.9536 | 1 |
| 0 | 760.0745 | 5 |
| 0 | 771.8503 | 1 |
| 0 | 321.127 | 0 |
| 0 | 586.3157 | 1 |
| 0 | 315.9475 | 0 |
| 0 | 973.7399 | 0 |
| 0 | 415.3933 | 0 |
| 0 | 433.0035 | 0 |
| 0 | 1161.237 | 0 |
| 0 | 274.5118 | 0 |
| 0 | 1050.396 | 4 |
| 0 | 271.4041 | 0 |
| 0 | 1007.924 | 1 |
| 0 | 337.974 | 0 |
| 0 | 577.0288 | 3 |
| 0 | 167.9566 | 0 |
| 0 | 834.6309 | 0 |
| 0 | 490.4745 | 1 |
| 0 | 480.1704 | 0 |
| 0 | 766.624 | 0 |
| 0 | 562.6031 | 0 |
| 0 | 221.5378 | 0 |
| 0 | 0 | 26.31579 |
| 0 | 0 | 63.25653 |
| 0 | 0 | 53.68421 |
| 0 | 0 | 47.98771 |
| 0 | 0 | 44.71582 |
| 0 | 0 | 34.73684 |
| 0 | 0 | 58.89401 |
| 0 | 0 | 73.0722 |
| 0 | 0 | 64.21053 |
| 0 | 0 | 75.25346 |


| 0 | 160.0067 | 3.46875 |
| :---: | :---: | :---: |
| 0 | 0 | 55.78947 |
| 0 | 0 | 34.90015 |
| 0 | 0 | 29.447 |
| 0 | 0 | 32.71889 |
| 0 | 0 | 55.62212 |
| 0 | 242.6592 | 3.46875 |
| 0 | 0 | 89.43164 |
| 0 | 0 | 50.16897 |
| 0 | 0 | 75.25346 |
| 0 | 0 | 37.89474 |
| 0 | 0 | 53.68421 |
| 0 | 200.2733 | 2.3125 |
| 0 | 193.9155 | 1.15625 |
| 0 | 0 | 51.2596 |
| 0 | 0 | 56.71275 |
| 0 | 0 | 47.98771 |
| 0 | 0 | 40 |
| 0 | 225.7049 | 10.40625 |
| 0 | 0 | 34.73684 |
| 0 | 199.2137 | 3.46875 |
| 0 | 0 | 21.05263 |
| 0 | 305.1784 | 4.625 |
| 0 | 205.5716 | 0 |
| 0 | 0 | 87.25038 |
| 0 | 0 | 70.89094 |
| 0 | 216.168 | 5.78125 |
| 0 | 0 | 43.62519 |
| 0 | 94.30861 | 2.3125 |
| 0 | 0 | 79.61598 |
| 0 | 0 | 55.62212 |
| 0 | 0 | 24.21053 |
| 0 | 0 | 22.90323 |
| 0 | 0 | 28.35637 |
| 0 | 0 | 23.99386 |
| 0 | 0 | 45.80645 |
| 0 | 0 | 22.10526 |
| 0 | 0 | 29.447 |
| 0 | 0 | 20.72197 |
| 0 | 0 | 45.26316 |
| 0 | 0 | 6.543779 |
| 0 | 0 | 28.42105 |
| 0 | 0 | 57.89474 |
| 0 | 0 | 18.54071 |
| 0 | 501.1993 | 5.114504 |
| 0 | 539.4351 | 2.045802 |
| 0 | 1041.668 | 9.206107 |


| 0 | 935.2275 | 13.29771 |
| :---: | :---: | :---: |
| 0 | 744.0484 | 25.57252 |
| 0 | 968.2964 | 13.29771 |
| 0 | 1626.573 | 8.183206 |
| 0 | 437.1285 | 4.091603 |
| 0 | 605.5727 | 3.068702 |
| 0 | 545.6355 | 1.022901 |
| 0 | 594.2053 | 2.045802 |
| 0 | 650.009 | 4.091603 |
| 0 | 400.9594 | 1.022901 |
| 0 | 228.3815 | 0 |
| 0 | 708.9128 | 4.091603 |
| 0 | 1012.733 | 5.114504 |
| 0 | 518.7671 | 3.068702 |
| 0 | 515.6669 | 0 |
| 0 | 986.8976 | 6.137405 |
| 0 | 599.3723 | 3.068702 |
| 0 | 1471.562 | 7.160305 |
| 0 | 932.1273 | 4.091603 |
| 0 | 722.347 | 2.045802 |
| 0 | 1273.15 | 4.091603 |
| 0 | 901.1253 | 3.068702 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 722.7405 | 28.91354 |
| 0 | 299.4211 | 12.39152 |
| 0 | 539.9904 | 28.91354 |
| 0 | 449.1316 | 23.75041 |
| 0 | 377.89 | 21.68515 |
| 0 | 483.2036 | 22.71778 |
| 0 | 839.4115 | 99.13214 |
| 0 | 341.753 | 8.261011 |
| 0 | 672.1008 | 0 |
| 0 | 942.6601 | 73.31648 |
| 0 | 696.9283 | 25.81566 |
| 0 | 410.1162 | 0 |
| 0 | 387.1824 | 21.68515 |
| 0 | 329.2773 | 0 |
| 0 | 584.3873 | 23.75041 |
| 0 | 970.5372 | 107.3931 |
| 0 | 535.8605 | 56.79445 |
| 0 | 1101.663 | 142.5024 |


| 0 | 912.718 | 36.14192 |
| :---: | :---: | :---: |
| 0 | 238.5044 | 19.6199 |
| 0 | 355.1753 | 20.65253 |
| 0 | 589.5497 | 29.94617 |
| 0 | 856.9637 | 122.8825 |
| 0 | 1200.782 | 85.70799 |
| 0 | 548.2503 | 19.6199 |
| 0 | 569.9325 | 24.78303 |
| 0 | 188.945 | 10.32626 |
| 0 | 948.855 | 42.33768 |
| 0 | 1043.844 | 28.91354 |
| 0 | 623.6218 | 33.04405 |
| 0 | 458.424 | 17.55465 |
| 0 | 959.1799 | 77.44698 |
| 0 | 146.1235 | 0 |
| 0 | 171.1732 | 3.272727 |
| 0 | 52.18696 | 0 |
| 0 | 304.7719 | 6.545455 |
| 0 | 197.2667 | 1.090909 |
| 0 | 80.36792 | 0 |
| 0 | 265.1098 | 1.090909 |
| 0 | 858.1923 | 31.29921 |
| 0 | 979.7522 | 27.12598 |
| 0 | 858.1923 | 25.03937 |
| 0 | 888.3225 | 29.2126 |
| 0 | 783.3862 | 27.12598 |
| 0 | 789.62 | 26.08268 |
| 0 | 571.4356 | 9.389764 |
| 0 | 1159.495 | 33.38583 |
| 0 | 568.3186 | 11.47638 |
| 0 | 1047.286 | 44.8622 |
| 0 | 127.604 |  |
| 0 | 255.2079 | 0 |
| 0 | 272.2218 | 3.046154 |
| 0 | 0 | 8.123077 |
| 0 | 0 | 16.24615 |
| 0 | 0 | 18.27692 |
| 0 | 71.24554 |  |
| 0 | 243.5109 |  |
| 0 | 106.3366 |  |
| 0 | 97.8297 |  |
| 0 | 324.3267 |  |
| 0 | 92.51287 | 0 |
| 0 | 20.20396 | 25.30769 |
| 0 | 261.918 | 0 |
| 0 | 530.8831 | 2.142857 |
| 0 | 45.80628 | 0 |


| 0 | 233.7295 | 1.071429 |
| :---: | :---: | :---: |
| 0 | 264.267 |  |
| 0 | 304.2007 | 2.142857 |
| 0 | 281.8848 | 3.214286 |
| 0 | 438.096 | 4.285714 |
| 0 | 42.28272 | 1.071429 |
| 0 | 253.6963 | 4.285714 |
| 0 | 61.07504 | 2.142857 |
| 0 | 297.1536 | 3.214286 |
| 0 | 191.4468 | 1.071429 |
| 0 | 231.3805 |  |
| 0 | 130.3717 | 1.071429 |
| 0 | 257.2199 | 3.214286 |
| 0 | 212.5881 | 1.071429 |
| 0 | 381.9034 |  |
| 0 | 104.1555 |  |
| 0 | 238.8211 |  |
| 0 | 312.4664 |  |
| 0 | 256.7064 |  |
| 0 | 526.0377 |  |
| 0 | 208.3109 |  |
| 0 | 210.4151 |  |
| 0 | 273.5396 |  |
| 0 | 275.6438 |  |
| 0 | 1120.52 | 52.79157 |
| 0 | 1042.104 | 44.51054 |
| 0 | 766.617 | 43.475 |
| 0 | 1173.141 | 50.72131 |
| 0 | 420.9687 | 15.52693 |
| 0 | 412.7144 | 14.4918 |
| 0 | 1032.818 | 49.68618 |
| 0 | 777.3224 | 2 |
| 0 | 1381.561 | 43.4754 |
| 0 | 1054.485 | 33.12412 |
| 0 | 702.6463 | 26.91335 |
| 0 | 733.5998 | 19.66745 |
| 0 | 1209.335 | 46.5808 |
| 0 | 550.6465 |  |
| 0 | 725.4295 | 2.035129 |
| 0 | 357.0922 | 0 |
| 0 | 634.8771 | 1.333333 |
| 0 | 447.3474 | 1.333333 |
| 0 | 313.2479 | 0 |
| 0 | 445.2521 | 1.333333 |
| 0 | 235.7217 |  |
| 0 | 510.2065 | 0 |
| 0 | 433.7279 | 1.333333 |


| 0 | 162.386 | 1.333333 |
| ---: | ---: | ---: |
| 0 | 297.5331 | 1.333333 |
| 0 | 390.7742 | 0 |
| 0 | 382.393 | 0 |
| 0 | 297.5331 | 0 |
| 0 | 230.4237 | 1 |
| 0 | 371.5842 | 0 |
| 0 | 194.0957 | 1 |
| 0 | 354.9771 | 0 |
| 0 | 814.7866 | 3 |
| 0 | 304.1178 | 1 |
| 0 | 434.8988 | 1 |
| 0 | 1006.52 | 5 |
| 0 | 337.5842 | 1 |
| 0 | 219.17 | 0 |
| 0 | 619.653 | 0 |
| 0 | 614.4632 | 0 |
| 0 | 102.8333 | 0 |
| 0 | 197.3569 | 0 |
| 0 | 573.3737 | 0 |
| 0 | 326.1582 | 0 |
| 0 | 322.0034 | 0 |
| 281.8137 | 0 | 19.35185 |
| 245.9273 | 0 | 12.22222 |
| 271.2589 | 0 | 23.42593 |
| 0 | 413.5279 | 0 |
| 0 | 397.1099 | 0 |
| 0 | 326.3073 | 2 |
| 0 | 409.4234 | 0 |
| 0 | 360.1694 | 0 |
| 0 | 442.2593 | 0 |
| 0 | 322.2028 | 0 |
| 0 | 0 | 26.02041 |
| 0 | 853.5393 | 5.632911 |
| 0 | 0 | 77.02041 |
| 0 | 1160.047 | 1.126582 |
| 0 | 0 | 17.69388 |
| 0 | 0 | 39.55102 |
| 0 | 739.6631 | 11.26582 |
| 0 | 1570.853 | 5.632911 |
| 0 | 0 | 58.28571 |
| 0 | 0 | 21.85714 |
| 0 | 821.6114 | 3.379747 |
| 0 | 0 | 40.59184 |
| 0 | 679.0001 | 1.126582 |
| 0 | 742.8559 | 4.506329 |
| 0 | 613.0158 | 2.253165 |
|  |  |  |
| 0 |  |  |


| 0 | 286.2869 | 3.379747 |
| :--- | ---: | ---: |
| 0 | 485.3042 | 3.379747 |
| 0 | 507.6537 | 2.253165 |
| 0 | 166.133 | 0 |
| 0 | 176.7148 | 1.027027 |
| 0 | 405.4844 | 5.632911 |
| 0 | 940.8089 | 9.012658 |
| 0 | 821.6114 | 3.379747 |
| 0 | 1704.95 | 5.632911 |
| 0 | 541.7101 | 2.253165 |
| 0 | 204.3386 | 1.126582 |
| 0 | 0 | 2.081633 |
| 0 | 195.8245 | 0 |
| 0 | 309.7007 | 6.759494 |
| 0 | 0 | 16.65306 |
| 0 | 444.8621 | 1.126582 |
| 0 | 0 | 57.2449 |
| 0 | 945.066 | 5.632911 |
| 0 | 570.4452 | 1.126582 |
| 0 | 1598.524 | 6.759494 |
| 0 | 1337.779 | 4.506329 |
| 0 | 243.7163 | 1.126582 |
| 0 | 930.1663 | 2.253165 |
| 0 | 1104.732 | 3.081081 |
| 0 | 1585.142 | 0 |
| 0 | 707.7352 | 1.126582 |
| 0 | 1438.884 | 7.886076 |
| 0 | 984.4437 | 3.379747 |
| 0 | 1414.406 | 6.759494 |
| 0 | 387.3919 | 1.126582 |
| 0 | 1200.489 | 4.506329 |
| 0 | 1009.496 | 3.081081 |
| 0 | 449.7232 | 1295.209 | 1.126582

$\left.\begin{array}{rrr}0 & 464.0189 & 2.253165 \\ 0 & 620.0889 & 0 \\ 0 & 493.1082 & 2.054054 \\ 0 & 1141.768 & 0 \\ 0 & 1708.948 & 2.054054 \\ 0 & 969.2857 & 2.054054 \\ 0 & 847.5959 & 2.054054 \\ 0 & 1662.388 & 1.027027 \\ 0 & 902.6209 & 3.081081 \\ 0 & 471.9448 & 0 \\ 0 & 1122.798 & 9.012658 \\ 0 & 867.7012 & 2.054054 \\ 0 & 201.0527 & 1.027027 \\ 0 & 1369.275 & 3.081081 \\ 0 & 296.2882 & 1.027027 \\ 0 & 210.7242 & 2.253165 \\ 0 & 586.4092 & 2.253165 \\ 0 & 1334.355 & 2.054054 \\ 0 & 808.5401 & 0 \\ 0 & 456.5013 & 2.666667 \\ 0 & 474.2599 & 0 \\ 0 & 202.6573 & 1.333333 \\ 0 & 671.6941 & 0 \\ 0 & 423.0733 & 0 \\ 0 & 170.2739 & 0 \\ 0 & 317.2258 & 0 \\ 0 & 358.9661 & 4 \\ 0 & 169.048 & 10 \\ 0 & 147.1344 & 8 \\ 0 & 156.5259 & 9 \\ 0 & 22.95713 & 3 \\ 0 & 131.4818 & 1 \\ 0 & 327.6609 & 1 \\ 0 & 987.562 & 15.64706 \\ 0 & 690.3073 & 14.61158 \\ 0 & 642.2232 & 30.12698 \\ 0 & 584.0316 & 18.53968 \\ 0 & 210.3936 & 2.235294 \\ 0 & 694.0666 & 22.01587 \\ 0 & 1131.392 & 23.1746 \\ 0 & 860.1308 & 3.272727 \\ 0 & 837.3959 & 20.51804 \\ 0 & 158.8687 & 3.352941 \\ 0 & 960.6131 & 6.788049 \\ 0 & 240.4499 & 482.0809\end{array}\right) 12.746038$

| 0 | 262.391 | 3.47619 |
| :---: | :---: | :---: |
| 0 | 446.2215 | 2 |
| 0 | 471.3608 | 1 |
| 0 | 272.3418 | 1 |
| 0 | 443.0791 | 2 |
| 0 | 352.9968 | 2 |
| 0 | 760.8837 | 13.88095 |
| 0 | 201.7227 | 2.52381 |
| 0 | 73.13921 | 0 |
| 0 | 259.5262 | 5.047619 |
| 0 | 123.8648 | 0 |
| 0 | 185.2074 | 1.261905 |
| 0 | 371.5944 | 2.52381 |
| 0 | 515.5135 | 16.40476 |
| 0 | 179.309 | 5.047619 |
| 0 | 566.2391 | 6.309524 |
| 0 | 266.0719 | 1.090909 |
| 0 | 387.1085 | 0 |
| 0 | 678.2225 | 0 |
| 0 | 36.51967 | 6.090909 |
| 0 | 59.4749 | 27.36364 |
| 0 | 222.2483 | 0 |
| 0 | 21.9118 | 4 |
| 0 | 395.4559 | 3.272727 |
| 0 | 544.6649 | 0 |
| 0 | 274.4193 | 0 |
| 0 | 189.9023 | 2.181818 |
| 0 | 0 | 2 |
| 0 | 0 | 4 |
| 0 | 405.2096 | 1 |
| 0 | 313.9844 | 1 |
| 0 | 642.8194 | 1 |
| 0 | 540.9866 | 1 |
| 0 | 0 | 123.23 |
| 0 | 0 | 172.5219 |
| 0 | 0 | 47.05144 |
| 0 | 0 | 99.70424 |
| 0 | 0 | 50.92954 |
| 0 | 0 | 182.2715 |
| 0 | 0 | 156.1101 |
| 0 | 0 | 93.00176 |
| 0 | 0 | 108.7041 |
| 0 | 0 | 117.3594 |
| 0 | 0 | 90.78743 |
| 0 | 0 | 122.1097 |
| 0 | 0 | 170.5032 |
| 0 | 0 | 142.8241 |


| 0 | 0 | 71.96565 |
| ---: | ---: | ---: |
| 0 | 0 | 150.5743 |
| 0 | 0 | 134.4327 |
| 0 | 0 | 80.82296 |
| 0 | 0 | 160.1989 |
| 0 | 0 | 87.84169 |
| 0 | 0 | 73.56742 |
| 0 | 0 | 132.1921 |
| 0 | 0 | 115.388 |
| 0 | 0 | 85.1407 |
| 0 | 0 | 30.74459 |
| 0 | 0 | 19.92895 |
| 0 | 411.0346 | 5.696203 |
| 0 | 525.9941 | 1.139241 |
| 0 | 593.2346 | 1.139241 |
| 0 | 0 | 19.92895 |
| 0 | 325.3572 | 7.974684 |
| 0 | 276.5536 | 3.417722 |
| 0 | 0 | 129.5382 |
| 0 | 0 | 80.82296 |
| 0 | 0 | 40.96506 |
| 0 | 0 | 52.0367 |
| 0 | 543.3465 | 3.417722 |
| 0 | 433.8096 | 1.139241 |
| 0 | 360.062 | 2.278481 |
| 0 | 158.3405 | 2.278481 |
| 0 | 392.5977 | 3.417722 |
| 0 | 428.387 | 2.278481 |
| 0 | 283.0608 | 5.696203 |
| 0 | 595.4037 | 2.278481 |
| 0 | 257.0322 | 1.139241 |
| 0 | 791.7025 | 5.696203 |
| 0 | 510.8108 | 1.139241 |
| 0 | 316.681 | 1.139241 |
| 0 | 305.8245 | 1.033333 |
| 0 | 198.4679 | 2.278481 |
| 0 | 243.8041 | 3.1 |
| 0 | 392.5977 | 1.139241 |
| 0 | 0 | 110.0056 |
| 0 | 0 | 104.3352 |
| 0 | 0 | 103.2011 |
| 0 | 0 | 53.30168 |
| 0 | 0 | 90.72626 |
| 0 | 323.1881 | 2.278481 |
| 0 | 0 | 120.2123 |
| 0 | 363.3155 | 2.278481 |
| 0 | 0 | 132.6872 |
|  |  |  |


| 0 | 303.6667 | 1.139241 |
| :---: | :---: | :---: |
| 0 | 0 | 91.86034 |
| 0 | 328.6108 | 0 |
| 0 | 402.3584 | 0 |
| 0 | 413.2036 | 3.417722 |
| 0 | 0 | 37.42458 |
| 0 | 328.6108 | 0 |
| 0 | 202.806 | 1.139241 |
| 0 | 538.9355 | 8.266667 |
| 0 | 435.2118 | 4.133333 |
| 0 | 0 | 315.2737 |
| 0 | 0 | 218.8771 |
| 0 | 0 | 89.59218 |
| 0 | 379.6073 | 3.1 |
| 0 | 149.7043 | 1.033333 |
| 0 | 0 | 142.8939 |
| 0 | 0 | 185.9888 |
| 0 | 0 | 257.4358 |
| 0 | 0 | 105.4693 |
| 0 | 237.3882 | 4.133333 |
| 0 | 0 | 73.71508 |
| 0 | 495.397 | 4.521739 |
| 0 | 0 | 49.38943 |
| 0 | 158.8801 | 0 |
| 0 | 0 | 84.25532 |
| 0 | 0 | 39.51154 |
| 0 | 0 | 79.02308 |
| 0 | 0 | 63.65748 |
| 0 | 379.5469 | 2.26087 |
| 0 | 68.40672 | 132.8356 |
| 0 | 0 | 55.8851 |
| 0 | 0 | 24.07295 |
| 0 | 0 | 99.91993 |
| 0 | 461.1937 | 4.521739 |
| 0 | 0 | 50.50897 |
| 0 | 326.5869 | 0 |
| 0 | 0 | 114.8936 |
| 0 | 324.3802 | 3.391304 |
| 0 | 354.1703 | 3.391304 |
| 0 | 0 | 83.41325 |
| 0 | 0 | 75.50152 |
| 0 | 399.407 | 3.391304 |
| 0 | 303.4169 | 1.130435 |
| 0 | 0 | 41.58055 |
| 0 | 0 | 35.0152 |
| 0 | 0 | 61.48919 |
| 0 | 0 | 48.31293 |


| 0 | 0 | 49.29198 |
| ---: | ---: | ---: |
| 0 | 0 | 39.20953 |
| 0 | 0 | 66.97929 |
| 0 | 0 | 19.76438 |
| 0 | 0 | 66.97929 |
| 0 | 0 | 72.8177 |
| 0 | 0 | 12.07823 |
| 0 | 0 | 57.0971 |
| 0 | 0 | 94.42982 |
| 0 | 0 | 57.0971 |
| 0 | 0 | 59.37443 |
| 0 | 0 | 16.47032 |
| 0 | 0 | 49.41095 |
| 0 | 0 | 88.93971 |
| 0 | 0 | 23.05844 |
| 0 | 0 | 84.02042 |
| 0 | 0 | 45.93116 |
| 0 | 0 | 32.94064 |
| 0 | 0 | 66.97929 |
| 0 | 0 | 60.89401 |
| 0 | 0 | 99.91993 |
| 0 | 0 | 80.15555 |
| 0 | 0 | 65.88127 |
| 0 | 0 | 81.25357 |
| 0 | 0 | 62.00117 |
| 0 | 0 | 29.64657 |
| 0 | 0 | 75.73045 |
| 0 | 0 | 85.60834 |
| 0 | 0 | 72.21884 |
| 0 | 0 | 102.0715 |
| 0 | 0 | 99.7105 |
| 0 | 0 | 96.58377 |
| 0 | 0 | 42.67477 |
| 0 | 0 | 87.80343 |
| 0 | 0 | 62.37082 |
| 0 | 0 | 128.0243 |
| 0 | 300.1069 | 4.521739 |
| 0 | 367.4103 | 3.391304 |
| 0 | 0 | 63.65748 |
| 0 | 0 | 208.5331 |
| 0 | 0 | 93.29114 |
| 0 | 0 | 116.2831 |
| 0 | 0 | 100.6687 |
| 0 | 180.9468 | 0 |
| 0 | 0 | 114.8936 |
| 0 | 0.2639 | 5.652174 |
| 0 | 0 |  |
| 0 | 0 | 0 |


| 0 | 574.8371 | 3.391304 |
| :---: | :---: | :---: |
| 0 | 0 | 80.97264 |
| 0 | 411.5436 | 1.130435 |
| 0 | 594.6971 | 2.26087 |
| 0 | 99.30007 | 0 |
| 0 | 0 | 114.0379 |
| 0 | 0 | 50.50897 |
| 0 | 291.737 | 3.417722 |
| 0 | 0 | 106.5081 |
| 0 | 0 | 76.3943 |
| 0 | 0 | 113.0962 |
| 0 | 0 | 81.93012 |
| 0 | 0 | 66.97929 |
| 0 | 0 | 67.53699 |
| 0 | 0 | 40.62678 |
| 0 | 0 | 60.39116 |
| 0 | 0 | 84.14445 |
| 0 | 0 | 58.25416 |
| 0 | 0 | 69.75132 |
| 0 | 0 | 132.8597 |
| 0 | 0 | 59.29314 |
| 0 | 0 | 34.03866 |
| 0 | 318.85 | 3.417722 |
| 0 | 0 | 79.7158 |
| 0 | 0 | 95.21609 |
| 0 | 0 | 101.8591 |
| 0 | 234.2572 | 0 |
| 0 | 0 | 149.4671 |
| 0 | 0 | 99.64474 |
| 0 | 0 | 52.0367 |
| 0 | 157.256 | 1.139241 |
| 0 | 0 | 166.9206 |
| 0 | 0 | 35.84871 |
| 0 | 1240.148 | 0 |
| 0 | 0 | 128.8313 |
| 0 | 0 | 71.69743 |
| 0 | 671.9305 | 0 |
| 0 | 0 | 104.1853 |
| 0 | 0 | 54.89334 |
| 0 | 0 | 95.22315 |
| 0 | 763.5072 | 0 |
| 0 | 0 | 174.7625 |
| 0 | 0 | 107.5461 |
| 0 | 0 | 102.116 |
| 0 | 0 | 332.7209 |
| 0 | 0 | 107.5461 |
| 0 | 840.7406 | 1.130435 |


| 0 | 542.8404 | 1.130435 |
| :---: | :---: | :---: |
| 0 | 0 | 85.25161 |
| 0 | 0 | 122.1097 |
| 0 | 0 | 128.8313 |
| 0 | 0 | 44.28655 |
| 0 | 1020.584 | 1.130435 |
| 0 | 0 | 91.8946 |
| 0 | 0 | 98.53758 |
| 0 | 0 | 70.57716 |
| 0 | 1247.871 | 2.26087 |
| 0 | 617.8671 | 1.130435 |
| 0 | 0 | 96.34342 |
| 0 | 0 | 96.34342 |
| 0 | 532.5196 | 1.033333 |
| 0 | 0 | 149.4671 |
| 0 | 0 | 78.41906 |
| 0 | 167.8827 | 2.066667 |
| 0 | 439.2322 | 1.139241 |
| 0 | 377.4143 | 1.139241 |
| 0 | 0 | 112.0272 |
| 0 | 542.262 | 5.696203 |
| 0 | 0 | 163.8602 |
| 0 | 421.8798 | 2.278481 |
| 0 | 0 | 140.034 |
| 0 | 823.1537 | 2.278481 |
| 0 | 0 | 70.85849 |
| 0 | 0 | 123.23 |
| 0 | 0 | 127.711 |
| 0 | 416.4572 | 1.139241 |
| 0 | 0 | 153.8958 |
| 0 | 0 | 138.9138 |
| 0 | 0 | 49.29198 |
| 0 | 0 | 76.17852 |
| 0 | 0 | 101.9448 |
| 0 | 276.5536 | 2.278481 |
| 0 | 0 | 83.03729 |
| 0 | 174.6084 | 0 |
| 0 | 399.1048 | 1.139241 |
| 0 | 372.1221 | 3.1 |
| 0 | 0 | 34.32208 |
| 0 | 139.0201 | 1.130435 |
| 0 | 500.8868 | 0 |
| 0 | 1094.765 | 1.176471 |
| 0 | 455.4477 | 2.352941 |
| 0 | 413.1787 | 0 |
| 0 | 426.9161 | 0 |
| 0 | 543.1557 | 2.352941 |


| 0 | 836.9247 | 1.176471 |
| ---: | ---: | ---: |
| 0 | 753.4436 | 0 |
| 0 | 752.3869 | 1.176471 |
| 0 | 665.7356 | 1.176471 |
| 0 | 853.8323 | 0 |
| 0 | 888.7042 | 1.176471 |
| 0 | 814.7335 | 1.176471 |
| 0 | 729.139 | 1.176471 |
| 0 | 1048.269 | 3.529412 |
| 0 | 467.0716 | 0 |
| 0 | 620.2965 | 0 |
| 0 | 925.6895 | 2.352941 |
| 0 | 770.3512 | 0 |
| 0 | 1473.072 | 1.176471 |
| 0 | 603.0683 | 0 |
| 0 | 676.6133 | 2 |
| 0 | 521.1183 | 0 |
| 0 | 573.6504 | 0 |
| 0 | 654.5498 | 0 |
| 0 | 910.5133 | 3 |
| 0 | 701.543 | 2 |
| 0 | 840.1457 | 3 |
| 0 | 1152.535 | 3 |
| 0 | 1019.263 | 0 |
| 0 | 826.2898 | 0 |
| 0 | 1556.283 | 4 |
| 0 | 848.1926 | 1 |
| 0 | 620.9577 | 0 |
| 0 | 121.9588 | 0 |
| 0 | 448.3502 | 0 |
| 0 | 376.6987 | 0 |
| 0 | 343.6731 | 1.066667 |
| 0 | 558.3397 | 12.8 |
| 0 | 232.2115 | 1.066667 |
| 0 | 653.7352 | 1 |
| 0 | 356.1951 | 0 |
| 0 | 360.3369 | 0 |
| 0 | 464.8494 | 0 |
| 0 | 618.1642 | 1 |
| 0 | 305.458 | 0 |
| 0 | 556.0371 | 1 |
| 0 | 696.8584 | 1 |
| 0 | 657.5113 | 0 |
| 0 | 509.4418 | 1 |
| 0 | 716.5476 | 4.266667 |
| 0 | 520.2116 | 5.333333 |
| 0 | 437.6985 | 7.466667 |
|  |  |  |


| 0 | 828.5326 | 0 |
| ---: | ---: | ---: |
| 0 | 817.1545 | 3 |
| 0 | 966.1041 | 2 |
| 0 | 563.7331 | 1 |
| 0 | 598.9018 | 1 |
| 0 | 837.8419 | 2 |
| 0 | 982.6541 | 1 |
| 0 | 910.248 | 2 |
| 0 | 559.5957 | 1 |
| 0 | 817.1545 | 2 |
| 0 | 1165.738 | 2 |
| 0 | 887.4918 | 1 |
| 0 | 492.3614 | 1 |
| 0 | 813.017 | 0 |
| 0 | 835.7732 | 1 |
| 0 | 865.77 | 0 |
| 0 | 1019.892 | 1 |
| 0 | 1007.479 | 0 |
| 0 | 504.7739 | 0 |
| 0 | 590.6268 | 1 |
| 0 | 1118.157 | 2 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 5.882353 |
| 0 | 0 | 7.058824 |
| 0 | 0 | 1.176471 |
| 0 | 0 | 0 |
| 0 | 0 | 1.176471 |
| 0 | 0 | 3.529412 |
| 0 | 0 | 1.176471 |
| 0 | 612.9049 | 0 |
| 0 | 791.9776 | 1.052632 |
| 0 | 406.1916 | 2.105263 |
| 0 | 657.3483 | 0 |
| 0 | 893.0014 | 1.052632 |
| 0 | 717.2951 | 0 |
| 0 | 931.2434 | 3.157895 |
| 0 | 805.1483 | 3.157895 |
| 0 | 689.3888 | 2.105263 |
| 0 | 1237.179 | 4.210526 |
| 0 | 687.3217 | 3.157895 |
| 0 | 480.74 | 0 |
| 0 | 740.7639 | 2.333333 |
| 0 | 209.9906 | 0 |
| 0 | 949.7545 | 4.666667 |
| 0 | 1.166667 |  |
|  | 337.937 | 2.333333 |
| 0 |  |  |


| 0 | 1024.37 | 1.166667 |
| :---: | :---: | :---: |
| 0 | 781.3357 | 0 |
| 0 | 1220.504 | 2.333333 |
| 0 | 697.1262 | 0 |
| 0 | 157.3465 | 0 |
| 0 | 70.16804 | 0 |
| 0 | 155.2202 | 0 |
| 0 | 93.55739 | 0 |
| 0 | 122.2625 | 0 |
| 0 | 141.3992 | 0 |
| 0 | 64.85228 | 0 |
| 0 | 121.1993 | 0 |
| 0 | 289.1774 | 1 |
| 0 | 822.8797 | 4 |
| 0 | 417.8188 | 0 |
| 0 | 512.4393 | 1 |
| 0 | 198.8094 | 0 |
| 0 | 527.3234 | 0 |
| 0 | 177.5464 | 0 |
| 0 | 533.6122 | 1.4375 |
| 0 | 585.5943 | 4.3125 |
| 0 | 1040.703 | 1.4375 |
| 0 | 1075.711 | 10.0625 |
| 0 | 1209.379 | 5.75 |
| 0 | 0 | 18 |
| 0 | 0 | 6 |
| 0 | 0 | 2 |
| 0 | 0 | 8 |
| 0 | 0 | 24 |
| 0 | 0 | 37 |
| 0 | 0 | 17 |
| 0 | 0 | 12 |
| 0 | 0 | 10 |
| 0 | 335.248 | 0 |
| 0 | 192.0151 | 0 |
| 0 | 356.0064 | 1 |
| 0 | 295.5955 | 0 |
| 0 | 247.582 | 0 |
| 0 | 299.8145 | 0 |
| 0 | 104.8299 | 1 |
| 0 | 302.0346 | 0 |
| 0 | 339.3997 | 1 |
| 0 | 439.0399 | 3 |
| 0 | 524.4143 | 0 |
| 0 | 617.3881 | 1 |
| 0 | 390.6991 | 1 |
| 0 | 368.5124 | 2 |


|  | 458.7604 | 2 |
| :---: | :---: | :---: |
| 0 | 172.2946 | 1 |
| 0 | 565.1556 | 1 |
|  | 426.2172 | 3 |
|  | 250.716 | 0 |
| 0 | 361.2767 | 8 |
| 310.0559 | 0 | 11.8209 |
| 0 | 612.9265 | 0 |
| 229.1717 | 0 | 9.671642 |
| 0 | 430.3968 | 1.062069 |
| 0 | 523.7358 | 2.124138 |
| 0 | 1082.733 | 0 |
| 0 | 481.2147 | 1.062069 |
| 0 | 869.787 | 0 |
| 0 | 557.9602 | 3.186207 |
| 0 | 732.1931 | 1.062069 |
| 0 | 214.0368 | 0 |
| 178.3599 | 0 | 5.373134 |
| 0 | 985.2456 | 8.496552 |
| 0 | 916.797 | 8.496552 |
| 0 | 1592.987 | 6.372414 |
| 0 | 784.0481 | 1.062069 |
| 0 | 1115.92 | 11.68276 |
| 0 | 1168.812 | 6.372414 |
| 0 | 1362.75 | 10.62069 |
| 0 | 518.5503 | 9.558621 |
| 0 | 187.7152 | 1.062069 |
| 0 | 946.8729 | 4.248276 |
| 0 | 622.2604 | 7.434483 |
| 0 | 751.898 | 3.186207 |
| 0 | 565.2199 | 4.248276 |
| 0 | 724.9334 | 9.558621 |
| 0 | 859.7564 | 4.248276 |
| 0 | 1345.12 | 25.48966 |
| 0 | 1104.512 | 13.8069 |
| 0 | 509.2164 | 3.186207 |
| 0 | 649.225 | 6.372414 |
| 0 | 948.477 | 2 |
| 0 | 761.7193 | 1 |
| 0 | 970.5102 | 3 |
| 544.4125 | 0 | 45.13433 |
| 0 | 564.4697 | 1 |
| 0 | 1113.763 | 2.110345 |
|  | 429.2628 | 4.22069 |
|  | 1306.773 | 6.331034 |
|  | 605.3977 | 5.275862 |
| 274.3934 | 259.4562 | 22.56598 |

$\left.\begin{array}{rrr}0 & 1081.067 & 2.110345 \\ 242.173 & 0 & 8.194595 \\ 0 & 504.1465 & 6.331034 \\ 0 & 896.4949 & 2.110345 \\ 0 & 720.36 & 6.331034 \\ 0 & 342.7774 & 0 \\ 0 & 305.863 & 0 \\ 549.8262 & 459.8491 & 52.27139 \\ 0 & 549.4986 & 4.22069 \\ 31.18107 & 0 & 0 \\ 77.95267 & 0 & 5.121622 \\ 0 & 384.9654 & 1.055172 \\ 0 & 143.4392 & 0 \\ 121.6062 & 0 & 3.072973 \\ 35.33854 & 0 & 3.072973 \\ 255.6848 & 0 & 7.17027 \\ 28.06296 & 0 & 3.072973 \\ 87.30699 & 0 & 3.072973 \\ 134.0786 & 0 & 4.097297 \\ 0 & 0 & 0\end{array}\right) 0$

| 0 | 430.3175 | 7.386207 |
| ---: | ---: | ---: |
| 0 | 492.5448 | 0 |
| 0 | 795.2437 | 2.110345 |
| 0 | 475.6696 | 4.22069 |
| 0 | 812.1189 | 1.055172 |
| 0 | 525.2405 | 0 |
| 0 | 1145.404 | 3.165517 |
| 0 | 763.6027 | 3.165517 |
| 0 | 664.4609 | 1.055172 |
| 0 | 659.1874 | 5.275862 |
| 0 | 897.5496 | 8.441379 |
| 0 | 687.6643 | 2.110345 |
| 0 | 560.0456 | 5.275862 |
| 0 | 815.283 | 2.110345 |
| 0 | 1003.02 | 6.331034 |
| 0 | 652.8592 | 3.165517 |
| 0 | 340.668 | 4.22069 |
| 0 | 359.6526 | 0 |
| 0 | 1510.33 | 3.165517 |
| 0 | 521.0217 | 2.110345 |
| 0 | 860.6351 | 3.165517 |
| 459.4011 | 0 | 28.68108 |
| 61.32277 | 0 | 6.145946 |
| 380.409 | 0 | 21.51081 |
| 175.6533 | 0 | 10.24324 |
| 393.9208 | 0 | 29.70541 |
| 207.8738 | 0 | 8.194595 |
| 193.3226 | 0 | 13.31622 |
| 116.4093 | 0 | 1.024324 |
| 144.4723 | 0 | 5.121622 |
| 173.5746 | 0 | 11.26757 |
| 159.0234 | 0 | 7.17027 |
| 116.4093 | 0 | 4.097297 |
| 87.30699 | 0 | 11.26757 |
| 91.46446 | 0 | 11.26757 |
| 389.7633 | 0 | 13.31622 |
| 269.1965 | 0 | 11.26757 |
| 182.9289 | 0 | 10.24324 |
| 435.4956 | 0 | 23.55946 |
| 0 | 180.8984 | 1.064516 |
| 0 | 503.1885 | 0 |
| 0 | 853.5491 | 1.064516 |
| 0 | 248.4753 | 0 |
| 0 | 508.3868 | 1.064516 |
| 0 | 226.6428 | 0 |
| 0 | 540.6158 | 1.064516 |
| 0 | 237.0392 | 2.129032 |
|  |  |  |


| 0 | 467.8406 | 0 |
| :---: | :---: | :---: |
| 0 | 515.6643 | 3.193548 |
| 0 | 270.3079 | 3.193548 |
| 0 | 370.1139 | 1.064516 |
| 0 | 331.647 | 3.193548 |
| 0 | 656.0164 | 1.064516 |
| 0 | 315.0127 | 3.193548 |
| 0 | 223.5238 | 1.064516 |
| 0 | 442.8891 | 1.064516 |
| 0 | 670.5715 | 0 |
| 0 | 234.9599 | 0 |
| 0 | 273.4268 | 1.064516 |
| 0 | 541.6554 | 5.322581 |
| 0 | 189.2155 | 0 |
| 0 | 590.5188 | 1.064516 |
| 0 | 467.8406 | 2.129032 |
| 0 | 0 | 1 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 944.7915 | 2 |
| 0 | 766.2155 | 2 |
| 0 | 942.715 | 2 |
| 0 | 840.9682 | 3 |
| 0 | 425.6753 | 17.65979 |
| 0 | 0 | 57.26804 |
| 0 | 0 | 62.47423 |
| 0 | 292.5878 | 54.10309 |
| 0 | 212.8376 | 54.14433 |
| 0 | 382.6148 | 1 |
| 0 | 0 | 17.70103 |
| 0 | 216.8832 | 0 |
| 0 | 395.9142 | 4.164948 |
| 0 | 48.79692 | 37.48454 |
| 0 | 1085.523 | 10.54795 |
| 0 | 580.9538 | 3.164384 |
| 0 | 1479.28 | 4.219178 |
| 0 | 282.946 | 0 |
| 0 | 0 | 36.79134 |
| 0 | 0 | 75.68504 |
| 0 | 692.8412 | 3.164384 |
| 0 | 1178.045 | 8.438356 |
| 0 | 1150.073 | 3.164384 |
| 0 | 0 | 32.58661 |
| 0 | 475.5214 | 4.219178 |


| 0 | 0 | 80.94094 |
| ---: | ---: | ---: |
| 0 | 1037.11 | 5.273973 |
| 0 | 1457.764 | 14.76712 |
| 0 | 1030.655 | 8.438356 |
| 0 | 0 | 36.79134 |
| 0 | 1267.34 | 6.328767 |
| 0 | 0 | 4.204724 |
| 0 | 892.9474 | 5.273973 |
| 0 | 195.0778 | 0 |
| 0 | 328.6069 | 1.1 |
| 0 | 306.6998 | 5.5 |
| 0 | 291.0518 | 0 |
| 0 | 327.5637 | 4.4 |
| 0 | 1012.32 | 3 |
| 0 | 498.1439 | 2 |
| 0 | 1451.209 | 3 |
| 0 | 1053.558 | 2 |
| 0 | 1356.769 | 0 |
| 0 | 658.0221 | 3.081081 |
| 0 | 282.3028 | 4.108108 |
| 0 | 454.7641 | 3.081081 |
| 0 | 836.6428 | 7.189189 |
| 0 | 861.2801 | 12.32432 |
| 0 | 849.988 | 8.216216 |
| 0 | 671.9479 | 0 |
| 0 | 389.8823 | 0 |
| 0 | 485.7192 | 0 |
| 0 | 264.6408 | 0 |
| 0 | 155.3842 | 1.052632 |
| 0 | 435.0756 | 1.052632 |
| 0 | 66.44012 | 0 |
| 0 | 95.37372 | 3.157895 |
| 0 | 555.3091 | 4.430769 |
| 0 | 325.6279 | 0 |
| 0 | 748.1819 | 0 |
| 0 | 260.4024 | 18.9492 |


| 0 | 452.7905 | 3.323077 |
| :---: | :---: | :---: |
| 0 | 322.5064 | 0 |
| 0 | 341.7287 | 3.323077 |
| 0 | 121.5809 | 0 |
| 0 | 412.1541 | 2.215385 |
| 0 | 346.0003 | 1.107692 |
| 0 | 488.0313 | 1.107692 |
| 0 | 310.7595 | 1.107692 |
| 0 | 533.9511 | 2.215385 |
| 0 | 363.0867 | 2.215385 |
| 0 | 326.7781 | 0 |
| 0 | 271.9572 | 1.066667 |
| 0 | 441.0436 | 3.323077 |
| 0 | 397.8041 | 0 |
| 0 | 409.5356 | 1.066667 |
| 0 | 0 | 99.30159 |
| 0 | 524.7174 | 1.066667 |
| 0 | 187.7038 | 1.066667 |
| 0 | 0 | 144.6349 |
| 0 | 0 | 100.381 |
| 0 | 0 | 92.8254 |
| 0 | 0 | 102.5397 |
| 0 | 289.0212 | 0 |
| 0 | 418.0675 |  |
| 0 | 890.6304 | 0 |
| 0 | 865.0007 | 4.430769 |
| 0 | 748.5994 | 0 |
| 0 | 387.6485 | 1.107692 |
| 0 | 345.639 |  |
| 0 | 395.318 |  |
| 0 | 316.043 |  |
| 0 | 945.0934 |  |
| 0 | 907.7168 | 0 |
| 0 | 498.7103 | 1.107692 |
| 0 | 560.6486 | 1.107692 |
| 0 | 410.6021 | 1.066667 |
| 0 | 312.8953 | 0 |
| 0 | 503.3875 | 1.066667 |
| 0 | 830.8279 | 1.107692 |
| 0 | 637.5376 | 1.107692 |
| 0 | 381.8066 | 1.066667 |
| 0 | 282.6222 | 1.066667 |
| 0 | 305.42 | 2.215385 |
| 0 | 1101.007 | 2.215385 |
| 0 | 956.8403 | 3.323077 |
| 0 | 930.1428 | 1.107692 |
| 0 | 396.7376 |  |


| 0 | 726.1735 | 2.215385 |
| :--- | ---: | ---: |
| 0 | 997.4206 | 1.107692 |
| 0 | 784.9081 | 2.215385 |
| 0 | 37.32746 | 0 |
| 0 | 330.6146 | 0 |
| 0 | 1144.791 | 2.215385 |
| 0 | 702.8227 | 2.133333 |
| 0 | 132.4199 | 0 |
| 0 | 622.587 | 2.215385 |
| 0 | 650.5643 | 0 |
| 0 | 407.4026 | 2.133333 |
| 0 | 353.0111 | 0 |
| 0 | 677.2268 | 1.066667 |
| 0 | 748.5994 | 1.107692 |
| 0 | 261.2922 | 0 |
| 0 | 390.3386 | 0 |
| 0 | 605.7713 | 1.066667 |
| 0 | 523.6509 | 2.133333 |
| 0 | 441.0436 | 0 |
| 0 | 521.1362 | 0 |
| 0 | 517.9325 | 1.107692 |
| 0 | 82.12041 | 0 |
| 0 | 115.1819 | 0 |
| 0 | 671.7105 | 1.107692 |
| 0 | 595.8894 | 1.107692 |
| 0 | 528.9834 | 2.133333 |
| 0 | 732.5809 | 5.538462 |
| 0 | 304.3521 | 0 |
| 0 | 407.4026 | 1.066667 |
| 0 | 123.8766 | 0 |
| 0 | 396.7376 | 0 |
| 0 | 114.1154 | 0 |
| 0 | 424.4665 | 2.133333 |
| 0 | 366.8756 | 1.066667 |
| 0 | 276.2232 | 1.066667 |
| 0 | 536.4489 | 1.066667 |
| 0 | 289.0212 | 1.066667 |
| 0 | 0 | 72.31746 |
| 0 | 392.4716 | 1.066667 |
| 0 | 357.2771 | 2.133333 |
| 0 | 696.2722 | 2.215385 |
| 0 | 476.2844 | 2.215385 |
| 0 | 313.5507 | 0 |
| 0 | 670.6426 | 0 |
| 0 | 649.4978 | 1.066667 |
| 0 | 803.0624 | 3.323077 |
| 0 | 450.6547 | 0 |
|  | 0 |  |

$\left.\begin{array}{lrr}0 & 447.451 & 0 \\ 0 & 472.0128 & 1.107692 \\ 0 & 423.4 & 1.066667 \\ 0 & 833.1177 & 4.266667 \\ 0 & 440.0571 & 4.266667 \\ 0 & 581.0462 & 1.066667 \\ 0 & 497.7344 & 2.133333 \\ 0 & 730.5802 & 1.066667 \\ 0 & 249.9353 & 0 \\ 0 & 962.3578 & 1.066667 \\ 0 & 227.3763 & 1.066667 \\ 0 & 231.7776 & 0 \\ 0 & 468.8958 & 0 \\ 0 & 466.6105 & 2.066667 \\ 0 & 608.7059 & 1 \\ 0 & 713.9786 & 0 \\ 0 & 677.498 & 0 \\ 0 & 512.3285 & 0 \\ 0 & 329.1411 & 0 \\ 0 & 315.5142 & 0 \\ 0 & 261.0068 & 0 \\ 0 & 179.2456 & 3.333333 \\ 0 & 168.7634 & 1.666667 \\ 0 & 258.9103 & 0 \\ 0 & 131.0275 & 0 \\ 0 & 134.1721 & 0 \\ 0 & 229.5602 & 0 \\ 0 & 123.69 & 0 \\ 0 & 194.9689 & 0 \\ 0 & 350.9617 & 11.01266 \\ 0 & 547.713 & 11.01266 \\ 0 & 303.1033 & 15.41772 \\ 0 & 36.15969 & 1.101266 \\ 0 & 670.0178 & 6.607595 \\ 0 & 375.4227 & 18.72152 \\ 0 & 730.6385 & 14.31646 \\ 0 & 358.4064 & 5.506329 \\ 0 & 210.577 & 3.303797 \\ 0 & 597.6494 & 253.75 \\ 0 & 141.8426 & 45.89026\end{array}\right)$

| 0 | 429.6997 | 1 |
| ---: | ---: | ---: |
| 0 | 228.4083 | 0 |
| 0 | 271.1697 | 1 |
| 0 | 54.23394 | 1 |
| 0 | 555.8979 | 1 |
| 0 | 227.3654 | 1 |
| 0 | 192.9477 | 0 |
| 0 | 101.1672 | 0 |
| 0 | 139.7567 | 0 |
| 0 | 240.9239 | 0 |
| 0 | 207.5491 | 1 |
| 0 | 86.56572 | 0 |
| 0 | 393.1961 | 0 |
| 0 | 206.5062 | 1 |
| 0 | 85.52276 | 1 |
| 0 | 173.1314 | 0 |
| 0 | 571.5423 | 0 |
| 0 | 194.7235 | 0 |
| 0 | 397.9133 | 0 |
| 0 | 813.8173 | 0 |
| 0 | 467.7598 | 1 |
| 0 | 446.5942 | 0 |
| 0 | 657.1919 | 1 |
| 0 | 0 | 11.49438 |
| 0 | 0 | 5.224719 |
| 0 | 62.71199 | 6.269663 |
| 0 | 0 | 1.044944 |
| 0 | 0 | 4.179775 |
| 0 | 171.6869 | 5.224719 |
| 0 | 353.6545 | 7.314607 |
| 0 | 658.9899 | 1 |
| 0 | 652.8215 | 0 |
| 0 | 77.1049 | 3.134831 |
| 0 | 135.7046 | 7.314607 |
| 0 | 407.1139 | 0 |
| 0 | 755.628 | 1 |
| 0 | 497.4994 | 0 |
| 0 | 326.9248 | 0 |
| 0 | 372.1597 | 7.224719 |
| 0 | 0 | 13.58427 |
| 0 | 0 | 3.134831 |
| 0 | 0 | 0 |
| 0 | 0 | 3.134831 |
| 0 | 0 | 2.089888 |
| 0 | 0 | 0 |
| 0 | 0 | 10.44944 |
| 0 | 0 | 4.179775 |
|  |  |  |
| 0 |  |  |


| 0 | 0 | 8 |
| :---: | :---: | :---: |
| 0 | 0 | 4 |
| 0 | 0 | 1 |
| 0 | 0 | 3 |
| 0 | 0 | 1 |
| 0 | 0 | 6 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 2 |
| 0 | 341.174 | 4.487805 |
| 0 | 920.8586 | 21.31707 |
| 0 | 745.6051 | 5.609756 |
| 0 | 528.8715 | 15.70732 |
| 0 | 463.5403 | 11.21951 |
| 0 | 593.1657 | 3.365854 |
| 0 | 727.9761 | 14.58537 |
| 0 | 283.1018 | 6.731707 |
| 0 | 394.0611 | 1.121951 |
| 0 | 634.6458 | 7.853659 |
| 0 | 500.2528 | 2.5 |
| 0 | 222.213 | 0 |
| 0 | 222.213 | 1.25 |
| 0 | 412.6812 | 0 |
| 0 | 400.6401 | 1.25 |
| 0 | 580.304 | 1 |
| 0 | 763.3312 | 1 |
| 0 | 253.0082 | 4 |
| 0 | 940.9753 | 1 |
| 0 | 862.3813 | 11 |
| 0 | 365.4281 | 0 |
| 0 | 285.2904 | 0 |
| 0 | 433.8124 | 1 |
| 0 | 271.3999 | 0 |
| 0 | 201.9471 | 0 |
| 0 | 227.5912 | 0 |
| 0 | 129.2889 | 0 |
| 0 | 348.3321 | 1 |
| 0 | 606.9099 | 2 |
| 0 | 770.5979 | 10.61224 |
| 0 | 691.0252 | 11.67347 |
| 0 | 875.2986 | 9.55102 |
| 0 | 773.7389 | 15.91837 |
| 0 | 805.1491 | 11.67347 |
| 0 | 326.6665 | 4.244898 |
| 0 | 885.7687 | 12.73469 |
| 0 | 652.286 | 11.67347 |
| 0 | 802.0081 | 5.306122 |


| 0 | 923.461 | 10.61224 |
| :---: | :---: | :---: |
| 0 | 990.3379 | 1.1 |
| 0 | 1133.594 | 4.4 |
| 0 | 1404.536 | 2.2 |
| 0 | 1020.443 | 3.3 |
| 0 | 1147.089 | 0 |
| 0 | 151.7286 | 0 |
| 0 | 204.7296 | 0 |
| 0 | 181.8664 | 1 |
| 0 | 167.3171 | 1 |
| 0 | 482.2059 | 2 |
| 0 | 366.8506 | 0 |
| 0 | 445.8326 | 1 |
| 0 | 359.5759 | 1 |
| 0 | 295.1432 | 0 |
| 0 | 488.4413 | 5 |
| 0 | 169.3956 | 0 |
| 0 | 237.9852 | 3 |
| 0 | 315.928 | 1 |
| 0 | 1159.893 | 2 |
| 0 | 392.9537 | 1 |
| 0 | 426.7336 | 1 |
| 0 | 241.6443 | 0 |
| 0 | 390.744 | 0 |
| 0 | 102.8274 | 0 |
| 0 | 259.125 | 0 |
| 0 | 308.3879 | 0 |
| 0 | 702.1744 | 0 |
| 0 | 181.3601 | 1 |
| 0 | 230.3901 | 2 |
| 0 | 134.233 | 39 |
| 0 | 105.6148 | 3 |
| 0 | 156.5972 | 0 |
| 0 | 438.9291 | 0 |
| 0 | 779.4287 | 3 |
| 0 | 763.8658 | 1 |
| 0 | 536.7588 | 0 |
| 0 | 570.6919 | 1 |
| 0 | 313.4103 | 2 |
| 0 | 541.9002 | 0 |
| 0 | 346.5282 | 1 |
| 0 | 408.2246 | 0 |
| 0 | 299.8319 | 2 |
| 0 | 225.1919 | 0 |
| 0 | 693.8463 | 0 |
| 0 | 105.4017 | 0 |
| 0 | 765.9746 | 2 |


| 0 | 412.3377 | 0 |
| :---: | :---: | :---: |
| 0 | 1115.25 | 0 |
| 0 | 828.2295 | 0 |
| 0 | 614.2879 | 0 |
| 0 | 883.3036 | 0 |
| 0 | 1058.058 | 3 |
| 0 | 901.3086 | 0 |
| 0 | 809.1654 | 1 |
| 0 | 1532.542 | 1 |
| 0 | 536.9723 | 0 |
| 0 | 685.2487 | 1 |
| 0 | 406.7009 | 1 |
| 0 | 392.9324 | 0 |
| 0 | 372.5044 | 1.142857 |
| 0 | 582.3661 | 1.142857 |
| 0 | 275.9681 | 1.142857 |
| 0 | 128.0156 | 1.142857 |
| 0 | 339.9759 | 0 |
| 0 | 267.5736 | 0 |
| 0 | 163.6921 | 0 |
| 0 | 435.4629 | 0 |
| 0 | 312.6939 | 3.428571 |
| 0 | 79.74743 | 0 |
| 0 | 450.6303 | 4 |
| 0 | 1326.681 | 0 |
| 0 | 0 | 17.3617 |
| 0 | 0 | 4.085106 |
| 0 | 337.1849 | 0 |
| 0 | 956.9328 | 2 |
| 0 | 721.6387 | 0 |
| 0 | 331.9328 | 0 |
| 0 | 0 | 20.42553 |
| 0 | 0 | 6.12766 |
| 0 | 1059.92 | 11.51515 |
| 0 | 734.1388 | 54.29122 |
| 0 | 765.8936 | 3.580645 |
| 0 | 806.5346 | 34.31939 |
| 0 | 910.3585 | 5.967742 |
| 0 | 0 | 61.99632 |
| 0 | 25.22404 | 193.7385 |
| 0 | 525.1186 | 74.26064 |
| 0 | 473.524 | 48.03668 |
| 0 | 372.6279 | 37.7271 |
| 0 | 433.3949 | 0 |
| 0 | 796.3539 | 3.454545 |
| 0 | 620.2821 | 0 |
| 0 | 0 | 70.85294 |


| 0 | 968.294 | 1.151515 |
| :---: | :---: | :---: |
| 0 | 895.8982 | 1.151515 |
| 0 | 0 | 88.56618 |
| 0 | 0 | 179.3465 |
| 0 | 631.201 | 36.57799 |
| 0 | 0 | 153.9842 |
| 0 | 733.0076 | 1.151515 |
| 0 | 805.4034 | 0 |
| 0 | 0 | 172.704 |
| 0 | 418.6696 | 56.7983 |
| 0 | 214.4684 | 83.03079 |
| 0 | 0 | 53.13971 |
| 0 | 624.4139 | 3.454545 |
| 0 | 0 | 57.56801 |
| 0 | 0 | 49.49492 |
| 0 | 0 | 26.56985 |
| 0 | 0 | 39.59594 |
| 0 | 0 | 9.898984 |
| 0 | 0 | 115.4881 |
| 0 | 0 | 102.2895 |
| 0 | 0 | 133.0863 |
| 0 | 0 | 91.29063 |
| 0 | 0 | 85.7912 |
| 0 | 1.131185 | 75.89221 |
| 0 | 0 | 93.50479 |
| 0 | 0 | 102.2895 |
| 0 | 0 | 68.193 |
| 0 | 0 | 82.49153 |
| 0 | 0 | 18.82031 |
| 0 | 921.1561 | 3.496579 |
| 0 | 1083.487 | 1.193548 |
| 0 | 565.8397 | 4.648094 |
| 0 | 169.689 | 32.36465 |
| 0 | 32.10332 | 95.20864 |
| 0 | 473.9663 | 0 |
| 0 | 1111.004 | 1.193548 |
| 0 | 0 | 98.52987 |
| 0 | 583.5465 | 7.16129 |
| 0 | 867.6186 | 4.606061 |
| 0 | 237.3353 | 0 |
| 0 | 686.7818 | 3.580645 |
| 0 | 937.752 | 3.454545 |
| 0 | 495.1025 | 5.777778 |
| 0 | 0 | 58.29402 |
| 0 | 300.0276 | 0 |
| 0 | 403.8394 | 1.444444 |
| 0 | 552.142 | 1.444444 |


| 0 | 0 | 124.2872 |
| :---: | :---: | :---: |
| 0 | 0 | 106.6891 |
| 0 | 255.5368 | 0 |
| 0 | 831.6353 | 0 |
| 0 | 587.5064 | 1.444444 |
| 0 | 548.7196 | 0 |
| 0 | 0 | 53.90885 |
| 0 | 606.8999 | 0 |
| 0 | 538.4525 | 1.444444 |
| 0 | 0 | 52.03263 |
| 0 | 0 | 99.63695 |
| 0 | 0 | 39.85478 |
| 0 | 0 | 33.21232 |
| 0 | 0 | 65.19532 |
| 0 | 0 | 60.88925 |
| 0 | 0 | 69.74586 |
| 0 | 0 | 48.7114 |
| 0 | 0 | 95.20864 |
| 0 | 0 | 53.13971 |
| 0 | 0 | 50.92555 |
| 0 | 0 | 68.193 |
| 0 | 0 | 47.60432 |
| 0 | 0 | 18.69808 |
| 0 | 0 | 32.10524 |
| 0 | 0 | 41.79571 |
| 0 | 0 | 80.29176 |
| 0 | 0 | 41.79571 |
| 0 | 0 | 39.59594 |
| 0 | 0 | 49.81847 |
| 0 | 0 | 25.46278 |
| 0 | 0 | 40.96186 |
| 0 | 0 | 97.88995 |
| 0 | 249.7008 | 10.64516 |
| 0 | 695.819 | 20.22581 |
| 0 | 374.0288 | 1.064516 |
| 0 | 461.7898 | 4.258065 |
| 0 | 65.82072 | 5.322581 |
| 0 | 625.8192 | 10.64516 |
| 0 | 620.5953 | 6.387097 |
| 0 | 148.3578 | 0 |
| 0 | 341.6409 | 7.451613 |
| 0 | 797.162 | 9.580645 |
| 0 | 328.0588 | 1.064516 |
| 0 | 798.2068 | 22.35484 |
| 0 | 414.96 | 2 |
| 0 | 406.64 | 1 |
| 0 | 276.64 | 2 |


| 0 | 321.36 | 1 |
| :---: | :---: | :---: |
| 0 | 171.6 | 0 |
| 0 | 176.8 | 0 |
| 0 | 226.1887 | 0 |
| 0 | 371.7453 | 0 |
| 0 | 318.3396 | 0 |
| 0 | 383.2642 | 0 |
| 0 | 365.4623 | 0 |
| 0 | 0 | 5.104167 |
| 0 | 234.8016 | 0 |
| 0 | 757.3909 | 1.071429 |
| 0 | 309.6056 | 4.083333 |
| 0 | 815.5719 | 1.071429 |
| 0 | 794.793 | 1.071429 |
| 0 | 0 | 4.083333 |
| 0 | 413.5001 | 0 |
| 0 | 667.0299 | 38.62295 |
| 0 | 0 | 6.125 |
| 0 | 973.1398 | 59.96721 |
| 0 | 0 | 8.166667 |
| 0 | 1036.223 | 58.95082 |
| 0 | 260.607 | 28.45902 |
| 0 | 227.529 | 0 |
| 0 | 975.5694 | 0 |
| 0 | 471.681 | 1.071429 |
| 0 | 966.2189 | 0 |
| 0 | 988.0367 | 1.071429 |
| 0 | 0 | 9.1875 |
| 0 | 502.8494 | 1.071429 |
| 0 | 195.3217 | 0 |
| 0 | 472.72 | 2.142857 |
| 0 | 516.3557 | 1.071429 |
| 0 | 585.965 | 0 |
| 0 | 752.1962 | 1.071429 |
| 0 | 497.6547 | 1.071429 |
| 0 | 406.2275 | 0 |
| 0 | 599.4713 | 0 |
| 0 | 0 | 2.041667 |
| 0 | 412.4612 | 0 |
| 0 | 0 | 10.20833 |
| 0 | 749.0794 | 3.214286 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 3.111111 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 3.111111 |


| 0 | 0 | 0 |
| :---: | :---: | :---: |
| 0 | 0 | 10.37037 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 1.037037 |
| 0 | 0 | 0 |
| 0 | 0 | 4.148148 |
| 0 | 914.8308 | 0 |
| 0 | 414.7096 | 1.071429 |
| 0 | 542.3125 | 1.071429 |
| 0 | 236.6829 | 0 |
| 0 | 425.0001 | 1.071429 |
| 0 | 326.2107 | 0 |
| 0 | 434.2616 | 0 |
| 0 | 325.1817 | 0 |
| 0 | 617.4336 | 2.142857 |
| 0 | 832.5063 | 1.071429 |
| 0 | 395.1575 | 1.071429 |
| 0 | 663.7411 | 2.142857 |
| 0 | 789.2859 | 1.071429 |
| 0 | 416.104 | 0 |
| 0 | 552.0382 | 2 |
| 0 | 370.4601 | 1.071429 |
| 0 | 518.8329 | 0 |
| 0 | 651.6541 | 1 |
| 0 | 236.5878 | 1 |
| 0 | 808.3416 | 5 |
| 0 | 476.4529 | 1.071429 |
| 0 | 735.705 | 0 |
| 0 | 98.57825 | 0 |
| 0 | 547.8875 | 1 |
| 0 | 754.298 | 1.071429 |
| 0 | 583.4747 | 1.071429 |
| 0 | 532.3225 | 0 |
| 0 | 957.7655 | 2 |
| 0 | 767.8727 | 1 |
| 0 | 429.5936 | 0 |
| 0 | 570.7162 | 0 |
| 0 | 383.5384 | 2.039216 |
| 0 | 312.8302 | 6.117647 |
| 0 | 205.6966 | 0 |
| 0 | 614.947 | 5.098039 |
| 0 | 100.7056 | 0 |


| 0 | 109.2763 | 3.058824 |
| :---: | :---: | :---: |
| 0 | 198.1972 | 1.019608 |
| 0 | 321.4009 | 4.078431 |
| 0 | 207.8392 | 1.019608 |
| 0 | 48.21013 | 1.019608 |
| 0 | 432.8198 | 2.039216 |
| 0 | 212.1246 | 3.058824 |
| 0 | 870.9963 | 14.27451 |
| 0 | 434.9625 | 3.058824 |
| 0 | 517.4554 | 6.117647 |
| 0 | 430.1373 | 1 |
| 0 | 545.1245 | 2 |
| 0 | 334.3147 | 1 |
| 0 | 554.7068 | 0 |
| 0 | 124.5695 | 0 |
| 0 | 409.9081 | 1 |
| 0 | 306.6325 | 0 |
| 0 | 275.7564 | 0 |
| 0 | 84.11101 | 0 |
| 0 | 1008.267 | 3 |
| 0 | 187.3866 | 2 |
| 0 | 267.2388 | 0 |
| 0 | 157.5751 | 0 |
| 0 | 365.1908 | 1 |
| 0 | 227.845 | 0 |
| 0 | 507.8602 | 1 |
| 0 | 121.3754 | 0 |
| 0 | 457.1188 | 0 |
| 0 | 1047.953 | 2 |
| 0 | 869.666 | 0 |
| 0 | 704.8545 | 1 |
| 0 | 801.2537 | 1 |
| 0 | 882.1046 | 0 |
| 0 | 459.1919 | 0 |
| 0 | 1362.028 | 6 |
| 0 | 62.19304 | 0 |
| 0 | 995.0886 | 7 |
| 0 | 679.9772 | 1 |
| 0 | 1150.571 | 1 |
| 0 | 608.5482 | 11 |
| 0 | 501.8953 | 2 |
| 0 | 141.4518 | 2 |
| 0 | 557.3193 | 2 |
| 0 | 200.1423 | 0 |
| 0 | 353.0715 | 4 |
| 0 | 165.2457 | 1 |
| 0 | 421.8384 | 3 |


| 0 | 234.0125 | 4 |
| :---: | :---: | :---: |
| 0 | 367.4407 | 4 |
| 0 | 259.6718 | 1 |
| 0 | 501.8953 | 0 |
| 0 | 313.0431 | 3 |
| 0 | 55.42402 | 0 |
| 0 | 382.3089 | 0 |
| 0 | 406.1385 | 0 |
| 0 | 0 | 34.38298 |
| 0 | 0 | 15.04255 |
| 0 | 0 | 37.60638 |
| 0 | 0 | 55.87234 |
| 0 | 0 | 21.48936 |
| 0 | 613.3519 | 2.666667 |
| 0 | 106.715 | 11.81915 |
| 0 | 0 | 60.17021 |
| 0 | 272.4857 | 1.333333 |
| 0 | 0 | 22.56383 |
| 0 | 0 | 44.05319 |
| 0 | 694.7516 | 1 |
| 0 | 701.0484 | 3 |
| 0 | 816.4847 | 0 |
| 0 | 719.9389 | 1 |
| 0 | 744.2066 | 1.2 |
| 0 | 769.1191 | 2 |
| 0 | 875.2903 | 1.2 |
| 0 | 831.1368 | 0 |
| 0 | 896.8644 | 0 |
| 0 | 848.0987 | 2.4 |
| 0 | 1338.25 | 2 |
| 0 | 801.7979 | 0 |
| 0 | 656.165 | 3.2 |
| 0 | 860.5684 | 2 |
| 0 | 741.0263 | 1.2 |
| 0 | 657.2765 | 2.4 |
| 0 | 771.7698 | 1.2 |
| 0 | 898.9847 | 2.4 |
| 0 | 1198.433 | 1 |
| 0 | 880.9626 | 2.4 |
| 0 | 980.6142 | 2.4 |
| 0 | 569.2863 | 2.4 |
| 0 | 568.594 | 2.2 |
| 0 | 744.1747 | 1.2 |
| 0 | 312.7364 | 0 |
| 0 | 1206.42 | 1.2 |
| 0 | 1742.009 | 7.046512 |
| 0 | 880.0463 | 0 |


| 0 | 887.3713 | 1.023256 |
| ---: | ---: | ---: |
| 0 | 1040.409 | 1.023256 |
| 0 | 478.2178 | 76.26464 |
| 0 | 978.4105 | 3.069767 |
| 0 | 914.4856 | 0 |
| 0 | 1197.114 | 2.046512 |
| 0 | 201.9607 | 38.67705 |
| 0 | 0 | 189.204 |
| 0 | 636.2285 | 1.023256 |
| 0 | 0 | 66.90085 |
| 0 | 186.2643 | 1.023256 |
| 0 | 778.5427 | 5.116279 |
| 0 | 1309.082 | 2.046512 |
| 0 | 760.7534 | 2.046512 |
| 0 | 1376.053 | 3.069767 |
| 0 | 910.3927 | 0 |
| 0 | 859.1177 | 2.046512 |
| 0 | 646.6927 | 1.023256 |
| 0 | 972.132 | 0 |
| 0 | 979.457 | 2.046512 |
| 0 | 1431.514 | 1.023256 |
| 0 | 262.6535 | 4.093023 |
| 0 | 1003.525 | 5.116279 |
| 0 | 516.9356 | 3.069767 |
| 0 | 1118.632 | 0 |
| 0 | 0 | 59 |
| 0 | 2 | 20 |
| 0 | 0 | 17 |
| 0 | 0 | 15 |
| 0 | 0 | 23 |
| 0 | 0 | 23 |
| 0 | 0 | 7 |
| 0 | 0 | 12.55491 |
| 0 | 0 | 20.92486 |
| 0 | 0 | 4.184971 |
| 0 | 0 | 28.24855 |
| 0 | 0 | 15.69364 |
| 0 | 318.337 | 1.060606 |
| 0 | 170.3475 | 1.060606 |
| 0 | 0 | 28.24855 |
| 0 | 0 | 3.138728 |
| 0 | 176.7356 | 1.060606 |
| 0 | 169.2829 | 0 |
| 0 | 0 | 12.55491 |
| 0 | 0 | 5.231214 |
| 0 | 0 | 33.47977 |
| 0 |  |  |
| 0 | 0.73988 |  |
| 0 |  | 0 |


| 0 | 68.13902 | 0 |
| ---: | ---: | ---: |
| 0 | 24.48746 | 0 |
| 0 | 44.71623 | 0 |
| 0 | 70.26836 | 2.121212 |
| 0 | 37.26353 | 1.060606 |
| 0 | 203.3524 | 0 |
| 0 | 72.39771 | 0 |
| 0 | 933.7175 | 16.9697 |
| 0 | 205.4817 | 2.121212 |
| 0 | 639.868 | 12.72727 |
| 0 | 119.2433 | 1.060606 |
| 0 | 484.4258 | 7.424242 |
| 0 | 898.5833 | 19.09091 |
| 0 | 53.23361 | 1.060606 |
| 0 | 433.3216 | 1.060606 |
| 0 | 819.7976 | 2.121212 |
| 0 | 483.8502 | 0 |
| 0 | 1098.247 | 0 |
| 0 | 886.886 | 0 |
| 0 | 687.9583 | 0 |
| 0 | 590.5666 | 0 |
| 0 | 814.3603 | 2 |
| 0 | 1104.463 | 0 |
| 0 | 520.1131 | 2 |
| 0 | 822.6489 | 2 |
| 0 | 410.2884 | 2 |
| 0 | 333.6183 | 0 |
| 0 | 1167.947 | 9.964286 |
| 0 | 618.263 | 4.428571 |
| 0 | 391.4259 | 2.214286 |
| 0 | 743.8147 | 2.214286 |
| 0 | 372.4349 | 2.214286 |
| 0 | 774.4113 | 3.321429 |
| 0 | 250.56 | 79.12922 |


| 0 | 170.64 | 0 |
| :---: | :---: | :---: |
| 0 | 423.36 | 1 |
| 0 | 270.2391 | 0 |
| 0 | 349.1034 | 0 |
| 0 | 226.9365 | 0 |
| 0 | 710.0916 | 0 |
| 0 | 641.0694 | 0 |
| 0 | 282.4296 | 1.05 |
| 0 | 228.4357 | 2.1 |
| 0 | 245.0492 | 0 |
| 0 | 614.6998 | 3.15 |
| 0 | 349.0813 | 0 |
| 0 | 953.9458 | 7 |
| 0 | 158.8667 | 1.05 |
| 0 | 601.2013 | 11.55 |
| 0 | 814.523 | 12 |
| 0 | 715.9835 | 7 |
| 0 | 726.4664 | 0 |
| 0 | 252.3176 | 2.1 |
| 0 | 261.6498 | 0 |
| 0 | 797.4089 | 4.4 |
| 0 | 872.8558 | 2.2 |
| 0 | 1018.068 | 3 |
| 0 | 610.6355 | 0 |
| 0 | 581.8997 | 3 |
| 0 | 378.6967 | 0 |
| 0 | 660.9232 | 1 |
| 0 | 313.0149 | 0 |
| 0 | 388.3215 | 1.1 |
| 0 | 312.5261 | 3.3 |
| 0 | 0 | 67.03665 |
| 0 | 827.0836 | 1 |
| 0 | 0 | 136.5259 |
| 0 | 0 | 175.3125 |
| 0 | 0 | 71.1875 |
| 0 | 1491.479 | 4 |
| 0 | 946.7378 | 0 |
| 0 | 0 | 122.1875 |
| 0 | 1294.155 | 4 |
| 0 | 1282.609 | 0 |
| 0 | 600.3703 | 1 |
| 0 | 1006.565 | 48.625 |
| 0 | 0 | 138.125 |
| 0 | 0 | 85.95629 |
| 0 | 0 | 153.8724 |
| 0 | 0 | 151.75 |
| 0 | 0 | 93.38462 |


| 0 | 0 | 56.24301 |
| :---: | :---: | :---: |
| 0 | 0 | 89.13986 |
| 0 | 0 | 92.32343 |
| 0 | 0 | 96.56818 |
| 0 | 0 | 102.9353 |
| 0 | 0 | 75.34441 |
| 0 | 0 | 39.26399 |
| 0 | 0 | 61.54895 |
| 0 | 0 | 99.75175 |
| 0 | 0 | 137.9545 |
| 0 | 0 | 76.40559 |
| 0 | 0 | 122.0367 |
| 0 | 0 | 129.465 |
| 0 | 0 | 79.58916 |
| 0 | 321.7323 | 4.8 |
| 0 | 0 | 77.46678 |
| 0 | 225.8518 | 3.6 |
| 0 | 0 | 58.94515 |
| 0 | 105.4685 | 3.6 |
| 0 | 139.5594 | 3.6 |
| 0 | 129.9713 | 0 |
| 0 | 0 | 57.87342 |
| 0 | 0 | 61.08861 |
| 0 | 0 | 76.09283 |
| 0 | 327.059 | 1.2 |
| 0 | 87.35777 | 1.2 |
| 0 | 311.1309 | 2 |
| 0 | 491.8538 | 13 |
| 0 | 201.2596 | 1 |
| 0 | 870.7558 | 9 |
| 0 | 0 | 3 |
| 0 | 0 | 1 |
| 0 | 0 | 4.093023 |
| 0 | 0 | 4.093023 |
| 0 | 0 | 4.093023 |
| 0 | 0 | 5.116279 |
| 0 | 0 | 4.093023 |
| 0 | 0 | 9.209302 |
| 0 | 0 | 5.116279 |
| 0 | 0 | 4.093023 |
| 0 | 0 | 4.093023 |
| 0 | 671.7373 | 2.179104 |
| 0 | 913.2725 | 2.179104 |
| 0 | 0 | 3.086957 |
| 0 | 667.5908 | 2.179104 |
| 0 | 0 | 8.231884 |
| 0 | 507.9495 | 2.179104 |


| 0 | 611.6127 | 3.268657 |
| :--- | ---: | ---: |
| 0 | 0 | 10.28986 |
| 0 | 894.6131 | 1.089552 |
| 0 | 0 | 6.173913 |
| 0 | 0 | 11.31884 |
| 0 | 0 | 3.086957 |
| 0 | 0 | 9.26087 |
| 0 | 862.4775 | 3.268657 |
| 0 | 0 | 17.49275 |
| 0 | 802.3529 | 2.179104 |
| 0 | 621.979 | 3.268657 |
| 0 | 0 | 12.34783 |
| 0 | 596.0632 | 1.089552 |
| 0 | 788.8767 | 3.268657 |
| 0 | 638.5651 | 3.268657 |
| 0 | 0 | 14.4058 |
| 0 | 434.3487 | 1.089552 |
| 0 | 0 | 16.46377 |
| 0 | 0 | 5.144928 |
| 0 | 0 | 8.231884 |
| 0 | 536.9752 | 2.179104 |
| 0 | 129.579 | 1.089552 |
| 0 | 0 | 21.6087 |
| 0 | 0 | 0 |
| 0 | 0 | 10.28986 |
| 0 | 0 | 2.057971 |
| 0 | 0 | 14.4058 |
| 0 | 898.7597 | 2.179104 |
| 0 | 0 | 42.10526 |
| 0 | 653.0779 | 1.089552 |
| 0 | 697.6531 | 3.268657 |
| 0 | 639.6017 | 2.179104 |
| 0 | 425.019 | 4.358209 |
| 0 | 664.4809 | 4.358209 |
| 0 | 0 | 11.31884 |
| 0 | 718.3857 | 2.179104 |
| 0 | 0 | 98.94737 |
| 0 | 0 | 6.173913 |
| 0 | 485.1436 | 2.179104 |
| 0 | 0 | 3.086957 |
| 0 | 535.9386 | 1.089552 |
| 0 | 0 | 17.49275 |
| 0 | 930.8952 | 0 |
| 0 | 233.2421 | 1.089552 |
| 0 | 0 | 33.95652 |
| 0 | 0 | 78.94737 |
| 0 | 0 | 5.144928 |
|  |  |  |


| 0 | 0 | 20.57971 |
| :---: | :---: | :---: |
| 0 | 0 | 7.202899 |
| 0 | 0 | 5.144928 |
| 0 | 485.1436 | 1.089552 |
| 0 | 682.1036 | 4.358209 |
| 0 | 913.2725 | 3.268657 |
| 0 | 757.7777 | 0 |
| 0 | 519.3525 | 1.089552 |
| 0 | 394.9567 | 4.358209 |
| 0 | 713.2026 | 1.089552 |
| 0 | 549.9898 | 3.9375 |
| 0 | 632.4319 | 2.625 |
| 0 | 781.5051 | 5.25 |
| 0 | 1019.796 | 5.25 |
| 0 | 1242.277 | 3.9375 |
| 0 | 0 | 1 |
| 0 | 0 | 5 |
| 0 | 0 | 1 |
| 0 | 0 | 2 |
| 0 | 0 | 0 |
| 0 | 72.59151 | 1.133333 |
| 0 | 154.6515 | 1.133333 |
| 0 | 253.5443 | 3.4 |
| 0 | 611.2416 | 11.33333 |
| 0 | 61.01895 | 1.133333 |
| 0 | 93.63253 | 2.266667 |
| 0 | 213.5663 | 0 |
| 0 | 240.9197 | 0 |
| 0 | 350.333 | 2.266667 |
| 0 | 361.9055 | 1.133333 |
| 0 | 483.9434 | 4.533333 |
| 0 | 373.4781 | 2.266667 |
| 0 | 17.88487 | 1.133333 |
| 0 | 430.2888 | 2.266667 |
| 0 | 621.3831 | 1 |
| 0 | 646.6169 | 0 |
| 0 | 0 | 5 |
| 0 | 0 | 1 |
| 0 | 0 | 10 |
| 0 | 0 | 12 |
| 0 | 0 | 1 |
| 0 | 0 | 12 |
| 0 | 0 | 2 |
| 0 | 0 | 67.95506 |
| 0 | 0 | 76.58427 |
| 0 | 0 | 94.92135 |
| 0 | 0 | 93.8427 |


| 0 | 0 | 73.34831 |
| :---: | :---: | :---: |
| 0 | 0 | 73.34831 |
| 0 | 0 | 64.31551 |
| 0 | 0 | 60.93048 |
| 0 | 0 | 85.75401 |
| 0 | 489.7778 | 1 |
| 0 | 329.3333 | 3 |
| 0 | 0 | 7 |
| 0 | 0 | 3 |
| 0 | 0 | 1 |
| 0 | 16.88889 | 33 |
| 0 | 736.4514 | 4.363636 |
| 0 | 672.5972 | 2.181818 |
| 0 | 655.5694 | 0 |
| 0 | 211.783 | 3.272727 |
| 0 | 175.599 | 2.181818 |
| 0 | 366.3743 | 0 |
| 0 | 256.3582 | 0 |
| 0 | 281.2675 | 2 |
| 0 | 0 | 29.55992 |
| 0 | 0 | 17.32823 |
| 0 | 0 | 28.54061 |
| 0 | 0 | 46.88815 |
| 0 | 0 | 44.84953 |
| 0 | 0 | 87.66045 |
| 0 | 0 | 30.57923 |
| 0 | 0 | 38.73369 |
| 0 | 0 | 22.42477 |
| 0 | 0 | 22.42477 |
| 0 | 0 | 47.90746 |
| 0 | 0 | 88.67976 |
| 0 | 0 | 63.19707 |
| 0 | 0 | 30.57923 |
| 0 | 0 | 42.81092 |
| 0 | 0 | 30.57923 |
| 0 | 0 | 104.9887 |
| 0 | 0 | 92.75699 |
| 0 | 0 | 83.58322 |
| 0 | 0 | 99.8156 |
| 0 | 1171 | 6 |
| 0 | 0 | 144.6296 |
| 0 | 0 | 84.60253 |
| 0 | 0 | 96.83422 |
| 0 | 0 | 87.66045 |
| 0 | 0 | 151.8768 |
| 0 | 0 | 141.5741 |
| 0 | 0 | 15.28961 |


| 0 | 0 | 80.5253 |
| :---: | :---: | :---: |
| 0 | 0 | 59.11984 |
| 0 | 407.1869 | 2.125 |
| 0 | 221.3206 | 4.25 |
| 0 | 408.2613 | 0 |
| 0 | 434.0462 | 0 |
| 0 | 145.0402 | 0 |
| 0 | 565.1196 | 3.1875 |
| 0 | 526.4422 | 4.25 |
| 0 | 499.5829 | 3.1875 |
| 0 | 0 | 11 |
| 0 | 0 | 9 |
| 0 | 0 | 25 |
| 0 | 0 | 24 |
| 0 | 0 | 19 |
| 0 | 0 | 6 |
| 0 | 0 | 10 |
| 0 | 0 | 6 |
| 0 | 771.1194 | 138.3025 |
| 0 | 1078.556 | 5.434783 |
| 0 | 725.236 | 5.434783 |
| 0 | 206.62 | 1.086957 |
| 0 | 381.2138 | 2.173913 |
| 0 | 265.5066 | 0 |
| 0 | 171.4946 | 3.26087 |
| 0 | 80.58178 | 2.173913 |
| 0 | 131.2037 | 0 |
| 0 | 245.8777 | 3.26087 |
| 0 | 178.8997 | 2.03386 |
| 0 | 385.5597 | 53.89729 |
| 0 | 371.1655 | 65.08352 |
| 0 | 786.5418 | 125.0824 |
| 0 | 1146.397 | 156.6072 |
| 0 | 388.4455 | 1.086957 |
| 0 | 601.2641 | 1.086957 |
| 0 | 778.3165 | 359.9932 |
| 0 | 0 | 96.29577 |
| 0 | 0 | 101.8944 |
| 0 | 0 | 142.2042 |
| 0 | 0 | 178.0352 |
| 0 | 0 | 122.0493 |
| 0 | 0 | 154.5211 |
| 0 | 0 | 86.35514 |
| 0 | 0 | 72.8972 |
| 0 | 0 | 80.74766 |
| 0 | 28.04343 | $0$ |
| 0 | 255.6267 | 4.571429 |

$\left.\begin{array}{rrr}0 & 92.75905 & 0 \\ 0 & 155.3175 & 1.142857 \\ 0 & 497.2316 & 9.142857 \\ 0 & 14.02172 & 1.142857 \\ 0 & 0 & 98.29727 \\ 0 & 0 & 68.6033 \\ 0 & 0 & 124.9194 \\ 0 & 0 & 56.31614 \\ 0 & 0 & 26.62218 \\ 0 & 0 & 123.8955 \\ 0 & 0 & 135.1587 \\ 0 & 0 & 64.50758 \\ 0 & 0 & 67.57937 \\ 0 & 0 & 95.22548 \\ 0 & 0 & 21.50253 \\ 0 & 0 & 108.5366 \\ 0 & 0 & 233.456 \\ 0 & 0 & 62.45972 \\ 0 & 0 & 204.786 \\ 0 & 0 & 105.4648 \\ 0 & 0 & 132.087 \\ 0 & 0 & 237.5517 \\ 0 & 0 & 101.3313 \\ 0 & 0 & 82.93832 \\ 0 & 0 & 86.01011 \\ 0 & 0 & 51.19649 \\ 0 & 0 & 80.89046 \\ 0 & 0 & 117.7519 \\ 0 & 0 & 151.5322 \\ 0 & 0 & 87.94791 \\ 0 & 0 & 26.54042 \\ 0 & 0 & 25.59825 \\ 0 & 0 & 2.04157 \\ 0 & 0 & 10.22986 \\ 0 & 0 & 0 \\ 0 & 0 & 0\end{array}\right)$

| 0 | 0 | 146.9931 |
| :--- | ---: | ---: |
| 0 | 0 | 216.9662 |
| 0 | 416.6801 | 4.290909 |
| 0 | 263.1125 | 1.072727 |
| 0 | 402.3471 | 3.218182 |
| 0 | 45.04649 | 0 |
| 0 | 373.6811 | 1.072727 |
| 0 | 319.4206 | 2.145455 |
| 0 | 88.04542 | 4.106952 |
| 0 | 88.04542 | 5.363636 |
| 0 | 267.2076 | 2.145455 |
| 0 | 212.9471 | 3.218182 |
| 0 | 358.3244 | 5.363636 |
| 0 | 41.97514 | 1.072727 |
| 0 | 233.4227 | 6.436364 |
| 0 | 0 | 14.37433 |
| 0 | 365.4909 | 0 |
| 0 | 240.5892 | 1.072727 |
| 0 | 91.11677 | 27.72193 |
| 0 | 0 | 2.053476 |
| 0 | 0 | 6.160428 |
| 0 | 0 | 7.187166 |
| 0 | 0 | 8.213904 |
| 0 | 0 | 2.053476 |
| 0 | 0 | 0 |


| 0 | 595.8422 | 0 |
| :--- | ---: | ---: |
| 0 | 491.4163 | 2.145455 |
| 0 | 336.0145 | 1 |
| 0 | 439 | 6 |
| 0 | 0 | 4.444444 |
| 0 | 0 | 11.11111 |
| 0 | 0 | 15.55556 |
| 0 | 0 | 15.55556 |
| 0 | 0 | 4.444444 |
| 0 | 0 | 5.555556 |
| 0 | 0 | 13.33333 |
| 0 | 1059.942 | 0 |
| 0 | 1089.153 | 2 |
| 0 | 1227.905 | 1 |
| 0 | 0 | 74.28183 |
| 0 | 0 | 6.105356 |
| 0 | 0 | 48.84284 |
| 0 | 0 | 33.57946 |
| 0 | 0 | 46.80773 |
| 0 | 0 | 6.105356 |
| 0 | 0 | 3.052678 |
| 0 | 0 | 4.070237 |
| 0 | 0 | 45.79017 |
| 0 | 0 | 48.84284 |
| 0 | 0 | 42.73749 |
| 0 | 0 | 29.50922 |
| 0 | 0 | 3.052678 |
| 0 | 0 | 76.31694 |
| 0 | 0 | 79.36962 |
| 0 | 0 | 45.79017 |
| 0 | 0 | 94.63301 |
| 0 | 0 | 7.122915 |
| 0 | 0 | 13.22827 |
| 0 | 0 | 9.158033 |
| 0 | 0 | 5 |
| 0 | 321.0086 | 5 |
| 0 | 0 | 100.2652 |
| 0 | 360.6268 | 3 |
| 0 | 0 | 70.21159 |
| 0 | 363.6744 | 5 |
| 0 | 364.6902 | 0 |
| 0 | 0 | 90.56277 |
| 0 | 0 | 103.791 |
| 0 | 0 | 176.0378 |
| 0 | 0 | 110.393 |
| 0 |  | 45.86667 |
| 0 |  | 46.90909 |
| 0 |  |  |
| 0 |  | 0 |


| 0 | 656.9001 | 50.03636 |
| ---: | ---: | ---: |
| 0 | 246.5999 | 29.18788 |
| 0 | 201.3159 | 0 |
| 0 | 398.5022 | 0 |
| 386.2627 | 22.71256 | 20.88364 |
| 291.7516 | 0 | 13.59091 |
| 346.1982 | 249.8382 | 18.81818 |
| 0 | 439.7978 | 1.02 |
| 0 | 327.2674 | 0 |
| 0 | 258.0973 | 2.04 |
| 0 | 341.7208 | 2.04 |
| 0 | 458.3808 | 2.04 |
| 0 | 225.0608 | 3.06 |
| 0 | 0 | 1.02 |
| 43.14636 | 195.1216 | 0 |
| 61.63766 | 0 | 3.136364 |
| 176.6946 | 0 | 8.363636 |
| 154.0941 | 0 | 2.090909 |
| 86.29272 | 0 | 3.136364 |
| 0 | 85.6883 | 2.04 |
| 0 | 0 | 118.7248 |
| 0 | 0 | 140.4049 |


| 77.04707 | 0 | 2.090909 |
| ---: | ---: | ---: |
| 47.25554 | 0 | 1.045455 |
| 85.26543 | 10.32389 | 2.090909 |
| 0 | 0 | 31.12782 |
| 0 | 0 | 2.075188 |
| 0 | 0 | 6.225564 |
| 0 | 0 | 8.300752 |
| 0 | 0 | 17.6391 |
| 0 | 0 | 25.93985 |
| 0 | 0 | 23.86466 |
| 0 | 0 | 63.29323 |
| 36.98259 | 0 | 23.88038 |
| 0 | 0 | 3.112782 |
| 0 | 0 | 5.18797 |
| 0 | 0 | 10.37594 |
| 0 | 0 | 1.037594 |
| 0 | 0 | 15.56391 |
| 0 | 0 | 2.075188 |
| 0 | 0 | 4.150376 |
| 0 | 114.5952 | 0 |
| 0 | 75.36441 | 1.02 |
| 0 | 106.3361 | 3.06 |
| 0 | 92.91503 | 7.14 |
| 0 | 65.04052 | 3.06 |
| 0 | 0 | 4.095238 |
| 0 | 0 | 7.166667 |
| 0 | 0 | 9.214286 |
| 0 | 0 | 7.166667 |
| 0 | 0 | 5.119048 |
| 0 | 0 | 7.166667 |
| 0 | 0 | 3.071429 |
| 0 | 0 | 1.02381 |
| 0 | 0 | 3.071429 |
| 0 | 0 | 8.190476 |
| 0 | 0 | 202.4508 |
| 0 | 299.4585 | 0 |
| 0 |  | 0 |
| 0 | 0 | 11.023888 |
| 0 | 0 | 7.166667 |
| 0 | 0 | 7.166667 |
| 0 | 0 | 9.214286 |
| 0 | 0 | 8.190476 |
| 0 | 0 | 10.2381 |
| 0 | 0 | 10.2381 |
| 0 | 0 | 14.33333 |
| 0 | 0 | 1.02381 |
| 0 | 0 | 1.5 |
| 0 | 0 | 0 |


| 0 | 451.2967 | 0 |
| :---: | :---: | :---: |
| 0 | 459.7321 | 0 |
| 0 | 216.1584 | 0 |
| 0 | 354.289 | 0 |
| 0 | 129.6951 | 0 |
| 0 | 572.5563 | 4.5 |
| 0 | 554.6309 | 0 |
| 0 | 671.5788 | 7.233333 |
| 0 | 815.1143 | 6.2 |
| 0 | 730.2502 | 9.3 |
| 0 | 727.1071 | 3.1 |
| 0 | 547.9496 | 5.166667 |
| 0 | 0 | 42.79739 |
| 0 | 1314.663 | 1 |
| 0 | 416.1374 | 42.49052 |
| 0 | 771.1998 | 1 |
| 0 | 0 | 116.91 |
| 0 | 0 | 85.59479 |
| 0 | 0 | 77.24408 |
| 0 | 47.75113 | 16.70142 |
| 0 | 0 | 33.40284 |
| 0 | 0 | 98.12085 |
| 0 | 0 | 51.1481 |
| 0 | 376.8187 | 2.166667 |
| 0 | 584.4323 | 1.083333 |
| 0 | 0 | 0 |
| 0 | 0 | 9.39455 |
| 0 | 166.0909 | 0 |
| 0 | 898.9669 | 1.083333 |
| 0 | 807.6169 | 2.166667 |
| 0 | 856.4061 | 44.0782 |
| 0 | 544.9857 | 0 |
| 0 | 0 | 19.83294 |
| 0 | 79.93124 | 18.7891 |
| 0 | 0 | 67.84953 |
| 0 | 0 | 4.175355 |
| 0 | 0 | 141.9621 |
| 0 | 0 | 100 |
| 0 | 0 | 24.00829 |
| 0 | 1208.005 | 2.065934 |
| 0 | 653.1468 | 6.197802 |
| 0 | 506.2416 | 1.032967 |
| 0 | 878.2605 | 1.032967 |
| 0 | 448.1137 | 3.098901 |
| 0 | 968.0946 | 1.032967 |
| 0 | 683.2887 | 0 |
| 0 | 666.8861 | 5.164835 |


| 0 | 935.3316 | 2.065934 |
| ---: | ---: | ---: |
| 0 | 1274.587 | 0 |
| 0 | 1014.597 | 2.065934 |
| 0 | 517.8672 | 2.065934 |
| 0 | 896.0304 | 7.397727 |
| 0 | 732.5442 | 5.284091 |
| 0 | 490.4588 | 0 |
| 0 | 836.2951 | 3.170455 |
| 0 | 629.8413 | 2.113636 |
| 0 | 991.3974 | 1.056818 |
| 0 | 483.1228 | 3.170455 |
| 0 | 626.6973 | 0 |
| 0 | 266.1892 | 2.113636 |
| 0 | 714.7284 | 1.056818 |
| 0 | 781.7997 | 1.056818 |
| 0 | 511.4185 | 1.056818 |
| 0 | 1060.565 | 2.113636 |
| 0 | 811.1433 | 0 |
| 0 | 940.046 | 2.113636 |
| 0 | 645.5611 | 3.170455 |
| 0 | 449.1705 | 3.098901 |
| 0 | 795.8245 | 2.065934 |
| 0 | 1080.123 | 1.032967 |
| 0 | 586.8172 | 0 |
| 0 | 681.6824 | 3.098901 |
| 0 | 343.174 | 0 |
| 0 | 1056.872 | 2.065934 |
| 0 | 636.1292 | 2.113636 |
| 0 | 469 | 0 |
| 0 | 1230.339 | 2.113636 |
| 0 | 774.4637 | 3.170455 |
| 0 | 483.1228 | 1.056818 |
| 0 | 428.6274 | 2.113636 |
| 0 | 661.2809 | 6.340909 |
| 0 | 371.1671 | 6.136364 |
| 0 | 798.5675 | 3.170455 |
| 0 | 347.7108 | 5.164835 |
| 0 | 364.6208 | 3.098901 |
| 0 | 1142.308 | 3.170455 |
| 0 | 915.251 | 4.131868 |
| 0 | 995.5733 | 4.131868 |
| 0 | 223 | 3.098901 |
| 0 | 713.6804 | 0 |
| 0 | 966.2457 | 2.113636 |
| 0 | 686.4327 | 3.170455 |
| 0 | 442.7048 | 4.090909 |
| 0 | 375.1895 | 4.131868 |

$\left.\begin{array}{lrr}0 & 402.4277 & 1.056818 \\ 0 & 517.7065 & 1.056818 \\ 0 & 601.3321 & 9.204545 \\ 0 & 479.9789 & 1.056818 \\ 0 & 1038.905 & 0 \\ 0 & 129.9506 & 2.113636 \\ 0 & 775.7439 & 2.065934 \\ 0 & 898.3411 & 2.065934 \\ 0 & 589.9275 & 3.068182 \\ 0 & 616.2174 & 3.170455 \\ 0 & 752.4928 & 5.164835 \\ 0 & 235.6824 & 2.065934 \\ 0 & 813.2393 & 2.113636 \\ 0 & 352.1242 & 1.056818 \\ 0 & 602.417 & 0 \\ 0 & 313.1074 & 4.090909 \\ 0 & 835.9856 & 2.065934 \\ 0 & 299.0947 & 3.098901 \\ 0 & 360.3933 & 0 \\ 0 & 1033.621 & 2.065934 \\ 0 & 259.9012 & 1.056818 \\ 0 & 519.981 & 4.131868 \\ 0 & 506.9852 & 7.159091 \\ 0 & 310.2047 & 2.113636 \\ 0 & 300.1516 & 1.032967 \\ 0 & 530.5497 & 1.032967 \\ 0 & 611.9288 & 3.098901 \\ 0 & 792.6539 & 1.032967 \\ 0 & 494.6507 & 1.056818 \\ 0 & 932.161 & 0 \\ 0 & 844.679 & 1.056818 \\ 0 & 639.693 & 2.045455 \\ 0 & 601.3321 & 5.113636 \\ 0 & 747.216 & 3.170455 \\ 0 & 544.9542 & 0 \\ 0 & 466.355 & 5.284091 \\ 0 & 714.7284 & 1.056818 \\ 0 & 160.3423 & 3.170455 \\ 0 & 373.0758 & 076.9381\end{array}\right)$

| 0 | 587.7024 | 2 |
| :--- | ---: | ---: |
| 0 | 1196.944 | 2 |
| 0 | 0 | 114.9259 |
| 0 | 0 | 88.07407 |
| 0 | 771.0721 | 2 |
| 0 | 580.1399 | 0 |
| 0 | 386.0606 | 3 |
| 0 | 450.0543 | 2 |
| 0 | 240.2388 | 1 |
| 0 | 586.4344 | 1 |

LocalityCoc LocalityNar PrecinctNa GE20PRSD GE20PRSL GE20PRSR GE20PRSW GE20SLLD GE20SLLR GE20SLLW

| 1 ACCOMACI 101 - CHINI | 837.5299 |
| :---: | :---: |
| 1 ACCOMACI 201 - ATLA | 321.8456 |
| 1 ACCOMACI 202 - GREE | 515.6844 |
| 1 ACCOMACI 301 - NEW | 1013.082 |
| 1 ACCOMACI 401 - BLOX | 307.2162 |
| 1 ACCOMACI 402 - PARK | 387.6776 |
| 1 ACCOMACI 403 - SAXIS | 124.3494 |
| 1 ACCOMACI 501 - MAPF | 482.7683 |
| 1 ACCOMACI 502 - RUE | 362.0763 |
| 1 ACCOMACI 601 - ACCC | 413.279 |
| 1 ACCOMACI 602 - TANE | 80.46139 |
| 1 ACCOMACI 701 - NANL | 471.7963 |
| 1 ACCOMACI801-BOBT | 263.3282 |
| 1 ACCOMACI 802 - MELF | 504.7124 |
| 1 ACCOMACI 803 - WACI | 219.4402 |
| 1 ACCOMACI901-PAIN ${ }^{-}$ | 1272.753 |

3 ALBEMARL 101 -WOO 1778.349
3 ALBEMARL 103 - BRAN 745.4449
3 ALBEMARL 104 -AGNC 1797.838
3 ALBEMARL 105 - DUNL 1676.033
3 ALBEMARL 106 - NORT 2221.718
3 ALBEMARL 201-JACK 1422.679
3 ALBEMARL 202 - UNIV 1739.372
3 ALBEMARL 203-GEOR 2367.884
3 ALBEMARL 301 - IVY 2333.779
3 ALBEMARL 302 -RED +2002.47
3 ALBEMARL 304 -EAST 609.0236
3 ALBEMARL 305-COUN 1120.603
3 ALBEMARL 306 - PORT 1637.056
3 ALBEMARL 307 - YELLC 604.1514
3 ALBEMARL 401 - SCOT 891.6106
3 ALBEMARL 402 - MON 648.0011
3 ALBEMARL 405 - MOU 1403.19
3 ALBEMARL 406 - STON 1091.37
3 ALBEMARL 407 - BISCL 1047.521
3 ALBEMARL 501-KESW 1193.686
3 ALBEMARL 502-STON 1023.16
3 ALBEMARL 503 -HOLL 2075.553
3 ALBEMARL 504 - FREE 1120.603
3 ALBEMARL 506 - BAKE 1622.439
3 ALBEMARL 507 - PANT 735.7006
3 ALBEMARL 601-CROZ 1505.506
3 ALBEMARL 602 - FREE 1101.115
3 ALBEMARL 603 -EARL' 1812.454
3 ALBEMARL 604 - BROV 1369.085
3 ALBEMARL 606-MECF 1768.605
29.27869
10.78689
18.4918
1617.701
656.4363
1091.042
00
18.4918
13.86885
7.704918
10.78689
0
666.9997
-
6.163934
4.622951
461.769

2
0
0
0
0
$\begin{array}{llll}2 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0\end{array}$
15.409845

0
0
0
6.163934
20.03279
3.081967
10.78689
585.511

0
0

| 5 ALLEGHAN 101 - ARRI1 | 153.5992 | 0 | 720.249 | 3 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 103 - DAM | 60.98792 | 2.738462 | 281.721 | 1.5 | 0 | 0 | 0 |
| 5 ALLEGHAN 201 - HUM | 101.6465 | 4.107692 | 380.0576 | 3 | 0 | 0 | 0 |
| 5 ALLEGHAN 202 - DOLL | 149.0816 | 9.584615 | 450.4879 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 301 - CALL | 63.24673 | 4.107692 | 462.4477 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 302 - GRIFF | 214.5871 | 4.107692 | 583.3751 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 401 - LOW | 117.4582 | 5.476923 | 401.3196 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 402 -JACK | 142.3051 | 5.476923 | 453.1456 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 501 -IRON | 140.0463 | 4.107692 | 217.9351 | 1.5 | 0 | 0 | 0 |
| 5 ALLEGHAN 502 - PETEI | 280.0926 | 8.215385 | 774.7328 | 1.5 | 0 | 0 | 0 |
| 5 ALLEGHAN 601 - DISTF | 444.9859 | 16.43077 | 685.6983 | 0 | 0 | 0 | 0 |
| 5 ALLEGHAN 701 - DISTF | 374.9627 | 24.64615 | 447.8301 | 1.5 | 0 | 0 | 0 |
| 7 AMELIA CC 101 - NUM | 408.4012 | 17.14286 | 1098.179 | 0 | 0 | 0 | 0 |
| 7 AMELIA CC 201 - NUM | 483.633 | 22.85714 | 1076.836 | 0 | 0 | 0 | 0 |
| 7 AMELIA CC301-NUM | 440.6434 | 15.2381 | 1090.418 | 4.333333 | 0 | 0 | 0 |
| 7 AMELIA CC 401 - NUM | 322.422 | 9.52381 | 882.8114 | 0 | 0 | 0 | 0 |
| 7 AMELIA CC 501 - NUM | 755.9004 | 15.2381 | 1241.757 | 8.666667 | 0 | 0 | 0 |
| 9 AMHERST ( 101 - WRIG | 808.8935 | 15.30488 | 610.2049 | 0 | 0 | 0 | 0 |
| 9 AMHERST ( 102 - NEW | 399.5739 | 12.2439 | 977.6763 | 0 | 0 | 0 | 0 |
| 9 AMHERST (103-COOL | 237.1455 | 26.01829 | 637.1753 | 6.833333 | 0 | 0 | 0 |
| 9 AMHERST ( 201 - COUF | 691.945 | 30.60976 | 1087.244 | 5.125 | 0 | 0 | 0 |
| 9 AMHERST ( 202 -TEMF | 279.3769 | 4.591463 | 868.1092 | 1.708333 | 0 | 0 | 0 |
| 9 AMHERST ( 301 - MON | 289.1226 | 12.2439 | 718.0864 | 3.416667 | 0 | 0 | 0 |
| 9 AMHERST ( 302 -ELON | 678.9507 | 24.4878 | 1808.701 | 3.416667 | 0 | 0 | 0 |
| 9 AMHERST ( 303 -PLEA! | 220.9026 | 7.652439 | 514.1229 | 1.708333 | 0 | 0 | 0 |
| 9 AMHERST ( 401 - AMEI | 818.6392 | 44.38415 | 1673.849 | 8.541667 | 0 | 0 | 0 |
| 9 AMHERST ( 402 -LONC | 220.9026 | 12.2439 | 495.5808 | 0 | 0 | 0 | 0 |
| 9 AMHERST ( 501 - MADI | 1026.548 | 61.21951 | 1650.25 | 10.25 | 0 | 0 | 0 |
| 11 APPOMAT 101 - VERA | 136.5459 | 5.028169 | 610.4254 | 7.631579 | 0 | 0 | 0 |
| 11 APPOMAT1 102 - PAMF | 347.0541 | 11.73239 | 925.6005 | 4.578947 | 0 | 0 | 0 |
| 11 APPOMAT1201-CHAP | 264.5576 | 3.352113 | 309.7411 | 1.526316 | 0 | 0 | 0 |
| 11 APPOMAT $202-$ SPOU | 256.0235 | 16.76056 | 1121.226 | 1.526316 | 0 | 0 | 0 |
| 11 APPOMAT1301-US 41 | 167.8376 | 11.73239 | 686.5022 | 3.052632 | 0 | 0 | 0 |
| 11 APPOMAT1302-STON | 213.3529 | 5.028169 | 911.1097 | 3.052632 | 0 | 0 | 0 |
| 11 APPOMAT1401-COUF | 401.1035 | 45.25352 | 849.5238 | 1.526316 | 0 | 0 | 0 |
| 11 APPOMAT1501-OAKV | 409.6376 | 8.380282 | 889.3735 | 6.105263 | 0 | 0 | 0 |
| 11 APPOMAT1502-AGEE | 221.8871 | 11.73239 | 398.4973 | 0 | 0 | 0 | 0 |
| 13 ARLINGTOIOO1-ARLIN | 2995.793 | 24.96073 | 486.3422 | 0 | 0 | 0 | 0 |
| 13 ARLINGTOIOO2-ASHT | 2134.1 | 47.14804 | 408.4199 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 003 -AURC | 692.5758 | 41.60121 | 185.4012 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOIO04-BALLS | 2593.133 | 41.60121 | 526.6468 | 33.70617 | 0 | 0 | 0 |
| 13 ARLINGTOI 005 -BARC | 2399.856 | 27.73414 | 443.3506 | 39.83457 | 0 | 0 | 0 |
| 13 ARLINGTOI 006 - CRYS | 1352.939 | 19.4139 | 354.6805 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI 007 -CHER | 2166.313 | 30.50755 | 548.1425 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOIOO8-HUM | 2641.452 | 38.82779 | 513.2119 | 30.64198 | 0 | 0 | 0 |
| 13 ARLINGTOIO09-COLU | 2029.408 | 33.28097 | 411.1069 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 010 - WILSI | 2271.004 | 27.73414 | 542.7686 | 33.70617 | 0 | 0 | 0 |


| 13 ARLINGTOI 011 - EAST | 1256.3 | 16.64048 | 427.2288 | 21.44938 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 ARLINGTOI 012 - FAIRL | 2214.632 | 63.78852 | 521.2728 | 24.51358 | 0 | 0 | 0 |
| 13 ARLINGTOI013-GLEN | 1989.142 | 22.18731 | 480.9682 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOI 014 - CLAR | 1530.109 | 36.05438 | 333.1847 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOIO15-LYON | 1699.227 | 27.73414 | 298.254 | 6.128395 | 0 | 0 | 0 |
| 13 ARLINGTOIO16-LYON | 2005.249 | 27.73414 | 394.9851 | 49.02716 | 0 | 0 | 0 |
| 13 ARLINGTOI017-OVER | 1715.333 | 22.18731 | 513.2119 | 55.15556 | 0 | 0 | 0 |
| 13 ARLINGTOI 018 - PARK | 1852.238 | 49.92145 | 510.5249 | 33.70617 | 0 | 0 | 0 |
| 13 ARLINGTOIO19-ROSS | 1876.397 | 44.37462 | 462.1594 | 24.51358 | 0 | 0 | 0 |
| 13 ARLINGTOIO20-THRIF | 1191.875 | 38.82779 | 384.2372 | 24.51358 | 0 | 0 | 0 |
| 13 ARLINGTOI 021 - VIRGI | 628.1501 | 11.09366 | 166.5923 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOIO22-ABINI | 2327.377 | 52.69486 | 515.8989 | 36.77037 | 0 | 0 | 0 |
| 13 ARLINGTOI 023 - WEST | 2440.122 | 27.73414 | 515.8989 | 27.57778 | 0 | 0 | 0 |
| 13 ARLINGTOIO24-WOO | 2045.515 | 36.05438 | 462.1594 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOIO25-ARLIN | 2271.004 | 30.50755 | 408.4199 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 026 - FILLN | 2633.399 | 52.69486 | 491.7161 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI 027 - JEFFE | 2190.472 | 36.05438 | 424.5418 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI 028 - WAKI | 3245.442 | 61.01511 | 518.5858 | 27.57778 | 0 | 0 | 0 |
| 13 ARLINGTOIO29-DOM | 1876.397 | 52.69486 | 397.672 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOI030-GLEB | 3253.496 | 27.73414 | 365.4284 | 6.128395 | 0 | 0 | 0 |
| 13 ARLINGTOIO31-LEXIN | 2061.621 | 30.50755 | 413.7939 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOIO32-OAKR | 821.4271 | 19.4139 | 257.9494 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOI 033 -ROCK | 1481.79 | 41.60121 | 556.2035 | 27.57778 | 0 | 0 | 0 |
| 13 ARLINGTOI 034 - YORK | 1224.087 | 27.73414 | 462.1594 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 035 - MADI | 918.0656 | 24.96073 | 472.9073 | 30.64198 | 0 | 0 | 0 |
| 13 ARLINGTOI036-MARS | 1940.823 | 58.24169 | 451.4115 | 30.64198 | 0 | 0 | 0 |
| 13 ARLINGTOI037-NOTT | 1441.524 | 44.37462 | 478.2812 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 038 - ARLIN | 2689.771 | 33.28097 | 351.9935 | 24.51358 | 0 | 0 | 0 |
| 13 ARLINGTOI 039 - ASHL. | 1296.566 | 22.18731 | 351.9935 | 12.25679 | 0 | 0 | 0 |
| 13 ARLINGTOI 040 - VIRGI | 2424.015 | 58.24169 | 588.4471 | 33.70617 | 0 | 0 | 0 |
| 13 ARLINGTOIO41-NAVY | 1063.023 | 30.50755 | 298.254 | 30.64198 | 0 | 0 | 0 |
| 13 ARLINGTOI 042 - SHIRL | 2101.887 | 33.28097 | 338.5586 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI 043 - CAMI | 3648.103 | 2.773414 | 389.6111 | 6.128395 | 0 | 0 | 0 |
| 13 ARLINGTOI 044 - DAW: | 1667.014 | 33.28097 | 341.2456 | 30.64198 | 0 | 0 | 0 |
| 13 ARLINGTOI 045 - BUCK | 2327.377 | 24.96073 | 381.5502 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOI 046 - CENT | 2399.856 | 55.46828 | 521.2728 | 24.51358 | 0 | 0 | 0 |
| 13 ARLINGTOI 047 - FOUR | 2190.472 | 16.64048 | 298.254 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI 048 - AUSA | 901.9592 | 30.50755 | 271.3843 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOIO49-MON | 1844.184 | 36.05438 | 295.5671 | 21.44938 | 0 | 0 | 0 |
| 13 ARLINGTOI 050 - CRYS ${ }^{-}$ | 2109.94 | 27.73414 | 491.7161 | 15.32099 | 0 | 0 | 0 |
| 13 ARLINGTOI051-TAYL( | 958.3316 | 11.09366 | 196.149 | 12.25679 | 0 | 0 | 0 |
| 13 ARLINGTOI052-GUNS | 2174.366 | 41.60121 | 351.9935 | 18.38519 | 0 | 0 | 0 |
| 13 ARLINGTOI053-MET I | 2963.58 | 36.05438 | 548.1425 | 49.02716 | 0 | 0 | 0 |
| 13 ARLINGTOI 054 -GARF | 1175.768 | 24.96073 | 196.149 | 6.128395 | 0 | 0 | 0 |
| 15 AUGUSTA (101-JOLIV | 361.2092 | 10.54335 | 721.9288 | 5.704918 | 0 | 0 | 0 |
| 15 AUGUSTA (102-STUA | 629.3233 | 24.60116 | 1082.028 | 5.704918 | 0 | 0 | 0 |
| 15 AUGUSTA (103-VERO | 368.6568 | 33.38728 | 957.3779 | 5.704918 | 0 | 0 | 0 |


| 15 AUGUSTA ( 201 - CRIM | 554.8471 | 22.84393 | 1810.881 | 1.901639 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA ( 202 - NEW | 398.4473 | 14.0578 | 1222.258 | 3.803279 | 0 | 0 | 0 |
| 15 AUGUSTA ( 203 - WEYE | 774.5517 | 36.90173 | 1620.444 | 7.606557 | 0 | 0 | 0 |
| 15 AUGUSTA ( 301 - FORT | 603.2566 | 40.41618 | 1686.232 | 9.508197 | 0 | 0 | 0 |
| 15 AUGUSTA ( 302 - NORT | 249.495 | 12.30058 | 801.566 | 7.606557 | 0 | 0 | 0 |
| 15 AUGUSTA (303-MOU | 256.9426 | 22.84393 | 1395.383 | 3.803279 | 0 | 0 | 0 |
| 15 AUGUSTA ( 304 - CHUF | 215.9808 | 14.0578 | 926.2155 | 1.901639 | 0 | 0 | 0 |
| 15 AUGUSTA ( 401 - BUFF, | 271.8379 | 21.08671 | 1083.759 | 1.901639 | 0 | 0 | 0 |
| 15 AUGUSTA ( 402 - CHUR | 249.495 | 17.57225 | 1004.122 | 3.803279 | 0 | 0 | 0 |
| 15 AUGUSTA (403-CRAIC | 312.7997 | 12.30058 | 1068.178 | 1.901639 | 0 | 0 | 0 |
| 15 AUGUSTA (404-DEER | 175.0189 | 1.757225 | 476.0921 | 0 | 0 | 0 | 0 |
| 15 AUGUSTA ( 405 - CEDA | 335.1426 | 22.84393 | 882.9344 | 5.704918 | 0 | 0 | 0 |
| 15 AUGUSTA ( 501 - GREE | 409.6187 | 29.87283 | 1594.476 | 7.606557 | 0 | 0 | 0 |
| 15 AUGUSTA ( 502 - MIDC | 275.5617 | 15.81503 | 962.5717 | 0 | 0 | 0 | 0 |
| 15 AUGUSTA ( 503 - SPOT | 361.2092 | 21.08671 | 1109.727 | 3.803279 | 0 | 0 | 0 |
| 15 AUGUSTA ( 504 - WHIT | 484.0948 | 42.17341 | 1587.551 | 1.901639 | 0 | 0 | 0 |
| 15 AUGUSTA (601-SHER. | 431.9615 | 22.84393 | 1412.695 | 1.901639 | 0 | 0 | 0 |
| 15 AUGUSTA ( 602 - RIDGI | 685.1804 | 38.65896 | 1971.887 | 13.31148 | 0 | 0 | 0 |
| 15 AUGUSTA (603-LYND | 588.3614 | 24.60116 | 1402.308 | 7.606557 | 0 | 0 | 0 |
| 15 AUGUSTA (801-DOOI | 417.0663 | 24.60116 | 1230.914 | 3.803279 | 0 | 0 | 0 |
| 15 AUGUSTA ( 802 - FISHE | 629.3233 | 42.17341 | 1497.526 | 7.606557 | 0 | 0 | 0 |
| 15 AUGUSTA ( 803 - WILSI | 800.6183 | 38.65896 | 1204.946 | 1.901639 | 0 | 0 | 0 |
| 17 BATH COUI 101 - WARI | 100.9375 | 1.333333 | 276.8302 | 1.666667 | 0 | 0 | 0 |
| 17 BATH COUI 102 - MOU | 22.43056 | 0 | 73.05241 | 0 | 0 | 0 | 0 |
| 17 BATH COUI201-HOT! | 143.5556 | 2.666667 | 220.4389 | 0 | 0 | 0 | 0 |
| 17 BATH COUI 301 - FAIR | 58.31944 | 2.666667 | 347.3194 | 1.666667 | 0 | 0 | 0 |
| 17 BATH COUI 302 - BUR^ | 11.21528 | 1.333333 | 112.7827 | 0 | 0 | 0 | 0 |
| 17 BATH COUI 401 - MILLE | 157.0139 | 4 | 449.8491 | 0 | 0 | 0 | 0 |
| 17 BATH COUI501-HEAL | 152.5278 | 4 | 353.7275 | 1.666667 | 0 | 0 | 0 |
| 19 BEDFORD ( 101 -GOOI | 525.5997 | 35.75758 | 1857.525 | 8.387097 | 0 | 0 | 0 |
| 19 BEDFORD ( 102 - HARC | 414.7589 | 14.30303 | 918.3466 | 0 | 0 | 0 | 0 |
| 19 BEDFORD (103-CHAN | 343.2488 | 28.60606 | 1383.596 | 2.096774 | 0 | 0 | 0 |
| 19 BEDFORD ( 104 - STEW | 432.6365 | 23.24242 | 1208.259 | 2.096774 | 0 | 0 | 0 |
| 19 BEDFORD ( 201 - BEDF | 200.2284 | 19.66667 | 550.3136 | 2.096774 | 0 | 0 | 0 |
| 19 BEDFORD ( 202 - STAU | 307.4937 | 17.87879 | 954.8027 | 0 | 0 | 0 | 0 |
| 19 BEDFORD ( 203 - MON | 496.9956 | 26.81818 | 1536.364 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 204 - Quak | 228.8325 | 3.575758 | 619.7538 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 205 -SAUN | 446.9385 | 12.51515 | 1350.612 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 301 - NEW | 367.7607 | 32.67692 | 1324.511 | 7.164179 | 0 | 0 | 0 |
| 19 BEDFORD ( 302 - BEDF | 210.955 | 10.72727 | 756.8981 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 303 - BETH | 210.955 | 8.939394 | 848.9064 | 0 | 0 | 0 | 0 |
| 19 BEDFORD ( 304 - RIVEF | 204.3115 | 27.23077 | 698.7999 | 10.74627 | 0 | 0 | 0 |
| 19 BEDFORD ( 305 -HUD[ | 218.106 | 7.151515 | 739.5381 | 0 | 0 | 0 | 0 |
| 19 BEDFORD ( 306 -FORE | 178.3082 | 12.70769 | 834.2815 | 1.791045 | 0 | 0 | 0 |
| 19 BEDFORD ( 401 - FORE | 557.2131 | 38.12308 | 1566.952 | 7.164179 | 0 | 0 | 0 |
| 19 BEDFORD ( 402 - THON | 416.0525 | 38.12308 | 841.4121 | 14.32836 | 0 | 0 | 0 |
| 19 BEDFORD ( 403 -KNIG\| | 761.5246 | 45.38462 | 1843.263 | 17.91045 | 0 | 0 | 0 |


| 19 BEDFORD ( 404 - FORE | 404.9082 | 14.52308 | 1445.731 | 10.74627 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD ( 502 - BIG IS | 178.3082 | 10.89231 | 588.2754 | 1.791045 | 0 | 0 | 0 |
| 19 BEDFORD (503-SEDA | 170.8787 | 12.70769 | 716.6264 | 1.791045 | 0 | 0 | 0 |
| 19 BEDFORD (504-SUCK | 200.5967 | 16.33846 | 932.3274 | 8.955224 | 0 | 0 | 0 |
| 19 BEDFORD ( $505-\mathrm{BOO}$ | 910.1148 | 41.75385 | 1463.558 | 12.53731 | 0 | 0 | 0 |
| 19 BEDFORD (506-BOON | 854.3934 | 56.27692 | 2272.882 | 17.91045 | 0 | 0 | 0 |
| 19 BEDFORD (601-MON | 460.6295 | 7.261538 | 1317.38 | 7.164179 | 0 | 0 | 0 |
| 19 BEDFORD (602-SHAD | 361.1263 | 26.81818 | 1543.308 | 2.096774 | 0 | 0 | 0 |
| 19 BEDFORD (603-THAX | 60.78364 | 7.151515 | 355.881 | 0 | 0 | 0 | 0 |
| 19 BEDFORD ( 604 - BEDF | 522.0242 | 35.75758 | 1166.595 | 0 | 0 | 0 | 0 |
| 19 BEDFORD ( 701 -GOOI | 389.7304 | 21.45455 | 1553.724 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 702 -LIBER | 200.2284 | 3.575758 | 708.29 | 6.290323 | 0 | 0 | 0 |
| 19 BEDFORD ( 703 -THAX | 182.3509 | 7.151515 | 683.9859 | 4.193548 | 0 | 0 | 0 |
| 19 BEDFORD ( 704 - BEDF | 758.0077 | 42.90909 | 1017.299 | 6.290323 | 0 | 0 | 0 |
| 21 BLAND COI 101 - BAST | 73.21101 | 5.454545 | 349.8681 | 1.333333 | 0 | 0 | 0 |
| 21 BLAND COI 102 - CERE! | 82.97248 | 9.090909 | 407.174 | 0 | 0 | 0 | 0 |
| 21 BLAND COI 201 - DAVI! | 36.6055 | 0 | 144.773 | 0 | 0 | 0 | 0 |
| 21 BLAND COI 202 - SEDD | 100.055 | 14.54545 | 576.0758 | 0 | 0 | 0 | 0 |
| 21 BLAND COI 301 - HOLL | 61.00917 | 7.272727 | 459.9558 | 2.666667 | 0 | 0 | 0 |
| 21 BLAND COI 302 - MECF | 43.92661 | 0 | 215.6514 | 0 | 0 | 0 | 0 |
| 21 BLAND COI 401 -ROCK | 134.2202 | 3.636364 | 749.5018 | 0 | 0 | 0 | 0 |
| 23 BOTETOUR 101 - DALE | 716.9072 | 33 | 1336.381 | 6.923077 | 0 | 0 | 0 |
| 23 BOTETOUR 102-GREE | 481.8557 | 27.5 | 1616.312 | 18.46154 | 0 | 0 | 0 |
| 23 BOTETOUR 201 - BLUE | 677.732 | 40.33333 | 1765.864 | 2.307692 | 0 | 0 | 0 |
| 23 BOTETOUR 202 -RAINI | 724.7423 | 27.5 | 1648.907 | 0 | 0 | 0 | 0 |
| 23 BOTETOUR 301 - BUCH | 673.8144 | 25.66667 | 1721.765 | 6.923077 | 0 | 0 | 0 |
| 23 BOTETOUR 302 -MILL | 618.9691 | 29.33333 | 1522.363 | 2.307692 | 0 | 0 | 0 |
| 23 BOTETOUR 403 - EAGL | 383.9175 | 16.5 | 1328.712 | 0 | 0 | 0 | 0 |
| 23 BOTETOUR 406-FINC/ | 411.3402 | 27.5 | 1664.245 | 6.923077 | 0 | 0 | 0 |
| 23 BOTETOUR 501 -TROU | 352.5773 | 11 | 1023.856 | 9.230769 | 0 | 0 | 0 |
| 23 BOTETOUR $502-\mathrm{CLOV}$ | 658.1443 | 25.66667 | 1470.595 | 6.923077 | 0 | 0 | 0 |
| 25 BRUNSWIC 101-BROL | 284.337 | 0 | 244.8516 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 102-ROCK | 276.5112 | 1.545455 | 415.4034 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 103-TILLN | 344.3347 | 3.090909 | 520.0986 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 201 - DRON | 169.5587 | 4.636364 | 128.336 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 202 -EDGE | 479.9817 | 3.090909 | 145.2223 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 203 -FITZH | 495.6332 | 3.090909 | 211.079 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 301 -ALBEI | 133.0384 | 3.090909 | 97.94064 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC $302-$ DANI | 331.2917 | 3.090909 | 454.242 | 2.5 | 0 | 0 | 0 |
| 25 BRUNSWIC 303 -ELMC | 195.6447 | 0 | 202.6358 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 304 -SEYM | 242.5994 | 3.090909 | 236.4085 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC 401-STUR | 623.4544 | 4.636364 | 403.583 | 2.5 | 0 | 0 | 0 |
| 25 BRUNSWIC 402 - KING | 302.5971 | 1.545455 | 116.5156 | 0 | 0 | 0 | 0 |
| 25 BRUNSWIC501-TOTA | 673.0178 | 3.090909 | 180.6836 | 0 | 0 | 0 | 0 |
| 27 BUCHANA 102 - BLAC | 62.31166 | 1.294118 | 479.4006 | 0 | 0 | 0 | 0 |
| 27 BUCHANA 103 -HURL | 109.0454 | 1.294118 | 1022.721 | 1.875 | 0 | 0 | 0 |
| 27 BUCHANA「 201 -GRAS | 52.57546 | 1.294118 | 132.0089 | 1.875 | 0 | 0 |  |


| 27 BUCHANA「 202 －BULL | 72.04785 | 1.294118 | 509.9711 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANA「 203 －ROCK | 91.52025 | 5.176471 | 604.4616 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「 301 －SLATE | 99.3092 | 1.294118 | 666.9921 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「 302 －NORT | 68.15337 | 5.176471 | 498.8545 | 1.875 | 0 | 0 | 0 |
| 27 BUCHANA「 403 －SOUT | 110.9926 | 11.64706 | 653.0965 | 3.75 | 0 | 0 | 0 |
| 27 BUCHANA「 404－OAKV | 19.47239 | 0 | 65.30965 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「501－PRAT | 116.8344 | 0 | 551.6581 | 1.875 | 0 | 0 | 0 |
| 27 BUCHANA「502－FOX | 91.52025 | 1.294118 | 152.8524 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「 503 －VANS | 110.9926 | 0 | 469.6736 | 1.875 | 0 | 0 | 0 |
| 27 BUCHANA「 601 －COUN | 83.73129 | 0 | 419.6492 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「 602 －GARL | 114.8871 | 2.588235 | 555.8268 | 1.875 | 0 | 0 | 0 |
| 27 BUCHANA「 603 －HURF | 147.9902 | 2.588235 | 327.9378 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「 701 －WHIT | 144.0957 | 7.764706 | 686.4461 | 0 | 0 | 0 | 0 |
| 27 BUCHANA「702－CONT | 91.52025 | 1.294118 | 514.1398 | 0 | 0 | 0 | 0 |
| 29 BUCKINGH． 101 －NEW | 646.5876 | 12.05556 | 670.6706 | 0 | 0 | 0 | 0 |
| 29 BUCKINGH． 102 －GEOI | 141.0737 | 1.722222 | 258.3324 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 201 －WHIT | 305.6596 | 3.444444 | 298.0758 | 0 | 0 | 0 | 0 |
| 29 BUCKINGH． 301 －CURL | 352.6842 | 8.611111 | 539.8484 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 302 －NEW | 214.5495 | 6.888889 | 450.4257 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 401 －MAYS | 396.7697 | 17.22222 | 587.8717 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 501 －WRIG | 214.5495 | 8.611111 | 380.8746 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 502 －GLEN | 290.9644 | 15.5 | 466.9854 | 2.333333 | 0 | 0 | 0 |
| 29 BUCKINGH． 601 －SLATE | 590.746 | 8.611111 | 528.2566 | 7 | 0 | 0 | 0 |
| 29 BUCKINGH． 701 －GOLE | 317.4157 | 10.33333 | 362.6589 | 0 | 0 | 0 | 0 |
| 31 CAMPBELL 101－BROC | 656.0458 | 49 | 1827.776 | 14.6087 | 0 | 0 | 0 |
| 31 CAMPBELL 102 －NEW | 738.8477 | 50.58065 | 2039.976 | 8.347826 | 0 | 0 | 0 |
| 31 CAMPBELL 201 －WALk | 643.307 | 50.58065 | 1376.627 | 0 | 0 | 0 | 0 |
| 31 CAMPBELL 202 －BEDF | 496.8114 | 49 | 1833.126 | 6.26087 | 0 | 0 | 0 |
| 31 CAMPBELL 301 －EVIN | 343.9463 | 14.22581 | 827.4031 | 2.086957 | 0 | 0 | 0 |
| 31 CAMPBELL 302 －OTTE | 264.3291 | 9.483871 | 704.3625 | 2.086957 | 0 | 0 | 0 |
| 31 CAMPBELL 303 －ALTA＇ | 843.9424 | 28.45161 | 1132.33 | 2.086957 | 0 | 0 | 0 |
| 31 CAMPBELL 401－THRE | 261.1444 | 33.19355 | 1344.53 | 4.173913 | 0 | 0 | 0 |
| 31 CAMPBELL 402 －COUF | 477.7032 | 50.58065 | 1779.63 | 10.43478 | 0 | 0 | 0 |
| 31 CAMPBELL 501 －SPRII | 601.9061 | 44.25806 | 1581.695 | 18.78261 | 0 | 0 | 0 |
| 31 CAMPBELL 502 －YELLC | 436.3023 | 22.12903 | 1064.568 | 2.086957 | 0 | 0 | 0 |
| 31 CAMPBELL 601 －KING！ | 535.0276 | 17.3871 | 1298.167 | 8.347826 | 0 | 0 | 0 |
| 31 CAMPBELL 602 －CONC | 452.2257 | 31.6129 | 1595.961 | 12.52174 | 0 | 0 | 0 |
| 31 CAMPBELL 701 －BROC | 554.1358 | 12.64516 | 920.1293 | 0 | 0 | 0 | 0 |
| 31 CAMPBELL 702 －GLAD | 490.442 | 15.80645 | 1189.392 | 4.173913 | 0 | 0 | 0 |
| 31 CAMPBELL 703 －MOR｜ | 273.8832 | 11.06452 | 729.3273 | 0 | 0 | 0 | 0 |
| 33 CAROLINE 101－BOW | 546.5155 | 20.72 | 915.1512 | 3 | 0 | 0 | 0 |
| 33 CAROLINE 102－SPAR | 523.3826 | 11.84 | 810.9128 | 1.5 | 0 | 0 | 0 |
| 33 CAROLINE 201 －NORT | 693.9879 | 25.16 | 599.3704 | 6 | 0 | 0 | 0 |
| 33 CAROLINE 1202 －SOUT | 679.5298 | 47.36 | 795.5837 | 4.5 | 0 | 0 | 0 |
| 33 CAROLINE 1301 －PORT | 361.452 | 11.84 | 412.3545 | 0 | 0 | 0 | 0 |
| 33 CAROLINE 1302－WOO | 731.5789 | 17.76 | 1088.371 | 3 | 0 | 0 | 0 |
| 33 CAROLINE 401 －DAW | 1214.479 | 29.6 | 763.3924 | 6 | 0 | 0 |  |


| 33 CAROLINE 402 -CARN | 378.8017 | 2.96 | 286.6554 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 CAROLINE 501 - WEST | 734.4705 | 11.84 | 481.3358 | 6 | 0 | 0 | 0 |
| 33 CAROLINE 502 - MILFI | 471.3335 | 4.44 | 628.4958 | 0 | 0 | 0 | 0 |
| 33 CAROLINE 601 -CHILE | 786.5196 | 42.92 | 879.8941 | 6 | 0 | 0 | 0 |
| 33 CAROLINE 602 -LAKE | 534.949 | 32.56 | 674.4833 | 0 | 0 | 0 | 0 |
| 35 CARROLL C 101 - MT B | 171.3636 | 0 | 601.9786 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C 102 - ST PA | 142.3636 | 7.195122 | 811.3625 | 2.814815 | 0 | 0 | 0 |
| 35 CARROLL C 103-LAME | 155.5455 | 4.317073 | 520.5516 | 4.222222 | 0 | 0 | 0 |
| 35 CARROLL C 105 -FANC | 113.3636 | 8.634146 | 569.9894 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C 201 - HILLS | 258.3636 | 10.07317 | 1107.99 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C 202 -LAUR | 145 | 11.5122 | 597.6165 | 2.814815 | 0 | 0 | 0 |
| 35 CARROLL C 203 -GLAD | 210.9091 | 4.317073 | 713.9408 | 5.62963 | 0 | 0 | 0 |
| 35 CARROLL C 301 - HILLS | 311.0909 | 15.82927 | 1445.33 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C $302-$ SYLV t | 118.6364 | 7.195122 | 668.8652 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C 303 -DUGS | 60.63636 | 5.756098 | 353.3353 | 2.814815 | 0 | 0 | 0 |
| 35 CARROLL C 401 - OAKL | 300.5455 | 14.39024 | 1272.298 | 4.222222 | 0 | 0 | 0 |
| 35 CARROLL C 402 - Woo | 203 | 8.634146 | 977.1247 | 4.222222 | 0 | 0 | 0 |
| 35 CARROLL C 406 -WOO | 68.54545 | 4.317073 | 193.3893 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C 501 -VAUG | 113.3636 | 4.317073 | 538.0002 | 0 | 0 | 0 | 0 |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 197.7273 | 5.756098 | 1089.087 | 1.407407 | 0 | 0 | 0 |
| 35 CARROLL C $503-$ WOO | 150.2727 | 2.878049 | 516.1894 | 0 | 0 | 0 | 0 |
| 35 CARROLL C 504 -LAUR | 121.2727 | 2.878049 | 681.9516 | 1.407407 | 0 | 0 | 0 |
| 36 CHARLES C 101 - PREC | 886.4865 | 27.81818 | 836.8004 | 0 | 0 | 0 | 0 |
| 36 CHARLES C 201 - PREC | 828.8649 | 13.09091 | 451.8722 | 0 | 0 | 0 | 0 |
| 36 CHARLES C 301 - PREC | 908.6486 | 13.09091 | 472.3273 | 0 | 0 | 0 | 0 |
| 37 CHARLOTTI 101 - COUN | 295.1592 | 10.66667 | 466.0504 | 2.2 | 0 | 0 | 0 |
| 37 CHARLOTTI 201 - RED ( | 469.3032 | 5.333333 | 628.2233 | 2.2 | 0 | 0 | 0 |
| 37 CHARLOTTI 302 - DRAK | 304.014 | 5.333333 | 521.1577 | 1.1 | 0 | 0 | 0 |
| 37 CHARLOTT। 401 - KEYSI | 395.5134 | 12.44444 | 653.4152 | 1.1 | 0 | 0 | 0 |
| 37 CHARLOTTI501-CULLI | 345.3363 | 10.66667 | 467.6248 | 3.3 | 0 | 0 | 0 |
| 37 CHARLOTTI602-PHEN | 250.8854 | 3.555556 | 706.948 | 0 | 0 | 0 | 0 |
| 37 CHARLOTTI 702 - BACC | 256.7885 | 0 | 371.5807 | 1.1 | 0 | 0 | 0 |
| 41 CHESTERFII 101 - BELLI | 1471.59 | 27.35876 | 1140.257 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII 102 - SOUT | 2027.524 | 42.0904 | 1559.544 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII 103 - ENON | 1999.493 | 65.24011 | 2482.487 | 10.05714 | 0 | 0 | 0 |
| 41 CHESTERFII 104 - NORT | 1359.469 | 50.50847 | 1996.728 | 17.6 | 0 | 0 | 0 |
| 41 CHESTERFII 105 - DREV | 2131.887 | 22.77662 | 949.1252 | 2.686364 | 0 | 0 | 0 |
| 41 CHESTERFII 106 - HARR | 2335.857 | 50.50847 | 1856.113 | 15.08571 | 0 | 0 | 0 |
| 41 CHESTERFII 107 - WELL | 1966.791 | 31.5678 | 1362.683 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII 108 -ECOF | 1247.348 | 50.50847 | 1531.421 | 17.6 | 0 | 0 | 0 |
| 41 CHESTERFII 109 -ELIZA | 2233.079 | 61.03107 | 2170.578 | 10.05714 | 0 | 0 | 0 |
| 41 CHESTERFII 110 - DUTC | 1037.12 | 27.35876 | 1278.315 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII 111 -IRON | 602.6511 | 35.77684 | 782.3286 | 2.514286 | 0 | 0 | 0 |
| 41 CHESTERFII112-CARV | 1256.691 | 29.46328 | 984.3023 | 5.028571 | 0 | 0 | 0 |
| 41 CHESTERFII 113 -IRON | 1023.105 | 23.14972 | 759.3189 | 20.11429 | 0 | 0 | 0 |
| 41 CHESTERFII 201 -GATE | 1055.807 | 31.5678 | 1089.124 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII202-BEUL. | 2084.629 | 38.72025 | 930.8225 | 8.059091 | 0 | 0 | 0 |


| 41 CHESTERFII 203 - BIRD | 513.8885 | 14.73164 | 534.3355 | 2.514286 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII 204 -JACO | 981.9285 | 22.77662 | 891.6025 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII 205 - FALLI | 1764.321 | 22.77662 | 533.3927 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII 206 - BELM | 2021.617 | 27.33194 | 269.311 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII 207 -CHIPF | 1034.438 | 9.110647 | 271.9257 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII208-MEAL | 1675.054 | 18.22129 | 546.466 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII 209 - SALEI | 1831.312 | 46.29944 | 1641.356 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII210-FIVE I | 2179.146 | 54.66388 | 1106.005 | 2.686364 | 0 | 0 | 0 |
| 41 CHESTERFII 211 - NASH | 784.8479 | 48.40395 | 1574.884 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII212-ST. Ll | 855.9056 | 15.94363 | 739.9516 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII 213 - SOUT | 1228.723 | 13.66597 | 313.7604 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII214-HOPk | 567.1031 | 2.277662 | 60.13741 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII 215 - Nortt | 992.4304 | 6.832985 | 376.5125 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII216-RIDGI | 1822.081 | 29.6096 | 381.7418 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII301-ETTRI | 2092.928 | 16.83616 | 447.4101 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII302-DEER | 635.3655 | 29.6096 | 857.6118 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII303-MATC | 1186.615 | 35.77684 | 1444.496 | 7.542857 | 0 | 0 | 0 |
| 41 CHESTERFII304-WINF | 537.2471 | 29.46328 | 1766.631 | 2.514286 | 0 | 0 | 0 |
| 41 CHESTERFII305-BEAC | 331.6917 | 8.418079 | 925.4998 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII306-WINT | 876.9094 | 22.77662 | 2423.799 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII307-COSB | 2431.192 | 61.49687 | 2549.303 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII308-SOUT | 546.0992 | 15.94363 | 394.8152 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII309-SKINC | 808.647 | 59.21921 | 1388.39 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII310-TOM/ | 1575.286 | 88.82881 | 1642.013 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII313-WOO | 1722.313 | 36.44259 | 2159.717 | 29.55 | 0 | 0 | 0 |
| 41 CHESTERFII314-LONG | 256.9443 | 18.94068 | 979.189 | 12.57143 | 0 | 0 | 0 |
| 41 CHESTERFII315-BAILE | 960.9246 | 40.99791 | 1974.076 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII316-SPRIN | 1874.591 | 56.94154 | 2102.195 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII317-BIRK[ | 1359.997 | 50.10856 | 1725.682 | 21.49091 | 0 | 0 | 0 |
| 41 CHESTERFII318-WEST | 451.5821 | 11.38831 | 763.4837 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII319-MAG | 1507.024 | 59.21921 | 2240.772 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII 401 - HARB | 913.6661 | 22.77662 | 1040.639 | 2.686364 | 0 | 0 | 0 |
| 41 CHESTERFII402-GENI | 593.3578 | 22.77662 | 496.7873 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII403-BRAN | 1438.761 | 40.99791 | 1432.839 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII404-PROV | 1549.032 | 50.10856 | 990.9599 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII 405 -LA PR | 845.4036 | 25.05428 | 805.3184 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII406-SMOI | 1013.434 | 34.16493 | 1103.391 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII407-MON | 593.3578 | 22.77662 | 789.6304 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII408-REAN | 1769.572 | 59.21921 | 1024.951 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII 409 - MAN | 1554.282 | 29.6096 | 807.933 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII410-WAG: | 1044.94 | 45.55324 | 834.0797 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII411-SWIF | 1480.769 | 50.10856 | 1456.371 | 18.80455 | 0 | 0 | 0 |
| 41 CHESTERFII412-CLOV | 1275.982 | 43.27557 | 1357.014 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII413-SHEN | 1759.07 | 47.8309 | 1158.299 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII414-CREN | 2326.173 | 77.4405 | 2162.332 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII415-EVER | 1328.491 | 31.88727 | 1158.299 | 21.49091 | 0 | 0 | 0 |
| 41 CHESTERFII416-EVER | 1134.206 | 34.16493 | 779.1717 | 2.686364 | 0 | 0 | 0 |


| 41 CHESTERFII417-EDGE | 813.8979 | 20.49896 | 763.4837 | 8.059091 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII501-HUGI | 1732.815 | 54.66388 | 1072.015 | 18.80455 | 0 | 0 | 0 |
| 41 CHESTERFIII502-CRES | 1008.183 | 22.77662 | 690.2729 | 0 | 0 | 0 | 0 |
| 41 CHESTERFII503-MIDL | 1113.202 | 34.16493 | 1181.831 | 5.372727 | 0 | 0 | 0 |
| 41 CHESTERFII504-ROBII | 1438.761 | 36.44259 | 1835.498 | 21.49091 | 0 | 0 | 0 |
| 41 CHESTERFIII505-BON, | 1344.244 | 45.55324 | 1100.776 | 18.80455 | 0 | 0 | 0 |
| 41 CHESTERFII506-GREE | 2194.899 | 77.4405 | 1244.583 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII507-SALIS | 1496.522 | 61.49687 | 2204.167 | 32.23636 | 0 | 0 | 0 |
| 41 CHESTERFIII508-BELG | 1349.495 | 45.55324 | 1066.785 | 16.11818 | 0 | 0 | 0 |
| 41 CHESTERFII509-CRAN | 1659.302 | 31.88727 | 894.2172 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII510-SYCAI | 1102.7 | 56.94154 | 1090.317 | 10.74545 | 0 | 0 | 0 |
| 41 CHESTERFII511-BLAC | 1097.449 | 50.10856 | 1255.042 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII513-BEAU | 1417.758 | 13.66597 | 439.2646 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII514-WATr | 1402.005 | 52.38622 | 1456.371 | 13.43182 | 0 | 0 | 0 |
| 41 CHESTERFII515-DAVI! | 2420.69 | 34.16493 | 551.6954 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII516-POCC | 1160.461 | 13.66597 | 407.8885 | 8.059091 | 0 | 0 | 0 |
| 41 CHESTERFII517-ROSE | 1160.461 | 38.72025 | 1239.354 | 16.11818 | 0 | 0 | 0 |
| 41 CHESTERFII518-MIDL | 1160.461 | 36.44259 | 1534.811 | 16.11818 | 0 | 0 | 0 |
| 43 CLARKE CO 101 - RUSS | 515.3982 | 30.34091 | 1084.954 | 2.35 | 0 | 0 | 0 |
| 43 CLARKE CO 201 - BERR | 773.0973 | 26.29545 | 694.3708 | 14.1 | 0 | 0 | 0 |
| 43 CLARKE CO 301 - MILLI | 490.6195 | 24.27273 | 725.9331 | 0 | 0 | 0 | 0 |
| 43 CLARKE CO 302 - PINE | 396.4602 | 16.18182 | 376.7751 | 11.75 | 0 | 0 | 0 |
| 43 CLARKE CO 401 - Whit | 901.9469 | 50.56818 | 1144.134 | 9.4 | 0 | 0 | 0 |
| 43 CLARKE CO 501 - BUCK | 490.6195 | 12.13636 | 733.8237 | 7.05 | 0 | 0 | 0 |
| 43 CLARKE CO 502 - blue | 351.8584 | 18.20455 | 432.0091 | 2.35 | 0 | 0 | 0 |
| 45 CRAIG COU 101 - COUF | 81.70696 | 6.666667 | 439.1214 | 0 | 0 | 0 | 0 |
| 45 CRAIG COU 201 - AMM | 105.359 | 10.66667 | 542.2708 | 2.8 | 0 | 0 | 0 |
| 45 CRAIG COU301-GIVEI | 101.0586 | 6.666667 | 356.602 | 1.4 | 0 | 0 | 0 |
| 45 CRAIG COU 303 -MAR | 83.85714 | 1.333333 | 234.2963 | 0 | 0 | 0 | 0 |
| 45 CRAIG COU 401 - BARB | 60.20513 | 9.333333 | 232.8228 | 1.4 | 0 | 0 | 0 |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 21.50183 | 0 | 48.62754 | 0 | 0 | 0 | 0 |
| 45 CRAIG COU 403 -CRAIC | 51.6044 | 1.333333 | 241.6641 | 0 | 0 | 0 | 0 |
| 45 CRAIG COU501-CRAIC | 81.70696 | 4 | 440.595 | 1.4 | 0 | 0 | 0 |
| 47 CULPEPER 101 - WEST | 1603.196 | 42.73684 | 1306.422 | 10.8 | 0 | 0 | 0 |
| 47 CULPEPER 201 - EAST | 1615.721 | 34.96651 | 1025.848 | 9 | 0 | 0 | 0 |
| 47 CULPEPER 302 - EGGB | 434.199 | 33.02392 | 1195.946 | 7.2 | 0 | 0 | 0 |
| 47 CULPEPER 303 -CARD | 505.1738 | 15.54067 | 1020.587 | 1.8 | 0 | 0 | 0 |
| 47 CULPEPER 304 - WILL | 417.499 | 17.48325 | 341.9494 | 3.6 | 0 | 0 | 0 |
| 47 CULPEPER 401 - ELDO | 580.3236 | 33.02392 | 1285.379 | 3.6 | 0 | 0 | 0 |
| 47 CULPEPER 402 - BROV | 772.3732 | 38.85167 | 1704.486 | 5.4 | 0 | 0 | 0 |
| 47 CULPEPER 501 - JEFFE | 860.048 | 34.96651 | 1629.082 | 12.6 | 0 | 0 | 0 |
| 47 CULPEPER 502 - RIXEY | 705.5733 | 38.85167 | 1487.042 | 7.2 | 0 | 0 | 0 |
| 47 CULPEPER 601 - MITC | 258.8494 | 1.942584 | 289.3418 | 1.8 | 0 | 0 | 0 |
| 47 CULPEPER 602 - PEAR | 697.2234 | 42.73684 | 1194.193 | 7.2 | 0 | 0 | 0 |
| 47 CULPEPER 603 - SOUT | 475.9489 | 5.827751 | 382.2819 | 1.8 | 0 | 0 | 0 |
| 47 CULPEPER 702 - BRAN | 864.223 | 33.02392 | 1648.371 | 5.4 | 0 | 0 | 0 |
| 47 CULPEPER -703-LIGNI | 521.8738 | 21.36842 | 889.0684 | 1.8 | 0 | 0 | 0 |


| 47 CULPEPER - 704 - RICH/ | 304.7743 | 11.6555 | 612.0018 | 1.8 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 CUMBERLA 101 - PREC | 529.7098 | 17.66667 | 824.3369 | 7 | 0 | 0 | 0 |
| 49 CUMBERLA 201 - PREC | 341.122 | 16.06061 | 663.7518 | 2.8 | 0 | 0 | 0 |
| 49 CUMBERLA 301 - PREC | 449.2827 | 6.424242 | 354.8166 | 0 | 0 | 0 | 0 |
| 49 CUMBERLA 401 - PREC | 391.0423 | 8.030303 | 656.1049 | 2.8 | 0 | 0 | 0 |
| 49 CUMBERLA 501 - PREC | 515.8431 | 4.818182 | 519.9899 | 1.4 | 0 | 0 | 0 |
| 51 DICKENSOI 101-SOUT | 187.4778 | 3.384615 | 806.6447 | 0 | 0 | 0 | 0 |
| 51 DICKENSOP 201-NORA | 108.0381 | 5.076923 | 482.937 | 0 | 0 | 0 | 0 |
| 51 DICKENSOR 202 -FRYIN | 47.66385 | 0 | 227.4703 | 0 | 0 | 0 | 0 |
| 51 DICKENSOr 203 - CLINC | 174.7674 | 5.076923 | 542.4292 | 0 | 0 | 0 | 0 |
| 51 DICKENSOR 301 -WEST | 38.13108 | 0 | 321.958 | 0 | 0 | 0 | 0 |
| 51 DICKENSO 302 - HERA | 69.90698 | 0 | 568.6758 | 6 | 0 | 0 | 0 |
| 51 DICKENSOr 303 -RIDG\| | 136.6364 | 5.076923 | 586.1735 | 0 | 0 | 0 | 0 |
| 51 DICKENSOP 401 - HAYS | 448.0402 | 11.84615 | 1221.341 | 0 | 0 | 0 | 0 |
| 51 DICKENSOP 501 -TARP | 120.7484 | 3.384615 | 241.4685 | 0 | 0 | 0 | 0 |
| 51 DICKENSOP 502 - NORT | 171.5899 | 10.15385 | 748.9023 | 6 | 0 | 0 | 0 |
| 53 DINWIDDIE 101 -WHIT | 156.8807 | 8.470588 | 677.6524 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 102-ROCK | 217.7119 | 8.470588 | 733.0463 | 2.416667 | 0 | 0 | 0 |
| 53 DINWIDDIE 103-CHUR | 188.8971 | 15.24706 | 1194.662 | 14.5 | 0 | 0 | 0 |
| 53 DINWIDDIE 201-ROHC | 589.1029 | 10.16471 | 384.0646 | 4.833333 | 0 | 0 | 0 |
| 53 DINWIDDIE 202-SUTH | 742.7819 | 15.24706 | 1202.048 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 301 - REAN | 284.9465 | 8.470588 | 607.4867 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 302 - NEW | 345.7778 | 3.388235 | 738.5857 | 2.416667 | 0 | 0 | 0 |
| 53 DINWIDDIE 303 - LITTL | 710.7654 | 6.776471 | 637.0302 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 401 - DINM | 403.4074 | 15.24706 | 803.2119 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 402 - MCKE | 467.4403 | 6.776471 | 581.6362 | 2.416667 | 0 | 0 | 0 |
| 53 DINWIDDIE 403 - CHER | 374.5926 | 13.55294 | 348.9817 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 501 -EDGE | 214.5103 | 1.694118 | 90.47675 | 0 | 0 | 0 | 0 |
| 53 DINWIDDIE 502 -CHES | 1527.185 | 30.49412 | 696.117 | 2.416667 | 0 | 0 | 0 |
| 57 ESSEX COU 101-GREA | 726.5517 | 21.75 | 530.1724 | 3.5 | 0 | 0 | 0 |
| 57 ESSEX COU 201 - NORT | 1013.793 | 12.6875 | 463.3246 | 3.5 | 0 | 0 | 0 |
| 57 ESSEX COU 301 - SOUT | 679.2414 | 16.3125 | 1230.922 | 0 | 0 | 0 | 0 |
| 57 ESSEX COU 401 - CENT | 618.4138 | 7.25 | 850.581 | 0 | 0 | 0 | 0 |
| 59 FAIRFAX CC 104 - CHAP | 1428.035 | 32.62878 | 711.0438 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 105 -FAIR | 3065.813 | 54.38131 | 1257.06 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 106 - HERI7 | 3257.705 | 36.97929 | 1018.687 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 108 - KING! | 1834.133 | 45.6803 | 798.6509 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 109 - LITTL | 1044.251 | 8.701009 | 378.9517 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 110 - NORT | 2936.397 | 36.97929 | 1403.751 | 53.62755 | 0 | 0 | 0 |
| 59 FAIRFAX CC 113 - CANT | 2311.632 | 43.50505 | 1104.257 | 53.62755 | 0 | 0 | 0 |
| 59 FAIRFAX C 114 - OLDE | 1521.75 | 26.10303 | 627.5114 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX C( 115 - RAVE | 1579.764 | 26.10303 | 776.2397 | 32.64286 | 0 | 0 | 0 |
| 59 FAIRFAX CC 116 - WAKI | 1593.152 | 28.27828 | 641.773 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 117 - WOO | 1396.797 | 30.45353 | 782.3519 | 41.96939 | 0 | 0 | 0 |
| 59 FAIRFAX CC 118 - LAKE | 2940.86 | 56.55656 | 1010.538 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 119 - LAUR | 2650.79 | 56.55656 | 1195.939 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 120 - SIDEE | 1758.268 | 45.6803 | 1057.397 | 32.64286 | 0 | 0 | 0 |


| 59 FAIRFAX C( 121 - VILLA | 1664.554 | 30.45353 | 761.9781 | 20.98469 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX C( 123 -ROBII | 2079.576 | 50.0308 | 1059.435 | 27.97959 | 0 | 0 | 0 |
| 59 FAIRFAX C( $125-$ SIGN, | 1901.072 | 39.15454 | 816.9872 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX C( 126 - BON | 1954.623 | 26.10303 | 653.9973 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX C( 127 - BURK | 3311.257 | 54.38131 | 1073.696 | 39.63776 | 0 | 0 | 0 |
| 59 FAIRFAX CC 128 - CARD | 1909.997 | 32.62878 | 692.7074 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 129 - KEEN | 1392.334 | 21.75252 | 568.4275 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX C( 130 - TERR, | 1865.371 | 41.32979 | 735.4923 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX C( 131 - EAGL | 1807.357 | 60.90706 | 890.3327 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX C( 132 - MON | 1410.185 | 36.97929 | 586.7639 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX C( 133 - DANE | 870.2089 | 26.10303 | 226.1486 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 134 - UNIV | 1227.218 | 26.10303 | 105.9435 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 201 - Arms | 2150.978 | 50.0308 | 729.3801 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 202 - FLINT | 1334.32 | 39.15454 | 796.6135 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 203 - FLOR | 2075.114 | 36.97929 | 927.0055 | 2.331633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 204 - MADI | 673.8541 | 8.701009 | 215.9617 | 0 | 0 | 0 | 0 |
| 59 FAIRFAX CC 208 - REST | 2490.136 | 47.85555 | 717.1559 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 209 - REST | 2775.743 | 45.6803 | 552.1285 | 27.97959 | 0 | 0 | 0 |
| 59 FAIRFAX CC 213 - VIEN | 1994.787 | 63.08232 | 953.4913 | 34.97449 | 0 | 0 | 0 |
| 59 FAIRFAX C( 214 - VIEN | 1387.872 | 39.15454 | 729.3801 | 41.96939 | 0 | 0 | 0 |
| 59 FAIRFAX C( 216 - VIENi | 919.2977 | 13.05151 | 391.1759 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 218 - VIEN | 1035.326 | 28.27828 | 450.2598 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 219 - WEST | 1776.119 | 43.50505 | 786.4266 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 220 - DOG | 3114.902 | 50.0308 | 855.6974 | 32.64286 | 0 | 0 | 0 |
| 59 FAIRFAX CC 221 - HUN7 | 1508.362 | 23.92777 | 576.577 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 222 -REST | 1588.689 | 39.15454 | 332.0921 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 223 -GLAD | 2048.338 | 60.90706 | 643.8104 | 34.97449 | 0 | 0 | 0 |
| 59 FAIRFAX CC 224 - SOUT | 2525.837 | 63.08232 | 904.5943 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 225 - HUG | 2619.552 | 80.48433 | 662.1468 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 226 - WOLI | 1847.521 | 34.80404 | 927.0055 | 41.96939 | 0 | 0 | 0 |
| 59 FAIRFAX CC 227 - SUNR | 1066.564 | 21.75252 | 433.9608 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 229 - FOX | 2826.889 | 70.48649 | 1382.002 | 32.06061 | 0 | 0 | 0 |
| 59 FAIRFAX CC 233 - NORT | 1660.091 | 36.97929 | 916.8186 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 234 - ALDR | 1535.138 | 28.27828 | 560.278 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 235 - FRYIN | 1816.282 | 23.92777 | 598.9881 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX C( 236 - STUA | 1169.204 | 39.15454 | 348.3911 | 6.994898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 237 - MCN, | 2378.571 | 26.10303 | 637.6983 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 238 - CAMI | 1039.788 | 32.62878 | 550.0912 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC $240-\mathrm{COLV}$ | 1183.823 | 26.43243 | 633.2393 | 19.7296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 301 - CHAII | 1178.721 | 26.43243 | 776.5739 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 302 - CHES | 658.3173 | 18.4186 | 429.8237 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC $303-\mathrm{CHUR}$ | 1005.229 | 22.02703 | 423.5857 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 304 - COOF | 816.4299 | 6.608108 | 536.9698 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 305 - EL NII | 952.6238 | 34.7907 | 447.249 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC 306 -GREA | 1051.153 | 15.41892 | 770.1559 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 307 - HAYC | 1092.032 | 28.65116 | 464.6742 | 32.26906 | 0 | 0 | 0 |
| 59 FAIRFAX CC 309 - KENN | 1474.677 | 24.22973 | 744.484 | 14.7972 | 0 | 0 | 0 |


| 59 FAIRFAX CC 310 - KIRBY | 882.9197 | 24.55814 | 424.0152 | 18.43946 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 311 -LANG | 898.0729 | 26.43243 | 549.8057 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 312 -LONE | 913.8993 | 18.4186 | 545.9922 | 20.74439 | 0 | 0 | 0 |
| 59 FAIRFAX CC 314 - MCLE | 709.2735 | 22.02703 | 410.7498 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 315 - PIMN | 1576.089 | 45.02326 | 776.3932 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC 316 -SALO | 294.3066 | 12.27907 | 203.295 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC 317 - WEST | 728.0215 | 28.65116 | 447.249 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC318-WEST | 739.6388 | 10.23256 | 288.4853 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC $319-$ HERN | 2414.272 | 65.25757 | 973.8651 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 320 - HERN | 2597.239 | 41.32979 | 884.2206 | 34.97449 | 0 | 0 | 0 |
| 59 FAIRFAX CC 321 - CLEAI | 2530.933 | 72.68919 | 1135.98 | 36.99301 | 0 | 0 | 0 |
| 59 FAIRFAX CC 322 - FORE | 1612.449 | 50.66216 | 1257.921 | 22.1958 | 0 | 0 | 0 |
| 59 FAIRFAX CC $323-\mathrm{SHOL}$ | 1530.806 | 13.21622 | 665.3291 | 19.7296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 324 - HERN | 2329.482 | 43.50505 | 780.3145 | 32.64286 | 0 | 0 | 0 |
| 59 FAIRFAX CC 325 - HUTC | 2374.109 | 32.62878 | 411.5497 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 327 - SUGA | 1995.151 | 48.45946 | 992.6454 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 328 - HICKC | 1219.542 | 33.04054 | 838.6142 | 27.12821 | 0 | 0 | 0 |
| 59 FAIRFAX CC 329 - SENEI | 2066.588 | 33.04054 | 1157.373 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 331 - SPRIN | 1000.127 | 17.62162 | 457.8149 | 12.331 | 0 | 0 | 0 |
| 59 FAIRFAX CC 332 - COAT | 3097.051 | 63.08232 | 882.1832 | 32.64286 | 0 | 0 | 0 |
| 59 FAIRFAX C( $333-$ SALO | 604.1029 | 22.51163 | 284.613 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 401 - BUSH | 2129.85 | 65.48837 | 931.2846 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 402 - CAMI | 1002.966 | 16.37209 | 319.4635 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC 403 - FORE | 956.4963 | 16.37209 | 296.2298 | 11.52466 | 0 | 0 | 0 |
| 59 FAIRFAX CC 404 - FRAN | 1874.268 | 22.51163 | 714.4366 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC 405 -GRO\ | 1568.344 | 16.37209 | 344.6334 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC 406 - HAYF | 1270.165 | 30.69767 | 815.1161 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 408 - MOU | 2029.166 | 36.83721 | 416.2707 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC 409 - PION | 3163.795 | 38.88372 | 952.5822 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC 410 - ROSE | 2741.698 | 53.2093 | 1194.6 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC 411 - VIRGI | 2060.146 | 34.7907 | 600.2042 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 413 - FAIRF | 2366.07 | 18.4186 | 350.4418 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 415 - CRES | 2377.687 | 30.69767 | 1045.517 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 417 - GARF | 3132.816 | 34.7907 | 995.1773 | 34.57399 | 0 | 0 | 0 |
| 59 FAIRFAX CC 418 - LYNB | 2191.809 | 24.55814 | 582.7789 | 4.609865 | 0 | 0 | 0 |
| 59 FAIRFAX CC 419 - LANE | 2215.044 | 45.02326 | 729.9258 | 13.8296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 420 - VILLA | 2300.238 | 40.93023 | 789.9462 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 421 - KING: | 1781.329 | 40.93023 | 650.5439 | 29.96413 | 0 | 0 | 0 |
| 59 FAIRFAX CC 422 - VAN I | 2079.508 | 30.69767 | 633.1187 | 25.35426 | 0 | 0 | 0 |
| 59 FAIRFAX CC 423 - CLERI | 1928.482 | 51.16279 | 741.5426 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC424-HUN7 | 1839.416 | 30.69767 | 724.1174 | 11.52466 | 0 | 0 | 0 |
| 59 FAIRFAX CC 426 - GREE | 1593.152 | 6.525757 | 474.7083 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 427 - ISLAN | 1874.268 | 49.11628 | 594.3958 | 13.8296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 428 - PINEI | 2439.646 | 14.32558 | 362.0587 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 429 - HYBL | 3187.03 | 22.51163 | 406.59 | 36.87892 | 0 | 0 | 0 |
| 59 FAIRFAX CC501-BAILE | 2482.243 | 36.83721 | 489.8441 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC502-BARC | 745.2559 | 4.350505 | 305.6062 | 11.65816 | 0 | 0 | 0 |


| 59 FAIRFAX CC503-BELVI | 914.835 | 10.87626 | 321.9052 | 34.97449 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC504-BRIST | 2360.721 | 26.10303 | 725.3054 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC505-GLEN | 2067.891 | 18.4186 | 569.2259 | 13.8296 | 0 | 0 | 0 |
| 59 FAIRFAX CC506-HOLN | 592.4856 | 10.23256 | 135.53 | 0 | 0 | 0 | 0 |
| 59 FAIRFAX CC507-LINCC | 1916.865 | 34.7907 | 559.5452 | 25.35426 | 0 | 0 | 0 |
| 59 FAIRFAX CC508-MASC | 1611.002 | 36.97929 | 690.67 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC509-PLAZ | 1645.793 | 8.186047 | 197.4866 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC510-PARK | 1475.405 | 22.51163 | 454.9935 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC511-RAVE | 1615.465 | 26.10303 | 548.0538 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC512-SLEEF | 1178.129 | 19.57727 | 442.1103 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC513-SAIN7 | 1590.525 | 27.50584 | 538.4367 | 13.9364 | 0 | 0 | 0 |
| 59 FAIRFAX CC514-CROS | 433.7149 | 6.139535 | 71.63728 | 4.609865 | 0 | 0 | 0 |
| 59 FAIRFAX CC515-WEST | 1382.466 | 12.27907 | 454.9935 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC516-WEY/ | 2350.58 | 28.65116 | 648.6078 | 11.52466 | 0 | 0 | 0 |
| 59 FAIRFAX CC517-WILLS | 1301.145 | 14.32558 | 445.3128 | 32.26906 | 0 | 0 | 0 |
| 59 FAIRFAX CC518-COLU | 2119.74 | 34.80404 | 786.4266 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC519-HUM | 1280.769 | 15.22677 | 527.68 | 6.994898 | 0 | 0 | 0 |
| 59 FAIRFAX CC520-SKYLI | 1936.227 | 12.27907 | 340.7611 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC521-BROC | 1386.339 | 22.51163 | 697.0114 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC522-CAMI | 977.3116 | 21.75252 | 468.5962 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC523-POE | 1440.553 | 18.4186 | 607.9488 | 2.304933 | 0 | 0 | 0 |
| 59 FAIRFAX CC525-WALI | 1839.416 | 32.74419 | 786.0739 | 25.35426 | 0 | 0 | 0 |
| 59 FAIRFAX CC526-BREN | 2629.397 | 36.83721 | 623.4379 | 39.18386 | 0 | 0 | 0 |
| 59 FAIRFAX CC527-EDSA | 1661.283 | 24.55814 | 695.0752 | 9.219731 | 0 | 0 | 0 |
| 59 FAIRFAX CC528-RIDGI | 954.9985 | 23.92777 | 407.4749 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC530-HOLN | 1695.792 | 21.75252 | 295.4193 | 4.663265 | 0 | 0 | 0 |
| 59 FAIRFAX CC 601 - BELLE | 1301.145 | 26.60465 | 619.5657 | 50.70852 | 0 | 0 | 0 |
| 59 FAIRFAX CC 602 - BELLE | 995.2208 | 38.88372 | 518.8862 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 604 - BUCK | 3016.642 | 51.16279 | 613.7572 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 605 - FORT | 1405.701 | 34.7907 | 764.7764 | 43.79372 | 0 | 0 | 0 |
| 59 FAIRFAX CC 606 - HOLL | 1332.124 | 26.60465 | 704.7559 | 41.48879 | 0 | 0 | 0 |
| 59 FAIRFAX CC 607 - HUN7 | 2083.381 | 38.88372 | 652.4801 | 34.57399 | 0 | 0 | 0 |
| 59 FAIRFAX CC 608 - KIRKS | 1123.012 | 32.74419 | 352.378 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC 609 - MARI | 786.1083 | 32.74419 | 499.5248 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 610 - SHER' | 1421.191 | 10.23256 | 363.9948 | 13.8296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 611 - STRA | 1641.921 | 40.93023 | 863.5196 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC 612 - WAY | 1111.394 | 6.139535 | 458.8658 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 613 - WEST | 1514.13 | 45.02326 | 1386.278 | 41.48879 | 0 | 0 | 0 |
| 59 FAIRFAX CC 614 - RIVEF | 1088.16 | 32.74419 | 704.7559 | 2.304933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 615 - WOO | 1843.288 | 28.65116 | 766.7125 | 29.96413 | 0 | 0 | 0 |
| 59 FAIRFAX CC616-GUNS | 1560.599 | 45.02326 | 1142.324 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC 617 - LORT | 1669.028 | 12.27907 | 346.5695 | 11.52466 | 0 | 0 | 0 |
| 59 FAIRFAX CC 618 - NEWI | 3931.559 | 106.5874 | 1528.031 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 619 - BELVI | 1707.752 | 36.83721 | 625.3741 | 13.8296 | 0 | 0 | 0 |
| 59 FAIRFAX CC 621 -GROS | 1707.752 | 16.37209 | 447.249 | 6.914798 | 0 | 0 | 0 |
| 59 FAIRFAX CC 622 -LORT | 2768.805 | 24.55814 | 619.5657 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC 623 - ALBA | 2443.519 | 30.69767 | 710.5644 | 18.43946 | 0 | 0 | 0 |


| 59 FAIRFAX CC 626 - SARA | 2300.238 | 49.11628 | 935.1569 | 20.74439 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 627 - WOO | 3183.158 | 47.06977 | 873.2003 | 20.74439 | 0 | 0 | 0 |
| 59 FAIRFAX CC 628 -LAUR | 3065.813 | 32.62878 | 796.6135 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 629 - SOUT | 1490.512 | 19.57727 | 764.0155 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 630-ARMY | 491.8017 | 2.046512 | 232.3371 | 2.304933 | 0 | 0 | 0 |
| 59 FAIRFAX CC701-BLAK | 2084.039 | 54.38131 | 735.4923 | 39.63776 | 0 | 0 | 0 |
| 59 FAIRFAX CC 703 -FORT | 1177.226 | 20.46512 | 404.6538 | 18.43946 | 0 | 0 | 0 |
| 59 FAIRFAX CC704-FREEI | 1285.232 | 15.22677 | 493.0447 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 705 -GRAF | 1773.584 | 32.74419 | 710.5644 | 23.04933 | 0 | 0 | 0 |
| 59 FAIRFAX CC 707 - MAN | 1164.741 | 32.62878 | 501.1942 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC708-MARS | 1618.686 | 45.02326 | 669.9054 | 29.96413 | 0 | 0 | 0 |
| 59 FAIRFAX CC 709 - MOSI | 2008.174 | 43.50505 | 658.072 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 710 - PINE | 1351.487 | 24.55814 | 412.3984 | 16.13453 | 0 | 0 | 0 |
| 59 FAIRFAX CC 711 - PRICE | 1298.62 | 26.10303 | 543.979 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 712 -SHRE' | 673.8071 | 24.55814 | 311.719 | 11.52466 | 0 | 0 | 0 |
| 59 FAIRFAX CC 713 - TIMB | 1967.207 | 24.55814 | 576.9705 | 20.74439 | 0 | 0 | 0 |
| 59 FAIRFAX CC 714 - WALk | 1695.792 | 28.27828 | 745.6791 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 717 - WOO | 1209.367 | 28.27828 | 376.9143 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 718 - PINE | 1329.858 | 43.50505 | 554.1659 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 720 - THOR | 1316.47 | 47.85555 | 692.7074 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 721 - MERF | 2213.455 | 50.0308 | 543.979 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 723 -GALLI | 1062.101 | 19.57727 | 305.6062 | 2.331633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 726 - MAG، | 1672.9 | 45.02326 | 606.0127 | 27.65919 | 0 | 0 | 0 |
| 59 FAIRFAX CC727-OAKT | 1048.713 | 21.75252 | 694.7448 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 729 - NOTT | 883.5968 | 23.92777 | 468.5962 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC $730-\mathrm{PEND}$ | 2597.239 | 34.80404 | 977.9398 | 27.97959 | 0 | 0 | 0 |
| 59 FAIRFAX CC 731 - TYSO | 2137.59 | 52.20605 | 653.9973 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC732-OAK I | 1298.62 | 52.20605 | 867.9216 | 20.98469 | 0 | 0 | 0 |
| 59 FAIRFAX CC 733 - KILM | 1892.147 | 32.62878 | 635.6609 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC734-HUN7 | 651.5411 | 15.22677 | 228.186 | 6.994898 | 0 | 0 | 0 |
| 59 FAIRFAX CC $735-$ ROTC | 1490.512 | 4.350505 | 405.4376 | 4.663265 | 0 | 0 | 0 |
| 59 FAIRFAX CC 801 - BURK | 3244.317 | 58.73181 | 1130.743 | 27.97959 | 0 | 0 | 0 |
| 59 FAIRFAX CC 802 - CEDA | 620.3028 | 6.525757 | 260.784 | 11.65816 | 0 | 0 | 0 |
| 59 FAIRFAX CC 803 - CLIFT | 1387.931 | 61.67568 | 1634.442 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 804 - COLC | 1199.131 | 22.02703 | 723.0908 | 9.864802 | 0 | 0 | 0 |
| 59 FAIRFAX CC 805 - FAIRF | 1306.288 | 37.44595 | 624.682 | 34.52681 | 0 | 0 | 0 |
| 59 FAIRFAX CC 806 - SYDEI | 2307.169 | 50.0308 | 941.2671 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 807 - HUN7 | 1579.764 | 50.0308 | 696.7821 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 811 - POHII | 1677.941 | 26.10303 | 541.9417 | 9.326531 | 0 | 0 | 0 |
| 59 FAIRFAX CC 812 - VALLI | 2088.501 | 32.62878 | 833.2862 | 25.64796 | 0 | 0 | 0 |
| 59 FAIRFAX CC 815 - WOO | 1765.53 | 24.22973 | 1189.463 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 824 - ORAN | 2753.43 | 60.90706 | 1252.985 | 34.97449 | 0 | 0 | 0 |
| 59 FAIRFAX CC 825 - CHER | 1843.058 | 36.97929 | 971.8277 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 827 -IRVIN | 1548.526 | 19.57727 | 741.6044 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 833 - WHIT | 2525.837 | 50.0308 | 977.9398 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 838 - SANG | 1551.217 | 28.63514 | 723.0908 | 14.7972 | 0 | 0 | 0 |
| 59 FAIRFAX CC $839-$ SILVE | 1780.838 | 35.24324 | 1080.358 | 22.1958 | 0 | 0 | 0 |


| 59 FAIRFAX CC 840 - WEST | 2244.693 | 34.80404 | 829.2115 | 41.96939 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC 841 - POPE | 847.046 | 26.43243 | 678.165 | 14.7972 | 0 | 0 | 0 |
| 59 FAIRFAX CC 842 - PARK | 1289.694 | 43.50505 | 833.2862 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 843 - FAIR I | 2097.427 | 45.6803 | 747.7165 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 844 -CENT | 1307.545 | 30.45353 | 462.484 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC 845 -FOUN | 1918.61 | 39.64865 | 1491.107 | 44.39161 | 0 | 0 | 0 |
| 59 FAIRFAX CC 846 - GREE | 1918.922 | 34.80404 | 774.2024 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 847 -GREE | 1607.346 | 33.04054 | 733.7874 | 12.331 | 0 | 0 | 0 |
| 59 FAIRFAX CC 848 - FAIR I | 1374.484 | 21.75252 | 639.7356 | 6.994898 | 0 | 0 | 0 |
| 59 FAIRFAX CC 849 - NEW | 2678.911 | 39.64865 | 1585.238 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC $850-$ SOUT | 1367.52 | 26.43243 | 930.605 | 14.7972 | 0 | 0 | 0 |
| 59 FAIRFAX CC 851 - WILL | 1298.62 | 23.92777 | 772.165 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC901-CENT | 1941.235 | 32.62878 | 743.6418 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC902-BROC | 3638.216 | 35.24324 | 1232.249 | 12.331 | 0 | 0 | 0 |
| 59 FAIRFAX CC903-CUB F | 2183.95 | 57.27027 | 1138.119 | 22.1958 | 0 | 0 | 0 |
| 59 FAIRFAX CC904-STON | 1056.256 | 24.22973 | 609.7067 | 27.12821 | 0 | 0 | 0 |
| 59 FAIRFAX CC 905 - FRAN | 658.2466 | 24.22973 | 271.6939 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC 908 - HIDD | 1484.882 | 28.63514 | 714.5335 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC909-OAK I | 1551.217 | 22.02703 | 654.6325 | 17.2634 | 0 | 0 | 0 |
| 59 FAIRFAX CC910-LONL | 2699.879 | 39.15454 | 890.3327 | 23.31633 | 0 | 0 | 0 |
| 59 FAIRFAX CC 911 - NAVY | 1959.432 | 39.64865 | 941.3016 | 29.59441 | 0 | 0 | 0 |
| 59 FAIRFAX CC913-ROCK | 2092.102 | 57.27027 | 1279.315 | 27.12821 | 0 | 0 | 0 |
| 59 FAIRFAX CC 914 - VALE | 1342.007 | 46.25676 | 693.1403 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 915 - VIRGI | 1678.784 | 41.85135 | 1063.243 | 27.12821 | 0 | 0 | 0 |
| 59 FAIRFAX CC 916 - WAPI | 2076.794 | 44.05405 | 1283.593 | 39.45921 | 0 | 0 | 0 |
| 59 FAIRFAX CC917-STON | 1326.699 | 30.83784 | 489.9047 | 14.7972 | 0 | 0 | 0 |
| 59 FAIRFAX CC918-CENT | 3034.575 | 45.6803 | 1077.771 | 18.65306 | 0 | 0 | 0 |
| 59 FAIRFAX CC919-GREE | 2708.804 | 30.45353 | 935.155 | 13.9898 | 0 | 0 | 0 |
| 59 FAIRFAX CC920-CHAN | 1796.146 | 17.62162 | 691.001 | 22.1958 | 0 | 0 | 0 |
| 59 FAIRFAX CC 921 - DEER | 2086.999 | 57.27027 | 1121.005 | 29.59441 | 0 | 0 | 0 |
| 59 FAIRFAX CC923-BULL | 1387.931 | 17.62162 | 1073.94 | 24.662 | 0 | 0 | 0 |
| 59 FAIRFAX CC 924 - SPINE | 1298.62 | 26.10303 | 368.7648 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC925-OLD I | 1479.779 | 46.25676 | 560.5023 | 12.331 | 0 | 0 | 0 |
| 59 FAIRFAX CC926-POW | 3217.542 | 39.15454 | 1228.537 | 16.32143 | 0 | 0 | 0 |
| 59 FAIRFAX CC 927 - ARMI | 1234.85 | 6.608108 | 605.4281 | 9.864802 | 0 | 0 | 0 |
| 59 FAIRFAX CC 928 - POPL | 1831.865 | 57.27027 | 919.9084 | 34.52681 | 0 | 0 | 0 |
| 59 FAIRFAX CC 929 - DIFFII | 494.9606 | 6.608108 | 346.5701 | 4.932401 | 0 | 0 | 0 |
| 59 FAIRFAX CC930-LEES | 1571.628 | 44.05405 | 637.5179 | 14.7972 | 0 | 0 | 0 |
| 59 FAIRFAX CC931-CARS | 1959.432 | 26.43243 | 686.7223 | 19.7296 | 0 | 0 | 0 |
| 59 FAIRFAX CC932-STON | 1321.596 | 15.41892 | 440.7003 | 29.59441 | 0 | 0 | 0 |
| 59 FAIRFAX CC933-COM | 522.1254 | 10.87626 | 222.0738 | 0 | 0 | 0 | 0 |
| 61 FAUQUIER 101 - KETTI | 390.6862 | 19.83103 | 766.3688 | 13.80282 | 0 | 0 | 0 |
| 61 FAUQUIER 102-CATLI | 676.4745 | 45.28125 | 1743.185 | 9 | 0 | 0 | 0 |
| 61 FAUQUIER 103-CASA | 572.6496 | 22.03448 | 886.8957 | 8.28169 | 0 | 0 | 0 |
| 61 FAUQUIER 104 -LOIS | 410.7166 | 12.9375 | 900.0247 | 4.5 | 0 | 0 | 0 |
| 61 FAUQUIER 105-OPAL | 433.5011 | 30.84828 | 973.3111 | 2.760563 | 0 | 0 | 0 |
| 61 FAUQUIER 106-BALD | 652.9276 | 30.84828 | 955.1184 | 2.760563 | 0 | 0 | 0 |


| 61 FAUQUIER 201 - COUF | 1380.781 | 81.52759 | 1359.907 | 22.08451 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 202 - AIRLII | 818.8354 | 35.25517 | 1232.558 | 22.08451 | 0 | 0 | 0 |
| 61 FAUQUIER 203 -WARI | 1188.114 | 44.06897 | 1130.223 | 8.28169 | 0 | 0 | 0 |
| 61 FAUQUIER 301 - MORI | 463.8682 | 36.65625 | 1474.55 | 4.5 | 0 | 0 | 0 |
| 61 FAUQUIER 302-REMI | 1252.337 | 52.88276 | 1837.466 | 11.04225 | 0 | 0 | 0 |
| 61 FAUQUIER 303-BEALI | 1381.941 | 43.125 | 1590.24 | 9 | 0 | 0 | 0 |
| 61 FAUQUIER 401 - MARs | 1434.3 | 50.67931 | 1571.397 | 13.80282 | 0 | 0 | 0 |
| 61 FAUQUIER 402 -LEED! | 1337.966 | 41.86552 | 1582.768 | 22.08451 | 0 | 0 | 0 |
| 61 FAUQUIER 403 - WATE | 776.0205 | 59.4931 | 1610.057 | 22.08451 | 0 | 0 | 0 |
| 61 FAUQUIER 404 -SPRIN | 337.1675 | 30.84828 | 693.5979 | 5.521127 | 0 | 0 | 0 |
| 61 FAUQUIER 501 -THE F | 1803.579 | 33.05172 | 1362.181 | 11.04225 | 0 | 0 | 0 |
| 61 FAUQUIER 502 - NEW | 722.5018 | 28.64483 | 1266.669 | 2.760563 | 0 | 0 | 0 |
| 61 FAUQUIER 503-BROA | 727.8537 | 30.84828 | 989.2298 | 11.04225 | 0 | 0 | 0 |
| 61 FAUQUIER 504 - VINT | 802.7798 | 46.27241 | 1180.253 | 16.56338 | 0 | 0 | 0 |
| 63 FLOYD COL 101 - LOCU | 812.2403 | 45.43636 | 1381.887 | 5.142857 | 0 | 0 | 0 |
| 63 FLOYD COL 201 - LITTL | 438.3519 | 32.07273 | 1173.581 | 5.142857 | 0 | 0 | 0 |
| 63 FLOYD COL 301 - COUF | 754.2232 | 16.03636 | 801.6059 | 0 | 0 | 0 | 0 |
| 63 FLOYD COL 401 - BURK | 547.9399 | 32.07273 | 1329.81 | 7.714286 | 0 | 0 | 0 |
| 63 FLOYD COL 501 - INDIA | 451.2446 | 21.38182 | 1538.116 | 18 | 0 | 0 | 0 |
| 65 FLUVANNA 101 - PALN | 1712.691 | 36.45161 | 1677.419 | 14.57143 | 0 | 0 | 0 |
| 65 FLUVANNA 201 -COLU | 1436.822 | 46.17204 | 1601.461 | 18.21429 | 0 | 0 | 0 |
| 65 FLUVANNA 301 -FORK | 1729.933 | 34.02151 | 1519.172 | 10.92857 | 0 | 0 | 0 |
| 65 FLUVANNA 401 - CUNN | 1206.93 | 53.46237 | 2173.26 | 7.285714 | 0 | 0 | 0 |
| 65 FLUVANNA 501 - RIVAI | 1327.623 | 55.89247 | 1183.688 | 0 | 0 | 0 | 0 |
| 67 FRANKLIN (102-BURN | 469.8312 | 22.5 | 1442.357 | 4.723404 | 0 | 0 | 0 |
| 67 FRANKLIN (103-SCRU | 680.8332 | 33 | 2098.644 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN ( 201 - GLAD | 424.8174 | 7.5 | 1396.638 | 9.446809 | 0 | 0 | 0 |
| 67 FRANKLIN ( 202 - PENH | 419.1907 | 9 | 873.083 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN ( 203 - HODC | 118.1611 | 3 | 215.3211 | 0 | 0 | 0 | 0 |
| 67 FRANKLIN ( 204 - DUDL | 334.7899 | 13.5 | 853.9106 | 1.574468 | 0 | 0 | 0 |
| 67 FRANKLIN (301-SNOV | 154.7348 | 10.5 | 712.3295 | 4.723404 | 0 | 0 | 0 |
| 67 FRANKLIN ( 302 - FORK | 177.2417 | 4.5 | 651.8626 | 0 | 0 | 0 | 0 |
| 67 FRANKLIN (303-SONT | 658.3263 | 21 | 898.1546 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN (304-DICKI | 275.7093 | 6 | 432.1171 | 0 | 0 | 0 | 0 |
| 67 FRANKLIN ( 401 - HENR | 306.6563 | 7.5 | 1232.935 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN ( 402 - FERRI | 340.4166 | 12 | 625.3162 | 1.574468 | 0 | 0 | 0 |
| 67 FRANKLIN ( 403 -ENDII | 199.7486 | 16.5 | 771.3216 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN (501-WAIC | 292.5895 | 7.5 | 738.876 | 1.574468 | 0 | 0 | 0 |
| 67 FRANKLIN (502-CALL/ | 334.7899 | 21 | 1122.325 | 4.723404 | 0 | 0 | 0 |
| 67 FRANKLIN (503-BOW | 267.2692 | 12 | 594.3454 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN (504-GOGC | 331.9765 | 10.5 | 914.3775 | 1.574468 | 0 | 0 | 0 |
| 67 FRANKLIN (601-BOON | 430.4441 | 46.5 | 1199.014 | 1.574468 | 0 | 0 | 0 |
| 67 FRANKLIN (602-BONE | 430.4441 | 24 | 1250.632 | 9.446809 | 0 | 0 | 0 |
| 67 FRANKLIN (603-COOF | 292.5895 | 16.5 | 968.9452 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN (701-ROCK | 582.3656 | 18 | 871.6082 | 0 | 0 | 0 | 0 |
| 67 FRANKLIN ( 702 -ROCK | 520.4716 | 19.5 | 594.3454 | 3.148936 | 0 | 0 | 0 |
| 67 FRANKLIN (703-ROCK | 337.6032 | 12 | 436.5415 | 7.87234 | 0 | 0 | 0 |


| FREDERICK 101 - RUSS | 362.1149 | 31.91587 | 1460.996 | 7.478261 | 374.4402 | 1539.335 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 69 FREDERICK 102 -GORE | 798.3978 | 46.9351 | 2347.67 | 2.492754 | 837.8099 | 2466.671 | 0 |
| 69 FREDERICK 103 - KERN | 719.8669 | 30.03846 | 1487.194 | 14.95652 | 711.4364 | 1574.603 | 0 |
| 69 FREDERICK 104 - CEDA | 724.2297 | 35.67067 | 1332.026 | 2.492754 | 744.1999 | 1400.339 | 7.941176 |
| 69 FREDERICK 201 -GAIN | 253.0441 | 18.77404 | 1227.237 | 0 | 257.4276 | 1263.417 | 5.294118 |
| 69 FREDERICK 202 - ALBIM | 322.8494 | 22.52885 | 1064.008 | 7.478261 | 308.9132 | 1130.644 | 2.647059 |
| 69 FREDERICK 203 -REDL | 610.7961 | 37.54808 | 1839.848 | 9.971014 | 599.1043 | 1935.579 | 2.647059 |
| 69 FREDERICK 204 - NAIN | 335.9379 | 26.28365 | 1027.735 | 7.478261 | 393.1622 | 1060.108 | 0 |
| 69 FREDERICK 301 - CLEAI | 366.4777 | 13.14183 | 1106.327 | 2.492754 | 0 | 0 | 0 |
| 69 FREDERICK 302 - NEFF' | 1540.079 | 41.30288 | 1747.15 | 12.46377 | 0 | 0 | 0 |
| 69 FREDERICK 303 -WHIT | 680.6014 | 37.54808 | 1559.74 | 14.95652 | 678.6729 | 1663.81 | 5.294118 |
| 69 FREDERICK 401 - CARP | 855.1146 | 30.03846 | 1229.252 | 17.44928 | 0 | 0 | 0 |
| 69 FREDERICK 402 -SHEN | 527.9024 | 28.16106 | 928.9922 | 0 | 0 | 0 | 0 |
| 69 FREDERICK 403 - PARK | 1099.433 | 58.19952 | 1545.633 | 7.478261 | 0 | 0 | 0 |
| 69 FREDERICK 404 - ARMI | 903.1057 | 60.07692 | 1261.495 | 0 | 0 | 0 | 0 |
| 69 FREDERICK 501 - STEPł | 1020.902 | 33.79327 | 1352.177 | 7.478261 | 1099.918 | 1414.861 | 2.647059 |
| 69 FREDERICK 502 - NEW | 1265.221 | 50.6899 | 2055.471 | 12.46377 | 1310.541 | 2147.186 | 13.23529 |
| 69 FREDERICK 503 -CANT | 1217.229 | 30.03846 | 1765.287 | 12.46377 | 1254.375 | 1848.447 | 5.294118 |
| 69 FREDERICK 601 - MILLF | 802.7606 | 33.79327 | 1078.115 | 7.478261 | 0 | 0 | 0 |
| 69 FREDERICK 602 - ASH + | 1129.973 | 37.54808 | 1162.752 | 9.971014 | 0 | 0 | 0 |
| 69 FREDERICK 603 -GREE | 1670.964 | 76.97356 | 1978.894 | 14.95652 | 0 | 0 | 0 |
| 71 GILES COUI 101 - GLEN | 39.30996 | 3.04878 | 146.7948 | 0 | 0 | 0 | 0 |
| 71 GILES COUI 102 - RICH | 211.669 | 9.146341 | 548.8122 | 3.230769 | 0 | 0 | 0 |
| 71 GILES COUI 103 - NARR | 368.9088 | 25.91463 | 1394.55 | 0 | 0 | 0 | 0 |
| 71 GILES COUI 201 - PEAR | 302.3843 | 32.0122 | 1319.485 | 3.230769 | 0 | 0 | 0 |
| 71 GILES COUI 202 - STAFI | 69.54839 | 7.621951 | 392.0087 | 3.230769 | 0 | 0 | 0 |
| 71 GILES COUI203-WHIT | 48.38149 | 1.52439 | 290.2533 | 1.615385 | 0 | 0 | 0 |
| 71 GILES COUI301-EGGL | 260.0505 | 12.19512 | 577.1703 | 1.615385 | 0 | 0 | 0 |
| 71 GILES COUI 302 - PEME | 486.8387 | 19.81707 | 1417.904 | 6.461538 | 0 | 0 | 0 |
| 71 GILES COUI 303 - NEWI | 368.9088 | 13.71951 | 789.0218 | 1.615385 | 0 | 0 | 0 |
| 73 GLOUCESTI 101 - HARC | 555.543 | 30.05909 | 1247.089 | 2.333333 | 0 | 0 | 0 |
| 73 GLOUCESTI 102 - SALEI | 663.0674 | 31.82727 | 1151.825 | 0 | 0 | 0 | 0 |
| 73 GLOUCEST1 103 -PEASI | 301.0685 | 30.05909 | 841.785 | 4.666667 | 0 | 0 | 0 |
| 73 GLOUCESTI201-COUF | 491.0283 | 19.45 | 814.072 | 7 | 0 | 0 | 0 |
| 73 GLOUCESTI202-BOTE | 655.8991 | 49.50909 | 1396.047 | 9.333333 | 0 | 0 | 0 |
| 73 GLOUCESTI301-WHIT | 637.9784 | 21.21818 | 1352.745 | 0 | 0 | 0 | 0 |
| 73 GLOUCESTI302-ROAN | 713.2455 | 37.13182 | 1508.631 | 9.333333 | 0 | 0 | 0 |
| 73 GLOUCEST1401-HAYE | 863.7797 | 53.04545 | 1519.024 | 4.666667 | 0 | 0 | 0 |
| 73 GLOUCEST1402-SARA | 792.0968 | 30.05909 | 1356.209 | 9.333333 | 0 | 0 | 0 |
| 73 GLOUCESTI501-ACHII | 698.9089 | 44.20455 | 2357.345 | 9.333333 | 0 | 0 | 0 |
| 73 GLOUCESTI502-WALk | 591.3845 | 42.43636 | 1330.228 | 0 | 0 | 0 | 0 |
| 75 GOOCHLAP 101 - FIFE | 587.9007 | 30.25 | 979.5079 | 3.6875 | 0 | 0 | 0 |
| 75 GOOCHLAR 102 - HADE | 734.8759 | 30.25 | 1468.166 | 12.90625 | 0 | 0 | 0 |
| 75 GOOCHLAR 201 -THRE | 398.2553 | 5.671875 | 392.2414 | 0 | 0 | 0 | 0 |
| 75 GOOCHLAR 202 -SAND | 1014.603 | 24.57813 | 1167.959 | 3.6875 | 0 | 0 | 0 |
| 75 GOOCHLAR 301 -GOO( | 512.0426 | 26.46875 | 826.1174 | 5.53125 | 0 | 0 | 0 |
| 75 GOOCHLAR 302 -GOOC | 284.4681 | 17.01563 | 444.8325 | 0 | 0 | 0 | 0 |


| 75 GOOCHLAR 401 -SHAL | 891.3333 | 28.35938 | 1297.245 | 7.375 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 75 GOOCHLAN 402 -CENT | 587.9007 | 26.46875 | 889.6649 | 1.84375 | 0 | 0 | 0 |
| 75 GOOCHLAR 501 -MAN, | 910.2979 | 18.90625 | 1529.522 | 16.59375 | 0 | 0 | 0 |
| 75 GOOCHLAR 502 - BLAIR | 763.3227 | 34.03125 | 970.7427 | 7.375 | 0 | 0 | 0 |
| 77 GRAYSON ( 101 - BRIDI | 98.75919 | 1.513514 | 294.5976 | 2.2 | 0 | 0 | 0 |
| 77 GRAYSON (102-FLATF | 73.36397 | 0 | 163.0007 | 0 | 0 | 0 | 0 |
| 77 GRAYSON (103-GRAN | 95.9375 | 9.081081 | 305.0655 | 0 | 0 | 0 | 0 |
| 77 GRAYSON (104-MOU | 50.79044 | 1.513514 | 165.9915 | 2.2 | 0 | 0 | 0 |
| 77 GRAYSON ( 105 - MOU | 56.43382 | 0 | 275.1571 | 0 | 0 | 0 | 0 |
| 77 GRAYSON ( 106 - RUGE | 84.65074 | 6.054054 | 270.6709 | 0 | 0 | 0 | 0 |
| 77 GRAYSON (107-TROU | 25.39522 | 0 | 165.9915 | 0 | 0 | 0 | 0 |
| 77 GRAYSON (108-COMI | 79.00735 | 3.027027 | 188.4228 | 2.2 | 0 | 0 | 0 |
| 77 GRAYSON ( 202 - ELK C | 73.36397 | 7.567568 | 439.6532 | 0 | 0 | 0 | 0 |
| 77 GRAYSON ( 203 -INDEI | 194.6967 | 6.054054 | 934.637 | 2.2 | 0 | 0 | 0 |
| 77 GRAYSON (301-BAYM | 87.47243 | 6.054054 | 643.0302 | 0 | 0 | 0 | 0 |
| 77 GRAYSON ( 302 - FAIR | 208.8051 | 10.59459 | 885.2881 | 2.2 | 0 | 0 | 0 |
| 77 GRAYSON ( 401 - FRIES | 172.1232 | 0 | 426.1945 | 0 | 0 | 0 | 0 |
| 77 GRAYSON ( 402 - PROV | 138.2629 | 3.027027 | 960.0591 | 0 | 0 | 0 | 0 |
| 77 GRAYSON ( 403 - OLDT | 95.9375 | 1.513514 | 411.2403 | 0 | 0 | 0 | 0 |
| 79 GREene CC 101 - DYKE | 308.7515 | 28.74312 | 907.5387 | 8.6 | 0 | 0 | 0 |
| 79 GREENE CC 102 - SWIF | 627.7948 | 42.00917 | 1134.945 | 8.6 | 0 | 0 | 0 |
| 79 GREene CC 201 - RUCK | 1373.944 | 61.90826 | 1790.042 | 5.733333 | 0 | 0 | 0 |
| 79 GREENE CC 301 - STAN | 797.6082 | 44.22018 | 1485.443 | 8.6 | 0 | 0 | 0 |
| 79 GREENE CC 401 - MIDV | 1054.901 | 64.11927 | 1548.032 | 11.46667 | 0 | 0 | 0 |
| 81 GREENSVIL 101 - PREC | 358.7896 | 3.833333 | 214.8678 | 1.25 | 0 | 0 | 0 |
| 81 GREENSVIL 102 - PREC | 76.29435 | 1.277778 | 156.9602 | 1.25 | 0 | 0 | 0 |
| 81 GREENSVIL 103 - PREC | 317.5495 | 5.111111 | 47.24045 | 0 | 0 | 0 | 0 |
| 81 GREENSVIL 201 - PREC | 424.7739 | 0 | 163.0557 | 0 | 0 | 0 | 0 |
| 81 GREENSVIL 202 - PREC | 253.6272 | 1.277778 | 451.0701 | 2.5 | 0 | 0 | 0 |
| 81 GREENSVIL 302 - PREC | 604.1688 | 5.111111 | 306.301 | 3.75 | 0 | 0 | 0 |
| 81 GREENSVIL 401 - PREC | 101.0385 | 1.277778 | 245.3455 | 0 | 0 | 0 | 0 |
| 81 GREENSVIL 402 - PREC | 377.3477 | 2.555556 | 202.6768 | 0 | 0 | 0 | 0 |
| 81 GREENSVIL 403 - PREC | 113.4105 | 2.555556 | 126.4825 | 1.25 | 0 | 0 | 0 |
| 83 HALIFAX C( 101 - CHILE | 449.6509 | 9.210526 | 672.794 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 102 - LIBER | 237.6204 | 3.684211 | 367.3193 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 103 -REPU | 519.1092 | 11.05263 | 543.4826 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 201 - CLAY! | 142.5722 | 3.684211 | 432.912 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 202 - CROS | 263.2103 | 3.684211 | 498.5048 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( $203-\mathrm{CLOV}$ | 566.6333 | 1.842105 | 579.0901 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 302 - MEAI | 339.98 | 3.684211 | 166.7929 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 304 - VERN | 244.9318 | 0 | 530.3641 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( $305-$ SINAI | 650.7144 | 3.684211 | 290.4821 | 2.4 | 0 | 0 | 0 |
| 83 HALIFAX C( 401 - COUF | 321.7015 | 9.210526 | 333.5859 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 403 - CENT | 339.98 | 5.526316 | 419.7935 | 2.4 | 0 | 0 | 0 |
| 83 HALIFAX C( 502 - DAN | 522.7649 | 16.57895 | 650.3051 | 4.8 | 0 | 0 | 0 |
| 83 HALIFAX C(503-SCOT | 263.2103 | 7.368421 | 697.157 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C( 601 - BLAC | 193.752 | 7.368421 | 573.4679 | 4.8 | 0 | 0 | 0 |


| 83 HALIFAX C( $603-\mathrm{MT}$ C | 614.1574 | 5.526316 | 753.3794 | 2.4 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 HALIFAX C(605-UNIO | 153.5393 | 1.842105 | 284.8599 | 0 | 0 | 0 | 0 |
| 83 HALIFAX C(701-HYCC | 336.3243 | 11.05263 | 884.5648 | 2.4 | 0 | 0 | 0 |
| 83 HALIFAX C( 702 - MIDV | 193.752 | 14.73684 | 837.7129 | 2.4 | 0 | 0 | 0 |
| 83 HALIFAX C( 703 - VIRGI | 157.195 | 7.368421 | 624.068 | 2.4 | 0 | 0 | 0 |
| 83 HALIFAX C( 801 - SOUT | 1155.201 | 12.89474 | 277.3636 | 0 | 0 | 0 | 0 |
| 85 HANOVER 1101 -ASHL | 983.7952 | 25.95294 | 776.9408 | 8.965517 | 0 | 0 | 0 |
| 85 HANOVER 104 -SLIDII | 827.3759 | 36.76667 | 981.9669 | 0 | 0 | 0 | 0 |
| 85 HANOVER 105 -BERK | 1148.447 | 25.95294 | 645.2925 | 4.482759 | 0 | 0 | 0 |
| 85 HANOVER 106 -KERSI | 473.3743 | 19.46471 | 556.8076 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER $1107-\mathrm{CHICl}$ | 543.3513 | 25.95294 | 753.201 | 6.724138 | 0 | 0 | 0 |
| 85 HANOVER 1201 -BEAV | 617.4447 | 47.58039 | 2162.485 | 13.44828 | 0 | 0 | 0 |
| 85 HANOVER 1202 -BLUN | 720.3521 | 28.11569 | 1066.135 | 6.724138 | 0 | 0 | 0 |
| 85 HANOVER 1203 -WILN | 572.1654 | 34.60392 | 1387.703 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1206 - COUF | 428.095 | 15.13922 | 705.7213 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER $1208-$ OAK I | 362.2342 | 30.27843 | 990.5996 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1209 - WEST | 259.3268 | 2.162745 | 517.9606 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER $1210-\mathrm{OAK}$ I | 185.2334 | 10.81373 | 334.5162 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1301 - CLAY | 572.1654 | 17.30196 | 951.7525 | 11.2069 | 0 | 0 | 0 |
| 85 HANOVER $1303-$ SHAD | 687.4218 | 38.92941 | 1178.36 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1304 -ATLEI | 1671.217 | 69.20784 | 2162.485 | 20.17241 | 0 | 0 | 0 |
| 85 HANOVER $1305-\mathrm{COOL}$ | 658.6077 | 25.95294 | 1046.712 | 8.965517 | 0 | 0 | 0 |
| 85 HANOVER 1401 - BATT | 543.3513 | 25.95294 | 1603.52 | 4.482759 | 0 | 0 |  |
| 85 HANOVER 1403 -COLD | 1181.378 | 67.0451 | 2276.868 | 8.965517 | 0 | 0 | 0 |
| 85 HANOVER 1404 - BLAC | 605.0958 | 19.46471 | 2486.211 | 4.482759 | 0 | 0 |  |
| 85 HANOVER 1405 - PEBB | 761.5151 | 32.44118 | 960.3852 | 6.724138 | 0 | 0 | 0 |
| 85 HANOVER 1406 - BEAV | 370.4668 | 10.81373 | 425.1593 | 8.965517 | 0 | 0 | 0 |
| 85 HANOVER1502-RURA | 629.7936 | 23.7902 | 1422.233 | 11.2069 | 0 | 0 | 0 |
| 85 HANOVER 1503 -NEWI | 794.4455 | 43.2549 | 1204.258 | 13.44828 | 0 | 0 | 0 |
| 85 HANOVER 1504 - STUD | 473.3743 | 25.95294 | 1396.335 | 4.482759 | 0 | 0 | 0 |
| 85 HANOVER 1505 -TOTO | 341.6527 | 23.7902 | 1040.237 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1506 -GEOR | 436.3276 | 32.44118 | 869.7421 | 2.241379 | 0 | 0 |  |
| 85 HANOVER 1507 -LAUR | 646.2588 | 43.2549 | 1392.019 | 6.724138 | 0 | 0 | 0 |
| 85 HANOVER 1601 -VILLA | 1214.308 | 36.76667 | 2002.781 | 15.68966 | 0 | 0 | 0 |
| 85 HANOVER 1602 -LEE D | 843.8411 | 34.60392 | 1607.836 | 8.965517 | 0 | 0 | 0 |
| 85 HANOVER 1603 - MECF | 1115.517 | 56.23137 | 1154.62 | 13.44828 | 0 | 0 | 0 |
| 85 HANOVER 1604 -HANC | 489.8395 | 17.30196 | 893.482 | 2.241379 | 0 | 0 | 0 |
| 85 HANOVER 1701 - FARR | 642.1425 | 32.44118 | 1435.182 | 6.724138 | 0 | 0 | 0 |
| 85 HANOVER 1702 -MON | 1119.633 | 30.27843 | 1493.453 | 4.482759 | 0 | 0 | 0 |
| 85 HANOVER $1703-\mathrm{ROCK}$ | 954.9811 | 32.44118 | 1821.495 | 15.68966 | 0 | 0 | 0 |
| 85 HANOVER 1704 -ELMC | 872.6552 | 30.27843 | 1523.667 | 17.93103 | 0 | 0 | 0 |
| 85 HANOVER 1705 -SOUT | 559.8165 | 30.27843 | 1089.875 | 4.482759 | 0 | 0 | 0 |
| 87 HENRICO C 101 - COAL | 1604.938 | 47.14014 | 1514.851 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 102 - DUM | 1958.51 | 48.88608 | 563.7911 | 4.275449 | 0 | 0 | 0 |
| 87 HENRICO C 103 -GLEN | 1306.829 | 40.15642 | 1513.05 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 105 -GREE | 2007.04 | 31.42676 | 1078.948 | 27.79042 | 0 | 0 | 0 |
| 87 HENRICO C 106 - HERN | 1736.661 | 50.63201 | 1008.7 | 10.68862 | 0 | 0 |  |


| 87 HENRICO C 108 - HUNC | 1358.825 | 43.64828 | 1172.613 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 109 - HUN7 | 509.5593 | 17.45931 | 646.6486 | 2.137725 | 0 | 0 | 0 |
| 87 HENRICO C 110 - JOHN | 2377.943 | 38.41049 | 898.8235 | 29.92814 | 0 | 0 | 0 |
| 87 HENRICO C 111 -LAKE! | 2121.43 | 61.10759 | 1273.483 | 25.65269 | 0 | 0 | 0 |
| 87 HENRICO C 112 -LONG | 1615.337 | 47.14014 | 1100.563 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C $113-\mathrm{MAU}$ | 717.5426 | 17.45931 | 480.9336 | 8.550898 | 0 | 0 | 0 |
| 87 HENRICO C 114 - MON | 773.0049 | 19.20524 | 462.9211 | 17.1018 | 0 | 0 | 0 |
| 87 HENRICO C 115 - STAPI | 1234.035 | 45.39421 | 1179.818 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 117 - WEST | 1130.043 | 24.44304 | 655.6548 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 201 - ADAn | 1503.207 | 11.947 | 88.70753 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 202 - AZALI | 3196.011 | 36.66456 | 223.3549 | 4.275449 | 0 | 0 | 0 |
| 87 HENRICO C 203 - BELM | 1854.518 | 47.14014 | 700.6861 | 8.550898 | 0 | 0 | 0 |
| 87 HENRICO C 204 - BROC | 457.5634 | 12.22152 | 327.8274 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 205 -CANT | 339.7062 | 1.745931 | 295.4049 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 206 - CENT | 2132.533 | 18.77385 | 57.49562 | 6.814286 | 0 | 0 | 0 |
| 87 HENRICO C 207 - CHAN | 1670.8 | 24.44304 | 549.3811 | 2.137725 | 0 | 0 | 0 |
| 87 HENRICO C 208 - FAIRF | 1731.46 | 10.24028 | 73.92294 | 11.35714 | 0 | 0 | 0 |
| 87 HENRICO C 209 - GLEN | 1376.038 | 20.48057 | 208.627 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 210 - GREE | 1119.644 | 22.69711 | 288.1999 | 2.137725 | 0 | 0 | 0 |
| 87 HENRICO C 211 - HIGH | 932.5754 | 13.65371 | 41.0683 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 212 - HOLL | 669.0132 | 6.983725 | 221.5537 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 213 - HUNC | 1310.295 | 24.44304 | 302.6099 | 4.275449 | 0 | 0 | 0 |
| 87 HENRICO C 214 -LONG | 1348.426 | 33.17269 | 560.1886 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 215 - MAPI | 2161.879 | 17.06714 | 123.2049 | 9.085714 | 0 | 0 | 0 |
| 87 HENRICO C 216 - MOO | 634.3493 | 26.18897 | 416.0886 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 217 - MOU | 558.0887 | 3.491863 | 261.1812 | 2.137725 | 0 | 0 | 0 |
| 87 HENRICO C 218 - OAKV | 121.3236 | 3.491863 | 73.85123 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 219 - RANL | 360.5045 | 3.491863 | 59.44123 | 4.275449 | 0 | 0 | 0 |
| 87 HENRICO C 220 -RATC | 2823.812 | 17.06714 | 154.4168 | 2.271429 | 0 | 0 | 0 |
| 87 HENRICO C 221 - STRA | 207.9834 | 17.45931 | 163.9137 | 2.137725 | 0 | 0 | 0 |
| 87 HENRICO C 222 - WILD | 1178.572 | 15.71338 | 286.3987 | 8.550898 | 0 | 0 | 0 |
| 87 HENRICO C 223 - YELLC | 1549.476 | 26.18897 | 824.9723 | 14.96407 | 0 | 0 | 0 |
| 87 HENRICO C 224 - ESSE> | 1105.395 | 13.65371 | 22.99825 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 301 -CAUS | 1171.64 | 33.17269 | 891.6185 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 302 -CEDA | 811.1351 | 38.41049 | 871.8048 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 303 -INNSI | 1383.089 | 41.90235 | 1048.327 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 304 -JACKS | 831.9335 | 12.22152 | 745.7173 | 8.550898 | 0 | 0 | 0 |
| 87 HENRICO C 305 - NUCK | 1369.224 | 54.12387 | 1345.533 | 32.06587 | 0 | 0 | 0 |
| 87 HENRICO C 306 - POCA | 1261.766 | 19.20524 | 888.016 | 14.96407 | 0 | 0 | 0 |
| 87 HENRICO C 307 - RIDGI | 967.1227 | 26.18897 | 630.4373 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 308 - RIVEF | 1469.749 | 24.44304 | 1329.322 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 309 - SADL | 1421.22 | 24.44304 | 1001.495 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 310 -SHAD | 1528.678 | 36.66456 | 1576.093 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 311 -SHOR | 807.6687 | 19.20524 | 731.3073 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 312 - SPRIN | 1251.367 | 22.69711 | 675.4686 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 313 - STON | 1365.757 | 36.66456 | 1374.353 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 314 -THRE | 1455.884 | 41.90235 | 1242.862 | 8.550898 | 0 | 0 | 0 |


| 87 HENRICO C 315 -TUCK | 2353.678 | 47.14014 | 709.6923 | 19.23952 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 316 - COLO | 1088.446 | 17.45931 | 648.4498 | 4.275449 | 0 | 0 | 0 |
| 87 HENRICO C 401 - QUIO | 1497.48 | 31.42676 | 949.2585 | 14.96407 | 0 | 0 | 0 |
| 87 HENRICO C 402 - CRES | 1740.128 | 36.66456 | 900.6248 | 19.23952 | 0 | 0 | 0 |
| 87 HENRICO C 403 - DERB | 1043.383 | 22.69711 | 1005.097 | 14.96407 | 0 | 0 | 0 |
| 87 HENRICO C 404 - FREEI | 1043.383 | 34.91863 | 803.3573 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 405 -GAYT | 880.4629 | 33.17269 | 1033.917 | 19.23952 | 0 | 0 | 0 |
| 87 HENRICO C 406 -GODI | 873.5301 | 10.47559 | 794.351 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 407 - LAKEI | 866.5974 | 20.95118 | 806.9598 | 14.96407 | 0 | 0 | 0 |
| 87 HENRICO C 408 -LAUD | 1497.48 | 43.64828 | 947.4573 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 409 - MAYE | 1355.358 | 31.42676 | 1035.718 | 19.23952 | 0 | 0 | 0 |
| 87 HENRICO C $410-\mathrm{MOO}$ | 703.6771 | 19.20524 | 871.8048 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 411 - PEME | 1424.686 | 22.69711 | 803.3573 | 19.23952 | 0 | 0 | 0 |
| 87 HENRICO C 412 - PINC | 1802.523 | 45.39421 | 1048.327 | 19.23952 | 0 | 0 | 0 |
| 87 HENRICO C 413 - RIDGI | 1393.489 | 47.14014 | 1408.577 | 17.1018 | 0 | 0 | 0 |
| 87 HENRICO C 414 - ROLLI | 1237.501 | 54.12387 | 792.5498 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 415 - SKIPV | 908.194 | 6.983725 | 567.3936 | 6.413174 | 0 | 0 | 0 |
| 87 HENRICO C 416 - SPOT | 731.4082 | 12.22152 | 506.1511 | 10.68862 | 0 | 0 | 0 |
| 87 HENRICO C 417 -TUCK | 1019.119 | 40.15642 | 1253.67 | 21.37725 | 0 | 0 | 0 |
| 87 HENRICO C 418 - WELE | 1244.434 | 41.90235 | 702.4873 | 12.82635 | 0 | 0 | 0 |
| 87 HENRICO C 419 - WEST | 1202.837 | 41.90235 | 1136.588 | 17.1018 | 0 | 0 | 0 |
| 87 HENRICO C501-ANTIC | 551.0673 | 15.36042 | 1404.536 | 6.814286 | 0 | 0 | 0 |
| 87 HENRICO C502-CEDA | 1040.18 | 13.65371 | 142.9177 | 2.271429 | 0 | 0 | 0 |
| 87 HENRICO C $503-\mathrm{CHICl}$ | 877.1426 | 22.18728 | 938 | 2.271429 | 0 | 0 | 0 |
| 87 HENRICO C504-DON/ | 1141.264 | 23.89399 | 505.9615 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 505 - DORE | 1121.699 | 30.72085 | 870.648 | 2.271429 | 0 | 0 | 0 |
| 87 HENRICO C 506 - EANE | 1692.331 | 20.48057 | 453.394 | 9.085714 | 0 | 0 | 0 |
| 87 HENRICO C 507 - ELKO | 192.3844 | 6.826855 | 586.4553 | 0 | 0 | 0 | 0 |
| 87 HENRICO C 508 - HIGH | 1659.723 | 22.18728 | 239.8389 | 9.085714 | 0 | 0 | 0 |
| 87 HENRICO C 509 -LABU | 1340.17 | 11.947 | 336.7601 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C $510-\mathrm{MEHI}$ | 1255.39 | 15.36042 | 463.2504 | 9.085714 | 0 | 0 | 0 |
| 87 HENRICO C511-MON | 2315.135 | 23.89399 | 267.7653 | 15.9 | 0 | 0 | 0 |
| 87 HENRICO C512-NINE | 926.0539 | 22.18728 | 363.0438 | 2.271429 | 0 | 0 | 0 |
| 87 HENRICO C 513 - PLEA! | 2589.038 | 11.947 | 228.3398 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 514 - ROLF | 2155.358 | 15.36042 | 215.1979 | 11.35714 | 0 | 0 | 0 |
| 87 HENRICO C515-SAND | 942.3577 | 35.84099 | 1276.403 | 9.085714 | 0 | 0 | 0 |
| 87 HENRICO C516-SULLI | 1822.761 | 27.30742 | 532.2452 | 13.62857 | 0 | 0 | 0 |
| 87 HENRICO C 517 - TOWI | 427.1587 | 5.120141 | 504.3187 | 4.542857 | 0 | 0 | 0 |
| 87 HENRICO C 518 - WHIT | 723.8872 | 35.84099 | 1156.483 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 101 - BASSI | 338.6409 | 1.670213 | 304.9086 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 102 -GUN | 263.7492 | 10.02128 | 1016.362 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 103 - SCOT | 468.8875 | 18.37234 | 1631.347 | 1.928571 | 0 | 0 | 0 |
| 89 HENRY COI 201 - FIELD | 237.6999 | 15.03191 | 440.9978 | 1.928571 | 0 | 0 | 0 |
| 89 HENRY COI 202 - HORS | 393.9957 | 6.680851 | 926.7845 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 203 - HORS | 661.0011 | 10.02128 | 310.0766 | 5.785714 | 0 | 0 | 0 |
| 89 HENRY COI 204 - SPEN | 452.6066 | 6.680851 | 1147.283 | 7.714286 | 0 | 0 | 0 |
| 89 HENRY COI 302 - AXTO | 450.5857 | 8.684211 | 507.8449 | 0 | 0 | 0 | 0 |


| 89 HENRY COI 303 - IRISB | 641.5119 | 15.63158 | 906.9872 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 304 - MOU | 568.3976 | 6.947368 | 565.5932 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 305 - MOU | 393.3079 | 12.15789 | 540.116 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 401 - COLLI | 205.1383 | 8.351064 | 515.0717 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 402 - DANI | 322.3601 | 5.010638 | 520.2396 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 404 - COLLI | 488.4244 | 20.04255 | 739.0159 | 3.857143 | 0 | 0 | 0 |
| 89 HENRY COI 405 - MOU | 378.0338 | 3.473684 | 473.8754 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 501 - BASSI | 312.5916 | 13.3617 | 428.9393 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 502 - FIGSE | 224.6752 | 3.340426 | 720.0667 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 503 - STAN | 332.1286 | 6.680851 | 1173.123 | 1.928571 | 0 | 0 | 0 |
| 89 HENRY COI 504-OAK I | 227.9314 | 5.010638 | 456.5016 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 505 - DYER | 168.4317 | 8.351064 | 445.344 | 1.928571 | 0 | 0 | 0 |
| 89 HENRY COI 601 - FONT | 452.6066 | 10.02128 | 708.0082 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 602 - HILLC | 240.9561 | 3.340426 | 320.4125 | 0 | 0 | 0 | 0 |
| 89 HENRY COI 603 -RIDGI | 584.234 | 19.10526 | 1076.835 | 3 | 0 | 0 | 0 |
| 89 HENRY COI 604 -RIDG। | 319.104 | 5.010638 | 849.2653 | 1.928571 | 0 | 0 | 0 |
| 91 HIGHLAND 001 - MON | 135.9783 | 3.384615 | 285.4818 | 0 | 0 | 0 | 0 |
| 91 HIGHLAND 003 - WILSI | 20.39674 | 5.076923 | 93.45369 | 0 | 0 | 0 | 0 |
| 91 HIGHLAND 005 - BLUE | 106.5163 | 3.384615 | 193.3083 | 0 | 0 | 0 | 0 |
| 91 HIGHLAND 007 - MILL | 65.72283 | 3.384615 | 124.1782 | 2 | 0 | 0 | 0 |
| 91 HIGHLAND 008 - MCD | 74.78804 | 6.769231 | 295.7233 | 0 | 0 | 0 | 0 |
| 91 HIGHLAND $010-$ HEAD | 13.59783 | 0 | 99.85463 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII 101 - SMITI | 892.0436 | 52.26374 | 1561.001 | 3.142857 | 0 | 0 | 0 |
| 93 ISLE OF WII 102 - CYPR | 742.7316 | 21.62637 | 1278.225 | 12.57143 | 0 | 0 | 0 |
| 93 ISLE OF WII 201 - BART | 911.1862 | 57.67033 | 1646.98 | 3.142857 | 0 | 0 | 0 |
| 93 ISLE OF WII 202 - CARR | 1098.783 | 43.25275 | 1381.4 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII301-RUSH | 1183.011 | 21.62637 | 991.6271 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII302-PONS | 1202.153 | 25.23077 | 643.8889 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII401-COUF | 248.8534 | 14.41758 | 575.1055 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII 402 - WINE | 543.6489 | 28.83516 | 1159.764 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII 403 - LONG | 761.8741 | 16.21978 | 890.3627 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII501-WALT | 363.7088 | 18.02198 | 1006.912 | 3.142857 | 0 | 0 | 0 |
| 93 ISLE OF WII502-CAMF | 398.1654 | 9.010989 | 288.5081 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII503-CARR | 474.7356 | 3.604396 | 630.5144 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII504-ZUNI | 444.1075 | 12.61538 | 1068.053 | 0 | 0 | 0 | 0 |
| 93 ISLE OF WII 505 - RAYN | 133.998 | 3.604396 | 584.6588 | 0 | 0 | 0 | 0 |
| 95 JAMES CIT 101 - BERK | 1336.749 | 39.22535 | 1420.752 | 20 | 0 | 0 | 0 |
| 95 JAMES CIT 102 - BERK | 1383.38 | 52.30047 | 1254.434 | 20 | 0 | 0 | 0 |
| 95 JAMES CIT 103 - BERK | 1173.542 | 31.38028 | 1629.355 | 12 | 0 | 0 | 0 |
| 95 JAMES CIT 104- BERKE | 436.2822 | 16.47692 | 468.6363 | 5.222222 | 0 | 0 | 0 |
| 95 JAMES CIT 201 - JAME | 595.4663 | 28.24615 | 422.7915 | 15.66667 | 0 | 0 | 0 |
| 95 JAMES CIT 202 - JAME | 1871.127 | 39.22535 | 890.2449 | 12 | 0 | 0 | 0 |
| 95 JAMES CIT 203 -JAME | 1134.683 | 52.30047 | 978.1765 | 12 | 0 | 0 | 0 |
| 95 JAMES CIT 204 - JAME | 862.6697 | 36.61033 | 966.9007 | 4 | 0 | 0 | 0 |
| 95 JAMES CIT 301 - POW | 1220.172 | 20.92019 | 1195.236 | 20 | 0 | 0 | 0 |
| 95 JAMES CIT 302 - POW | 1064.736 | 20.92019 | 490.4977 | 8 | 0 | 0 | 0 |
| 95 JAMES CIT\303-POW | 924.8441 | 15.69014 | 1271.348 | 8 | 0 | 0 |  |


| 95 JAMES CIT 304 - POW | 2339.311 | 62.76056 | 1262.891 | 16 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 JAMES CIT 401 - STON | 2626.868 | 70.60563 | 2844.323 | 20 | 0 | 0 | 0 |
| 95 JAMES CIT 402 - STON | 2238.278 | 75.83568 | 2238.248 | 8 | 0 | 0 | 0 |
| 95 JAMES CIT 403 - STON | 1616.534 | 39.22535 | 2179.05 | 16 | 0 | 0 | 0 |
| 95 JAMES CIT 501 -ROBE | 2034.018 | 16.47692 | 700.4075 | 0 | 0 | 0 | 0 |
| 95 JAMES CIT\502-ROBE | 595.4663 | 28.24615 | 1388.08 | 5.222222 | 0 | 0 | 0 |
| 95 JAMES CIT\ 503 -ROBE | 866.6687 | 9.415385 | 229.2243 | 0 | 0 | 0 | 0 |
| 95 JAMES CIT) 504 -ROBE | 1232.202 | 54.13846 | 1322.404 | 20.88889 | 0 | 0 | 0 |
| 97 KING \& QU 101 - OWEI | 613.777 | 10.18182 | 414.6154 | 5.5 | 0 | 0 | 0 |
| 97 KING \& QU 201 - CLAR | 306.8885 | 16 | 604.6474 | 0 | 0 | 0 | 0 |
| 97 KING \& QU 301 - SHAC | 322.7621 | 13.09091 | 494.7115 | 1.833333 | 0 | 0 | 0 |
| 97 KING \& QU 401 - COUF | 227.5208 | 10.18182 | 406.7628 | 0 | 0 | 0 | 0 |
| 97 KING \& QU 501 - OLDN | 119.0516 | 14.54545 | 529.2628 | 3.666667 | 0 | 0 | 0 |
| 99 KING GEOR 101 - COUF | 959.2899 | 62.28099 | 1717.258 | 15.75 | 0 | 0 | 0 |
| 99 KING GEOR 102 - PASS, | 783.4201 | 41.52066 | 1215.85 | 7.875 | 0 | 0 | 0 |
| 99 KING GEOR 201 - MON | 911.3254 | 90.82645 | 1777.011 | 13.125 | 0 | 0 | 0 |
| 99 KING GEOR 301 - DAHL | 1460.252 | 62.28099 | 1777.011 | 10.5 | 0 | 0 | 0 |
| 99 KING GEOR 401 - SHILC | 1289.712 | 57.09091 | 1958.869 | 15.75 | 0 | 0 | 0 |
| 101 KING WILLI 101 - WEST | 885.8092 | 44.54902 | 1411.22 | 7.5 | 0 | 0 | 0 |
| 101 KING WILLI 201 - SWEE | 241.5843 | 9.745098 | 598.6019 | 1.875 | 0 | 0 | 0 |
| 101 KING WILLI 202 - COUF | 347.1039 | 11.13725 | 646.8762 | 1.875 | 0 | 0 | 0 |
| 101 KING WILLI 301 - AYLE | 499.8296 | 33.41176 | 1642.937 | 1.875 | 0 | 0 | 0 |
| 101 KING WILLI 401 - MAN | 613.6797 | 23.66667 | 1562.48 | 0 | 0 | 0 | 0 |
| 101 KING WILLI 501 - MAN | 671.9932 | 19.4902 | 1457.885 | 1.875 | 0 | 0 | 0 |
| 103 LANCASTEF 101 - PREC | 618.9222 | 15.21429 | 825.8473 | 0 | 0 | 0 | 0 |
| 103 LANCASTEF 201 - PREC | 717.646 | 11.83333 | 423.0398 | 2.666667 | 0 | 0 | 0 |
| 103 LANCASTEF 301 - PREC | 360.7215 | 6.761905 | 739.4 | 0 | 0 | 0 | 0 |
| 103 LANCASTEF 302 - PREC | 155.6798 | 5.071429 | 340.2711 | 5.333333 | 0 | 0 | 0 |
| 103 LANCASTEF 401 - PREC | 911.2965 | 16.90476 | 426.7184 | 0 | 0 | 0 | 0 |
| 103 LANCASTEF 501 - PREC | 603.7339 | 15.21429 | 941.7234 | 8 | 0 | 0 | 0 |
| 105 LEE COUNT 101 - ELYD, | 96.6616 | 2.6 | 472.2836 | 1.153846 | 0 | 0 | 0 |
| 105 LEE COUNT 102 - EWIN | 69.92541 | 11.7 | 454.59 | 2.307692 | 0 | 0 | 0 |
| 105 LEE COUNT 103 -ROSE | 176.8702 | 15.6 | 826.156 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 201 - BLAC | 45.24586 | 1.3 | 201.4351 | 3.461538 | 0 | 0 | 0 |
| 105 LEE COUNT 202 - FLAT | 104.8881 | 2.6 | 642.4146 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 203 - JONE | 133.6809 | 5.2 | 809.8235 | 1.153846 | 0 | 0 | 0 |
| 105 LEE COUNT 301 - BEN + | 123.3978 | 9.1 | 935.0399 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 302 - WOO | 115.1713 | 2.6 | 728.1606 | 1.153846 | 0 | 0 | 0 |
| 105 LEE COUNT 401 - STICK | 113.1146 | 3.9 | 423.2859 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 402 - JASPE | 43.18923 | 3.9 | 326.6515 | 1.153846 | 0 | 0 | 0 |
| 105 LEE COUNT 403 - SEMII | 61.6989 | 2.6 | 454.59 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 404 - DRYD | 102.8315 | 6.5 | 751.2984 | 2.307692 | 0 | 0 | 0 |
| 105 LEE COUNT 501 - SAIN | 100.7749 | 2.6 | 299.4305 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 502 - PENN | 127.511 | 5.2 | 732.2437 | 0 | 0 | 0 | 0 |
| 105 LEE COUNT 503 -ROBB | 24.67956 | 2.6 | 122.4943 | 1.153846 | 0 | 0 | 0 |
| 105 LEE COUNT 504 - KEOK | 49.35912 | 0 | 185.1025 | 1.153846 | 0 | 0 | 0 |
| 107 LOUDOUN 107 - LITTL | 1277.265 | 30.89099 | 916.0973 | 15.3 | 0 | 0 | 0 |


| 107 LOUDOUN 108 - MERC | 1500.665 | 21.38607 | 828.6417 | 12.75 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 112 -FREEI | 854.7477 | 16.63361 | 481.0057 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 114 - DULL | 908.1695 | 30.89099 | 526.9199 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 117 - CART | 1107.287 | 14.25738 | 362.9407 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 118-MOO | 1631.791 | 14.25738 | 782.7275 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 119 - ARCC | 1452.1 | 23.7623 | 590.3252 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 120 - LUNS | 1617.222 | 28.51476 | 826.4553 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 121 -TOW | 1189.848 | 42.77214 | 625.3074 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 122 - HUTC | 1461.813 | 21.38607 | 898.6062 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 123 - CARD | 893.5999 | 19.00984 | 498.4968 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 124 - LIBER | 1053.865 | 9.504921 | 472.2602 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 125 -ROCK | 1772.63 | 14.25738 | 712.763 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 126-GOSHE | 1602.652 | 52.27706 | 811.1506 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 207 - RIVEF | 971.3042 | 28.51476 | 627.4938 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 208 - ALGO | 1296.691 | 33.26722 | 671.2216 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 209 - POTC | 1286.978 | 45.14837 | 756.4908 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 210 - CASC | 2132.013 | 61.78198 | 913.9109 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 213 - COUN | 733.3347 | 21.38607 | 343.2632 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 214 - SUGA | 1549.23 | 45.14837 | 920.47 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 215 - SUGA | 2365.126 | 33.26722 | 1060.399 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 216 -LOWI | 1597.795 | 42.77214 | 907.3517 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 217 - SOUT | 1340.4 | 33.26722 | 808.9642 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 218 - UNIV | 1753.204 | 47.5246 | 684.34 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 219 - GALIL | 1592.939 | 83.16805 | 773.9819 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 301 - PURC | 951.8781 | 49.90083 | 1211.26 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 302 -ROUN | 1685.213 | 45.14837 | 1679.147 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 303 - HILLS | 1092.717 | 42.77214 | 1443.017 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 305 - PHILC | 840.1782 | 19.00984 | 843.9464 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 307 - MIDC | 1369.539 | 16.63361 | 712.763 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 308 - ST LO | 1092.717 | 23.7623 | 738.9997 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 309 - ALDIE | 830.4651 | 7.12869 | 568.4613 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 310 - MOU | 1466.669 | 59.40575 | 1604.81 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 311 -ROUN | 1602.652 | 40.39591 | 1770.976 | 30.6 | 0 | 0 | 0 |
| 107 LOUDOUN 312 - BRIAF | 1748.348 | 7.12869 | 813.337 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 313 - PINEE | 1709.495 | 33.26722 | 902.9789 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 314 -LEGA | 1660.93 | 26.13853 | 843.9464 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 315 - FIREF | 524.5043 | 11.88115 | 629.6802 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 316 - CREIG | 2093.161 | 30.89099 | 972.9434 | 28.05 | 0 | 0 | 0 |
| 107 LOUDOUN 318 - MADI | 1184.991 | 45.14837 | 1287.784 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 319 - JOHN | 1777.487 | 26.13853 | 1128.177 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 320-STON | 2433.117 | 33.26722 | 826.4553 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 321 - BRAN | 1209.274 | 26.13853 | 509.4288 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 322-BUFFA | 1340.4 | 26.13853 | 649.3577 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 401 - WEST | 2054.308 | 78.41559 | 2380.978 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 402 - WATE | 1452.1 | 71.2869 | 1633.233 | 33.15 | 0 | 0 | 0 |
| 107 LOUDOUN 403 - LUCK | 1714.352 | 26.13853 | 1427.712 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 407 - HARP | 869.3173 | 11.88115 | 553.1566 | 10.2 | 0 | 0 | 0 |


| 107 LOUDOUN 408 - EVER | 1452.1 | 28.51476 | 1176.278 | 7.65 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 409 - CLAR | 981.0173 | 30.89099 | 1213.446 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 411 - EAST | 1097.574 | 40.39591 | 1534.846 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 413 -TUSC | 135.9826 | 2.37623 | 61.21891 | 2.55 | 0 | 0 | 0 |
| 107 LOUDOUN 414 -RED F | 1320.974 | 21.38607 | 629.6802 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 416 - HAMI | 1549.23 | 52.27706 | 1781.908 | 30.6 | 0 | 0 | 0 |
| 107 LOUDOUN 420 - RIVEF | 845.0347 | 9.504921 | 852.692 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 421 - BETM | 252.5391 | 19.00984 | 288.6034 | 2.55 | 0 | 0 | 0 |
| 107 LOUDOUN 422 - SYCO | 879.0303 | 28.51476 | 907.3517 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 501 - WEST | 1175.278 | 28.51476 | 745.5589 | 38.25 | 0 | 0 | 0 |
| 107 LOUDOUN 502 -EAST | 2034.882 | 59.40575 | 752.118 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 503 - DRY | 670.1999 | 9.504921 | 540.0382 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 504-SMAF | 1379.252 | 47.5246 | 857.0647 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 505-COOL | 1408.391 | 33.26722 | 911.7245 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 506-BRAN | 1180.135 | 40.39591 | 487.5649 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 507-GREE | 592.4956 | 11.88115 | 456.9554 | 30.6 | 0 | 0 | 0 |
| 107 LOUDOUN 508-BALLS | 1986.317 | 64.15821 | 1106.313 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 509-TOLB | 2462.256 | 49.90083 | 988.2481 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 510-HERI7 | 641.0608 | 4.75246 | 540.0382 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 615 - HILLS | 1860.048 | 42.77214 | 913.9109 | 33.15 | 0 | 0 | 0 |
| 107 LOUDOUN 616 -EAGL | 1588.082 | 49.90083 | 924.8428 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 617-OAK ( | 1476.382 | 14.25738 | 356.3815 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 619 -RIDGI | 806.1825 | 9.504921 | 325.7721 | 0 | 0 | 0 | 0 |
| 107 LOUDOUN 620-RUSS | 1952.321 | 49.90083 | 990.4345 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 621 - DOM | 2195.148 | 26.13853 | 1136.923 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 622 - FARN | 2083.448 | 23.7623 | 907.3517 | 12.75 | 0 | 0 | 0 |
| 107 LOUDOUN 623 - WELL | 1753.204 | 38.01968 | 920.47 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 625 - MILL | 675.0564 | 14.25738 | 450.3963 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 626 - ASHB | 917.8825 | 7.12869 | 616.5619 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 627 - ASHB | 820.7521 | 11.88115 | 277.6715 | 5.1 | 0 | 0 | 0 |
| 107 LOUDOUN 628 - MOO | 2428.261 | 61.78198 | 1056.026 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 629 - DISCC | 592.4956 | 4.75246 | 260.1804 | 0 | 0 | 0 | 0 |
| 107 LOUDOUN 701-SULL) | 1724.065 | 42.77214 | 780.5411 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 702 - PARK | 1855.191 | 26.13853 | 754.3044 | 7.65 | 0 | 0 | 0 |
| 107 LOUDOUN 703 -ROLLI | 2607.952 | 47.5246 | 690.8991 | 22.95 | 0 | 0 | 0 |
| 107 LOUDOUN 705 - FORE | 2442.83 | 57.02952 | 970.757 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 707 - CLAU | 1427.817 | 26.13853 | 474.4466 | 10.2 | 0 | 0 | 0 |
| 107 LOUDOUN 708 -SENEI | 1126.713 | 35.64345 | 712.763 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 709 - MIRR | 1918.326 | 38.01968 | 699.6447 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 710 - STERI | 1617.222 | 26.13853 | 662.4761 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 808 - STON | 1903.756 | 59.40575 | 1040.721 | 28.05 | 0 | 0 | 0 |
| 107 LOUDOUN 810 - CEDA | 1792.056 | 42.77214 | 905.1653 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 813 - SELDI | 1694.926 | 33.26722 | 686.5264 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 814 - NEW | 1184.991 | 26.13853 | 1180.65 | 25.5 | 0 | 0 | 0 |
| 107 LOUDOUN 815 - BELM | 1087.861 | 19.00984 | 631.8666 | 20.4 | 0 | 0 | 0 |
| 107 LOUDOUN 817 -SAND | 1942.608 | 57.02952 | 1117.245 | 17.85 | 0 | 0 | 0 |
| 107 LOUDOUN 818 -BROA | 1340.4 | 14.25738 | 738.9997 | 0 | 0 | 0 | 0 |


| 107 LOUDOUN 819 - HERIT | 1345.256 | 23.7623 | 795.8458 | 10.2 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 LOUDOUN 820 - BELM | 1369.539 | 26.13853 | 721.5086 | 15.3 | 0 | 0 | 0 |
| 107 LOUDOUN 822 - RIVEF | 1150.996 | 28.51476 | 620.9347 | 10.2 | 0 | 0 | 0 |
| 109 LOUISA CO 101 - ZION | 921.7902 | 25.14205 | 1309.334 | 4.296296 | 0 | 0 | 0 |
| 109 LOUISA CO 102 - MECr | 577.0871 | 28.49432 | 787.6068 | 0 | 0 | 0 | 0 |
| 109 LOUISA CO 201 - LOUIS | 499.6258 | 10.05682 | 668.8805 | 2.148148 | 0 | 0 | 0 |
| 109 LOUISA CO 202 - LOUIS | 503.4988 | 18.4375 | 837.7728 | 2.148148 | 0 | 0 | 0 |
| 109 LOUISA CO 301 - PATR | 1247.128 | 38.55114 | 1008.337 | 8.592593 | 0 | 0 | 0 |
| 109 LOUISA CO 302 - PATR | 387.3068 | 16.76136 | 389.6229 | 0 | 0 | 0 | 0 |
| 109 LOUISA CO 401 - MINE | 573.2141 | 20.11364 | 1322.711 | 2.148148 | 0 | 0 | 0 |
| 109 LOUISA CO 402 - YANC | 333.0838 | 15.08523 | 376.2453 | 8.592593 | 0 | 0 | 0 |
| 109 LOUISA CO 501 - FRED | 488.0066 | 10.05682 | 354.5067 | 4.296296 | 0 | 0 | 0 |
| 109 LOUISA CO 502 - CUCK | 379.5607 | 16.76136 | 750.8184 | 2.148148 | 0 | 0 | 0 |
| 109 LOUISA CO 503 - ELK C | 294.3532 | 8.380682 | 714.0299 | 4.296296 | 0 | 0 | 0 |
| 109 LOUISA CO 601 - BUM | 398.926 | 26.81818 | 1155.491 | 6.444444 | 0 | 0 | 0 |
| 109 LOUISA CO 602 - LOCU | 584.8333 | 23.46591 | 1401.305 | 2.148148 | 0 | 0 | 0 |
| 109 LOUISA CO 701 - SHEL ${ }^{-}$ | 619.6909 | 18.4375 | 1376.222 | 8.592593 | 0 | 0 | 0 |
| 109 LOUISA CO 702 - SOUT | 460.8951 | 18.4375 | 841.1172 | 2.148148 | 0 | 0 | 0 |
| 111 LUNENBUR 101 - PLYM | 164.562 | 4.444444 | 436.2462 | 3.5 | 0 | 0 | 0 |
| 111 LUNENBUR 201 -BROV | 214.9923 | 2.222222 | 407.055 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 301 -ROSE | 124.7486 | 4.444444 | 387.5942 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 302 - FLAT | 214.9923 | 4.444444 | 436.2462 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 401 - ARRC | 66.35565 | 0 | 293.5337 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 402 - PLEA! | 175.1789 | 6.666667 | 431.381 | 3.5 | 0 | 0 | 0 |
| 111 LUNENBUR 501 -REED | 175.1789 | 6.666667 | 180.0124 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 502 - PEOP | 326.4698 | 2.222222 | 147.5777 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 601 - HOUR | 528.191 | 4.444444 | 317.8597 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 701 - MEHI | 241.5346 | 2.222222 | 240.0165 | 0 | 0 | 0 | 0 |
| 111 LUNENBUR 702 - VICTC | 185.7958 | 2.222222 | 259.4773 | 0 | 0 | 0 | 0 |
| 113 MADISON 1001 - OAK I | 443.3171 | 21.50725 | 557.5705 | 1.705882 | 0 | 0 | 0 |
| 113 MADISON 1002 - RADI, | 484.878 | 10.75362 | 791.6885 | 1.705882 | 0 | 0 | 0 |
| 113 MADISON 1003-ROCF | 290.9268 | 15.36232 | 542.168 | 1.705882 | 0 | 0 | 0 |
| 113 MADISON 1004 - GRAV | 45.02439 | 0 | 66.23075 | 0 | 0 | 0 | 0 |
| 113 MADISON 1005 - MADI | 394.8293 | 15.36232 | 804.0105 | 6.823529 | 0 | 0 | 0 |
| 113 MADISON 1006 - WOLI | 360.1951 | 10.75362 | 572.973 | 0 | 0 | 0 | 0 |
| 113 MADISON 1007-BRIGI | 342.878 | 27.65217 | 1127.463 | 10.23529 | 0 | 0 | 0 |
| 113 MADISON 1008 - CRIGI | 214.7317 | 1.536232 | 497.5007 | 3.411765 | 0 | 0 | 0 |
| 113 MADISON 1009 - ETLAI | 121.2195 | 3.072464 | 340.3952 | 3.411765 | 0 | 0 | 0 |
| 115 MATHEWS 001 - CHES. | 452.7672 | 25.58824 | 971.4315 | 3.2 | 0 | 0 | 0 |
| 115 MATHEWS 002 -WEST | 633.874 | 28.14706 | 1341.064 | 9.6 | 0 | 0 | 0 |
| 115 MATHEWS 003 - PIANI | 738.3588 | 33.26471 | 1588.504 | 3.2 | 0 | 0 | 0 |
| 117 MECKLENB 101 - WRIG | 361.3363 | 4.708333 | 335.7639 | 1.923077 | 0 | 0 | 0 |
| 117 MECKLENB 102 - PEAR | 96.18303 | 1.569444 | 198.57 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 103 - SOUT | 517.3088 | 7.847222 | 474.7629 | 1.923077 | 0 | 0 | 0 |
| 117 MECKLENB 201 - BOYD | 200.1647 | 4.708333 | 227.453 | 1.923077 | 0 | 0 | 0 |
| 117 MECKLENB 202 - BLUE: | 187.167 | 0 | 75.81765 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 203 - CHAS | 501.7115 | 1.569444 | 77.62283 | 0 | 0 | 0 | 0 |


| 117 MECKLENB 301 - BRAC | 332.7413 | 9.416667 | 1061.447 | 3.846154 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 MECKLENB 302 -LACR | 374.334 | 3.138889 | 546.9702 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 401 - AMEF | 977.4276 | 10.98611 | 435.0489 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 402 - PARK | 168.9702 | 0 | 106.5057 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 501 - SOUT | 842.2514 | 9.416667 | 774.4231 | 3.846154 | 0 | 0 | 0 |
| 117 MECKLENB 601 - BASK | 163.7711 | 0 | 400.7504 | 3.846154 | 0 | 0 | 0 |
| 117 MECKLENB 602 - UNIO | 90.98395 | 3.138889 | 386.309 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 603 - SMITI | 122.1784 | 1.569444 | 247.31 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 604 - LAKE | 114.3798 | 3.138889 | 379.0883 | 1.923077 | 0 | 0 | 0 |
| 117 MECKLENB 701 - CHAS | 402.9289 | 4.708333 | 492.8147 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 702 - SUNS | 231.3592 | 1.569444 | 471.1525 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 801 - FINCF | 93.58349 | 1.569444 | 142.6094 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 802 - BLUE: | 213.1624 | 10.98611 | 543.3598 | 0 | 0 | 0 | 0 |
| 117 MECKLENB $803-$ CHAS | 278.1509 | 3.138889 | 404.3608 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 901 - AVER | 25.99541 | 1.569444 | 283.4136 | 0 | 0 | 0 | 0 |
| 117 MECKLENB 902 - BUFF, | 148.1739 | 7.847222 | 350.2053 | 1.923077 | 0 | 0 | 0 |
| 117 MECKLENB 903 - CLAR | 358.7367 | 20.40278 | 850.2408 | 3.846154 | 0 | 0 | 0 |
| 119 MIDDLESE) 101 - SALU | 146.7399 | 1.571429 | 211.4651 | 2.1 | 0 | 0 | 0 |
| 119 MIDDLESE) 102 - URBA | 386.5345 | 4.714286 | 464.5571 | 2.1 | 0 | 0 | 0 |
| 119 MIDDLESE) 201 - NEW | 458.1149 | 22 | 1212.178 | 4.2 | 0 | 0 | 0 |
| 119 MIDDLESE) 302 - CHUR | 583.3807 | 20.42857 | 724.3095 | 8.4 | 0 | 0 | 0 |
| 119 MIDDLESE) 401- HARN | 465.273 | 14.14286 | 626.0698 | 4.2 | 0 | 0 | 0 |
| 119 MIDDLESE> 501 - WILTI | 450.9569 | 14.14286 | 957.4206 | 0 | 0 | 0 | 0 |
| 121 MONTGON 101 - PREC | 1077.587 | 32.4129 | 926.6244 | 7.223301 | 0 | 0 | 0 |
| 121 MONTGON 102 - PREC | 1421.816 | 34.43871 | 358.3938 | 16.85437 | 0 | 0 | 0 |
| 121 MONTGON 103 - PREC | 1431.793 | 58.74839 | 594.2281 | 19.26214 | 0 | 0 | 0 |
| 121 MONTGON 201 - PREC | 184.5866 | 2.025806 | 209.8368 | 0 | 0 | 0 | 0 |
| 121 MONTGON 202 - PREC | 1162.397 | 56.72258 | 1231.166 | 21.6699 | 0 | 0 | 0 |
| 121 MONTGON 203 - PREC | 708.4134 | 28.36129 | 807.7788 | 9.631068 | 0 | 0 | 0 |
| 121 MONTGON 204 - PREC | 1137.453 | 70.90323 | 1173.601 | 24.07767 | 0 | 0 | 0 |
| 121 MONTGON 301 - PREC | 758.3017 | 32.4129 | 1795.683 | 2.407767 | 0 | 0 | 0 |
| 121 MONTGON 302 - PREC | 753.3128 | 38.49032 | 1223.739 | 2.407767 | 0 | 0 | 0 |
| 121 MONTGON 303 - PREC | 483.9162 | 24.30968 | 785.4953 | 9.631068 | 0 | 0 | 0 |
| 121 MONTGON 304 - PREC | 932.9106 | 52.67097 | 1156.888 | 21.6699 | 0 | 0 | 0 |
| 121 MONTGON 401 - PREC | 483.9162 | 30.3871 | 662.9357 | 9.631068 | 0 | 0 | 0 |
| 121 MONTGON 402 - PREC | 628.5922 | 28.36129 | 1635.984 | 0 | 0 | 0 | 0 |
| 121 MONTGON 403 - PREC | 538.7933 | 30.3871 | 1522.71 | 9.631068 | 0 | 0 | 0 |
| 121 MONTGON 404 - PREC | 399.1061 | 24.30968 | 956.3359 | 2.407767 | 0 | 0 | 0 |
| 121 MONTGON 405 - PREC | 808.1899 | 52.67097 | 1071.468 | 4.815534 | 0 | 0 | 0 |
| 121 MONTGON 501 - PREC | 1272.151 | 48.61935 | 1047.327 | 7.223301 | 0 | 0 | 0 |
| 121 MONTGON 502 - PREC | 962.8436 | 34.43871 | 1103.036 | 7.223301 | 0 | 0 | 0 |
| 121 MONTGON 503 - PREC | 962.8436 | 22.28387 | 180.1254 | 4.815534 | 0 | 0 | 0 |
| 121 MONTGON 601 - PREC | 1416.827 | 38.49032 | 525.5205 | 14.4466 | 0 | 0 | 0 |
| 121 MONTGON 602 - PREC | 1820.922 | 50.64516 | 497.666 | 9.631068 | 0 | 0 | 0 |
| 121 MONTGON 603 - PREC | 384.1397 | 22.28387 | 154.1279 | 2.407767 | 0 | 0 | 0 |
| 121 MONTGON 701 - PREC | 1805.955 | 70.90323 | 640.6522 | 28.8932 | 0 | 0 | 0 |
| 121 MONTGON 702 - PREC | 1681.235 | 56.72258 | 367.6786 | 12.03883 | 0 | 0 | 0 |


| 125 NELSON CC 101 - ROCK | 1166.004 | 37.05882 | 1008.187 | 10.875 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 125 NELSON CC 201 - LOVII | 457.1047 | 14.11765 | 547.3852 | 3.625 | 0 | 0 | 0 |
| 125 NELSON CC 202 - SCHU | 352.513 | 17.64706 | 396.2306 | 5.4375 | 0 | 0 | 0 |
| 125 NELSON CC 301 - SHIPN | 550.0752 | 17.64706 | 717.6176 | 7.25 | 0 | 0 | 0 |
| 125 NELSON CC 302 - GLAD | 185.9409 | 3.529412 | 202.5178 | 0 | 0 | 0 | 0 |
| 125 NELSON CC 401 - ROSE | 460.9785 | 28.23529 | 927.473 | 0 | 0 | 0 | 0 |
| 125 NELSON CC 402 - MON | 120.0868 | 0 | 120.3367 | 0 | 0 | 0 | 0 |
| 125 NELSON CC501-FABE | 317.6491 | 10.58824 | 306.7118 | 0 | 0 | 0 | 0 |
| 125 NELSON CC502-NELL | 716.6473 | 21.17647 | 585.5407 | 1.8125 | 0 | 0 | 0 |
| 127 NEW KENT 102 - TUNS | 248.4066 | 5.058824 | 632.2574 | 0 | 0 | 0 | 0 |
| 127 NEW KENT 103 - SOUT | 512.7367 | 15.17647 | 1567.532 | 6.130435 | 0 | 0 | 0 |
| 127 NEW KENT 201 - QUIN | 652.8635 | 25.29412 | 1091.154 | 8.173913 | 0 | 0 | 0 |
| 127 NEW KENT 202 - KENT | 394.9028 | 11.80392 | 951.2998 | 2.043478 | 0 | 0 | 0 |
| 127 NEW KENT 301 - WATt | 659.2329 | 20.23529 | 729.864 | 2.043478 | 0 | 0 | 0 |
| 127 NEW KENT 302 - CUMI | 433.1192 | 18.54902 | 987.7202 | 4.086957 | 0 | 0 | 0 |
| 127 NEW KENT 401 - PROV | 515.9214 | 23.60784 | 1073.672 | 10.21739 | 0 | 0 | 0 |
| 127 NEW KENT 403 - MOU | 305.7312 | 21.92157 | 579.8121 | 8.173913 | 0 | 0 | 0 |
| 127 NEW KENT 501 - ELTH, | 468.1509 | 11.80392 | 769.198 | 2.043478 | 0 | 0 | 0 |
| 127 NEW KENT $502-\mathrm{CHICl}$ | 429.9345 | 18.54902 | 1248.49 | 4.086957 | 0 | 0 | 0 |
| 131 NORTHAM 101 - PREC | 689.7452 | 21.66667 | 858.6226 | 3.333333 | 0 | 0 | 0 |
| 131 NORTHAM 201 - PREC | 916.75 | 33.33333 | 388.0528 | 3.333333 | 0 | 0 | 0 |
| 131 NORTHAM 301 - PREC | 842.5369 | 13.33333 | 410.3547 | 0 | 0 | 0 | 0 |
| 131 NORTHAM 401 - PREC | 462.7405 | 13.33333 | 568.6981 | 0 | 0 | 0 | 0 |
| 131 NORTHAM 501 - PREC | 755.2274 | 18.33333 | 729.2717 | 3.333333 | 0 | 0 | 0 |
| 133 NORTHUM 101-1A | 542.7012 | 9.655172 | 794.2188 | 2.75 | 0 | 0 | 0 |
| 133 NORTHUM 201-2A | 567.9431 | 9.655172 | 871.4063 | 5.5 | 0 | 0 | 0 |
| 133 NORTHUM 301-3A | 883.467 | 7.724138 | 310.7813 | 0 | 0 | 0 | 0 |
| 133 NORTHUM 401-4A | 622.6339 | 11.58621 | 1202.5 | 8.25 | 0 | 0 | 0 |
| 133 NORTHUM 501-5A | 635.2549 | 17.37931 | 1306.094 | 5.5 | 0 | 0 | 0 |
| 135 NOTTOWA 101 - PREC | 251.9269 | 5.142857 | 557.4041 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 102 - PREC | 243.2398 | 10.28571 | 424.4094 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 201 - PREC | 550.1852 | 8.571429 | 674.7523 | 2 | 0 | 0 | 0 |
| 135 NOTTOWA 202 - PREC | 101.3499 | 8.571429 | 348.1331 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 301 - PREC | 367.7554 | 10.28571 | 279.6799 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 302 - PREC | 127.4113 | 6.857143 | 357.9121 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 401 - PREC | 608.0994 | 1.714286 | 158.4201 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 402 - PREC | 234.5526 | 5.142857 | 688.4429 | 0 | 0 | 0 | 0 |
| 135 NOTTOWA 501 - PREC | 486.4795 | 15.42857 | 537.846 | 6 | 0 | 0 | 0 |
| 137 ORANGE C(101-ONE | 739.8553 | 17.48214 | 1259.526 | 11.37931 | 0 | 0 | 0 |
| 137 ORANGE C(102-ONE I | 906.0783 | 28.60714 | 1108.566 | 4.551724 | 0 | 0 | 0 |
| 137 ORANGE C1201-TWO | 537.7803 | 12.71429 | 1354.067 | 0 | 0 | 0 | 0 |
| 137 ORANGE CI202-TWO | 567.1137 | 38.14286 | 1450.132 | 6.827586 | 0 | 0 | 0 |
| 137 ORANGE Cl 301 - THRE | 971.2638 | 28.60714 | 977.4286 | 2.275862 | 0 | 0 | 0 |
| 137 ORANGE Cl 302 - THRE | 215.1121 | 3.178571 | 551.9956 | 2.275862 | 0 | 0 | 0 |
| 137 ORANGE C1401-FOUR | 544.2988 | 31.78571 | 1584.319 | 2.275862 | 0 | 0 | 0 |
| 137 ORANGE C1402-FOUR | 1183.117 | 55.625 | 1290.023 | 9.103448 | 0 | 0 | 0 |
| 137 ORANGE C1501-FIVE | 1137.487 | 23.83929 | 1404.387 | 11.37931 | 0 | 0 | 0 |


| 137 ORANGE CI502-FIVE I | 1192.894 | 27.01786 | 1445.557 | 15.93103 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 139 PAGE COUI 101 - WEST | 620.8932 | 30.92308 | 1462.658 | 4.666667 | 0 | 0 | 0 |
| 139 PAGE COUI 201 - EAST | 671.431 | 22.08791 | 1630.026 | 9.333333 | 0 | 0 | 0 |
| 139 PAGE COUI 301 - MARI | 559.5258 | 23.56044 | 2204.902 | 6.222222 | 0 | 0 | 0 |
| 139 PAGE COUI 401 - NEWI | 490.9388 | 22.08791 | 1667.866 | 3.111111 | 0 | 0 | 0 |
| 139 PAGE COUI501-SHEN | 664.2113 | 35.34066 | 2379.548 | 4.666667 | 0 | 0 | 0 |
| 141 PATRICK C( 101 - ARAR | 197.2165 | 6.352941 | 566.055 | 2.142857 | 0 | 0 | 0 |
| 141 PATRICK C( 102 - CLAU | 121.9628 | 3.176471 | 496.2267 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( 103 - WILLI | 163.4821 | 6.352941 | 659.6546 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( 201 - DRY F | 75.25365 | 4.764706 | 298.6274 | 2.142857 | 0 | 0 | 0 |
| 141 PATRICK C( 202 - PATR | 184.2417 | 4.764706 | 662.626 | 2.142857 | 0 | 0 | 0 |
| 141 PATRICK C( 203 - RUSS | 160.8871 | 7.941176 | 517.0266 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( 301 - CRITZ | 288.0398 | 15.88235 | 842.3968 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( 302 - LIBER | 93.41833 | 4.764706 | 612.1119 | 2.142857 | 0 | 0 | 0 |
| 141 PATRICK C( 401 - MEAL | 192.0266 | 1.588235 | 646.2832 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( 402 - STUA | 98.60823 | 6.352941 | 555.655 | 2.142857 | 0 | 0 | 0 |
| 141 PATRICK C( 501 - STUA | 90.82337 | 3.176471 | 295.656 | 4.285714 | 0 | 0 | 0 |
| 141 PATRICK C( 502 - ELAN | 147.9124 | 7.941176 | 598.7406 | 0 | 0 | 0 | 0 |
| 141 PATRICK C( $503-$ WOO | 140.1275 | 7.941176 | 733.9401 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 103 -TWIN | 364.0288 | 20.9 | 1420.665 | 5.560976 | 0 | 0 | 0 |
| 143 PITTSYLVAI 105 - CHAT | 172.2885 | 7.6 | 472.9008 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 106 -TUNS | 222.3077 | 7.6 | 947.7638 | 3.707317 | 0 | 0 | 0 |
| 143 PITTSYLVAI 108 - WEST | 163.9519 | 1.9 | 419.9202 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 201 -CALL | 255.6538 | 11.4 | 926.1791 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 202-BEARS | 88.92308 | 0 | 196.2244 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 204 -SAND | 200.0769 | 5.7 | 682.8609 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 206 -CLIM | 141.7212 | 5.7 | 478.7875 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 207 -GRET | 444.6154 | 13.3 | 1138.101 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 301 -CENT | 391.8173 | 0 | 211.9223 | 3.707317 | 0 | 0 | 0 |
| 143 PITTSYLVAI 305 -RICEV | 536.3173 | 0 | 323.7702 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 307 -EAST | 867 | 11.4 | 245.2805 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 308 -MT A | 352.9135 | 3.8 | 239.3938 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 309 -EAST | 247.3173 | 1.9 | 298.2611 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 402 - KEELI | 205.6346 | 3.8 | 988.9709 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 404 - KENT | 519.6442 | 9.5 | 1481.494 | 7.414634 | 0 | 0 | 0 |
| 143 PITTSYLVAI 405 -RING | 664.1442 | 15.2 | 1646.323 | 5.560976 | 0 | 0 | 0 |
| 143 PITTSYLVAI501-HURT | 605.7885 | 30.4 | 1401.042 | 11.12195 | 0 | 0 | 0 |
| 143 PITTSYLVAI 502 -MOTI | 411.2692 | 36.1 | 1346.099 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 503 -RENA | 289 | 11.4 | 910.4812 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 603 -STON | 322.3462 | 11.4 | 1273.496 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 604 - SWAr | 397.375 | 7.6 | 861.4251 | 1.853659 | 0 | 0 | 0 |
| 143 PITTSYLVAI 605 - WHIT | 319.5673 | 7.6 | 902.6322 | 3.707317 | 0 | 0 | 0 |
| 143 PITTSYLVAI 606 -BROS | 694.7115 | 9.5 | 767.2374 | 7.414634 | 0 | 0 | 0 |
| 143 PITTSYLVAI 607 - DRY F | 102.8173 | 1.9 | 408.1467 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 702 -BACH | 222.3077 | 26.6 | 1340.213 | 5.560976 | 0 | 0 | 0 |
| 143 PITTSYLVAI 703 - FERR' | 183.4038 | 3.8 | 310.0345 | 0 | 0 | 0 | 0 |
| 143 PITTSYLVAI 704 - MT H | 500.1923 | 13.3 | 1183.233 | 5.560976 | 0 | 0 | 0 |


| 143 PITTSYLVAI 705 - MT C | 227.8654 | 5.7 | 928.1414 | 1.853659 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 145 POWHATAI 101 - SUBL | 494.3979 | 35.29319 | 1352.85 | 10.27778 | 0 | 0 | 0 |
| 145 POWHATAI 102 -MAN, | 476.9895 | 18.48691 | 1015.53 | 6.166667 | 0 | 0 | 0 |
| 145 POWHATAI 103 - FLAT | 295.9424 | 21.84817 | 885.2419 | 0 | 0 | 0 | 0 |
| 145 POWHATAI 201 - POW | 417.801 | 35.29319 | 1352.85 | 4.111111 | 0 | 0 | 0 |
| 145 POWHATAI 202 -GRAC | 557.0681 | 42.01571 | 1790.116 | 2.055556 | 0 | 0 | 0 |
| 145 POWHATAI 301 - BETH | 473.5079 | 38.65445 | 1249.333 | 1.027778 | 0 | 0 | 0 |
| 145 POWHATAI 302 -LEE'S | 483.9529 | 20.16754 | 1140.463 | 3.083333 | 0 | 0 | 0 |
| 145 POWHATAI 401 - POW | 396.911 | 28.57068 | 1725.865 | 4.111111 | 0 | 0 | 0 |
| 145 POWHATAI 402 - MT ZI | 327.2775 | 16.80628 | 915.5829 | 2.055556 | 0 | 0 | 0 |
| 145 POWHATAI501-SMITI | 640.6283 | 23.5288 | 1085.135 | 1.027778 | 0 | 0 | 0 |
| 145 POWHATAI502-PINEI | 476.9895 | 18.48691 | 731.7524 | 1.027778 | 0 | 0 | 0 |
| 145 POWHATAI503-TOBA | 278.534 | 21.84817 | 810.2819 | 2.055556 | 0 | 0 | 0 |
| 147 PRINCE ED' 101 - FARN | 453.5208 | 19.90244 | 392.629 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED' 201 -LOCK | 760.2372 | 18.2439 | 726.0252 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED 301 - LEIG | 526.923 | 9.95122 | 487.4015 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED 302 - MT P | 422.0627 | 6.634146 | 262.3168 | 15.2381 | 0 | 0 | 0 |
| 147 PRINCE ED 401 - HAM | 537.4091 | 19.90244 | 548.3267 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED' 501 - DARL | 351.282 | 8.292683 | 572.0198 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED' 502 - BUFF, | 175.641 | 1.658537 | 214.9305 | 1.52381 | 0 | 0 | 0 |
| 147 PRINCE ED 601 - PROS | 854.6115 | 28.19512 | 727.7176 | 0 | 0 | 0 | 0 |
| 147 PRINCE ED 701 - WEST | 335.553 | 18.2439 | 380.7824 | 3.047619 | 0 | 0 | 0 |
| 147 PRINCE ED' 801 - CENT | 555.7596 | 4.97561 | 121.8504 | 4.571429 | 0 | 0 | 0 |
| 149 PRINCE GEI 101 - RICH/ | 500.2612 | 10.08621 | 810.5732 | 6.333333 | 0 | 0 | 0 |
| 149 PRINCE GEI 102 - TEMF | 780.5495 | 35.30172 | 2433.731 | 10.55556 | 0 | 0 | 0 |
| 149 PRINCE GEI 103 - UNIO | 872.7962 | 21.85345 | 1166.582 | 8.444444 | 0 | 0 | 0 |
| 149 PRINCE GEI 104 - RIVES | 713.1384 | 13.44828 | 599.3816 | 0 | 0 | 0 | 0 |
| 149 PRINCE GEI 105 - HARR | 230.6169 | 13.44828 | 637.5973 | 0 | 0 | 0 | 0 |
| 149 PRINCE GEI 201 - BLAN | 642.1793 | 25.21552 | 1166.582 | 2.111111 | 0 | 0 | 0 |
| 149 PRINCE GEI 202 - BLAC | 777.0015 | 30.25862 | 1263.126 | 8.444444 | 0 | 0 | 0 |
| 149 PRINCE GEI 203 - BRAN | 315.7677 | 10.08621 | 689.8923 | 0 | 0 | 0 | 0 |
| 149 PRINCE GEI 204 - COUF | 947.3032 | 13.44828 | 794.4824 | 2.111111 | 0 | 0 | 0 |
| 149 PRINCE GEI 205 - JEFFE | 1323.386 | 21.85345 | 541.0526 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 101 - BREN | 1244.131 | 50.84014 | 2221.414 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 102 - CEDA | 1635.802 | 62.94494 | 1374.126 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 103 - GLEN | 1140.454 | 29.05151 | 964.0611 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 104 - NOKE | 1111.654 | 53.2611 | 1683.712 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 105 - LIME: | 1653.082 | 45.99822 | 1224.765 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 106 - WEST | 2396.105 | 19.36767 | 725.0826 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 107 - MAR | 1653.082 | 43.57726 | 1232.912 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 108 - VICTC | 2459.463 | 50.84014 | 1417.577 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 109 - CHRIS | 1975.634 | 50.84014 | 1078.119 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 110-BUCK | 1950.292 | 40.00399 | 861.1585 | 162.1 | 0 | 0 | 0 |
| 153 PRINCE WI 111 - BRIST | 737.263 | 19.36767 | 494.251 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 112 - BURK | 2212.346 | 50.67948 | 1234.022 | 123.8 | 0 | 0 | 0 |
| 153 PRINCE WI 114 - PINE | 754.5426 | 16.94671 | 597.4463 | 76.6 | 0 | 0 | 0 |
| 153 PRINCE WI 201 - SAUN | 1330.366 | 47.3544 | 801.5293 | 0 | 0 | 0 | 0 |


| 153 PRINCE WI 202 - MAR؛ | 956.1379 | 36.31439 | 1023.806 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 153 PRINCE WI 203 - BENN | 1543.644 | 60.52398 | 1205.755 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 204 - ELLIS | 2090.832 | 58.10302 | 958.6297 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 205 - BUCK | 2012.847 | 78.57868 | 1483.59 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 206 - COLE: | 840.9406 | 55.68206 | 1021.09 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 207 - SPRIG | 1998.674 | 29.05151 | 1061.825 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 208 - HYLTI | 685.4242 | 9.683837 | 882.5911 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 209 - INDEI | 616.3058 | 43.57726 | 1007.512 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 210 - PENN | 709.3657 | 22.88241 | 940.6943 | 153.2 | 0 | 0 | 0 |
| 153 PRINCE WI 211 - SIGN, | 2137.192 | 3.274112 | 1455.385 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 212 - YORK | 4888.342 | 81.85279 | 1559.744 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 213 - SARA | 1676.121 | 31.47247 | 486.104 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 214 - LUCA | 887.0195 | 55.68206 | 1167.736 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 215 - ROSA | 1136.705 | 25.06998 | 837.3701 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 301 - DUM | 1157.755 | 22.28442 | 560.4189 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 302 - POTC | 1220.905 | 13.92777 | 325.8249 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 303 - GRAF | 1174.595 | 33.42664 | 469.1879 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 304 - QUAT | 558.7071 | 14.52575 | 347.6051 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 305 - PATT | 1434.207 | 36.31439 | 972.2081 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 306 - WASt | 1065.575 | 21.78863 | 594.7306 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 307 - HENL | 1123.174 | 38.73535 | 811.9838 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 308 - MON | 1088.615 | 16.94671 | 711.5042 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 309 - ASHL | 921.5787 | 21.78863 | 746.8079 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 310 - FORE | 1647.322 | 19.36767 | 638.1813 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 311 - SWAr | 2382.87 | 25.06998 | 1068.706 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 312 - TRIA | 1554.515 | 43.11047 | 752.6693 | 106.4176 | 0 | 0 | 0 |
| 153 PRINCE WI 313 - CARD | 1583.963 | 19.36767 | 521.4077 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 314 - CABII | 1140.454 | 19.36767 | 616.456 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 315 - WILLI | 913.5739 | 13.92777 | 241.1104 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 401 - EVER | 1220.143 | 55.6599 | 1438.462 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 402 - BATT | 1049.167 | 49.11168 | 1173.333 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 403 - BULL | 1328.945 | 29.46701 | 786.9231 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 404 - BEN L | 1797.079 | 50.84014 | 654.4753 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 405 - UNIT | 3127.608 | 33.89343 | 1050.962 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 406 - ALVE' | 233.1483 | 0 | 287.6923 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 407 - HERI7 | 637.2719 | 19.64467 | 885.641 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 408 - SUDL | 1854.677 | 29.05151 | 958.6297 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 409 - TYLEF | 2370.341 | 62.20812 | 1133.846 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 410 - MOU | 1336.717 | 45.83756 | 891.2821 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 411 - MULI | 2960.572 | 24.20959 | 765.8175 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 412 - CATH | 831.5621 | 29.46701 | 1074.615 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 413 - REAG | 1461.062 | 58.93401 | 1303.077 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 501 - LAKE | 1733.72 | 33.89343 | 779.3959 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 502 - OCCC | 1229.325 | 19.49887 | 752.6556 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 503 - OLD E | 1300.896 | 22.28442 | 661.4246 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 504-ROCK | 1111.445 | 36.21219 | 710.2984 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 505 - MOH | 1664.602 | 41.15631 | 936.9044 | 0 | 0 | 0 | 0 |


| 153 PRINCE WI 506 - BETH | 1730.317 | 44.56885 | 1098.03 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 153 PRINCE WI 507 - CHINI | 1246.165 | 38.99774 | 814.5623 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 508 - SPRIN | 1388.128 | 26.63055 | 475.2414 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 509 - MC C | 714.2235 | 21.78863 | 814.6995 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 510 - YATE! | 1375.575 | 52.38579 | 1235.385 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 511 - WEST | 1808.598 | 29.05151 | 787.5428 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 512 - YORK | 1987.128 | 36.21219 | 625.5839 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 513 - LYNN | 1275.635 | 50.13995 | 1071.964 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 514 - ANTII | 1726.107 | 64.06772 | 1101.288 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 601 - DALE | 1915.558 | 25.06998 | 677.7159 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 602 - BEVIL | 1982.918 | 30.64108 | 840.6283 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 603 - HAM | 1528.237 | 8.356659 | 505.0286 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 604 - GIDEI | 1528.237 | 30.64108 | 697.2654 | 68.11765 | 0 | 0 | 0 |
| 153 PRINCE WI 605 - MINN | 1465.086 | 44.56885 | 791.7546 | 113.5294 | 0 | 0 | 0 |
| 153 PRINCE WI 606 - BEL A | 1654.537 | 27.85553 | 925.3428 | 113.5294 | 0 | 0 | 0 |
| 153 PRINCE WI 607 - KERR | 1511.396 | 55.71106 | 808.0458 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 608 - ENTE | 1511.396 | 55.71106 | 808.0458 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 609 - KING | 1887.846 | 43.83966 | 778.7243 | 22.70588 | 0 | 0 | 0 |
| 153 PRINCE WI 610 - FITZG | 1999.759 | 22.28442 | 765.6886 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 611 - NEAB | 1406.146 | 16.71332 | 645.1334 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 701 - BELM | 1629.277 | 33.42664 | 1205.552 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 702 - LIBRA | 1587.177 | 41.7833 | 609.2926 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 703 - LYNN | 1427.196 | 30.64108 | 394.2482 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 704 - PORT | 1928.188 | 30.64108 | 625.5839 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 705 - POTC | 1557.707 | 22.28442 | 752.6556 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 706-RIPPC | 1886.088 | 22.28442 | 961.1835 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 707 - KILBY | 2012.389 | 33.42664 | 840.6283 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 708 - RIVEF | 1738.737 | 25.06998 | 482.2209 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 709 - FREEI | 1671.377 | 22.28442 | 469.1879 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 710 - POW | 1726.107 | 19.49887 | 426.8307 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 711 - GRAY | 2395.5 | 36.21219 | 866.6943 | 0 | 0 | 0 | 0 |
| 153 PRINCE WI 712 -LEESY | 1010.404 | 25.06998 | 694.0071 | 0 | 0 | 0 | 0 |
| 155 PULASKIC( 101 - BELSF | 317.0446 | 33.97059 | 707.9894 | 2.36 | 0 | 0 | 0 |
| 155 PULASKI C( 102 - NEW | 839.4477 | 19.41176 | 1399.888 | 11.8 | 0 | 0 | 0 |
| 155 PULASKIC(103-WEST | 317.0446 | 12.94118 | 915.3802 | 4.72 | 0 | 0 | 0 |
| 155 PULASKI C( 201 - DRAP | 309.8391 | 29.11765 | 1072.711 | 0 | 0 | 0 | 0 |
| 155 PULASKI C( 202 - SOUT | 72.0556 | 6.470588 | 184.1488 | 0 | 0 | 0 | 0 |
| 155 PULASKI C( 203 - NEWI | 619.6781 | 37.20588 | 1387.373 | 14.16 | 0 | 0 | 0 |
| 155 PULASKI C( 301 - DUBL | 486.3753 | 27.5 | 1289.041 | 2.36 | 0 | 0 | 0 |
| 155 PULASKIC(302-HIWA | 187.3446 | 4.852941 | 497.0229 | 0 | 0 | 0 | 0 |
| 155 PULASKI C( 304 - SNOV | 317.0446 | 9.705882 | 1072.711 | 4.72 | 0 | 0 | 0 |
| 155 PULASKIC(401-MASS | 598.0614 | 33.97059 | 1392.737 | 9.44 | 0 | 0 | 0 |
| 155 PULASKI C( 402 - WALk | 187.3446 | 8.088235 | 716.9286 | 7.08 | 0 | 0 | 0 |
| 155 PULASKIC(501-ROBII | 673.7198 | 51.76471 | 1491.069 | 2.36 | 0 | 0 | 0 |
| 157 RAPPAHAN 101 - WASt | 402.6798 | 3.2 | 485.4125 | 1.5 | 0 | 0 | 0 |
| 157 RAPPAHAN 201 - AMIS | 423.33 | 20.8 | 690.2775 | 1.5 | 0 | 0 | 0 |
| 157 RAPPAHAN 301 - SPERI | 450.8637 | 1.6 | 427.9981 | 4.5 | 0 | 0 | 0 |


| 157 RAPPAHAN 401 - SCRA | 333.8456 | 11.2 | 512.8148 | 1.5 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 157 RAPPAHAN 501 - CHES | 182.4105 | 14.4 | 403.2056 | 0 | 0 | 0 | 0 |
| 157 RAPPAHAN 502 -FLINT | 302.8703 | 4.8 | 292.2914 | 6 | 0 | 0 | 0 |
| 159 RICHMONL 101 - PREC | 499.6419 | 6.888889 | 297.2156 | 0 | 0 | 0 | 0 |
| 159 RICHMONL 201 - PREC | 316.6744 | 10.33333 | 478.3006 | 1.833333 | 0 | 0 | 0 |
| 159 RICHMONL 301 - PREC | 158.3372 | 3.444444 | 350.3601 | 1.833333 | 0 | 0 | 0 |
| 159 RICHMON[ 401 - PREC | 274.4512 | 3.444444 | 722.3717 | 7.333333 | 0 | 0 | 0 |
| 159 RICHMONL 501 - PREC | 263.8953 | 6.888889 | 698.7519 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 101 - CATA | 279.0535 | 16.94215 | 693.4635 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 102 - MASC | 229.8088 | 11.8595 | 631.0885 | 2.192308 | 0 | 0 | 0 |
| 161 ROANOKE 103 - GLEN | 755.0859 | 22.02479 | 1555.707 | 10.96154 | 0 | 0 | 0 |
| 161 ROANOKE 104 - NORT | 574.5219 | 22.02479 | 660.4414 | 2.192308 | 0 | 0 | 0 |
| 161 ROANOKE 105 - PETEI | 861.7828 | 33.8843 | 1247.5 | 13.15385 | 0 | 0 | 0 |
| 161 ROANOKE 106 - GREE | 492.4473 | 28.80165 | 1124.585 | 6.576923 | 0 | 0 | 0 |
| 161 ROANOKE 107 - BENN | 340.6094 | 11.8595 | 792.5297 | 4.384615 | 0 | 0 | 0 |
| 161 ROANOKE 108 - WILD | 463.7212 | 27.10744 | 966.8129 | 8.769231 | 0 | 0 | 0 |
| 161 ROANOKE 201 - PLAN | 1005.802 | 72.02786 | 1345.336 | 19.65517 | 0 | 0 | 0 |
| 161 ROANOKE 1202 - BURL | 1062.308 | 34.9226 | 934.8946 | 16.37931 | 0 | 0 | 0 |
| 161 ROANOKE 1203 - MOU | 1039.706 | 32.73994 | 1968.599 | 16.37931 | 0 | 0 | 0 |
| 161 ROANOKE 1204 - BOTE | 685.3225 | 16.94215 | 1054.872 | 4.384615 | 0 | 0 | 0 |
| 161 ROANOKE 1205 - ORC- | 598.9608 | 39.28793 | 1469.482 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 1206 - HOLL | 610.262 | 13.09598 | 785.4128 | 6.551724 | 0 | 0 | 0 |
| 161 ROANOKE 301 - BENT | 381.6467 | 13.55372 | 499.0002 | 4.384615 | 0 | 0 | 0 |
| 161 ROANOKE 302 - POAE | 870.1884 | 34.9226 | 1722.841 | 9.827586 | 0 | 0 | 0 |
| 161 ROANOKE 303 - WINL | 542.4551 | 32.73994 | 775.2784 | 6.551724 | 0 | 0 | 0 |
| 161 ROANOKE 1304 - OAK ( | 921.0436 | 19.64396 | 1226.257 | 9.827586 | 0 | 0 | 0 |
| 161 ROANOKE 305 - CAST | 1090.561 | 28.37461 | 1330.135 | 19.65517 | 0 | 0 | 0 |
| 161 ROANOKE 1306 -GARS | 593.3103 | 19.64396 | 597.9272 | 3.275862 | 0 | 0 | 0 |
| 161 ROANOKE 1401 - SOUT | 372.9379 | 8.73065 | 755.0097 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 1402 - BONS | 237.3241 | 8.73065 | 380.0384 | 3.275862 | 0 | 0 | 0 |
| 161 ROANOKE 1403 - NORT | 875.839 | 39.28793 | 1205.989 | 3.275862 | 0 | 0 | 0 |
| 161 ROANOKE 1404 - SOUT | 785.4298 | 52.3839 | 1183.186 | 13.10345 | 0 | 0 | 0 |
| 161 ROANOKE 1405 - NORT | 305.131 | 24.00929 | 846.2189 | 3.275862 | 0 | 0 | 0 |
| 161 ROANOKE 1406 - MOU | 700.6712 | 37.10526 | 1755.778 | 13.10345 | 0 | 0 | 0 |
| 161 ROANOKE 1501 - COTT | 548.1057 | 13.09598 | 894.3571 | 6.551724 | 0 | 0 | 0 |
| 161 ROANOKE 1502 - PENN | 638.5149 | 24.00929 | 795.5471 | 6.551724 | 0 | 0 | 0 |
| 161 ROANOKE 1503 - CAVE | 689.37 | 39.28793 | 983.0328 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 1504 - OGDE | 1152.717 | 30.55728 | 955.1633 | 19.65517 | 0 | 0 | 0 |
| 161 ROANOKE 1505 - CLEAI | 491.5999 | 30.55728 | 1102.111 | 9.827586 | 0 | 0 | 0 |
| 161 ROANOKE 1506 - MOU | 531.154 | 28.37461 | 732.2074 | 0 | 0 | 0 | 0 |
| 161 ROANOKE 507 - HUN7 | 1073.609 | 41.47059 | 1297.198 | 3.275862 | 0 | 0 | 0 |
| 163 ROCKBRID (101-AIRP( | 348.2386 | 12.33645 | 455.2165 | 3.166667 | 0 | 0 | 0 |
| 163 ROCKBRID ( 102 - BEN $\subseteq$ | 238.7922 | 10.79439 | 460.7176 | 1.583333 | 0 | 0 | 0 |
| 163 ROCKBRID (103-PLAN | 102.8133 | 9.252336 | 335.5674 | 1.583333 | 0 | 0 | 0 |
| 163 ROCKBRID (104-EFFIN | 189.0438 | 4.626168 | 350.6955 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID 201 - COLLI | 248.7419 | 9.252336 | 459.3423 | 1.583333 | 0 | 0 | 0 |
| 163 ROCKBRID( 202 - HIGH | 411.2532 | 20.04673 | 834.7927 | 7.916667 | 0 | 0 | 0 |


| 163 ROCKBRID (203-VO-TI | 159.1948 | 9.252336 | 173.2848 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 163 ROCKBRID (301-MAU | 404.6201 | 12.33645 | 496.4747 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID 302 - NATL | 265.3247 | 10.79439 | 628.5013 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID 303 - FALLI | 72.96429 | 4.626168 | 283.3069 | 3.166667 | 0 | 0 | 0 |
| 163 ROCKBRID ( 401 - FAIRF | 248.7419 | 10.79439 | 627.126 | 1.583333 | 0 | 0 | 0 |
| 163 ROCKBRID ( 402 - MOU | 265.3247 | 13.8785 | 885.6779 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID( 403 - VESU | 145.9286 | 1.542056 | 334.1921 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID(501-GOSF | 102.8133 | 3.084112 | 423.5851 | 1.583333 | 0 | 0 | 0 |
| 163 ROCKBRID( 502 - MEAI | 368.138 | 13.8785 | 411.2076 | 9.5 | 0 | 0 | 0 |
| 163 ROCKBRID( 503 -ROCK | 232.1591 | 9.252336 | 358.9471 | 0 | 0 | 0 | 0 |
| 163 ROCKBRID( 504 -ROCK | 281.9075 | 9.252336 | 569.3644 | 6.333333 | 0 | 0 | 0 |
| 165 ROCKINGH 101-BROA | 754.912 | 34.44725 | 1598.987 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 102-TIMB | 500.1681 | 35.94495 | 1000.088 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 103 -FULK: | 186.398 | 17.97248 | 1226.66 | 0 | 0 | 0 | 0 |
| 165 ROCKINGH 104 - BERG | 139.7985 | 2.995413 | 461.8012 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 105 -LACE' | 248.5307 | 13.47936 | 813.9247 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 106-TENT | 248.5307 | 13.47936 | 767.7446 | 7.291667 | 0 | 0 | 0 |
| 165 ROCKINGH 107 - PLAIN | 220.571 | 11.98165 | 812.4816 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 108-LITTL | 155.3317 | 5.990826 | 575.8084 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 201 - SINGI | 267.1705 | 14.97706 | 1163.162 | 9.114583 | 0 | 0 | 0 |
| 165 ROCKINGH 202 -EDON | 574.7273 | 34.44725 | 1424.368 | 12.76042 | 0 | 0 | 0 |
| 165 ROCKINGH 203 - DAYT | 438.0354 | 20.96789 | 634.9767 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 204 - MT C | 344.8364 | 19.47018 | 1070.802 | 20.05208 | 0 | 0 | 0 |
| 165 ROCKINGH 205 -SILVE | 493.9548 | 19.47018 | 932.2612 | 14.58333 | 0 | 0 | 0 |
| 165 ROCKINGH 301 - KEEZI | 410.0757 | 19.47018 | 740.3251 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 302 -PORT | 354.1563 | 14.97706 | 1153.06 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 303 - MELR | 198.8246 | 16.47477 | 596.0122 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 304-GROT | 627.54 | 34.44725 | 1236.761 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 305 - MASS | 807.7248 | 34.44725 | 913.5006 | 9.114583 | 0 | 0 | 0 |
| 165 ROCKINGH 306 - CROS | 201.9312 | 4.493119 | 402.633 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 307 - CROS | 674.1396 | 25.46101 | 862.9911 | 9.114583 | 0 | 0 | 0 |
| 165 ROCKINGH 401 - WEST | 391.4359 | 31.45183 | 684.0431 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 402 - MON | 285.8103 | 23.9633 | 1031.837 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 403 - MT C | 170.8649 | 5.990826 | 196.2655 | 0 | 0 | 0 | 0 |
| 165 ROCKINGH 404 - NORT | 490.8482 | 17.97248 | 932.2612 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 405 - OTTO | 304.4501 | 17.97248 | 1668.257 | 1.822917 | 0 | 0 | 0 |
| 165 ROCKINGH 406 - EAST | 636.86 | 25.46101 | 774.9602 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 501 - ELKT( | 565.4074 | 43.43349 | 1332.008 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 502-SWIF | 515.7012 | 22.4656 | 2128.615 | 9.114583 | 0 | 0 | 0 |
| 165 ROCKINGH 503 - MCG, | 571.6206 | 35.94495 | 1333.451 | 3.645833 | 0 | 0 | 0 |
| 165 ROCKINGH 504-SOUT | 205.0378 | 11.98165 | 883.1949 | 5.46875 | 0 | 0 | 0 |
| 165 ROCKINGH 505 - STON | 658.6064 | 20.96789 | 995.7589 | 9.114583 | 0 | 0 | 0 |
| 167 RUSSELL C( 101 - MOCI | 143.6731 | 10.38806 | 797.4054 | 2 | 0 | 0 | 0 |
| 167 RUSSELL C(102-COPP | 158.0404 | 3.462687 | 718.7658 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 103 - SOUT | 95.78204 | 6.925373 | 490.711 | 2 | 0 | 0 | 0 |
| 167 RUSSELL C( 201 - NORT | 294.5298 | 25.97015 | 1244.078 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 202 - DANT | 100.5711 | 1.731343 | 350.7325 | 0 | 0 | 0 | 0 |


| 167 RUSSELL C( 301 - COOk | 57.46922 | 1.731343 | 295.6848 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 167 RUSSELL C( 302 - DAUC | 88.59839 | 5.19403 | 382.1884 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 303 - NEW | 189.1695 | 3.462687 | 816.2789 | 8 | 0 | 0 | 0 |
| 167 RUSSELL C( 304 - CLEVI | 165.224 | 6.925373 | 474.9831 | 2 | 0 | 0 | 0 |
| 167 RUSSELL C( 401 - DRILL | 45.49647 | 1.731343 | 132.1145 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 402 - SWOI | 179.5913 | 5.19403 | 1435.959 | 2 | 0 | 0 | 0 |
| 167 RUSSELL C(403-HON/ | 138.884 | 0 | 528.458 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 501 - WEST | 328.0535 | 25.97015 | 1234.641 | 2 | 0 | 0 | 0 |
| 167 RUSSELL C(601-EAST | 167.6186 | 15.58209 | 753.3672 | 0 | 0 | 0 | 0 |
| 167 RUSSELL C( 602 - ELK G | 220.2987 | 1.731343 | 1223.632 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 101 - WEBE | 98.12164 | 7.894737 | 489.847 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 102 - YUM, | 174.7044 | 9.473684 | 762.1687 | 4.8 | 0 | 0 | 0 |
| 169 SCOTT COL 202 - WEBE | 83.76238 | 4.736842 | 388.5566 | 3.2 | 0 | 0 | 0 |
| 169 SCOTT COL 203 - HILTC | 167.5248 | 6.315789 | 797.0392 | 6.4 | 0 | 0 | 0 |
| 169 SCOTT COL 204 - CLAR | 23.93211 | 1.578947 | 298.8897 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 301 - NICKI | 102.9081 | 6.315789 | 725.6378 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 302 - SNOV | 71.79632 | 0 | 539.662 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 303 - TWIN | 131.6266 | 1.578947 | 416.7851 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 304 - COPP | 35.89816 | 11.05263 | 159.4078 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 401 - GATE | 239.3211 | 11.05263 | 1069.361 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 501 - DUNC | 81.36917 | 3.157895 | 395.1986 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 502 - FORT | 93.33522 | 3.157895 | 443.3531 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 503 - MAN | 23.93211 | 4.736842 | 283.9452 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 504 - RYE C | 62.22348 | 1.578947 | 672.5018 | 0 | 0 | 0 | 0 |
| 169 SCOTT COL 601 - CLINC | 74.18953 | 7.894737 | 401.8406 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 602 - DUFF | 160.3451 | 9.473684 | 983.015 | 1.6 | 0 | 0 | 0 |
| 169 SCOTT COL 603 - FAIR\ | 67.0099 | 0 | 235.7908 | 0 | 0 | 0 | 0 |
| 171 SHENANDC 101 - ORK^ | 479.7193 | 32.22549 | 833.1252 | 1.625 | 0 | 0 | 0 |
| 171 SHENANDC 103 - NEW | 892.8109 | 40.70588 | 2184.959 | 8.125 | 0 | 0 | 0 |
| 171 SHENANDC 201 - CONI | 443.0741 | 33.92157 | 1634.33 | 1.625 | 0 | 0 | 0 |
| 171 SHENANDC 202 - MT Jt | 589.655 | 40.70588 | 1327.893 | 1.625 | 0 | 0 | 0 |
| 171 SHENANDC 302 -EDINI | 553.0097 | 27.13725 | 1174.675 | 1.625 | 0 | 0 | 0 |
| 171 SHENANDC 303 - ST LU | 333.1384 | 11.87255 | 1390.138 | 4.875 | 0 | 0 | 0 |
| 171 SHENANDC 304 - FORT | 269.8421 | 8.480392 | 869.8337 | 0 | 0 | 0 | 0 |
| 171 SHENANDC 401 - WOO | 929.4561 | 42.40196 | 1613.581 | 13 | 0 | 0 | 0 |
| 171 SHENANDC 501 - CEDA | 89.94737 | 0 | 154.8144 | 0 | 0 | 0 | 0 |
| 171 SHENANDC 503 -TOM! | 496.3762 | 39.0098 | 1543.356 | 1.625 | 0 | 0 | 0 |
| 171 SHENANDC 504 -LEBAI | 569.6667 | 23.7451 | 1458.767 | 0 | 0 | 0 | 0 |
| 171 SHENANDC 601 - STRA: | 1189.304 | 45.79412 | 2277.528 | 4.875 | 0 | 0 | 0 |
| 173 SMYTH COI 101 - SALT | 471.5738 | 19.7037 | 1586.212 | 6.4 | 0 | 0 | 0 |
| 173 SMYTH COI 201 - SEVEI | 208.3166 | 9.851852 | 1114.303 | 0 | 0 | 0 | 0 |
| 173 SMYTH COI 202 - RICH | 169.4003 | 6.567901 | 480.0916 | 0 | 0 | 0 | 0 |
| 173 SMYTH COI 301 - CHILL | 363.9817 | 14.77778 | 1312.068 | 4.8 | 0 | 0 | 0 |
| 173 SMYTH COI 302 - ST CL | 98.43531 | 8.209877 | 469.1804 | 3.2 | 0 | 0 | 0 |
| 173 SMYTH COI 401 - EAST | 274.7032 | 0 | 686.0399 | 0 | 0 | 0 | 0 |
| 173 SMYTH COI 402 - WEST | 148.7976 | 0 | 402.3495 | 0 | 0 | 0 | 0 |
| 173 SMYTH COI 501 - ATKIN | 254.1005 | 9.851852 | 1164.768 | 0 | 0 | 0 | 0 |


| 173 SMYTH COI 502 - WAS | 215.1842 | 13.1358 | 482.8194 | 8 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 173 SMYTH COI 601 - ROYA | 217.4734 | 14.77778 | 762.4181 | 1.6 | 0 | 0 | 0 |
| 173 SMYTH COI 602 -ROYA | 176.2679 | 9.851852 | 484.1833 | 1.6 | 0 | 0 | 0 |
| 173 SMYTH COI 701 - ADW | 190.003 | 9.851852 | 1207.048 | 0 | 0 | 0 | 0 |
| 173 SMYTH COI 702 -SUGA | 194.5814 | 13.1358 | 686.0399 | 6.4 | 0 | 0 | 0 |
| 173 SMYTH COI 703 - KONN | 25.18113 | 3.283951 | 125.4785 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 101 - BERLI | 182.7666 | 7.5 | 657.4371 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 102 - IVOR | 493.9639 | 10.5 | 671.6948 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 201 - BOYK | 649.5625 | 13.5 | 441.9878 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 202 - BRAN | 170.4175 | 6 | 229.7069 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI301-CAPR | 330.9558 | 0 | 353.2734 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI302-SEBRI | 237.1027 | 4.5 | 465.7506 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 401 - DREV | 355.654 | 1.5 | 362.7785 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI501-HUN7 | 222.2838 | 12 | 611.4957 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI502-FORK | 207.4648 | 7.5 | 277.2325 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI601-COUF | 323.5464 | 10.5 | 475.2557 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 602 - SEDLI | 96.32296 | 4.5 | 422.9776 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI701-BLAC | 397.6409 | 7.5 | 199.6074 | 0 | 0 | 0 | 0 |
| 175 SOUTHAMI 702 - NEW! | 301.318 | 1.5 | 560.8018 | 0 | 0 | 0 | 0 |
| 177 SPOTSYLVA 101 - PART | 707.9936 | 54.31663 | 2100.778 | 4.5625 | 0 | 0 | 0 |
| 177 SPOTSYLVF 102 - BLAYI | 918.2463 | 29.0982 | 1924 | 9.125 | 0 | 0 | 0 |
| 177 SPOTSYLVA 103 - TRAV | 1347.954 | 50.43687 | 1800.667 | 18.25 | 0 | 0 | 0 |
| 177 SPOTSYLVA 104 - MAS | 1147.881 | 63.42857 | 1683.044 | 13.54286 | 0 | 0 | 0 |
| 177 SPOTSYLVA 201 - WILD | 1158.535 | 67.89579 | 1422.444 | 11.40625 | 0 | 0 | 0 |
| 177 SPOTSYLVA 202 - WILD | 1218.607 | 65.95591 | 1825.333 | 20.53125 | 0 | 0 | 0 |
| 177 SPOTSYLVA 203 - NI RII | 596.431 | 31.03808 | 1348.444 | 6.84375 | 0 | 0 | 0 |
| 177 SPOTSYLVA 204 - CHAN | 1514.677 | 56.25651 | 1543.722 | 9.125 | 0 | 0 | 0 |
| 177 SPOTSYLVA 301 - PLAN | 1591.913 | 60.13627 | 1358.722 | 20.53125 | 0 | 0 | 0 |
| 177 SPOTSYLVf 302 - HAZE | 1471.769 | 52.37675 | 1046.278 | 9.125 | 0 | 0 | 0 |
| 177 SPOTSYLVA 303 - RIVEF | 1368.788 | 48.49699 | 1786.278 | 15.96875 | 0 | 0 | 0 |
| 177 SPOTSYLVF 401 - SUMI | 2185.39 | 65.69388 | 1856.891 | 9.028571 | 0 | 0 | 0 |
| 177 SPOTSYLVf 402 - PARK | 2175.97 | 73.44072 | 1472.167 | 6.819643 | 0 | 0 | 0 |
| 177 SPOTSYLVf 403 -LEE H | 2052.942 | 61.16327 | 1511.716 | 24.82857 | 0 | 0 | 0 |
| 177 SPOTSYLVA 501 - BELM | 742.3206 | 31.03808 | 1878.778 | 4.5625 | 0 | 0 | 0 |
| 177 SPOTSYLVf 502 - BROK | 660.7941 | 34.91784 | 1560.167 | 0 | 0 | 0 | 0 |
| 177 SPOTSYLVA 503 - POST | 656.5032 | 25.21844 | 1650.611 | 2.28125 | 0 | 0 | 0 |
| 177 SPOTSYLVA 504 - COUF | 918.2463 | 40.73747 | 1311.444 | 15.96875 | 0 | 0 | 0 |
| 177 SPOTSYLVF 505 - BROC | 845.3015 | 52.37675 | 1739 | 11.40625 | 0 | 0 | 0 |
| 177 SPOTSYLVA 601 - SALEI | 1669.149 | 62.07615 | 1327.889 | 11.40625 | 0 | 0 | 0 |
| 177 SPOTSYLVA 602 -SMITI | 2471.541 | 69.83567 | 1728.722 | 18.25 | 0 | 0 | 0 |
| 177 SPOTSYLVA 603 - PIEDN | 1201.444 | 36.85772 | 931.1667 | 4.5625 | 0 | 0 | 0 |
| 177 SPOTSYLVA 701 - BATT | 1628.005 | 40.77551 | 1156.463 | 9.028571 | 0 | 0 | 0 |
| 177 SPOTSYLVA 702 - BREN | 1945.971 | 44.31716 | 1453.948 | 20.3625 | 0 | 0 | 0 |
| 177 SPOTSYLVA 703 - FAIR | 923.247 | 28.78545 | 823.1974 | 11.35804 | 0 | 0 | 0 |
| 177 SPOTSYLVA 704 -GAYL | 1187.382 | 54.32931 | 1169.13 | 9.125 | 0 | 0 | 0 |
| 179 STAFFORD 101 - HART | 1439.959 | 88.96552 | 3204.328 | 14.62921 | 0 | 0 | 0 |
| 179 STAFFORD 102-ROCK | 1087.148 | 49.42529 | 1035.762 | 16.7191 | 0 | 0 | 0 |


| 179 STAFFORD 103 - SIMP! | 984.5872 | 47.44828 | 1285.296 | 14.62921 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 179 STAFFORD 104 - COLLI | 1735.335 | 83.03448 | 2014.092 | 37.61798 | 0 | 0 | 0 |
| 179 STAFFORD 201 -ROCK | 1472.778 | 61.28736 | 1309.061 | 10.44944 | 0 | 0 | 0 |
| 179 STAFFORD 202 -ROSE | 1567.135 | 49.42529 | 1416.004 | 16.7191 | 0 | 0 | 0 |
| 179 STAFFORD 203 - RUBY | 992.792 | 61.28736 | 1873.482 | 10.44944 | 0 | 0 | 0 |
| 179 STAFFORD 204 - STEF/ | 1284.066 | 27.67816 | 1414.024 | 12.53933 | 0 | 0 | 0 |
| 179 STAFFORD 301 - GRIFF | 1817.384 | 27.67816 | 645.6186 | 8.359551 | 0 | 0 | 0 |
| 179 STAFFORD 302 - WIDE | 2104.555 | 47.44828 | 1481.358 | 16.7191 | 0 | 0 | 0 |
| 179 STAFFORD 303 - HARB | 1222.529 | 51.4023 | 1148.647 | 16.7191 | 0 | 0 | 0 |
| 179 STAFFORD 304 - BARR | 1124.07 | 23.72414 | 647.599 | 2.089888 | 0 | 0 | 0 |
| 179 STAFFORD 401 - AQUI | 918.948 | 19.77011 | 269.3378 | 4.179775 | 0 | 0 | 0 |
| 179 STAFFORD 402 - COUF | 2231.731 | 61.28736 | 1061.508 | 8.359551 | 0 | 0 | 0 |
| 179 STAFFORD 403 - BROC | 1464.573 | 67.21839 | 1869.521 | 14.62921 | 0 | 0 | 0 |
| 179 STAFFORD 404 -GOVE | 1608.159 | 67.21839 | 1443.73 | 16.7191 | 0 | 0 | 0 |
| 179 STAFFORD 501 - GRAF | 1476.881 | 53.37931 | 1958.64 | 10.44944 | 0 | 0 | 0 |
| 179 STAFFORD 502 -FALM | 1366.115 | 47.44828 | 1257.57 | 27.16854 | 0 | 0 | 0 |
| 179 STAFFORD 503 - DREV | 1501.495 | 73.14943 | 1455.613 | 12.53933 | 0 | 0 | 0 |
| 179 STAFFORD 504 -GAYL | 1460.471 | 13.83908 | 627.7948 | 8.359551 | 0 | 0 | 0 |
| 179 STAFFORD 601 - FERR' | 980.4847 | 53.37931 | 1427.887 | 12.53933 | 0 | 0 | 0 |
| 179 STAFFORD 602 -CHAT | 1546.622 | 57.33333 | 1598.203 | 10.44944 | 0 | 0 | 0 |
| 179 STAFFORD 603 -WHIT | 1259.451 | 73.14943 | 2451.766 | 14.62921 | 0 | 0 | 0 |
| 179 STAFFORD 604 -ENGL | 1764.052 | 33.6092 | 645.6186 | 6.269663 | 0 | 0 | 0 |
| 179 STAFFORD 701 - WOO | 2018.404 | 47.44828 | 1550.673 | 16.7191 | 0 | 0 | 0 |
| 179 STAFFORD 702 - WHIT | 2014.301 | 43.49425 | 942.6824 | 12.53933 | 0 | 0 | 0 |
| 179 STAFFORD 703 - HAMI | 1800.974 | 45.47126 | 1600.184 | 18.80899 | 0 | 0 | 0 |
| 181 SURRY COL 101 - SURR | 224.0519 | 10.43478 | 373.6819 | 3.6 | 0 | 0 | 0 |
| 181 SURRY COL 201 - BACC | 472.9985 | 12.17391 | 403.9323 | 0 | 0 | 0 | 0 |
| 181 SURRY COL 301 - DENL | 341.4125 | 1.73913 | 243.783 | 0 | 0 | 0 | 0 |
| 181 SURRY COL 302 - WALL | 238.2774 | 1.73913 | 233.1063 | 1.8 | 0 | 0 | 0 |
| 181 SURRY COL 401 - CARS | 537.0134 | 6.956522 | 361.2258 | 0 | 0 | 0 | 0 |
| 181 SURRY COL 501 - CLAR | 344.9688 | 3.478261 | 370.123 | 1.8 | 0 | 0 | 0 |
| 181 SURRY COL 502 - SPRIN | 238.2774 | 3.478261 | 39.14763 | 1.8 | 0 | 0 | 0 |
| 183 SUSSEX CO 101 - WAVI | 691.6463 | 7 | 158.0529 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 201 - STON | 345.8231 | 1.75 | 223.7779 | 2.8 | 0 | 0 | 0 |
| 183 SUSSEX CO 202 - LITTL | 129.1629 | 0 | 82.93865 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 301 - COUF | 133.3294 | 1.75 | 378.701 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 302 - WAKI | 39.58217 | 0 | 195.61 | 1.4 | 0 | 0 | 0 |
| 183 SUSSEX CO 401 - MAR! | 539.5674 | 12.25 | 302.0219 | 1.4 | 0 | 0 | 0 |
| 183 SUSSEX CO 402 - WEST | 93.74724 | 0 | 18.77856 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 501 - HENR | 412.4878 | 0 | 226.9076 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 502 - YALE | 137.4959 | 5.25 | 114.2362 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 601 - BLAC | 187.4945 | 1.75 | 314.5409 | 0 | 0 | 0 | 0 |
| 183 SUSSEX CO 602 - NEW ${ }^{\prime}$ | 116.6632 | 5.25 | 203.4344 | 1.4 | 0 | 0 | 0 |
| 185 TAZEWELL 101 - INDIA | 131.893 | 3.741176 | 824.2055 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 102 - TIP T | 69.24383 | 1.870588 | 415.8154 | 2.478261 | 0 | 0 | 0 |
| 185 TAZEWELL 103 - MUN | 112.1091 | 7.482353 | 833.4871 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 104 - FALLS | 131.893 | 3.741176 | 716.539 | 2.478261 | 0 | 0 | 0 |


| 185 TAZEWELL 106 - POCA | 89.02778 | 3.741176 | 291.442 | 2.478261 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 185 TAZEWELL 107 - AMO | 23.08128 | 3.741176 | 102.0975 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 109 - BISHC | 23.08128 | 1.870588 | 222.7582 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 112 - BANC | 29.67593 | 1.870588 | 274.7352 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 203 - BURK | 32.97325 | 0 | 154.0744 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 204 - CLEAI | 59.35185 | 0 | 560.6082 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 207 - FREE | 89.02778 | 3.741176 | 207.9077 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 209 - JEFFE | 362.7058 | 0 | 1529.607 | 7.434783 | 0 | 0 | 0 |
| 185 TAZEWELL 214 -THON | 92.3251 | 1.870588 | 568.0335 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 301 - CEDA | 237.4074 | 11.22353 | 1639.129 | 2.478261 | 0 | 0 | 0 |
| 185 TAZEWELL 302 - BAPT | 105.5144 | 0 | 428.8096 | 7.434783 | 0 | 0 | 0 |
| 185 TAZEWELL 303 - PAIN ${ }^{-}$ | 194.5422 | 11.22353 | 1251.159 | 4.956522 | 0 | 0 | 0 |
| 185 TAZEWELL 401 - RICHI | 577.0319 | 54.24706 | 2934.84 | 9.913043 | 0 | 0 | 0 |
| 185 TAZEWELL 402 - JEWE | 65.9465 | 0 | 361.9821 | 0 | 0 | 0 | 0 |
| 185 TAZEWELL 501 - SPRIM | 145.0823 | 13.09412 | 1234.452 | 2.478261 | 0 | 0 | 0 |
| 185 TAZEWELL 502-GRAF | 633.0864 | 35.54118 | 2179.318 | 14.86957 | 0 | 0 | 0 |
| 187 WARREN C 101 - FORK | 575.9626 | 19.39614 | 769.1853 | 2.2 | 16.55172 | 57.77851 | 0 |
| 187 WARREN C 102 - OTTE | 588.3047 | 44.08213 | 1972.969 | 8.8 | 0 | 0 | 0 |
| 187 WARREN C 201 - HAPP | 650.015 | 28.21256 | 1323.799 | 13.2 | 0 | 0 | 0 |
| 187 WARREN C 202 - LINDI | 913.3121 | 77.58454 | 1483.819 | 11 | 0 | 0 | 0 |
| 187 WARREN C 301 - NORT | 608.8748 | 35.2657 | 991.0308 | 4.4 | 666.2069 | 1065.914 | 5.4 |
| 187 WARREN C 302 -RIVEF | 551.2785 | 29.97585 | 1522.005 | 6.6 | 575.1724 | 1681.554 | 0 |
| 187 WARREN C 401 - EAST | 876.286 | 54.66184 | 2240.275 | 35.2 | 0 | 0 | 0 |
| 187 WARREN C 402 - TOW | 415.5159 | 21.15942 | 765.5485 | 4.4 | 422.069 | 846.754 | 3.6 |
| 187 WARREN C 501 - SOUT | 855.7159 | 22.92271 | 1478.363 | 13.2 | 0 | 0 | 0 |
| 187 WARREN C 502 - BENT | 287.9813 | 22.92271 | 874.6528 | 6.6 | 0 | 0 | 0 |
| 187 WARREN C 504 - BROV | 279.7533 | 8.816425 | 647.3522 | 4.4 | 0 | 0 | 0 |
| 191 WASHINGT 101 - EAST | 612.5196 | 31.32121 | 1351.627 | 7.75 | 0 | 0 | 0 |
| 191 WASHINGT 102 -WEST | 317.4372 | 18.42424 | 635.5982 | 10.33333 | 0 | 0 | 0 |
| 191 WASHINGT 201 - CLINC | 241.4311 | 16.58182 | 1008.326 | 5.166667 | 0 | 0 | 0 |
| 191 WASHINGT 202 -GREE | 205.6635 | 11.05455 | 1210.383 | 0 | 0 | 0 | 0 |
| 191 WASHINGT 203 - HAYT | 138.5993 | 5.527273 | 629.7131 | 7.75 | 0 | 0 | 0 |
| 191 WASHINGT 204 WOOD | 223.5473 | 12.89697 | 751.3399 | 2.583333 | 0 | 0 | 0 |
| 191 WASHINGT 301 - WAT/ | 380.0304 | 7.369697 | 1326.125 | 10.33333 | 0 | 0 | 0 |
| 191 WASHINGT 302 -SOUT | 371.0885 | 31.32121 | 849.426 | 2.583333 | 0 | 0 | 0 |
| 191 WASHINGT 401 -GLAD | 523.1007 | 29.47879 | 1555.646 | 5.166667 | 0 | 0 | 0 |
| 191 WASHINGT 402 - MEAI | 585.6939 | 25.79394 | 1720.431 | 5.166667 | 0 | 0 | 0 |
| 191 WASHINGT 501 -RHEA | 675.1128 | 27.63636 | 2305.024 | 12.91667 | 0 | 0 | 0 |
| 191 WASHINGT 502 - DAM، | 375.5595 | 14.73939 | 986.7466 | 0 | 0 | 0 | 0 |
| 191 WASHINGT 504 -GREE | 62.59324 | 0 | 258.9474 | 0 | 0 | 0 | 0 |
| 191 WASHINGT 601 - BURS | 388.9723 | 22.10909 | 1944.067 | 5.166667 | 0 | 0 | 0 |
| 191 WASHINGT 602 - MENI | 120.7155 | 5.527273 | 470.8135 | 5.166667 | 0 | 0 | 0 |
| 191 WASHINGT 603 - VALLI | 411.327 | 11.05455 | 1461.484 | 2.583333 | 0 | 0 | 0 |
| 191 WASHINGT 701 - HIGH | 304.0243 | 11.05455 | 1214.306 | 2.583333 | 0 | 0 | 0 |
| 191 WASHINGT 702 - WALL | 187.7797 | 7.369697 | 768.9954 | 0 | 0 | 0 | 0 |
| 191 WASHINGT 703 - JOHN | 491.8041 | 14.73939 | 1230 | 7.75 | 0 | 0 | 0 |
| 193 WESTMOR 101 - PREC | 779.0822 | 4.5 | 341.631 | 0 | 0 | 0 | 0 |


| 193 WESTMOR 102 - PREC | 353.5331 | 7.5 | 210.3639 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 193 WESTMOR 201 - PREC | 641.5971 | 3 | 486.3614 | 3.25 | 0 | 0 | 0 |
| 193 WESTMOR 202 - PREC | 219.3215 | 6 | 516.6538 | 3.25 | 0 | 0 | 0 |
| 193 WESTMOR 301 - PREC | 396.088 | 6 | 454.3861 | 13 | 0 | 0 | 0 |
| 193 WESTMOR 302 - PREC | 471.3775 | 4.5 | 545.2633 | 0 | 0 | 0 | 0 |
| 193 WESTMOR 401 - PREC | 690.6989 | 19.5 | 1549.961 | 6.5 | 0 | 0 | 0 |
| 193 WESTMOR 501 - PREC | 949.3018 | 39 | 1213.379 | 13 | 0 | 0 | 0 |
| 195 WISE COUP 101 - APPA | 305.6263 | 1.928571 | 984.3097 | 1.722222 | 0 | 0 | 0 |
| 195 WISE COUP 102 - DORC | 214.946 | 3.857143 | 668.8258 | 0 | 0 | 0 | 0 |
| 195 WISE COUP 103 - GUES | 204.8704 | 1.928571 | 639.3806 | 1.722222 | 0 | 0 | 0 |
| 195 WISE COUP 104 - WEST | 305.6263 | 13.5 | 1867.665 | 0 | 0 | 0 | 0 |
| 195 WISE COUP 201 - NORT | 188.0778 | 5.785714 | 893.871 | 0 | 0 | 0 | 0 |
| 195 WISE COUP 202 - WISE | 493.7041 | 23.14286 | 1617.381 | 8.611111 | 0 | 0 | 0 |
| 195 WISE COUP 203 - EAST | 80.60475 | 3.857143 | 445.8839 | 0 | 0 | 0 | 0 |
| 195 WISE COUP 301 - BIG S | 349.2873 | 9.642857 | 1081.058 | 3.444444 | 0 | 0 | 0 |
| 195 WISE COUP 302 - EAST | 298.9093 | 17.35714 | 1592.142 | 12.05556 | 0 | 0 | 0 |
| 195 WISE COUT 401 - CLINC | 157.851 | 7.714286 | 858.1161 | 0 | 0 | 0 | 0 |
| 195 WISE COUT 402 - SOUT | 248.5313 | 5.785714 | 1897.11 | 3.444444 | 0 | 0 | 0 |
| 195 WISE COUP 403 - ST PA | 261.9654 | 13.5 | 820.2581 | 0 | 0 | 0 | 0 |
| 197 WYTHE CO 101 - ROYA | 113.7078 | 3.148148 | 414.7648 | 0 | 0 | 0 | 0 |
| 197 WYTHE CO 102 -RURA | 425.6753 | 22.03704 | 1824.057 | 1.928571 | 0 | 0 | 0 |
| 197 WYTHE CO 203 - WEST | 527.7208 | 20.46296 | 1188.286 | 3.857143 | 0 | 0 | 0 |
| 197 WYTHE CO 303 - EAST | 568.539 | 34.62963 | 1214.02 | 1.928571 | 0 | 0 | 0 |
| 197 WYTHE CO 401 - FORT | 279.8961 | 11.01852 | 1124.709 | 3.857143 | 0 | 0 | 0 |
| 197 WYTHE CO 402 - MAX | 247.8247 | 17.31481 | 1209.478 | 1.928571 | 0 | 0 | 0 |
| 197 WYTHE CO 501 -JACKs | 221.5844 | 3.148148 | 1033.885 | 1.928571 | 0 | 0 | 0 |
| 197 WYTHE CO 502 - SHEFI | 276.9805 | 17.31481 | 1354.797 | 7.714286 | 0 | 0 | 0 |
| 197 WYTHE CO 601 - HUD[ | 99.12987 | 6.296296 | 675.1281 | 0 | 0 | 0 | 0 |
| 197 WYTHE CO 602 - ZION | 201.1753 | 17.31481 | 1020.261 | 0 | 0 | 0 | 0 |
| 197 WYTHE CO 603 EVER | 180.7662 | 17.31481 | 673.6144 | 3.857143 | 0 | 0 | 0 |
| 199 YORK COUI 101 - QUEE | 1347.623 | 44.59016 | 1147.342 | 0 | 0 | 0 | 0 |
| 199 YORK COUI 102 - WALI | 1286.919 | 51.27869 | 1436.261 | 18.7 | 0 | 0 | 0 |
| 199 YORK COUI 103 - MAG | 2853.076 | 78.03279 | 1716.846 | 16.02857 | 0 | 0 | 0 |
| 199 YORK COUI 201 - COVE | 2009.294 | 75.80328 | 1816.856 | 18.7 | 0 | 0 | 0 |
| 199 YORK COUI 202 - KILN | 1068.386 | 26.7541 | 1005.66 | 5.342857 | 0 | 0 | 0 |
| 199 YORK COUI 301 - SEAFI | 1232.286 | 55.7377 | 3028.094 | 32.05714 | 0 | 0 | 0 |
| 199 YORK COUI 302 - YORK | 764.8671 | 35.67213 | 1214.016 | 16.02857 | 0 | 0 | 0 |
| 199 YORK COUI 303 - EDGE | 1912.168 | 37.90164 | 1511.269 | 24.04286 | 0 | 0 | 0 |
| 199 YORK COUI 401 - HARV | 801.2894 | 60.19672 | 1502.935 | 5.342857 | 0 | 0 | 0 |
| 199 YORK COUI 402 - DARE | 959.1191 | 37.90164 | 1625.17 | 16.02857 | 0 | 0 | 0 |
| 199 YORK COUI 403 - GRAF | 564.5448 | 33.44262 | 791.7492 | 0 | 0 | 0 | 0 |
| 199 YORK COUI 501 - TABB | 1189.793 | 64.65574 | 1786.297 | 21.37143 | 0 | 0 | 0 |
| 199 YORK COUI 502 - BETH | 1693.634 | 78.03279 | 1658.506 | 13.35714 | 0 | 0 | 0 |
| 510 ALEXANDR 101 - LADR | 1002.932 | 18.92593 | 399.5895 | 17.875 | 0 | 0 | 0 |
| 510 ALEXANDR 102 - CITY I | 737.2546 | 16.22222 | 478.9782 | 26.8125 | 0 | 0 | 0 |
| 510 ALEXANDR 103 - LYLES | 2012.506 | 54.07407 | 717.1441 | 35.75 | 0 | 0 | 0 |
| 510 ALEXANDR 104 - DURA | 1680.409 | 40.55556 | 402.2358 | 17.875 | 0 | 0 | 0 |


| 510 ALEXANDR 105 - LEE C | 1182.264 | 29.74074 | 367.8341 | 5.958333 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 510 ALEXANDR 106 - CORA | 4224.27 | 51.37037 | 645.6943 | 20.85417 | 0 | 0 | 0 |
| 510 ALEXANDR 107 - MT V | 2743.118 | 37.85185 | 558.3668 | 35.75 | 0 | 0 | 0 |
| 510 ALEXANDR 108 - GEOR | 2112.135 | 40.55556 | 399.5895 | 8.9375 | 0 | 0 | 0 |
| 510 ALEXANDR 109 - FIRE I | 1454.583 | 40.55556 | 508.0873 | 29.79167 | 0 | 0 | 0 |
| 510 ALEXANDR 110 - CHAR | 2596.996 | 24.33333 | 370.4803 | 14.89583 | 0 | 0 | 0 |
| 510 ALEXANDR 111 - POTC | 1328.387 | 29.74074 | 291.0917 | 11.91667 | 0 | 0 | 0 |
| 510 ALEXANDR 112 - ALEX | 1242.042 | 5.407407 | 341.3712 | 20.85417 | 0 | 0 | 0 |
| 510 ALEXANDR 201 - MAU | 1766.754 | 21.62963 | 497.5022 | 32.77083 | 0 | 0 | 0 |
| 510 ALEXANDR 202 - GEOR | 1620.632 | 29.74074 | 643.048 | 38.72917 | 0 | 0 | 0 |
| 510 ALEXANDR 203 - CHAR | 2078.925 | 37.85185 | 478.9782 | 29.79167 | 0 | 0 | 0 |
| 510 ALEXANDR 204 - BLESS | 1733.545 | 29.74074 | 542.4891 | 44.6875 | 0 | 0 | 0 |
| 510 ALEXANDR 205 - DOU | 1932.803 | 40.55556 | 531.9039 | 38.72917 | 0 | 0 | 0 |
| 510 ALEXANDR 206 -CHIN | 1494.435 | 24.33333 | 383.7118 | 44.6875 | 0 | 0 | 0 |
| 510 ALEXANDR 207 - TEMF | 2490.725 | 37.85185 | 624.524 | 38.72917 | 0 | 0 | 0 |
| 510 ALEXANDR 208 - NOV/ | 3015.438 | 59.48148 | 685.3886 | 35.75 | 0 | 0 | 0 |
| 510 ALEXANDR 209 - JAME | 3168.202 | 35.14815 | 600.7074 | 17.875 | 0 | 0 | 0 |
| 510 ALEXANDR 210 - The + | 1215.474 | 32.44444 | 309.6157 | 5.958333 | 0 | 0 | 0 |
| 510 ALEXANDR 302 - PATR | 2344.602 | 32.44444 | 365.1878 | 17.875 | 0 | 0 | 0 |
| 510 ALEXANDR 303 - CHAR | 1899.593 | 35.14815 | 312.262 | 8.9375 | 0 | 0 | 0 |
| 510 ALEXANDR 304 - SAMI | 2696.625 | 48.66667 | 455.1616 | 11.91667 | 0 | 0 | 0 |
| 510 ALEXANDR 305 - JOHN | 4423.528 | 32.44444 | 516.0262 | 20.85417 | 0 | 0 | 0 |
| 510 ALEXANDR 306 - WILLI | 4237.553 | 32.44444 | 521.3188 | 17.875 | 0 | 0 | 0 |
| 510 ALEXANDR 307 - SOUT | 3008.796 | 27.03704 | 523.9651 | 17.875 | 0 | 0 | 0 |
| 510 ALEXANDR 308 - CAMI | 2225.048 | 27.03704 | 725.083 | 32.77083 | 0 | 0 | 0 |
| 510 ALEXANDR 309 - OLYN | 2570.428 | 48.66667 | 346.6638 | 11.91667 | 0 | 0 | 0 |
| 520 BRISTOL Cl 001 - FIRST | 530.2365 | 32.25806 | 1206.536 | 8.7 | 0 | 0 | 0 |
| 520 BRISTOL Cl 002 - SECO | 546.9368 | 36.29032 | 1125.222 | 2.9 | 0 | 0 | 0 |
| 520 BRISTOL Cl 003 - THIRI | 442.5596 | 10.08065 | 659.3095 | 8.7 | 0 | 0 | 0 |
| 520 BRISTOL Cl 004 - FOUR | 793.2671 | 46.37097 | 2355.933 | 8.7 | 0 | 0 | 0 |
| 530 BUENA VIS 001 - FIRST | 434.4415 | 40.61538 | 1054.433 | 8.888889 | 0 | 0 | 0 |
| 530 BUENA VIS 002 - SECO | 390.5585 | 31.38462 | 808.5673 | 7.111111 | 0 | 0 | 0 |
| 540 CHARLOTTI 101 - Key R | 1831.504 | 20.00585 | 402.4415 | 14.17722 | 0 | 0 | 0 |
| 540 CHARLOTTI 102 - CLAR | 3075 | 34.55556 | 443.0549 | 11.34177 | 0 | 0 | 0 |
| 540 CHARLOTTI 201 - CARV | 2496.63 | 38.19298 | 223.3735 | 14.17722 | 0 | 0 | 0 |
| 540 CHARLOTTI 202 - WALk | 2429.153 | 36.37427 | 544.5883 | 11.34177 | 0 | 0 | 0 |
| 540 CHARLOTTI301-BENJ/ | 2930.407 | 27.2807 | 232.6038 | 17.01266 | 0 | 0 | 0 |
| 540 CHARLOTTI 302 -JOHN | 2660.501 | 72.74854 | 548.2804 | 18.43038 | 0 | 0 | 0 |
| 540 CHARLOTTI303-BUFC | 1484.483 | 25.46199 | 184.6062 | 8.506329 | 0 | 0 | 0 |
| 540 CHARLOTTI 401 - VENA | 2053.213 | 27.2807 | 193.8365 | 7.088608 | 0 | 0 | 0 |
| 540 CHARLOTTI 402 - ALUN | 1735.109 | 29.09942 | 321.2148 | 9.924051 | 0 | 0 | 0 |
| 550 CHESAPEAI 001 - GREA | 765.4545 | 43.35714 | 1130.661 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAIOO2-BETH | 715.6688 | 43.35714 | 2389.568 | 10.55172 | 0 | 0 | 0 |
| 550 CHESAPEAIO03-CAMI | 1446.275 | 26.97653 | 134.9853 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAI004-CHUR | 464.356 | 24.90141 | 990.7414 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAIOO5-CRES | 1891.283 | 22.82629 | 328.5492 | 13.41176 | 0 | 0 | 0 |
| 550 CHESAPEAIO06-DEEP | 970.8203 | 29.66541 | 936.9828 | 7.034483 | 0 | 0 | 0 |


| 550 CHESAPEAI 007 - GREE | 659.66 | 45.6391 | 709.2803 | 17.58621 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAI008-SOUT | 1388.231 | 43.57746 | 1023.851 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAI009-BELLS | 908.5883 | 59.33083 | 1876.583 | 3.517241 | 0 | 0 | 0 |
| 550 CHESAPEAI 010 - OSCA | 667.5117 | 29.05164 | 562.8633 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAIO11-GENE | 1320.512 | 29.05164 | 1087.523 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAIO12-GEOR | 914.2008 | 12.4507 | 198.6576 | 6.705882 | 0 | 0 | 0 |
| 550 CHESAPEAI013-GILM | 1189.912 | 41.50235 | 1232.696 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAI 014 -GRAS | 852.5794 | 45.6391 | 1039.056 | 10.55172 | 0 | 0 | 0 |
| 550 CHESAPEAI 015 - GREE | 1349.534 | 49.80282 | 797.1775 | 20.11765 | 0 | 0 | 0 |
| 550 CHESAPEAI 016 - HICKI | 902.3651 | 41.07519 | 2004.829 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAI017-INDIA | 715.6688 | 25.1015 | 1792.83 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAIO18-INDIA | 1243.12 | 41.50235 | 555.2227 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAIO19-JOLLI | 703.2224 | 31.94737 | 1049.525 | 24.62069 | 0 | 0 | 0 |
| 550 CHESAPEAI020-E W C | 983.2667 | 38.79323 | 1070.464 | 10.55172 | 0 | 0 | 0 |
| 550 CHESAPEAI021-FELLC | 923.8749 | 37.35211 | 1082.43 | 6.705882 | 0 | 0 | 0 |
| 550 CHESAPEAI022-NORF | 836.8081 | 35.277 | 860.8498 | 6.705882 | 0 | 0 | 0 |
| 550 CHESAPEAI023-OAK 1 | 1300.65 | 47.92105 | 840.1438 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAIO24-OAKL | 1431.764 | 45.65258 | 794.6306 | 16.76471 | 0 | 0 | 0 |
| 550 CHESAPEAIO25-STJU | 1175.401 | 39.42723 | 669.8328 | 13.41176 | 0 | 0 | 0 |
| 550 CHESAPEAIO26-JOHN | 972.2453 | 29.05164 | 402.4091 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAIO27-SILVE | 851.3192 | 26.97653 | 883.7719 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAIO28-SUNR | 292.4907 | 9.12782 | 465.8741 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAI029-TANE | 623.9783 | 56.02817 | 1028.945 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAIO30-SOUT | 1189.912 | 8.300469 | 61.12543 | 6.705882 | 0 | 0 | 0 |
| 550 CHESAPEAIO31-CARV | 2050.905 | 24.90141 | 432.9718 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAI 032 - PROV | 2834.506 | 20.75117 | 170.6418 | 13.41176 | 0 | 0 | 0 |
| 550 CHESAPEAI033-WEST | 648.1635 | 16.60094 | 995.8351 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAI 034 - HICKI | 815.2401 | 45.6391 | 1813.768 | 21.10345 | 0 | 0 | 0 |
| 550 CHESAPEAI 035 - TAYL( | 1218.934 | 29.05164 | 392.2215 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAI036-GREA | 1151.293 | 29.66541 | 1408.091 | 24.62069 | 0 | 0 | 0 |
| 550 CHESAPEAI 037 - BRID | 871.249 | 34.22932 | 1012.884 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAI 038 - BAILE | 435.3337 | 39.42723 | 1006.023 | 3.352941 | 0 | 0 | 0 |
| 550 CHESAPEAI039-LAKE | 877.4722 | 52.48496 | 1041.674 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAIO41-JOHN | 1960.31 | 73.02256 | 1491.844 | 24.62069 | 0 | 0 | 0 |
| 550 CHESAPEAI 042 - PARK | 1185.075 | 18.67606 | 603.6136 | 20.11765 | 0 | 0 | 0 |
| 550 CHESAPEAI 043 - PLEA؛ | 566.3119 | 29.66541 | 1285.08 | 14.06897 | 0 | 0 | 0 |
| 550 CHESAPEAIO44-NANS | 977.0823 | 8.300469 | 634.1763 | 6.705882 | 0 | 0 | 0 |
| 550 CHESAPEAIO45-SUNR | 485.4102 | 11.40977 | 397.8251 | 3.517241 | 0 | 0 | 0 |
| 550 CHESAPEAI 046 - BELLS | 945.9275 | 34.22932 | 1101.871 | 0 | 0 | 0 | 0 |
| 550 CHESAPEAIO48-JOLLI | 2875.122 | 29.66541 | 287.8997 | 10.55172 | 0 | 0 | 0 |
| 550 CHESAPEAI 049 - WATE | 865.0258 | 25.1015 | 965.7728 | 14.06897 | 0 | 0 | 0 |
| 550 CHESAPEAI 050 - RIVEF | 1611.811 | 34.22932 | 910.8101 | 14.06897 | 0 | 0 | 0 |
| 550 CHESAPEAIO51-COOF | 1020.606 | 47.92105 | 2028.385 | 17.58621 | 0 | 0 | 0 |
| 550 CHESAPEAIO52-SHIPY | 809.0169 | 20.53759 | 638.614 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAIO53-FAIRV | 1523.668 | 45.65258 | 1156.289 | 30.17647 | 0 | 0 | 0 |
| 550 CHESAPEAI054-PUGF | 1426.927 | 33.20188 | 438.0656 | 10.05882 | 0 | 0 | 0 |
| 550 CHESAPEAI 055 -GEOR | 488.5412 | 14.52582 | 188.4701 | 3.352941 | 0 | 0 | 0 |


| 550 CHESAPEAI 056 - GREE | 860.9933 | 10.37559 | 644.3639 | 10.05882 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAI 057 - CYPR | 1257.631 | 22.82629 | 601.0667 | 16.76471 | 0 | 0 | 0 |
| 550 CHESAPEAI 058 -EXPR | 796.5705 | 15.97368 | 219.8507 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAI 059 - CLEAI | 1107.731 | 34.22932 | 999.7973 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAIO60-PARK | 640.9903 | 25.1015 | 1020.735 | 3.517241 | 0 | 0 | 0 |
| 550 CHESAPEAIO61-CENT | 865.0258 | 45.6391 | 1947.249 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAI 062 -FENT | 1138.847 | 57.04887 | 1792.83 | 7.034483 | 0 | 0 | 0 |
| 550 CHESAPEAI 063 - POPL | 373.3924 | 25.1015 | 934.3655 | 3.517241 | 0 | 0 | 0 |
| 550 CHESAPEAI 064 - DEEP | 1095.284 | 38.79323 | 793.0329 | 3.517241 | 0 | 0 | 0 |
| 550 CHESAPEAI 065 - WATE | 945.9275 | 43.35714 | 821.8229 | 10.55172 | 0 | 0 | 0 |
| 570 COLONIAL 001 - FIRST | 631.977 | 26.61972 | 1101.201 | 0 | 0 | 0 | 0 |
| 570 COLONIAL 002 - SECO | 570.4874 | 24.71831 | 1106.161 | 18.4 | 0 | 0 | 0 |
| 570 COLONIAL 003 -THIRI | 669.554 | 26.61972 | 1140.884 | 18.4 | 0 | 0 | 0 |
| 570 COLONIAL 004 - FOUR | 659.3057 | 24.71831 | 1212.809 | 4.6 | 0 | 0 | 0 |
| 570 COLONIAL 005 - FIFTH | 440.6759 | 32.32394 | 1445.946 | 4.6 | 0 | 0 | 0 |
| 580 COVINGTO 101 - PREC | 202.2902 | 6.666667 | 267.271 | 0 | 0 | 0 | 0 |
| 580 COVINGTO 201 - PREC | 159.8342 | 11.66667 | 256.9346 | 3.6 | 0 | 0 | 0 |
| 580 COVINGTO 301 - PREC | 224.7668 | 10 | 191.9626 | 3.6 | 0 | 0 | 0 |
| 580 COVINGTO 401 - PREC | 184.8083 | 18.33333 | 413.4579 | 1.8 | 0 | 0 | 0 |
| 580 COVINGTO 501 - PREC | 192.3005 | 3.333333 | 450.3738 | 0 | 0 | 0 | 0 |
| 590 DANVILLE (001-WARI | 498.9729 | 8.193277 | 101.8168 | 9.84 | 0 | 0 | 0 |
| 590 DANVILLE (002-WARI | 348.9926 | 13.10924 | 222.1458 | 14.76 | 0 | 0 | 0 |
| 590 DANVILLE (003-WARI | 718.1749 | 18.02521 | 275.3682 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (004-WARI | 1185.421 | 14.7479 | 951.0617 | 9.84 | 0 | 0 | 0 |
| 590 DANVILLE (006-WARI | 591.2685 | 6.554622 | 76.36262 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (007-WARI | 986.4089 | 4.915966 | 196.6916 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (008-WARI | 801.8177 | 9.831933 | 300.8224 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (009-WARI | 556.6576 | 9.831933 | 453.5477 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (010-WARI | 778.7438 | 14.7479 | 511.3981 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (011-WARI | 1093.126 | 16.38655 | 395.6972 | 0 | 0 | 0 | 0 |
| 590 DANVILLE (012-WARI | 997.9458 | 4.915966 | 620.157 | 4.92 | 0 | 0 | 0 |
| 590 DANVILLE (013-WARI | 1035.441 | 18.02521 | 546.1084 | 19.68 | 0 | 0 | 0 |
| 590 DANVILLE (014-WARI | 245.1601 | 0 | 13.88411 | 0 | 0 | 0 | 0 |
| 590 DANVILLE (015-WARI | 752.7857 | 24.57983 | 775.1963 | 0 | 0 | 0 | 0 |
| 590 DANVILLE (016-WARI | 749.9015 | 14.7479 | 1110.729 | 19.68 | 0 | 0 | 0 |
| 590 DANVILLE (017-WARI | 369.1823 | 16.38655 | 877.0131 | 14.76 | 0 | 0 | 0 |
| 595 EMPORIA ( 101 - PREC | 320.0294 | 5.2 | 100.5333 | 3.333333 | 0 | 0 | 0 |
| 595 EMPORIA ( 201 - PREC | 229.1569 | 1.3 | 11.82745 | 0 | 0 | 0 | 0 |
| 595 EMPORIA ( 301 - PREC | 191.6225 | 0 | 158.1922 | 0 | 0 | 0 | 0 |
| 595 EMPORIA ( 401 - PREC | 227.1814 | 2.6 | 180.3686 | 0 | 0 | 0 | 0 |
| 595 EMPORIA ( 501 - PREC | 233.1078 | 1.3 | 11.82745 | 0 | 0 | 0 | 0 |
| 595 EMPORIA ( 601 - DISTF | 152.1127 | 1.3 | 212.8941 | 0 | 0 | 0 | 0 |
| 595 EMPORIA C 701 - DISTF | 258.7892 | 1.3 | 78.35686 | 1.666667 | 0 | 0 | 0 |
| 600 FAIRFAX Cl 001 - ONE | 1828.725 | 38.65385 | 627.9627 | 29.67391 | 0 | 0 | 0 |
| 600 FAIRFAX Cl 002 - TWO | 1172.571 | 43.80769 | 685.2767 | 20.54348 | 0 | 0 | 0 |
| 600 FAIRFAX Cl 003 - THRE | 1992.763 | 43.80769 | 884.63 | 29.67391 | 0 | 0 | 0 |
| 600 FAIRFAX Cl 004 - FOUR | 947.7775 | 30.92308 | 458.5124 | 4.565217 | 0 | 0 | 0 |


| 600 FAIRFAX Cl 005 - FIVE | 1403.44 | 28.34615 | 652.8818 | 13.69565 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600 FAIRFAX Cl 006 - SIX | 1828.725 | 15.46154 | 697.7363 | 6.847826 | 0 | 0 | 0 |
| 610 FALLS CHU 001 - FIRST | 2867.222 | 46.76923 | 611.8075 | 21.95455 | 0 | 0 | 0 |
| 610 FALLS CHU 002 - SECO | 2260.694 | 20.46154 | 433.2417 | 21.95455 | 0 | 0 | 0 |
| 610 FALLS CHU 003 - THIRI | 2018.083 | 46.76923 | 444.9509 | 25.09091 | 0 | 0 | 0 |
| 620 FRANKLIN (101- PREC | 258.1742 | 10.65217 | 607.9558 | 17 | 0 | 0 | 0 |
| 620 FRANKLIN (201- PREC | 414.2135 | 9.130435 | 426.5657 | 0 | 0 | 0 | 0 |
| 620 FRANKLIN (301-PREC | 539.0449 | 0 | 55.81233 | 0 | 0 | 0 | 0 |
| 620 FRANKLIN ( 401 - PREC | 448.2584 | 3.043478 | 73.75201 | 0 | 0 | 0 | 0 |
| 620 FRANKLIN (501- PREC | 482.3034 | 1.521739 | 11.95979 | 0 | 0 | 0 | 0 |
| 620 FRANKLIN (601-PREC | 383.0056 | 10.65217 | 310.9544 | 0 | 0 | 0 | 0 |
| 630 FREDERICK 101 - PREC | 2572.752 | 78.41584 | 1256.153 | 11.44828 | 0 | 0 | 0 |
| 630 FREDERICK 201 - PREC | 1632.793 | 59.40594 | 972.0759 | 25.75862 | 0 | 0 | 0 |
| 630 FREDERICK 301 - PREC | 1632.793 | 61.78218 | 998.7081 | 20.03448 | 0 | 0 | 0 |
| 630 FREDERICK 401 - PREC | 1412.145 | 21.38614 | 390.6058 | 8.586207 | 0 | 0 | 0 |
| 630 FREDERICK 402 - PREC | 1266.518 | 19.0099 | 419.4574 | 17.17241 | 0 | 0 | 0 |
| 640 GALAX CIT 001 - EAST | 378.7875 | 5.4 | 791.038 | 2 | 0 | 0 | 0 |
| 640 GALAX CIT 003 - SOUT | 145.6875 | 7.2 | 506.0316 | 4 | 0 | 0 | 0 |
| 640 GALAX CIT 005 - WEST | 252.525 | 5.4 | 540.9304 | 0 | 0 | 0 | 0 |
| 650 HAMPTON 101 - ABER | 1765.34 | 22.1585 | 288.9744 | 10.16471 | 0 | 0 | 0 |
| 650 HAMPTON 102 - BASSI | 2091.927 | 14.10086 | 166.3792 | 2.541176 | 0 | 0 | 0 |
| 650 HAMPTON 103 - CITY I | 1372.552 | 42.30259 | 214.5416 | 10.16471 | 0 | 0 | 0 |
| 650 HAMPTON 104 - COOF | 2895.157 | 44.317 | 420.3264 | 10.16471 | 0 | 0 | 0 |
| 650 HAMPTON 105 - EAST | 1023.897 | 18.12968 | 205.7848 | 2.541176 | 0 | 0 | 0 |
| 650 HAMPTON 106 - ARM | 1553.499 | 32.23055 | 637.0572 | 7.623529 | 0 | 0 | 0 |
| 650 HAMPTON 107 - LIND | 1403.445 | 18.12968 | 295.542 | 0 | 0 | 0 | 0 |
| 650 HAMPTON 108 - THON | 2171.368 | 30.21614 | 243.0012 | 12.70588 | 0 | 0 | 0 |
| 650 HAMPTON 109 - PHEN | 2572.983 | 26.18732 | 205.7848 | 12.70588 | 0 | 0 | 0 |
| 650 HAMPTON 110 - PHOE | 506.5763 | 7.139535 | 243.7829 | 4.722222 | 0 | 0 | 0 |
| 650 HAMPTON 111 - HAM | 454.575 | 12.08646 | 249.5688 | 2.541176 | 0 | 0 | 0 |
| 650 HAMPTON 112 -SMIT | 2065.447 | 52.37464 | 768.4092 | 22.87059 | 0 | 0 | 0 |
| 650 HAMPTON 115 - WYTr | 895.9099 | 22.1585 | 562.6244 | 7.623529 | 0 | 0 | 0 |
| 650 HAMPTON 116 - JONE | 1045.964 | 18.12968 | 240.812 | 7.623529 | 0 | 0 | 0 |
| 650 HAMPTON 117 - KECO | 1624.112 | 40.28818 | 514.462 | 7.623529 | 0 | 0 | 0 |
| 650 HAMPTON 118 - MALL | 2180.194 | 14.10086 | 282.4068 | 20.32941 | 0 | 0 | 0 |
| 650 HAMPTON 201 - BOOk | 1307.294 | 46.40698 | 1165.587 | 14.16667 | 0 | 0 | 0 |
| 650 HAMPTON 202 - BRYA | 1315.464 | 42.83721 | 973.2269 | 21.25 | 0 | 0 | 0 |
| 650 HAMPTON 203 - BURB | 1278.697 | 39.26744 | 598.0298 | 11.80556 | 0 | 0 | 0 |
| 650 HAMPTON 204 - FORR | 1513.779 | 48.34582 | 610.7868 | 12.70588 | 0 | 0 | 0 |
| 650 HAMPTON 205 - ASBU | 1474.791 | 66.0407 | 2064.536 | 11.80556 | 0 | 0 | 0 |
| 650 HAMPTON 208 - KRAF | 2219.915 | 60.43228 | 1422.98 | 12.70588 | 0 | 0 | 0 |
| 650 HAMPTON 209 - LANG | 1417.597 | 44.62209 | 851.3355 | 9.444444 | 0 | 0 | 0 |
| 650 HAMPTON 210 - MACl | 2396.449 | 46.33141 | 729.0036 | 20.32941 | 0 | 0 | 0 |
| 650 HAMPTON 212 - BETH | 1703.553 | 42.30259 | 753.0848 | 0 | 0 | 0 | 0 |
| 650 HAMPTON 213 - PHILL | 1536.07 | 60.68605 | 1495.075 | 11.80556 | 0 | 0 | 0 |
| 650 HAMPTON 214 - TUCK | 2021.314 | 50.36023 | 945.7344 | 7.623529 | 0 | 0 | 0 |
| 650 HAMPTON 215 - TYLEF | 748.301 | 12.08646 | 138.4009 | 7.623529 | 0 | 0 | 0 |


| 650 HAMPTON 216 - SAND | 1032.724 | 18.12968 | 573.5704 | 15.24706 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 650 HAMPTON 217 - SYMS | 631.1089 | 14.10086 | 569.192 | 2.541176 | 0 | 0 | 0 |
| 660 HARRISONI 101 - NORT | 2073.001 | 63.03911 | 784.5934 | 10.54545 | 0 | 0 | 0 |
| 660 HARRISONI 102 - EAST | 869.1914 | 18.30168 | 358.3182 | 13.18182 | 0 | 0 | 0 |
| 660 HARRISONI 103 - SOUT | 1868.966 | 50.83799 | 871.084 | 10.54545 | 0 | 0 | 0 |
| 660 HARRISONI 104 - EAST | 1636.365 | 63.03911 | 904.0328 | 13.18182 | 0 | 0 | 0 |
| 660 HARRISONI 105 - Soutr | 685.5594 | 8.134078 | 185.337 | 10.54545 | 0 | 0 | 0 |
| 660 HARRISONI 201 - NORT | 1309.908 | 50.83799 | 889.6177 | 21.09091 | 0 | 0 | 0 |
| 660 HARRISONI 202 - SOUT | 1395.603 | 65.07263 | 834.0166 | 18.45455 | 0 | 0 | 0 |
| 660 HARRISONI 203 - WES | 1183.406 | 44.73743 | 764.0004 | 18.45455 | 0 | 0 | 0 |
| 670 HOPEWELL 101 - WARI | 558.1215 | 13.24719 | 578.8323 | 4.7 | 0 | 0 | 0 |
| 670 HOPEWELL 201 - WARI | 1014.516 | 11.77528 | 200.9005 | 11.75 | 0 | 0 | 0 |
| 670 HOPEWELL 301 - WARI | 585.6152 | 32.38202 | 1008.481 | 16.45 | 0 | 0 | 0 |
| 670 HOPEWELL 401 - WARI | 907.2911 | 27.96629 | 771.7763 | 11.75 | 0 | 0 | 0 |
| 670 HOPEWELL 501 - WARI | 569.119 | 16.19101 | 747.907 | 0 | 0 | 0 | 0 |
| 670 HOPEWELL 601 - WARI | 1135.489 | 14.7191 | 248.6393 | 2.35 | 0 | 0 | 0 |
| 670 HOPEWELL 701 - WARI | 659.8481 | 14.7191 | 463.4636 | 0 | 0 | 0 | 0 |
| 678 LEXINGTON 001 -LEXIN | 1791 | 48 | 906 | 19 | 0 | 0 | 0 |
| 680 LYNCHBUR 101 - FIRST | 1599.344 | 89.8951 | 1506.551 | 37.19178 | 0 | 0 | 0 |
| 680 LYNCHBUR 102 - FIRST | 1047.009 | 68.91958 | 1637.028 | 14.87671 | 0 | 0 | 0 |
| 680 LYNCHBUR 103 - FIRST | 710.1449 | 31.46329 | 937.6117 | 4.958904 | 0 | 0 | 0 |
| 680 LYNCHBUR 104 - FIRST | 521.9869 | 17.97902 | 330.7433 | 12.39726 | 0 | 0 | 0 |
| 680 LYNCHBUR 105 - FIRST | 740.493 | 28.46678 | 538.5957 | 19.83562 | 0 | 0 | 0 |
| 680 LYNCHBUR 201 - SECO | 2288.245 | 62.92657 | 611.4199 | 24.79452 | 0 | 0 | 0 |
| 680 LYNCHBUR 202 - SECO | 1902.824 | 35.95804 | 452.117 | 17.35616 | 0 | 0 | 0 |
| 680 LYNCHBUR 203 - SECO | 840.6417 | 10.48776 | 174.4747 | 0 | 0 | 0 | 0 |
| 680 LYNCHBUR 204 - SECO | 634.2748 | 11.98601 | 399.016 | 2.479452 | 0 | 0 | 0 |
| 680 LYNCHBUR 301 - THIRI | 740.493 | 40.4528 | 470.323 | 4.958904 | 0 | 0 | 0 |
| 680 LYNCHBUR 302 - THIRI | 355.0725 | 61.42832 | 1816.054 | 32.23288 | 0 | 0 | 0 |
| 680 LYNCHBUR 303 - THIRI | 698.0057 | 44.94755 | 720.6562 | 12.39726 | 0 | 0 | 0 |
| 680 LYNCHBUR 304 - THIRI | 652.4836 | 37.45629 | 752.5168 | 7.438356 | 0 | 0 | 0 |
| 680 LYNCHBUR 305 - THIRI | 910.4422 | 56.93357 | 1599.098 | 24.79452 | 0 | 0 | 0 |
| 680 LYNCHBUR 401 - FOUR | 1247.306 | 83.9021 | 2107.351 | 39.67123 | 0 | 0 | 0 |
| 680 LYNCHBUR 402 - FOUR | 606.9615 | 25.47028 | 694.8643 | 14.87671 | 0 | 0 | 0 |
| 680 LYNCHBUR 403 - FOUR | 1374.768 | 106.3759 | 1292.63 | 47.10959 | 0 | 0 | 0 |
| 680 LYNCHBUR 404 - FOUR | 1177.505 | 41.95105 | 1055.951 | 44.63014 | 0 | 0 | 0 |
| 683 MANASSAS001-DEAN | 2029.522 | 40.97561 | 866.9173 | 8.896552 | 0 | 0 | 0 |
| 683 MANASSAS002-WEET | 2219.79 | 63.73984 | 1280.097 | 5.931034 | 0 | 0 | 0 |
| 683 MANASSAS003-METZ | 1685.228 | 43.25203 | 1201.517 | 14.82759 | 0 | 0 | 0 |
| 683 MANASSAS004-HAYD | 1676.168 | 47.80488 | 1095.053 | 11.86207 | 0 | 0 | 0 |
| 683 MANASSAS005-BALD | 1635.396 | 59.18699 | 884.6613 | 32.62069 | 0 | 0 | 0 |
| 683 MANASSAS006-ROUN | 1109.895 | 25.04065 | 927.7536 | 11.86207 | 0 | 0 | 0 |
| 685 MANASSAS001-PREC | 1345.026 | 28.94737 | 642.5675 | 4.857143 | 0 | 0 | 0 |
| 685 MANASSAS002-PREC | 1579.568 | 44.73684 | 726.2633 | 7.285714 | 0 | 0 | 0 |
| 685 MANASSAS003-PREC | 1067.405 | 26.31579 | 610.1692 | 4.857143 | 0 | 0 | 0 |
| 690 MARTINSV 001 - PREC | 589.1698 | 8.111111 | 32.43446 | 0 | 0 | 0 | 0 |
| 690 MARTINSV 002 - PREC | 686.2489 | 19.46667 | 529.0871 | 9.090909 | 0 | 0 | 0 |


| 690 MARTINSV 003 - PREC | 562.3893 | 11.35556 | 281.7743 | 5.454545 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 690 MARTINSV 004 - PREC | 893.7973 | 6.488889 | 370.9691 | 0 | 0 | 0 | 0 |
| 690 MARTINSV 005 - PREC | 652.7733 | 25.95556 | 940.5993 | 5.454545 | 0 | 0 | 0 |
| 690 MARTINSV 006 - PREC | 381.6213 | 1.622222 | 10.13577 | 0 | 0 | 0 | 0 |
| 700 NEWPORT 101 - DENB | 2196.962 | 53.6783 | 754.9144 | 8.137143 | 0 | 0 | 0 |
| 700 NEWPORT 102 - EPES | 2750.978 | 41.15337 | 518.2191 | 16.27429 | 0 | 0 | 0 |
| 700 NEWPORT 103 -JENKI | 2308.402 | 64.41397 | 991.6096 | 18.30857 | 0 | 0 | 0 |
| 700 NEWPORT 104 - MCIN | 1598.369 | 37.57481 | 509.2534 | 20.34286 | 0 | 0 | 0 |
| 700 NEWPORT 105 - OYST | 413.9204 | 8.946384 | 206.2118 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 106 - RESEI | 2496.258 | 66.20324 | 860.71 | 12.20571 | 0 | 0 | 0 |
| 700 NEWPORT 107 - RICHI | 1595.185 | 50.09975 | 1031.059 | 10.17143 | 0 | 0 | 0 |
| 700 NEWPORT 108 -LEE H | 1881.746 | 37.57481 | 595.3244 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 109 - WINL | 1082.561 | 41.15337 | 654.4982 | 8.137143 | 0 | 0 | 0 |
| 700 NEWPORT 110 - GREE | 1897.666 | 60.83541 | 631.1873 | 14.24 | 0 | 0 | 0 |
| 700 NEWPORT 201 - BLAN | 458.4964 | 10.73566 | 134.4859 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 202 - BOUL | 1174.897 | 50.09975 | 1018.507 | 8.137143 | 0 | 0 | 0 |
| 700 NEWPORT 203 - CHAR | 1385.041 | 51.88903 | 1592.313 | 8.137143 | 0 | 0 | 0 |
| 700 NEWPORT 204 - WELL | 834.2088 | 25.04988 | 493.1151 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 205 - DEEP | 920.1768 | 55.46758 | 1447.069 | 20.34286 | 0 | 0 | 0 |
| 700 NEWPORT 208 - HIDEI | 595.4085 | 8.946384 | 896.5729 | 10.17143 | 0 | 0 | 0 |
| 700 NEWPORT 209 - HILTC | 923.3608 | 60.83541 | 907.3318 | 16.27429 | 0 | 0 | 0 |
| 700 NEWPORT 210 - NELSI | 1649.313 | 67.99252 | 1597.693 | 16.27429 | 0 | 0 | 0 |
| 700 NEWPORT 211 - PALN | 1607.203 | 43.15337 | 756.8801 | 12.20571 | 0 | 0 | 0 |
| 700 NEWPORT 212 - RIVEF | 678.1926 | 50.09975 | 758.5007 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 213 - SANF | 426.6564 | 25.04988 | 683.1886 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 215 - WAR' | 818.2887 | 25.04988 | 480.5631 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 216 - YATE: | 538.0965 | 30.41771 | 668.8434 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 217 - RIVEF | 754.6087 | 21.47132 | 962.9193 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 218 -KILN | 1315.096 | 54.6783 | 1084.506 | 16.27429 | 0 | 0 | 0 |
| 700 NEWPORT 219 - DEER | 1954.978 | 41.15337 | 537.9437 | 26.44571 | 0 | 0 | 0 |
| 700 NEWPORT 302 - BRIAF | 1404.145 | 26.83915 | 360.4223 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 303 - CARV | 961.5689 | 12.52494 | 301.2485 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 304 -CHES | 980.6729 | 3.578554 | 39.44921 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 305 - DOW | 413.9204 | 12.52494 | 104.0025 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 306 - DUNE | 433.0244 | 5.36783 | 19.7246 | 0 | 0 | 0 | 0 |
| 700 NEWPORT 307-HUN7 | 913.8088 | 1.789277 | 19.7246 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 308 - JEFFE | 875.6008 | 1.789277 | 30.48348 | 0 | 0 | 0 | 0 |
| 700 NEWPORT 309 - MAG | 862.8648 | 7.157107 | 32.27662 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 310 - MAR | 1111.217 | 12.52494 | 46.62179 | 10.17143 | 0 | 0 | 0 |
| 700 NEWPORT 311 - NEWI | 1502.849 | 23.2606 | 484.1494 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 312 - NEW! | 569.9365 | 5.36783 | 12.55202 | 0 | 0 | 0 | 0 |
| 700 NEWPORT 313 - REED | 1391.409 | 10.73566 | 57.38067 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 314 - RIVEF | 684.5606 | 37.57481 | 399.8715 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 315 -SEDG | 1034.801 | 35.78554 | 785.3979 | 6.102857 | 0 | 0 | 0 |
| 700 NEWPORT 316 -SOUT | 1241.761 | 32.20698 | 475.1836 | 4.068571 | 0 | 0 | 0 |
| 700 NEWPORT 317 - WASt | 499.8885 | 5.36783 | 12.55202 | 2.034286 | 0 | 0 | 0 |
| 700 NEWPORT 318 - WILSI | 904.2568 | 12.52494 | 66.3464 | 6.102857 | 0 | 0 | 0 |


| 700 NEWPORT 319 - SAUN | 1442.353 | 37.57481 | 932.4358 | 4.068571 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 700 NEWPORT 320 - WATH | 1614.289 | 69.7818 | 1423.758 | 14.24 | 0 | 0 | 0 |
| 710 NORFOLK (101-GRAN | 1816.384 | 55.70122 | 607.3208 | 15.57252 | 0 | 0 | 0 |
| 710 NORFOLK (102-OCEA | 595.7702 | 30.22222 | 543.3195 | 11.71642 | 0 | 0 | 0 |
| 710 NORFOLK (103-NORT | 940.146 | 47.22222 | 762.2107 | 11.71642 | 0 | 0 | 0 |
| 710 NORFOLK (104-TITUS | 1197.811 | 17 | 176.1457 | 7.029851 | 0 | 0 | 0 |
| 710 NORFOLK (106-SECO | 1439.491 | 35.88889 | 598.0423 | 14.0597 | 0 | 0 | 0 |
| 710 NORFOLK ( 201 - LARC | 1314.207 | 34.57317 | 563.6436 | 10.38168 | 0 | 0 | 0 |
| 710 NORFOLK ( 203 - GHEN | 573.4076 | 28.81098 | 266.2228 | 10.38168 | 0 | 0 | 0 |
| 710 NORFOLK ( 207 - LAME | 1933.915 | 32.65244 | 259.9832 | 23.35878 | 0 | 0 | 0 |
| 710 NORFOLK ( 208 -LARC | 452.3153 | 32.65244 | 405.5738 | 5.19084 | 0 | 0 | 0 |
| 710 NORFOLK ( 210 - MAU | 1118.323 | 42.2561 | 386.855 | 7.78626 | 0 | 0 | 0 |
| 710 NORFOLK ( 211 - CHRY | 1307.084 | 49.93902 | 551.1644 | 10.38168 | 0 | 0 | 0 |
| 710 NORFOLK ( 212 - PARK | 1784.33 | 23.04878 | 151.8302 | 18.16794 | 0 | 0 | 0 |
| 710 NORFOLK ( 213 - TAYLI | 1631.184 | 69.14634 | 426.3725 | 25.9542 | 0 | 0 | 0 |
| 710 NORFOLK ( 214 - STUA | 1207.361 | 28.81098 | 488.7684 | 10.38168 | 0 | 0 | 0 |
| 710 NORFOLK (215-SUBU | 933.2585 | 30.22222 | 664.4914 | 2.343284 | 0 | 0 | 0 |
| 710 NORFOLK ( 217 - WESL | 1436.047 | 49.11111 | 521.8212 | 7.029851 | 0 | 0 | 0 |
| 710 NORFOLK ( 218 - WILL) | 1079.146 | 46.09756 | 840.2657 | 12.9771 | 0 | 0 | 0 |
| 710 NORFOLK (301-BALLL | 1535.023 | 17.28659 | 270.3825 | 18.16794 | 0 | 0 | 0 |
| 710 NORFOLK (302-TANN | 1143.254 | 24.96951 | 257.9033 | 0 | 0 | 0 | 0 |
| 710 NORFOLK ( $303-$ BROA | 1819.946 | 9.603659 | 101.9134 | 15.57252 | 0 | 0 | 0 |
| 710 NORFOLK ( 304 - COLE | 1125.446 | 19.20732 | 205.9067 | 7.78626 | 0 | 0 | 0 |
| 710 NORFOLK ( 305 -LAFA) | 1125.446 | 24.96951 | 334.8584 | 0 | 0 | 0 | 0 |
| 710 NORFOLK ( 306 -LINDE | 1346.261 | 19.20732 | 108.153 | 15.57252 | 0 | 0 | 0 |
| 710 NORFOLK (309-NOR\} | 2514.446 | 63.38415 | 634.359 | 20.76336 | 0 | 0 | 0 |
| 710 NORFOLK (310-ROSE | 2646.223 | 19.20732 | 214.2262 | 12.9771 | 0 | 0 | 0 |
| 710 NORFOLK (311-SHER' | 2386.23 | 88.35366 | 1044.093 | 18.16794 | 0 | 0 | 0 |
| 710 NORFOLK (313-UNIO | 1285.715 | 11.52439 | 54.07651 | 0 | 0 | 0 | 0 |
| 710 NORFOLK ( 402 - BERK | 1296.4 | 3.841463 | 62.39597 | 2.59542 | 0 | 0 | 0 |
| 710 NORFOLK ( 404 - CAM | 1901.861 | 19.20732 | 87.35436 | 2.59542 | 0 | 0 | 0 |
| 710 NORFOLK ( 405 - CHES | 1859.123 | 7.682927 | 106.0731 | 7.78626 | 0 | 0 | 0 |
| 710 NORFOLK ( 406 - BARR | 798.9519 | 18.88889 | 510.0949 | 2.343284 | 0 | 0 | 0 |
| 710 NORFOLK ( 408 -EASTI | 1150.377 | 26.89024 | 817.3872 | 7.78626 | 0 | 0 | 0 |
| 710 NORFOLK ( 409 - FAIRL | 901.0691 | 24.96951 | 619.8 | 20.76336 | 0 | 0 | 0 |
| 710 NORFOLK ( 411 -RUFF | 1339.138 | 17.28659 | 45.75704 | 10.38168 | 0 | 0 | 0 |
| 710 NORFOLK ( 412 -INGLI | 1542.146 | 23.04878 | 232.945 | 7.78626 | 0 | 0 | 0 |
| 710 NORFOLK ( 413 - POPL | 1695.292 | 30.73171 | 324.459 | 15.57252 | 0 | 0 | 0 |
| 710 NORFOLK ( 414 - Youn | 2012.269 | 13.44512 | 89.43422 | 2.59542 | 0 | 0 | 0 |
| 710 NORFOLK ( 415 - LAKE | 1111.2 | 36.4939 | 582.3624 | 2.59542 | 0 | 0 | 0 |
| 710 NORFOLK ( 501 - BAYV | 1095.115 | 62.33333 | 986.9652 | 7.029851 | 0 | 0 | 0 |
| 710 NORFOLK (503-EAST | 1208.759 | 35.88889 | 940.0599 | 4.686567 | 0 | 0 | 0 |
| 710 NORFOLK ( 504 -LARR' | 1098.559 | 24.55556 | 611.723 | 11.71642 | 0 | 0 | 0 |
| 710 NORFOLK ( $505-$ LITTL | 888.4896 | 45.33333 | 775.8914 | 9.373134 | 0 | 0 | 0 |
| 710 NORFOLK (506-OCEA | 1484.26 | 47.22222 | 760.2564 | 16.40299 | 0 | 0 | 0 |
| 710 NORFOLK (507-PRETI | 1033.127 | 51 | 689.8984 | 18.74627 | 0 | 0 | 0 |
| 710 NORFOLK (509-TARR | 919.4834 | 41.55556 | 1168.723 | 9.373134 | 0 | 0 | 0 |


| 710 NORFOLK (510-THIRI | 1225.978 | 75.55556 | 1190.221 | 9.373134 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 710 NORFOLK (511-CROS | 1480.816 | 43.44444 | 865.7932 | 11.71642 | 0 | 0 | 0 |
| 710 NORFOLK ( 512 - AZALI | 709.4142 | 7.555556 | 535.5019 | 2.343284 | 0 | 0 | 0 |
| 720 NORTON C 001 - EAST | 464 | 21 | 1109 | 7 | 0 | 0 | 0 |
| 730 PETERSBUF 101 - FIRST | 1604.743 | 12.81356 | 200.4784 | 5.942857 | 0 | 0 | 0 |
| 730 PETERSBUF 201 - SECO | 2298.858 | 29.28814 | 220.306 | 14.85714 | 0 | 0 | 0 |
| 730 PETERSBUF 301 -THIRI | 1748.024 | 21.9661 | 429.5967 | 13.37143 | 0 | 0 | 0 |
| 730 PETERSBUF 401 -FOUR | 1502.855 | 20.13559 | 312.8345 | 5.942857 | 0 | 0 | 0 |
| 730 PETERSBUF 501 - FIFTH | 1700.264 | 14.64407 | 154.2142 | 4.457143 | 0 | 0 | 0 |
| 730 PETERSBUF601-SIXTH | 1767.128 | 9.152542 | 68.29485 | 5.942857 | 0 | 0 | 0 |
| 730 PETERSBUF701-SEVEI | 1767.128 | 0 | 198.2754 | 1.485714 | 0 | 0 | 0 |
| 735 POQUOSOI001-CENT | 622.125 | 30.14493 | 1589.587 | 17.73333 | 0 | 0 | 0 |
| 735 POQUOSOI002-EASTI | 725.8125 | 69.56522 | 2264.917 | 5.066667 | 0 | 0 | 0 |
| 735 POQUOSOI003-WEST | 706.0625 | 60.28986 | 1750.496 | 15.2 | 0 | 0 | 0 |
| 740 PORTSMOL 001 - EMAF | 1044.396 | 34.35421 | 344.6477 | 8.495146 | 0 | 0 | 0 |
| 740 PORTSMOL 005 - HAMI | 1047.219 | 10.93089 | 33.40198 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOL 007- PARK | 807.29 | 15.61555 | 211.0398 | 5.097087 | 0 | 0 | 0 |
| 740 PORTSMOL 009 - THIRI | 1131.9 | 23.42333 | 173.083 | 5.097087 | 0 | 0 | 0 |
| 740 PORTSMOI 010 -PORT | 640.7512 | 26.54644 | 309.7274 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOL011-JOSEF | 1439.573 | 10.93089 | 27.32889 | 0 | 0 | 0 | 0 |
| 740 PORTSMOI 013 -ST. M | 810.1127 | 9.36933 | 28.84716 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOI 014 -BRIGI | 1216.58 | 4.684665 | 40.99333 | 5.097087 | 0 | 0 | 0 |
| 740 PORTSMOL016-CRAD | 1177.063 | 35.91577 | 358.3121 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOI 017 - VICTC | 1157.304 | 24.98488 | 426.6343 | 6.796117 | 0 | 0 | 0 |
| 740 PORTSMOL 019 - VICTC | 561.7158 | 20.30022 | 361.3486 | 22.08738 | 0 | 0 | 0 |
| 740 PORTSMOL020-NOBL | 1117.786 | 18.73866 | 279.362 | 6.796117 | 0 | 0 | 0 |
| 740 PORTSMOLO21-JOHN | 863.7439 | 3.12311 | 39.47506 | 5.097087 | 0 | 0 | 0 |
| 740 PORTSMOL 022 -ST. M | 925.8431 | 24.98488 | 584.5346 | 6.796117 | 0 | 0 | 0 |
| 740 PORTSMOL023-WEST | 589.9427 | 42.16199 | 873.0062 | 6.796117 | 0 | 0 | 0 |
| 740 PORTSMOL024-THE S | 663.3327 | 17.17711 | 302.1361 | 5.097087 | 0 | 0 | 0 |
| 740 PORTSMOI 025 -JOHN | 835.517 | 17.17711 | 561.7605 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOI 026 - WILLI | 1360.538 | 6.24622 | 34.92025 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOI 027 - CAVA | 1289.97 | 7.807775 | 47.06642 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOL028-LAKE | 1507.318 | 6.24622 | 44.02988 | 6.796117 | 0 | 0 | 0 |
| 740 PORTSMOL029-WOO | 347.1912 | 24.98488 | 620.9731 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOL030-THE F | 575.8293 | 32.79266 | 961.0659 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOL031-WEST | 1563.772 | 39.03888 | 803.1657 | 1.699029 | 0 | 0 | 0 |
| 740 PORTSMOL032-HODC | 397.9996 | 20.30022 | 622.4914 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOL033- PINEC | 392.3543 | 29.66955 | 791.0195 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOL034-CHUR | 465.7443 | 32.79266 | 634.6375 | 3.398058 | 0 | 0 | 0 |
| 740 PORTSMOI 035 - CHUR | 776.2404 | 34.35421 | 786.4647 | 16.99029 | 0 | 0 | 0 |
| 740 PORTSMOL036-CHUR | 1295.616 | 37.47732 | 1088.601 | 10.19417 | 0 | 0 | 0 |
| 740 PORTSMOI 037 -CHUR | 1481.914 | 46.84665 | 614.9 | 8.495146 | 0 | 0 | 0 |
| 740 PORTSMOL038-GRO\ | 2229.927 | 34.35421 | 268.7341 | 13.59223 | 0 | 0 | 0 |
| 740 PORTSMOI 039 - CHUR | 1233.517 | 29.66955 | 481.2921 | 1.699029 | 0 | 0 | 0 |
| 750 RADFORD (001-EAST | 903.8232 | 34.87342 | 599.8294 | 7.294118 | 0 | 0 | 0 |
| 750 RADFORD (002-CENT | 646.5305 | 33.03797 | 746.9573 | 7.294118 | 0 | 0 | 0 |


| 750 RADFORD (003-WEST | 821.3576 | 55.06329 | 1024.237 | 7.294118 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 RADFORD (004-NEW | 986.2888 | 22.02532 | 414.9763 | 9.117647 | 0 | 0 | 0 |
| 760 RICHMONL 101 - ONE I | 914.8225 | 15.88622 | 248.11 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONE 102 - ONE I | 619.8254 | 26.47704 | 446.2276 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONL 104 - ONE I | 994.3723 | 15.88622 | 744.3299 | 17.17962 | 0 | 0 | 0 |
| 760 RICHMONL 105 - ONE I | 984.4286 | 35.30271 | 483.2589 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONL 106 - ONE I | 593.3088 | 35.30271 | 896.1584 | 17.17962 | 0 | 0 | 0 |
| 760 RICHMONL111-ONE | 871.7331 | 15.88622 | 536.9544 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMONL 112 - ONE I | 696.0606 | 22.94676 | 372.1649 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMONE 113 - ONE I | 1637.4 | 47.65866 | 335.1336 | 15.27078 | 0 | 0 | 0 |
| 760 RICHMONL 114 - ONE I | 1551.221 | 38.83299 | 398.0869 | 17.17962 | 0 | 0 | 0 |
| 760 RICHMONL 115 - ONE I | 759.0375 | 30.00731 | 566.5795 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMON[ 203 -TWO | 457.4113 | 15.88622 | 140.7191 | 9.544236 | 0 | 0 | 0 |
| 760 RICHMONL 204 -TWO | 1431.896 | 19.41649 | 316.6179 | 28.63271 | 0 | 0 | 0 |
| 760 RICHMONL 206 -TWO | 818.6999 | 15.88622 | 70.35954 | 15.27078 | 0 | 0 | 0 |
| 760 RICHMONL 207 -TWO | 1471.671 | 49.4238 | 331.4305 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMONL 208 -TWO | 1262.853 | 30.00731 | 288.8444 | 24.81501 | 0 | 0 | 0 |
| 760 RICHMONL 213 -TWO | 2621.828 | 44.12839 | 142.5706 | 28.63271 | 0 | 0 | 0 |
| 760 RICHMONL 214 -TWO | 1478.3 | 19.41649 | 109.2424 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL 215 -TWO | 1027.518 | 33.53758 | 248.11 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL 301 -THRE | 1080.551 | 7.060543 | 38.8829 | 5.726542 | 0 | 0 | 0 |
| 760 RICHMONL 302 -THRE | 752.4084 | 8.825678 | 105.5393 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMONL 303 -THRE | 921.4517 | 3.530271 | 42.58604 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMONL 304 -THRE | 1448.469 | 14.12109 | 44.4376 | 9.544236 | 0 | 0 | 0 |
| 760 RICHMONL 305 -THRE | 1332.459 | 31.77244 | 99.98461 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMONL 306 -THRE | 1050.72 | 19.41649 | 53.69544 | 15.27078 | 0 | 0 | 0 |
| 760 RICHMONL 307 -THRE | 672.8586 | 24.7119 | 199.9692 | 19.08847 | 0 | 0 | 0 |
| 760 RICHMONL 308 -THRE | 739.1501 | 17.65136 | 244.4068 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONL 309 -THRE | 679.4878 | 0 | 286.9929 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL 310 -THRE | 884.9914 | 8.825678 | 9.257834 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL 402 - FOUR | 1590.996 | 72.37056 | 551.7669 | 15.27078 | 0 | 0 | 0 |
| 760 RICHMONL 404 -FOUR | 1577.737 | 28.24217 | 412.8994 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONL 409 -FOUR | 782.2396 | 24.7119 | 636.939 | 5.726542 | 0 | 0 | 0 |
| 760 RICHMONL 410 -FOUR | 1382.178 | 33.53758 | 429.5635 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMONL 412 -FOUR | 1412.009 | 30.00731 | 312.9148 | 17.17962 | 0 | 0 | 0 |
| 760 RICHMON[ 413 -FOUR | 742.4647 | 19.41649 | 399.9384 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMON[ 414 -FOUR | 881.6768 | 21.18163 | 585.0951 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMONL 415 -FOUR | 702.6898 | 22.94676 | 518.4387 | 5.726542 | 0 | 0 | 0 |
| 760 RICHMONL501-FIVE I | 1610.883 | 47.65866 | 275.8835 | 15.27078 | 0 | 0 | 0 |
| 760 RICHMON[503-FIVE I | 1955.599 | 40.59812 | 181.4536 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMONL504-FIVE I | 2439.527 | 52.95407 | 248.11 | 19.08847 | 0 | 0 | 0 |
| 760 RICHMONL505-FIVE I | 1289.369 | 21.18163 | 151.8285 | 7.635389 | 0 | 0 | 0 |
| 760 RICHMON[508-FIVE I | 987.7432 | 24.7119 | 196.2661 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMONL509-FIVE I | 1697.062 | 15.88622 | 101.8362 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL510-FIVE I | 1942.341 | 38.83299 | 168.4926 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL602-SIX H | 1531.333 | 26.47704 | 44.4376 | 5.726542 | 0 | 0 | 0 |
| 760 RICHMONL603-SIXH | 1663.916 | 10.59081 | 70.35954 | 9.544236 | 0 | 0 | 0 |


| 760 RICHMON[604-SIXH | 1312.571 | 14.12109 | 64.80484 | 15.27078 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 760 RICHMON[606-SIXH | 1766.668 | 21.18163 | 77.76581 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMON[607-SIXH | 1272.797 | 21.18163 | 231.4459 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMON[609-SIXH | 2714.636 | 49.4238 | 303.657 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMONL610-SIXH | 1597.625 | 7.060543 | 59.25014 | 9.544236 | 0 | 0 | 0 |
| 760 RICHMON[701-SEVEI | 1819.701 | 12.35595 | 55.54701 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMON[ 702 - SEVEI | 1395.436 | 10.59081 | 64.80484 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMON[ 703 - SEVEI | 1826.331 | 26.47704 | 99.98461 | 24.81501 | 0 | 0 | 0 |
| 760 RICHMON[705-SEVEI | 1130.27 | 28.24217 | 124.055 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMON[706-SEVEI | 2578.739 | 31.77244 | 162.9379 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMON[707-SEVEI | 1839.589 | 42.36326 | 274.0319 | 9.544236 | 0 | 0 | 0 |
| 760 RICHMON[ 708 - SEVEI | 2167.732 | 75.90084 | 329.5789 | 20.99732 | 0 | 0 | 0 |
| 760 RICHMON[ 802 -EIGH ${ }^{-}$ | 1465.042 | 8.825678 | 74.06267 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMON[ 806 -EIGH ${ }^{-}$ | 1256.224 | 15.88622 | 140.7191 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMON[810-EIGH ${ }^{-}$ | 1123.641 | 5.295407 | 144.4222 | 13.36193 | 0 | 0 | 0 |
| 760 RICHMON[ 811 -EIGH ${ }^{-}$ | 1776.612 | 15.88622 | 122.2034 | 9.544236 | 0 | 0 | 0 |
| 760 RICHMON[ 812 -EIGH ${ }^{-}$ | 1809.758 | 19.41649 | 277.735 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMON[ 814 -EIGH ${ }^{-}$ | 1047.406 | 7.060543 | 88.87521 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL 902 - NINE | 629.7691 | 1.765136 | 77.76581 | 1.908847 | 0 | 0 | 0 |
| 760 RICHMONL903-NINE | 1584.367 | 26.47704 | 181.4536 | 5.726542 | 0 | 0 | 0 |
| 760 RICHMON[ 908 - NINE | 1537.963 | 17.65136 | 120.3518 | 3.817694 | 0 | 0 | 0 |
| 760 RICHMON[909-NINE | 1640.714 | 19.41649 | 201.8208 | 17.17962 | 0 | 0 | 0 |
| 760 RICHMON[ 910 - NINE | 1557.85 | 14.12109 | 161.0863 | 11.45308 | 0 | 0 | 0 |
| 760 RICHMON[ 911 - NINE | 1378.863 | 19.41649 | 77.76581 | 1.908847 | 0 | 0 | 0 |
| 770 ROANOKE 1001 -Peters | 1383.745 | 25.35664 | 397.3269 | 2.075 | 0 | 0 | 0 |
| 770 ROANOKE 1002 - Granc | 1363.154 | 39.84615 | 701.282 | 10.375 | 0 | 0 | 0 |
| 770 ROANOKE 1003 -Prestc | 1198.422 | 48.9021 | 1060.863 | 6.225 | 0 | 0 | 0 |
| 770 ROANOKE 1004 - Willia | 1289.025 | 23.54545 | 834.3865 | 12.45 | 0 | 0 | 0 |
| 770 ROANOKE 1005 - East ( | 798.9482 | 39.84615 | 1189.994 | 2.075 | 0 | 0 | 0 |
| 770 ROANOKE 1006 - Hollir | 1140.766 | 38.03497 | 888.0256 | 2.075 | 0 | 0 | 0 |
| 770 ROANOKE 1007 - Soutr | 938.97 | 38.03497 | 951.5979 | 8.3 | 0 | 0 | 0 |
| 770 ROANOKE 1008 -Linco | 1602.015 | 21.73427 | 127.1446 | 6.225 | 0 | 0 | 0 |
| 770 ROANOKE 1009 - Highli | 1812.047 | 41.65734 | 530.4314 | 18.675 | 0 | 0 | 0 |
| 770 ROANOKE 1010 - Old S | 1692.617 | 61.58042 | 788.6939 | 8.3 | 0 | 0 | 0 |
| 770 ROANOKE 1011 -RALEI | 1424.928 | 48.9021 | 929.7449 | 18.675 | 0 | 0 | 0 |
| 770 ROANOKE 1012 -SOUT | 893.6688 | 45.27972 | 808.5602 | 14.525 | 0 | 0 | 0 |
| 770 ROANOKE 1013 -GARL | 1074.874 | 65.2028 | 1338.992 | 4.15 | 0 | 0 | 0 |
| 770 ROANOKE 1014 - Cryst | 1033.691 | 27.16783 | 917.8251 | 2.075 | 0 | 0 | 0 |
| 770 ROANOKE 1015 - Granı | 1144.884 | 34.41259 | 820.48 | 10.375 | 0 | 0 | 0 |
| 770 ROANOKE 1016 - Deye | 745.4104 | 25.35664 | 1042.983 | 8.3 | 0 | 0 | 0 |
| 770 ROANOKE 1017 -LEE-H | 1717.327 | 70.63636 | 1005.237 | 14.525 | 0 | 0 | 0 |
| 770 ROANOKE 1018 -Sumn | 1470.229 | 43.46853 | 850.2795 | 4.15 | 0 | 0 | 0 |
| 770 ROANOKE 1019 - Fores | 2005.607 | 14.48951 | 224.4897 | 8.3 | 0 | 0 | 0 |
| 770 ROANOKE 1020 -EURE | 2042.672 | 23.54545 | 198.6634 | 4.15 | 0 | 0 | 0 |
| 775 SALEM CIT'001-NORT | 497.1245 | 25.76577 | 686.4447 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT' 002 - CONE | 579.9785 | 25.76577 | 657.9508 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT 003 - BEVE | 270.6567 | 11.89189 | 468.8547 | 0 | 0 | 0 | 0 |


| 775 SALEM CIT' 004 - WEST | 397.6996 | 17.83784 | 712.3483 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 775 SALEM CIT' 005 - NORT | 707.0215 | 29.72973 | 1069.818 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT'006-SOUT | 519.2189 | 25.76577 | 761.5651 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT'007-SOUT | 635.2146 | 21.8018 | 888.4926 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT' 008 - EAST | 375.6052 | 17.83784 | 375.6018 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT'009-SOUT | 480.5536 | 23.78378 | 945.4804 | 0 | 0 | 0 | 0 |
| 775 SALEM CIT' 010 - HIDD | 684.927 | 19.81982 | 1116.444 | 0 | 0 | 0 | 0 |
| 790 STAUNTON 101 - WARI | 1718.122 | 45.816 | 1362.794 | 11.65217 | 0 | 0 | 0 |
| 790 STAUNTON 201 - WARI | 1675.922 | 73.704 | 1539.13 | 17.47826 | 0 | 0 | 0 |
| 790 STAUNTON 301 - WARI | 1193.642 | 59.76 | 1132.034 | 8.73913 | 0 | 0 | 0 |
| 790 STAUNTON 401 - WARI | 1048.959 | 29.88 | 907.8039 | 5.826087 | 0 | 0 | 0 |
| 790 STAUNTON 501 - WARI | 1344.355 | 39.84 | 753.2378 | 23.30435 | 0 | 0 | 0 |
| 800 SUFFOLK C 101 - BELLE | 1268.844 | 25.06439 | 460.3813 | 6.646154 | 0 | 0 | 0 |
| 800 SUFFOLK C 102 - DRIVI | 1222.564 | 73.26515 | 2087.191 | 11.63077 | 0 | 0 | 0 |
| 800 SUFFOLK C 104 - BENN | 1261.13 | 59.76894 | 1090.988 | 8.307692 | 0 | 0 | 0 |
| 800 SUFFOLK C 201 - EBEN | 809.9003 | 21.20833 | 1408.225 | 3.323077 | 0 | 0 | 0 |
| 800 SUFFOLK C 202 - CHUC | 790.6169 | 21.20833 | 1162.559 | 8.307692 | 0 | 0 | 0 |
| 800 SUFFOLK C 203 - KING! | 1295.84 | 26.99242 | 655.7531 | 3.323077 | 0 | 0 | 0 |
| 800 SUFFOLK C 204 - HILLP | 1222.564 | 19.2803 | 706.0469 | 9.969231 | 0 | 0 | 0 |
| 800 SUFFOLK C 301 - WHIT | 340.8223 | 11.12069 | 193.8548 | 2.47619 | 0 | 0 | 0 |
| 800 SUFFOLK C 302 - JOHN | 2039.878 | 24.54232 | 353.8838 | 11.59853 | 0 | 0 | 0 |
| 800 SUFFOLK C 304 - NANS | 1261.13 | 40.48864 | 738.9313 | 6.646154 | 0 | 0 | 0 |
| 800 SUFFOLK C 305 - SHOL | 474.3702 | 17.35227 | 371.4 | 0 | 0 | 0 | 0 |
| 800 SUFFOLK C 401 - AIRPC | 370.1404 | 20.38793 | 661.7159 | 4.952381 | 0 | 0 | 0 |
| 800 SUFFOLK C 402 - WHA | 538.7192 | 14.82759 | 1219.048 | 7.428571 | 0 | 0 | 0 |
| 800 SUFFOLK C 403 - SOUT | 1154.398 | 11.12069 | 89.47144 | 4.952381 | 0 | 0 | 0 |
| 800 SUFFOLK C 404 - BOOk | 1792.86 | 15.05133 | 77.76087 | 0 | 0 | 0 | 0 |
| 800 SUFFOLK C 405 - PITTM | 282.1862 | 5.560345 | 382.1176 | 2.47619 | 0 | 0 | 0 |
| 800 SUFFOLK C 501 - KILBY | 769.5989 | 25.94828 | 1209.728 | 2.47619 | 0 | 0 | 0 |
| 800 SUFFOLK C 502 - HOLL | 985.8195 | 37.06897 | 1731.645 | 7.428571 | 0 | 0 | 0 |
| 800 SUFFOLK C 504 - LAKE | 736.3873 | 26.02286 | 1506.744 | 6.613919 | 0 | 0 | 0 |
| 800 SUFFOLK C 601 - LAKE | 1319.312 | 22.24138 | 618.8441 | 4.952381 | 0 | 0 | 0 |
| 800 SUFFOLK C 602 - OLDE | 620.3478 | 15.27508 | 174.0938 | 1.661538 | 0 | 0 | 0 |
| 800 SUFFOLK C 603 - ELEPr | 362.8109 | 16.68103 | 318.742 | 4.952381 | 0 | 0 | 0 |
| 800 SUFFOLK C 604 - WILR | 601.6402 | 36.63258 | 669.2938 | 11.63077 | 0 | 0 | 0 |
| 800 SUFFOLK C 605 - HOLL | 1249.56 | 3.856061 | 34.81875 | 1.661538 | 0 | 0 | 0 |
| 800 SUFFOLK C 702 - HARB | 1345.977 | 34.70455 | 957.5156 | 3.323077 | 0 | 0 | 0 |
| 800 SUFFOLK C 704 - BURB | 1750.927 | 67.48106 | 806.6344 | 14.95385 | 0 | 0 | 0 |
| 800 SUFFOLK C 706 - HUN1 | 2807.654 | 30.84848 | 394.6125 | 8.307692 | 0 | 0 | 0 |
| 810 VIRGINIA B 001 - NORT | 1070.191 | 20.17419 | 1702.964 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 002 - SOUT | 1484.352 | 53.79784 | 1253.851 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 003 - OCEA | 914.4667 | 38.6672 | 1010.047 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 004 - LINKF | 881.3338 | 28.5801 | 1176.86 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 005 - SEAT, | 1636.763 | 48.75429 | 980.7167 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 006 - ALAN | 722.2961 | 23.53656 | 1105.369 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 007 - KING! | 765.3688 | 28.5801 | 958.7193 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 008 -LONL | 1534.051 | 60.52257 | 1395.001 | 22.06433 | 0 | 0 | 0 |


| 810 VIRGINIA B 009 - TRAN | 679.2234 | 15.13064 | 1112.701 | 18.05263 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 010 - GREA | 483.7396 | 36.98602 | 1103.535 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 011 - CAPE | 1050.311 | 31.94247 | 1244.685 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 012 - PLAZ | 1769.294 | 70.60967 | 1070.539 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 013 - MT TI | 1527.424 | 79.01558 | 1470.158 | 20.05848 | 0 | 0 | 0 |
| 810 VIRGINIA B 014 - MALI | 1457.845 | 72.29085 | 1552.649 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 015 - OLD [ | 1063.564 | 63.88494 | 964.2186 | 20.05848 | 0 | 0 | 0 |
| 810 VIRGINIA B 016 - ARAE | 1709.655 | 82.37795 | 1587.478 | 18.05263 | 0 | 0 | 0 |
| 810 VIRGINIA B 017 - OCEA | 473.7998 | 36.98602 | 722.2474 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 018 -THOR | 868.0807 | 31.94247 | 1145.697 | 16.04678 | 0 | 0 | 0 |
| 810 VIRGINIA B 019 - LAKE | 669.2836 | 35.30483 | 843.233 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 020 - BAYS | 904.5268 | 26.89892 | 1028.378 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 021 - DAVI! | 1905.139 | 40.34838 | 518.7716 | 20.05848 | 0 | 0 | 0 |
| 810 VIRGINIA B 022 - POIN | 1090.071 | 57.16021 | 1178.693 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 023 - ARRC | 1394.893 | 63.88494 | 1504.988 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 024 - LARK: | 1116.577 | 42.02956 | 828.5681 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 025 - AVAL | 1769.294 | 52.11666 | 1653.47 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 026 - FAIRF | 901.2135 | 42.02956 | 1145.697 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 027 - EDWI | 1013.865 | 47.07311 | 1268.516 | 16.04678 | 0 | 0 | 0 |
| 810 VIRGINIA B 028 -THAL | 967.4792 | 38.6672 | 1044.876 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 029 - HOLL | 1706.342 | 48.75429 | 922.057 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B $030-$ RED | 699.1031 | 38.6672 | 931.2226 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 031 - SIGM | 891.2737 | 23.53656 | 1790.954 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B 032 - CREEI | 540.0655 | 25.21774 | 1398.667 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 033 - CAPP | 420.7872 | 21.85537 | 1466.492 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 034 - BLAC | 341.2684 | 13.44946 | 942.2213 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 035 - COUF | 480.4263 | 16.81183 | 969.718 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 036 - WIN[ | 1848.813 | 43.71075 | 1138.365 | 20.05848 | 0 | 0 | 0 |
| 810 VIRGINIA B 037 - CHES | 1106.637 | 53.79784 | 953.2199 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 038 - WITC | 679.2234 | 36.98602 | 1138.365 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 039 - PEME | 1656.642 | 70.60967 | 1248.352 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B $040-$ BON | 1457.845 | 57.16021 | 1105.369 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 041 - COLLI | 2418.698 | 38.6672 | 659.9215 | 22.06433 | 0 | 0 | 0 |
| 810 VIRGINIA B 042 - BRAN | 1497.605 | 60.52257 | 1132.865 | 16.04678 | 0 | 0 | 0 |
| 810 VIRGINIA B 043 - BELL | 1719.595 | 50.43548 | 810.237 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 044 - CENT | 1358.447 | 50.43548 | 1378.503 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 045 - TIMB | 1805.74 | 36.98602 | 711.2487 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B 046 -GREE | 1540.678 | 31.94247 | 768.0753 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 047 - KING! | 1007.239 | 35.30483 | 1616.808 | 24.07018 | 0 | 0 | 0 |
| 810 VIRGINIA B 048 - WOLI | 1050.311 | 43.71075 | 1176.86 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 049 - LYNN | 745.4891 | 21.85537 | 1044.876 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B $050-$ OCEA | 1504.231 | 31.94247 | 637.9241 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 051 - STRA | 997.2988 | 72.29085 | 1043.043 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 052 - HOM | 1351.82 | 58.84139 | 1237.353 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B $053-$ SHAN | 881.3338 | 43.71075 | 934.8888 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 054 - CRON | 960.8526 | 42.02956 | 740.5786 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 055 - MAG | 2001.224 | 68.92849 | 918.3908 | 10.02924 | 0 | 0 | 0 |


| 810 VIRGINIA B 056 - EDINI | 745.4891 | 15.13064 | 793.7389 | 8.023392 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 057 - SHER | 738.8625 | 21.85537 | 846.8993 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 058 - GLEN | 1341.88 | 52.11666 | 1213.522 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B $059-$ SHEL ${ }^{-}$ | 1023.805 | 45.39193 | 850.5655 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 060 - FOXF | 924.4065 | 43.71075 | 1776.289 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B 061 - BAKE | 2759.966 | 48.75429 | 366.6231 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 062 - LAND | 1328.627 | 33.62365 | 1492.156 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 063 - CULV | 1308.748 | 67.2473 | 1635.139 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 064 - ROSE | 1106.637 | 52.11666 | 984.3829 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 065 - COLO | 1461.159 | 35.30483 | 1213.522 | 26.07602 | 0 | 0 | 0 |
| 810 VIRGINIA B 066 - HUN1 | 818.3814 | 47.07311 | 1316.177 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 067 - EASTI | 1023.805 | 13.44946 | 566.4326 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 068 - MAN | 1116.577 | 47.07311 | 1200.691 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 069 - SHELI | 1252.422 | 30.26129 | 456.4457 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 070 - CORP | 1457.845 | 65.56612 | 1378.503 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 071 - ROUN | 672.5969 | 26.89892 | 566.4326 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 072 -RUDE | 801.815 | 42.02956 | 1345.507 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 073 - DAHL | 1507.545 | 55.47903 | 731.413 | 16.04678 | 0 | 0 | 0 |
| 810 VIRGINIA B 074 - BUCK | 1404.833 | 36.98602 | 716.7481 | 16.04678 | 0 | 0 | 0 |
| 810 VIRGINIA B 075 - COLO | 765.3688 | 42.02956 | 1389.501 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 076 - VILLA | 1696.402 | 62.20376 | 658.0884 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B 077 - BROC | 1474.412 | 60.52257 | 1173.194 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 078 - INDIA | 1066.878 | 57.16021 | 856.0648 | 18.05263 | 0 | 0 | 0 |
| 810 VIRGINIA B 079 - PLEA! | 1676.522 | 35.30483 | 669.0871 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 080 - CHIM | 1650.016 | 42.02956 | 707.5825 | 20.05848 | 0 | 0 | 0 |
| 810 VIRGINIA B 081 - ROCK | 1451.219 | 47.07311 | 1048.542 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 082 - SHELI | 891.2737 | 21.85537 | 1195.191 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 083 - STRA' | 1196.096 | 47.07311 | 1614.975 | 14.04094 | 0 | 0 | 0 |
| 810 VIRGINIA B 084 - TALLI | 1534.051 | 36.98602 | 865.2304 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 085 - UPTC | 1023.805 | 55.47903 | 1611.308 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 086 - HAYG | 808.4415 | 26.89892 | 1002.714 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 087 - HILLC | 801.815 | 33.62365 | 1026.545 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 088 - NORT | 934.3464 | 35.30483 | 1099.869 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 089 - LAKE | 904.5268 | 33.62365 | 1120.033 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 090 - LAKE | 718.9828 | 38.6672 | 890.894 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 091 - LEXIN | 1477.725 | 40.34838 | 817.5694 | 2.005848 | 0 | 0 | 0 |
| 810 VIRGINIA B 092 - LITTL | 934.3464 | 48.75429 | 1167.694 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 093 - NEW | 2534.663 | 42.02956 | 333.627 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 094 - PINE | 762.0555 | 23.53656 | 689.2513 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 095 - DAM | 758.7423 | 31.94247 | 955.0531 | 4.011696 | 0 | 0 | 0 |
| 810 VIRGINIA B 096 - HILLT | 1394.893 | 36.98602 | 652.589 | 10.02924 | 0 | 0 | 0 |
| 810 VIRGINIA B 097 - INDIA | 1388.266 | 36.98602 | 806.5707 | 12.03509 | 0 | 0 | 0 |
| 810 VIRGINIA B 098 - INDEI | 950.9128 | 40.34838 | 432.6152 | 6.017544 | 0 | 0 | 0 |
| 810 VIRGINIA B 099 - SALEI | 914.4667 | 31.94247 | 582.9307 | 8.023392 | 0 | 0 | 0 |
| 810 VIRGINIA B 100 - SAND | 394.2809 | 11.76828 | 879.8953 | 2.005848 | 0 | 0 | 0 |
| 820 WAYNESBC 001 - WARI | 1129.689 | 49.85321 | 1132.929 | 2.105263 | 0 | 0 | 0 |
| 820 WAYNESBC 002 - WARI | 1173.476 | 53.68807 | 1427.196 | 21.05263 | 0 | 0 | 0 |


| 820 WAYNESBC 003 - WARI | 1405.544 | 46.01835 | 1298.979 | 8.421053 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 820 WAYNESBC 004 - WARI | 1252.291 | 59.44037 | 1647.896 | 8.421053 | 0 | 0 | 0 |
| 830 WILLIAMSE 001 - STRYI | 2803.578 | 54.7027 | 1279.94 | 24.23077 | 0 | 0 | 0 |
| 830 WILLIAMSE 002 - MATC | 1986.422 | 37.2973 | 683.0602 | 20.76923 | 0 | 0 | 0 |
| 840 WINCHEST 101 - MERF | 937.8445 | 22.74757 | 951.6759 | 11.5 | 814.7555 | 1052.856 | 0 |
| 840 WINCHEST 102 - OLD 1 | 694.3656 | 39.29126 | 674.1038 | 28.75 | 598.0652 | 766.7538 | 25.77778 |
| 840 WINCHEST 201 - VIRGI | 1636.719 | 51.69903 | 828.3105 | 2.875 | 1547.169 | 904.0829 | 0 |
| 840 WINCHEST 301 - WAR | 1483.417 | 37.2233 | 1072.838 | 5.75 | 1378.15 | 1146.698 | 0 |
| 840 WINCHEST 401 - FRED | 852.176 | 31.01942 | 632.2477 | 5.75 | 840.7583 | 656.8906 | 1.611111 |
| 840 WINCHEST 402 - ROLLI | 1005.477 | 31.01942 | 1061.824 | 14.375 | 936.1021 | 1162.719 | 1.611111 |


| GE20USRD | GE20USRI | GE20USRR 1539.949 | 1.6 | 915.7795 | 1562.723 | 2.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 338.8452 | 32.98477 | 623.8533 | 0 | 356.8846 | 643.5631 | 0 |
| 549.7591 | 38.19289 | 1034.203 | 0 | 538.6938 | 1053.929 | 0 |
| 981.9596 | 29.51269 | 651.109 | 0 | 1003.317 | 637.5061 | 2.25 |
| 286.9812 | 13.88832 | 448.2053 | 0 | 306.3821 | 446.7085 | 0 |
| 401.0821 | 22.56853 | 557.2282 | 0 | 461.2566 | 551.1929 | 0 |
| 141.7618 | 1.736041 | 215.0174 | 0 | 154.8745 | 205.9402 | 2.25 |
| 449.4886 | 10.41624 | 228.6453 | 0 | 454.5229 | 227.1399 | 0 |
| 359.5908 | 10.41624 | 113.5655 | 0 | 350.151 | 130.2269 | 0 |
| 449.4886 | 24.30457 | 534.5151 | 0 | 444.4224 | 549.6786 | 0 |
| 96.81292 | 15.62437 | 301.3272 | 0 | 138.0403 | 301.339 | 0 |
| 504.8102 | 22.56853 | 741.9614 | 1.6 | 501.6586 | 760.1616 | 0 |
| 259.3203 | 5.208122 | 337.6682 | 1.6 | 286.1811 | 327.0815 | 0 |
| 532.4711 | 27.77665 | 407.3217 | 0 | 518.4928 | 413.3947 | 0 |
| 252.4051 | 8.680203 | 413.3785 | 3.2 | 276.0806 | 404.3091 | 0 |
| 1230.907 | 15.62437 | 645.0522 | 0 | 1232.262 | 648.1059 | 2.25 |
| 1890.309 | 0 | 626.0532 | 3.807692 | 1798.377 | 664.3674 | 0 |
| 752.4081 | 0 | 188.3541 | 3.807692 | 718.4239 | 203.7149 | 0 |
| 1839.22 | 0 | 461.0191 | 11.42308 | 1816.917 | 488.1816 | 7.173913 |
| 1732.396 | 0 | 522.01 | 7.615385 | 1691.772 | 556.0865 | 0 |
| 2336.181 | 0 | 1196.497 | 13.32692 | 2322.131 | 1238.807 | 7.173913 |
| 1402.637 | 0 | 721.1272 | 7.615385 | 1376.593 | 741.4487 | 2.391304 |
| 1667.374 | 0 | 222.4372 | 7.615385 | 1585.168 | 258.7729 | 4.782609 |
| 2368.692 | 0 | 401.8221 | 3.807692 | 2303.591 | 420.2766 | 2.391304 |
| 2340.825 | 0 | 884.3674 | 17.13462 | 2331.401 | 917.6345 | 0 |
| 1959.977 | 0 | 1060.165 | 3.807692 | 2030.127 | 1046.103 | 2.391304 |
| 599.1398 | 0 | 217.0557 | 0 | 593.2791 | 218.397 | 0 |
| 1179.702 | 0 | 500.4838 | 3.807692 | 1181.923 | 510.2048 | 4.782609 |
| 1625.573 | 0 | 681.6625 | 5.711538 | 1603.708 | 691.8964 | 7.173913 |
| 575.9173 | 0 | 333.6558 | 0 | 602.5491 | 311.9957 | 0 |
| 1017.144 | 0 | 902.3059 | 9.519231 | 1001.158 | 935.9872 | 4.782609 |
| 752.4081 | 0 | 627.847 | 3.807692 | 797.2188 | 633.1678 | 2.391304 |
| 1490.883 | 0 | 493.3084 | 7.615385 | 1441.483 | 523.0517 | 2.391304 |
| 1147.19 | 0 | 1027.875 | 7.615385 | 1237.543 | 1022.245 | 0 |
| 984.6328 | 0 | 303.1604 | 1.903846 | 977.9835 | 315.6663 | 0 |
| 1188.991 | 0 | 618.8778 | 1.903846 | 1163.383 | 633.1678 | 0 |
| 1054.3 | 0 | 696.0133 | 5.711538 | 1019.698 | 726.7666 | 0 |
| 2066.8 | 0 | 687.044 | 11.42308 | 2039.397 | 726.7666 | 0 |
| 1123.968 | 0 | 376.7082 | 0 | 1061.413 | 398.2534 | 0 |
| 1713.818 | 0 | 1006.349 | 13.32692 | 1691.772 | 1060.786 | 2.391304 |
| 761.6971 | 0 | 392.8529 | 1.903846 | 709.1539 | 416.6061 | 0 |
| 1602.351 | 0 | 1101.423 | 15.23077 | 1617.613 | 1123.185 | 2.391304 |
| 1091.456 | 0 | 717.5395 | 0 | 1084.588 | 737.7782 | 0 |
| 1806.708 | 0 | 1383.057 | 13.32692 | 1756.662 | 1438.851 | 2.391304 |
| 1449.082 | 0 | 787.4996 | 9.519231 | 1427.578 | 822.2005 | 0 |
| 1839.22 | 0 | 866.4289 | 5.711538 | 1747.392 | 917.6345 | 0 |


| 0 | 0 | 786.3897 | 2.526316 | 230.9265 | 636.0593 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 295.0701 | 2.526316 | 103.7212 | 238.1896 | 1.555556 |
| 0 | 0 | 414.7684 | 10.10526 | 138.9473 | 343.3124 | 0 |
| 0 | 0 | 495.4951 | 20.21053 | 199.6144 | 396.5391 | 3.111111 |
| 0 | 0 | 477.4012 | 10.10526 | 107.6352 | 413.8378 | 1.555556 |
| 0 | 0 | 663.9078 | 17.68421 | 272.0236 | 517.6299 | 1.555556 |
| 0 | 0 | 435.646 | 7.578947 | 150.6893 | 359.2804 | 0 |
| 0 | 0 | 495.4951 | 12.63158 | 197.6574 | 385.8937 | 0 |
| 0 | 0 | 258.8823 | 12.63158 | 162.4313 | 191.6162 | 0 |
| 0 | 0 | 837.8878 | 32.84211 | 346.3897 | 678.6407 | 0 |
| 0 | 0 | 832.3204 | 58.10526 | 497.0791 | 612.1073 | 3.111111 |
| 0 | 0 | 556.7361 | 53.05263 | 414.8849 | 385.8937 | 3.111111 |
| 419.7177 | 0 | 1087.873 | 2.5 | 468.3581 | 1062.165 | 1.6 |
| 521.2623 | 0 | 1058.681 | 0 | 519.2666 | 1058.267 | 0 |
| 460.3356 | 0 | 1068.412 | 2.5 | 461.5703 | 1062.165 | 0 |
| 396.024 | 0 | 836.8254 | 0 | 359.7533 | 863.3745 | 1.6 |
| 744.6605 | 0 | 1220.208 | 5 | 750.0517 | 1220.028 | 4.8 |
| 762.6385 | 0 | 639.686 | 4.285714 | 793.6429 | 580.2883 | 1.5 |
| 363.6209 | 0 | 1015.266 | 0 | 480.2857 | 919.3522 | 0 |
| 250.995 | 0 | 670.5556 | 0 | 295.7857 | 620.7736 | 1.5 |
| 572.7834 | 0 | 1186.763 | 2.142857 | 740.9286 | 1042.495 | 1.5 |
| 234.9055 | 0 | 907.2222 | 0 | 336.7857 | 821.5129 | 0 |
| 254.2128 | 0 | 758.0193 | 0 | 319.2143 | 701.744 | 0 |
| 566.3476 | 0 | 1929.348 | 2.142857 | 767.2857 | 1756.047 | 0 |
| 202.7267 | 0 | 540.2174 | 0 | 278.2143 | 475.7015 | 0 |
| 769.0743 | 0 | 1768.14 | 2.142857 | 931.2857 | 1605.914 | 0 |
| 183.4194 | 0 | 528.2126 | 0 | 231.3571 | 487.5097 | 0 |
| 949.2758 | 0 | 1771.57 | 4.285714 | 1098.214 | 1612.662 | 1.5 |
| 170.2959 | 0 | 575.2788 | 0 | 151.6966 | 585.3899 | 1.285714 |
| 340.5918 | 0 | 899.6572 | 4.227273 | 374.0105 | 864.5758 | 2.571429 |
| 259.4985 | 0 | 295.7041 | 1.409091 | 272.0076 | 288.1919 | 0 |
| 308.1545 | 0 | 1068.119 | 1.409091 | 313.855 | 1057.304 | 0 |
| 202.7332 | 0 | 657.7175 | 2.818182 | 211.8521 | 650.2331 | 0 |
| 264.9047 | 0 | 860.23 | 1.409091 | 243.2376 | 868.1782 | 0 |
| 462.2317 | 0 | 817.2185 | 2.818182 | 468.167 | 797.9314 | 2.571429 |
| 446.013 | 0 | 838.7243 | 15.5 | 468.167 | 821.347 | 11.57143 |
| 240.5767 | 0 | 376.3506 | 1.409091 | 238.0067 | 372.8483 | 0 |
| 3095.244 | 0 | 466.2004 | 7.4 | 3109.663 | 434.863 | 0 |
| 1977.067 | 0 | 536.8368 | 14.8 | 1962.332 | 547.1786 | 0 |
| 664.4241 | 0 | 251.4657 | 3.7 | 672.5735 | 259.1899 | 0 |
| 2455.128 | 0 | 680.9351 | 0 | 2468.74 | 671.0138 | 0 |
| 2422.717 | 0 | 500.1059 | 14.8 | 2429.177 | 501.1004 | 3.28 |
| 1377.465 | 0 | 401.2149 | 7.4 | 1384.71 | 391.6647 | 6.56 |
| 1952.759 | 0 | 680.9351 | 3.7 | 1970.245 | 676.7735 | 3.28 |
| 2487.539 | 0 | 649.8551 | 0 | 2516.216 | 633.5752 | 3.28 |
| 2025.683 | 0 | 463.3749 | 3.7 | 2001.895 | 466.5418 | 3.28 |
| 2260.663 | 0 | 615.9496 | 3.7 | 2263.012 | 613.416 | 0 |
|  |  |  |  |  |  | 0 |


| 1223.513 | 0 | 497.2804 | 0 | 1218.545 | 506.8602 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2131.019 | 0 | 655.506 | 14.8 | 2136.41 | 650.8545 | 6.56 |
| 2041.889 | 0 | 497.2804 | 3.7 | 2128.497 | 463.6619 | 6.56 |
| 1369.362 | 0 | 437.9458 | 11.1 | 1432.186 | 426.2233 | 3.28 |
| 1580.033 | 0 | 364.4839 | 0 | 1558.788 | 371.5055 | 3.28 |
| 1847.423 | 0 | 542.4877 | 11.1 | 1796.167 | 567.3378 | 3.28 |
| 1677.266 | 0 | 615.9496 | 3.7 | 1653.739 | 630.6953 | 0 |
| 1733.985 | 0 | 655.506 | 3.7 | 1732.866 | 659.4942 | 3.28 |
| 1815.012 | 0 | 570.7423 | 7.4 | 1835.73 | 552.9384 | 3.28 |
| 1045.253 | 0 | 511.4077 | 3.7 | 1091.943 | 498.2205 | 0 |
| 599.6023 | 0 | 203.4329 | 0 | 577.6219 | 215.9916 | 0 |
| 2228.252 | 0 | 649.8551 | 11.1 | 2207.623 | 645.0948 | 6.56 |
| 2365.998 | 0 | 604.6478 | 3.7 | 2381.701 | 607.6562 | 3.28 |
| 1993.272 | 0 | 548.1386 | 0 | 2001.895 | 538.5389 | 0 |
| 2074.3 | 0 | 528.3604 | 0 | 2231.361 | 483.8211 | 0 |
| 2649.594 | 0 | 567.9168 | 3.7 | 2666.556 | 550.0585 | 6.56 |
| 2139.122 | 0 | 500.1059 | 7.4 | 2152.235 | 495.3406 | 6.56 |
| 3330.223 | 0 | 576.3932 | 14.8 | 3252.09 | 593.2568 | 6.56 |
| 1879.834 | 0 | 497.2804 | 7.4 | 1843.643 | 495.3406 | 9.84 |
| 3265.401 | 0 | 401.2149 | 3.7 | 3283.741 | 380.1451 | 0 |
| 1985.17 | 0 | 511.4077 | 3.7 | 1914.856 | 535.659 | 0 |
| 834.5815 | 0 | 293.8475 | 7.4 | 822.9134 | 305.2681 | 6.56 |
| 1353.156 | 0 | 700.7133 | 3.7 | 1400.535 | 682.5333 | 0 |
| 1166.794 | 0 | 545.3132 | 0 | 1139.419 | 575.9775 | 0 |
| 818.3761 | 0 | 582.0441 | 0 | 909.9523 | 555.8183 | 0 |
| 1855.526 | 0 | 601.8223 | 0 | 1922.769 | 573.0976 | 0 |
| 1377.465 | 0 | 579.2187 | 3.7 | 1424.273 | 578.8574 | 0 |
| 2738.724 | 0 | 384.2621 | 11.1 | 2706.119 | 377.2652 | 9.84 |
| 1255.924 | 0 | 398.3894 | 3.7 | 1305.584 | 380.1451 | 0 |
| 2268.765 | 0 | 754.397 | 11.1 | 2294.6662 | 760.2903 | 0 |
| 1020.944 | 0 | 361.6585 | 7.4 | 1044.467 | 362.8658 | 9.84 |
| 2074.3 | 0 | 418.1676 | 0 | 2041.458 | 411.8239 | 0 |
| 3630.024 | 0 | 378.6112 | 11.1 | 3845.538 | 299.5083 | 9.84 |
| 1555.725 | 0 | 443.5967 | 11.1 | 1598.351 | 429.1032 | 9.84 |
| 2252.56 | 0 | 437.9458 | 3.7 | 2278.837 | 431.9831 | 0 |
| 2244.457 | 0 | 644.2042 | 11.1 | 2270.924 | 642.2149 | 6.56 |
| 2220.149 | 0 | 316.4512 | 3.7 | 2215.536 | 322.5474 | 3.28 |
| 785.9651 | 0 | 367.3094 | 7.4 | 846.6513 | 348.4664 | 3.28 |
| 1661.06 | 0 | 401.2149 | 0 | 1740.778 | 374.3854 | 0 |
| 2041.889 | 0 | 553.7895 | 3.7 | 2073.109 | 547.1786 | 3.28 |
| 931.8143 | 0 | 226.0365 | 3.7 | 917.8649 | 233.2709 | 0 |
| 2228.252 | 0 | 406.8658 | 3.7 | 2183.886 | 429.1032 | 0 |
| 2868.368 | 0 | 669.6333 | 11.1 | 2888.11 | 662.3741 | 9.84 |
| 1101.972 | 0 | 254.2911 | 3.7 | 1131.506 | 241.9105 | 3.28 |
| 322.6814 | 0 | 769.4917 | 1.571429 | 366.5606 | 705.1937 | 1.733333 |
| 580.8266 | 0 | 1146.314 | 1.571429 | 647.0592 | 1046.473 | 1.733333 |
| 311.2927 | 0 | 1028.337 | 1.571429 | 439.8728 | 922.8461 | 3.466667 |


| 531.4753 | 0 | 1855.937 | 1.571429 | 653.4342 | 1729.031 | 1.733333 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 334.0702 | 0 | 1281.899 | 1.571429 | 430.3103 | 1189.253 | 3.466667 |
| 664.3441 | 0 | 1743.242 | 0 | 784.121 | 1601.922 | 0 |
| 523.8828 | 0 | 1789.024 | 1.571429 | 675.7465 | 1648.934 | 0 |
| 201.2014 | 0 | 855.7734 | 1.571429 | 302.811 | 774.8425 | 0 |
| 201.2014 | 0 | 1468.549 | 1.571429 | 372.9356 | 1340.739 | 0 |
| 182.2201 | 0 | 963.1853 | 1.571429 | 270.9361 | 893.2454 | 0 |
| 250.5526 | 0 | 1123.423 | 3.142857 | 325.1233 | 1051.696 | 1.733333 |
| 216.3864 | 0 | 1058.271 | 0 | 334.6858 | 962.8942 | 3.466667 |
| 318.8852 | 0 | 1089.967 | 0 | 420.7478 | 1001.201 | 0 |
| 170.8313 | 0 | 484.2339 | 0 | 172.1241 | 463.1643 | 0 |
| 299.9039 | 0 | 933.2508 | 0 | 404.8104 | 841.0088 | 0 |
| 341.6627 | 0 | 1665.765 | 3.142857 | 452.6227 | 1572.321 | 0 |
| 220.1826 | 0 | 1024.815 | 0 | 334.6858 | 929.811 | 0 |
| 315.0889 | 0 | 1170.966 | 0 | 398.4355 | 1086.521 | 0 |
| 474.5315 | 0 | 1651.678 | 4.714286 | 631.1218 | 1507.896 | 3.466667 |
| 383.4215 | 0 | 1472.071 | 1.571429 | 500.4349 | 1365.116 | 0 |
| 573.2341 | 0 | 2088.369 | 1.571429 | 745.8712 | 1929.271 | 1.733333 |
| 463.1427 | 0 | 1519.614 | 0 | 573.7471 | 1406.905 | 1.733333 |
| 364.4402 | 0 | 1295.986 | 1.571429 | 458.9977 | 1199.7 | 0 |
| 527.679 | 0 | 1605.896 | 1.571429 | 685.309 | 1466.106 | 0 |
| 747.8616 | 0 | 1288.943 | 1.571429 | 841.4957 | 1157.911 | 1.733333 |
| 76.37555 | 0 | 283.0304 | 0 | 107.4441 | 258.9036 | 0 |
| 16.20087 | 0 | 75.64869 | 1.5 | 30.40872 | 64.08504 | 0 |
| 134.2358 | 0 | 223.0332 | 0 | 162.1798 | 189.6917 | 0 |
| 48.60262 | 0 | 357.3748 | 0 | 79.06267 | 328.1154 | 2 |
| 13.88646 | 0 | 110.8645 | 0 | 16.21798 | 103.8178 | 0 |
| 129.607 | 0 | 456.5007 | 1.5 | 182.4523 | 410.1443 | 0 |
| 111.0917 | 0 | 379.5477 | 0 | 166.2343 | 333.2422 | 0 |
| 566.6724 | 0 | 1820.326 | 3.069767 | 727.2352 | 1707.482 | 0 |
| 427.5492 | 0 | 897.2467 | 1.534884 | 472.7029 | 866.7949 | 0 |
| 383.437 | 0 | 1343.287 | 6.139535 | 457.5522 | 1303.673 | 1.75 |
| 464.8749 | 0 | 1176.237 | 6.139535 | 533.3058 | 1129.618 | 3.5 |
| 227.3476 | 0 | 540.759 | 1.534884 | 221.2007 | 536.09 | 1.75 |
| 329.145 | 0 | 928.2456 | 1.534884 | 348.4669 | 913.7898 | 1.75 |
| 532.7399 | 0 | 1506.892 | 4.604651 | 572.6977 | 1472.507 | 0 |
| 227.3476 | 0 | 602.7569 | 4.604651 | 236.3514 | 591.7877 | 1.75 |
| 488.6277 | 0 | 1315.732 | 4.604651 | 481.7933 | 1312.376 | 0 |
| 352.6931 | 0 | 1385.819 | 4.6 | 383.6197 | 1337.643 | 0 |
| 247.7071 | 0 | 735.3634 | 1.534884 | 272.7132 | 706.6641 | 0 |
| 247.7071 | 0 | 828.3602 | 0 | 254.5323 | 812.8378 | 0 |
| 176.3465 | 0 | 754.4209 | 0 | 245.91 | 697.5111 | 0 |
| 247.7071 | 0 | 706.0866 | 0 | 275.7434 | 687.5181 | 0 |
| 172.5945 | 0 | 862.9706 | 0 | 213.122 | 824.8203 | 0 |
| 472.7588 | 0 | 1655.384 | 0 | 600.0205 | 1543.848 | 3.6 |
| 405.2218 | 0 | 899.1539 | 4.6 | 452.4745 | 842.7512 | 1.8 |
| 645.3532 | 0 | 1973.797 | 0 | 773.7969 | 1837.915 | 1.8 |
|  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 337.6848 | 0 | 1505.223 | 0 | 429.5229 | 1427.298 | 1.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 165.0904 | 0 | 607.8787 | 0 | 222.9584 | 564.8226 | 0 |
| 153.8342 | 0 | 745.3751 | 0 | 252.4676 | 677.7871 | 0 |
| 180.0986 | 0 | 960.6654 | 2.3 | 275.4193 | 898.3369 | 1.8 |
| 810.4436 | 0 | 1573.972 | 4.6 | 888.555 | 1468.539 | 0 |
| 742.9066 | 0 | 2424.278 | 2.3 | 891.8338 | 2277.221 | 3.6 |
| 408.9739 | 0 | 1355.063 | 4.6 | 603.2993 | 1217.506 | 3.6 |
| 400.4032 | 0 | 1515.503 | 9.209302 | 469.6727 | 1463.804 | 3.5 |
| 88.22444 | 0 | 337.5439 | 0 | 96.9647 | 335.9265 | 0 |
| 593.8184 | 0 | 1121.128 | 4.604651 | 581.7882 | 1115.694 | 0 |
| 403.7965 | 0 | 1536.169 | 1.534884 | 393.9191 | 1540.389 | 0 |
| 223.9544 | 0 | 688.865 | 1.534884 | 245.4419 | 671.8531 | 0 |
| 217.1679 | 0 | 661.3104 | 0 | 224.2309 | 652.707 | 0 |
| 817.7727 | 0 | 978.1883 | 13.81395 | 772.6874 | 969.4875 | 7 |
| 0 | 0 | 366.4202 | 5.5 | 86.35955 | 330.6202 | 0 |
| 0 | 0 | 417.4408 | 8.25 | 117.2022 | 366.8525 | 1.5 |
| 0 | 0 | 145.3312 | 5.5 | 57.57303 | 119.2648 | 0 |
| 0 | 0 | 590.6014 | 13.75 | 160.382 | 520.84 | 0 |
| 0 | 0 | 462.277 | 5.5 | 108.9775 | 418.1817 | 1.5 |
| 0 | 0 | 214.9047 | 5.5 | 49.34831 | 199.2779 | 0 |
| 0 | 0 | 739.0247 | 11 | 152.1573 | 695.963 | 0 |
| 632.1497 | 0 | 1400.912 | 1.909091 | 801.8881 | 1240.089 | 4 |
| 421.4331 | 0 | 1651.355 | 3.818182 | 591.3925 | 1516.518 | 4 |
| 555.5255 | 0 | 1833.317 | 1.909091 | 755.1113 | 1658.571 | 0 |
| 616.8248 | 0 | 1702.226 | 1.909091 | 778.4997 | 1545.313 | 0 |
| 524.8758 | 0 | 1819.621 | 0 | 811.9117 | 1593.304 | 2 |
| 490.3949 | 0 | 1614.18 | 0 | 664.8989 | 1453.17 | 6 |
| 352.4713 | 0 | 1348.085 | 3.818182 | 511.2037 | 1224.732 | 0 |
| 356.3025 | 0 | 1721.792 | 1.909091 | 467.7681 | 1606.741 | 2 |
| 310.328 | 0 | 1054.597 | 1.909091 | 414.3089 | 963.6607 | 0 |
| 551.6943 | 0 | 1535.916 | 3.818182 | 715.0169 | 1387.902 | 2 |
| 284.989 | 0 | 235.3185 | 0 | 303.8243 | 215.5152 | 0 |
| 272.3789 | 0 | 413.9544 | 0 | 293.6968 | 402.1818 | 0 |
| 355.6057 | 0 | 510.143 | 0 | 356.9936 | 507.3939 | 1 |
| 174.0198 | 0 | 130.5416 | 0 | 174.699 | 130.6667 | 0 |
| 481.707 | 0 | 135.6946 | 0 | 496.2464 | 134.0606 | 0 |
| 481.707 | 0 | 211.2713 | 0 | 491.1826 | 208.7273 | 0 |
| 146.2775 | 0 | 92.75327 | 0 | 144.3166 | 93.33333 | 0 |
| 332.9075 | 0 | 451.7428 | 0 | 362.0573 | 431.0303 | 0 |
| 206.8062 | 0 | 190.6595 | 5 | 217.7408 | 184.9697 | 1 |
| 244.6366 | 0 | 231.8832 | 0 | 265.8463 | 220.6061 | 0 |
| 645.6388 | 0 | 393.3426 | 0 | 653.2223 | 383.5152 | 0 |
| 287.511 | 0 | 118.5181 | 0 | 298.7606 | 113.697 | 0 |
| 665.815 | 0 | 163.1771 | 0 | 668.4135 | 166.303 | 0 |
| 0 | 0 | 473.2076 | 6.732394 | 101.9987 | 427.356 | 1.2 |
| 0 | 0 | 1014.218 | 25.24648 | 215.5134 | 900.9506 | 2.4 |
| 0 | 0 | 138.4309 | 8.415493 | 54.28963 | 123.3027 | 0 |


| 0 | 0 | 480.2704 | 11.78169 | 149.7078 | 425.9549 | 1.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 607.4008 | 13.46479 | 143.1272 | 533.8447 | 1.2 |
| 0 | 0 | 644.1273 | 15.14789 | 176.03 | 571.6763 | 2.4 |
| 0 | 0 | 498.6336 | 13.46479 | 136.5466 | 431.5595 | 1.2 |
| 0 | 0 | 679.4413 | 21.88028 | 212.2231 | 561.8681 | 0 |
| 0 | 0 | 67.80287 | 3.366197 | 24.6771 | 58.84903 | 0 |
| 0 | 0 | 533.9476 | 16.83099 | 192.4814 | 466.5887 | 0 |
| 0 | 0 | 153.969 | 3.366197 | 110.2244 | 119.0992 | 1.2 |
| 0 | 0 | 474.6201 | 21.88028 | 144.7723 | 413.3444 | 0 |
| 0 | 0 | 401.167 | 11.78169 | 159.5786 | 339.0825 | 1.2 |
| 0 | 0 | 566.4365 | 16.83099 | 184.2557 | 487.6062 | 0 |
| 0 | 0 | 316.4134 | 8.415493 | 192.4814 | 262.0183 | 0 |
| 0 | 0 | 679.4413 | 28.61268 | 197.4168 | 615.1125 | 0 |
| 0 | 0 | 525.4723 | 11.78169 | 126.6758 | 463.7864 | 0 |
| 655.2038 | 0 | 650.7963 | 0 | 684.9715 | 630.0409 | 1 |
| 163.801 | 0 | 245.0836 | 2.125 | 152.2159 | 251.0189 | 1 |
| 287.3701 | 0 | 299.7306 | 2.125 | 295.9753 | 295.9031 | 0 |
| 364.96 | 0 | 526.5985 | 4.25 | 374.9021 | 525.3111 | 0 |
| 215.5276 | 0 | 448.7679 | 0 | 239.5991 | 432.218 | 0 |
| 448.2974 | 0 | 559.7179 | 4.25 | 439.7348 | 561.8834 | 1 |
| 227.0224 | 0 | 379.2172 | 0 | 228.3238 | 375.6972 | 1 |
| 310.3597 | 0 | 453.7358 | 2.125 | 321.3446 | 452.1665 | 0 |
| 614.972 | 0 | 505.0709 | 2.125 | 606.0447 | 498.7131 | 0 |
| 307.486 | 0 | 369.2813 | 0 | 312.8882 | 369.0477 | 0 |
| 766.3 | 0 | 1740.729 | 11.27586 | 746.0129 | 1780.421 | 1.545455 |
| 845.5724 | 0 | 1962.725 | 7.517241 | 843.1947 | 1972.515 | 1.545455 |
| 687.0276 | 0 | 1347.832 | 11.27586 | 700.2803 | 1351.768 | 4.636364 |
| 596.0111 | 0 | 1767.157 | 7.517241 | 594.5237 | 1785.757 | 1.545455 |
| 390.49 | 0 | 775.2235 | 5.637931 | 394.4436 | 773.7096 | 1.545455 |
| 290.6655 | 0 | 671.2731 | 3.758621 | 340.1362 | 634.9754 | 1.545455 |
| 916.0367 | 0 | 1048.314 | 1.87931 | 914.6519 | 1045.842 | 0 |
| 390.49 | 0 | 1252.691 | 7.517241 | 377.2939 | 1269.951 | 1.545455 |
| 604.8191 | 0 | 1705.492 | 5.637931 | 574.5157 | 1735.955 | 6.181818 |
| 666.4755 | 0 | 1534.59 | 11.27586 | 654.5478 | 1545.64 | 4.636364 |
| 469.7624 | 0 | 1014.838 | 7.517241 | 477.3339 | 1031.613 | 0 |
| 607.7551 | 0 | 1213.93 | 7.517241 | 620.2483 | 1221.927 | 3.090909 |
| 528.4827 | 0 | 1548.685 | 11.27586 | 540.2163 | 1550.976 | 3.090909 |
| 607.7551 | 0 | 849.2221 | 7.517241 | 600.2403 | 848.4125 | 1.545455 |
| 551.9709 | 0 | 1122.312 | 1.87931 | 571.6574 | 1104.537 | 1.545455 |
| 349.3858 | 0 | 665.9875 | 0 | 328.703 | 682.9988 | 0 |
| 451.2579 | 0 | 994.7527 | 5.076923 | 622.6225 | 870.336 | 2 |
| 468.614 | 0 | 858.2488 | 0 | 573.6827 | 774.9989 | 2 |
| 636.3894 | 0 | 666.8295 | 0 | 717.7831 | 588.9376 | 0 |
| 616.1406 | 0 | 884.922 | 1.692308 | 736.8153 | 787.3004 | 2 |
| 315.302 | 0 | 453.4441 | 1.692308 | 448.6145 | 365.9717 | 0 |
| 636.3894 | 0 | 1151.654 | 1.692308 | 793.9116 | 1031.794 | 0 |
| 1154.179 | 0 | 819.0236 | 1.692308 | 1193.586 | 765.7727 | 2 |


| 347.1215 | 0 | 309.0951 | 0 | 394.2369 | 275.2476 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 671.1015 | 0 | 514.6355 | 5.076923 | 734.0964 | 456.6958 | 4 |
| 393.4043 | 0 | 658.9845 | 0 | 475.8032 | 596.6261 | 0 |
| 752.0965 | 0 | 953.9585 | 1.692308 | 851.008 | 859.5721 | 0 |
| 512.0042 | 0 | 726.4519 | 3.384615 | 581.8394 | 662.747 | 2 |
| 0 | 0 | 595.0709 | 20.65882 | 180.7775 | 560.2836 | 0 |
| 0 | 0 | 804.3103 | 23.24118 | 162.9229 | 768.2239 | 1.8 |
| 0 | 0 | 541.6481 | 20.65882 | 145.0684 | 496.7463 | 0 |
| 0 | 0 | 587.6511 | 2.582353 | 124.982 | 540.0672 | 1.8 |
| 0 | 0 | 1136.719 | 49.06471 | 383.8732 | 976.1642 | 0 |
| 0 | 0 | 609.9106 | 18.07647 | 185.2411 | 547.2873 | 0 |
| 0 | 0 | 743.4676 | 46.48235 | 265.5867 | 645.4813 | 0 |
| 0 | 0 | 1476.548 | 54.22941 | 397.2641 | 1318.399 | 3.6 |
| 0 | 0 | 678.1731 | 20.65882 | 169.6184 | 605.0485 | 3.6 |
| 0 | 0 | 363.572 | 10.32941 | 95.9683 | 319.1306 | 0 |
| 0 | 0 | 1295.504 | 69.72353 | 361.555 | 1169.664 | 1.8 |
| 0 | 0 | 1004.646 | 18.07647 | 274.514 | 903.9627 | 3.6 |
| 0 | 0 | 209.2394 | 7.747059 | 91.50466 | 171.8396 | 0 |
| 0 | 0 | 519.3886 | 12.91176 | 138.3729 | 492.4142 | 0 |
| 0 | 0 | 1114.459 | 23.24118 | 287.9049 | 992.0485 | 0 |
| 0 | 0 | 555.0038 | 25.82353 | 169.6184 | 479.4179 | 0 |
| 0 | 0 | 676.6891 | 15.49412 | 156.2275 | 623.8209 | 1.8 |
| 903.0442 | 0 | 817.492 | 1 | 925.1163 | 814.7133 | 0 |
| 851.1948 | 0 | 428.0351 | 0 | 870.6977 | 425.0678 | 0 |
| 885.761 | 0 | 479.4728 | 1 | 904.186 | 464.2188 | 1 |
| 306.7732 | 0 | 454.8995 | 0 | 307.7603 | 456.4943 | 0 |
| 478.4536 | 0 | 610.1928 | 3.454545 | 512.0259 | 586.0187 | 0 |
| 343.3608 | 0 | 492.5464 | 1.727273 | 324.1015 | 503.8813 | 0 |
| 433.4227 | 0 | 622.7418 | 6.909091 | 435.7667 | 625.5078 | 1.5 |
| 351.8041 | 0 | 450.1937 | 1.727273 | 386.743 | 429.6417 | 1.5 |
| 273 | 0 | 687.0552 | 0 | 291.419 | 674.4743 | 0 |
| 270.1856 | 0 | 351.3707 | 5.181818 | 264.1836 | 356.9817 | 0 |
| 1499.005 | 0 | 1103.165 | 2.384615 | 1519.386 | 1099.286 | 4.129032 |
| 1969.729 | 0 | 1564.955 | 7.153846 | 2046.52 | 1512.163 | 2.064516 |
| 1988.009 | 0 | 2478.273 | 7.153846 | 2011.083 | 2472.103 | 2.064516 |
| 1339.05 | 0 | 1993.393 | 4.769231 | 1426.363 | 1953.425 | 4.129032 |
| 2063.814 | 0 | 934.2793 | 5.394495 | 2142.52 | 895.7126 | 0 |
| 2335.34 | 0 | 1829.201 | 4.769231 | 2352.169 | 1790.855 | 6.193548 |
| 1905.747 | 0 | 1362.28 | 4.769231 | 1904.77 | 1344.432 | 6.193548 |
| 1279.638 | 0 | 1513.645 | 4.769231 | 1342.198 | 1491.519 | 2.064516 |
| 2088.552 | 0 | 2088.317 | 0 | 2290.154 | 2046.323 | 0 |
| 1032.851 | 0 | 1277.619 | 2.384615 | 1027.69 | 1254.115 | 4.129032 |
| 548.4164 | 0 | 805.5669 | 0 | 580.2904 | 797.3692 | 0 |
| 1211.086 | 0 | 1005.676 | 7.153846 | 1231.456 | 978.003 | 4.129032 |
| 1041.991 | 0 | 749.1259 | 7.153846 | 1045.409 | 740.5986 | 4.129032 |
| 1073.982 | 0 | 1064.682 | 2.384615 | 1107.424 | 1050.257 | 2.064516 |
| 2161.116 | 0 | 866.2366 | 5.394495 | 2147.585 | 864.192 | 2.636364 |
| 0 |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 557.5567 | 0 | 502.8379 | 2.384615 | 535.9934 | 510.9356 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 988.3775 | 0 | 874.0877 | 8.091743 | 1002.882 | 885.2057 | 5.272727 |
| 1766.789 | 0 | 507.7036 | 8.091743 | 1808.226 | 488.5705 | 2.636364 |
| 1992.118 | 0 | 277.4051 | 2.697248 | 2015.894 | 249.5387 | 2.636364 |
| 993.4986 | 0 | 269.554 | 8.091743 | 1007.947 | 265.299 | 2.636364 |
| 1689.972 | 0 | 507.7036 | 2.697248 | 1717.055 | 496.4507 | 0 |
| 1887.466 | 0 | 1593.175 | 7.153846 | 1922.489 | 1576.675 | 6.193548 |
| 2278.901 | 0 | 1062.514 | 8.091743 | 2329.927 | 1019.169 | 7.909091 |
| 690.0906 | 0 | 1652.182 | 0 | 788.4862 | 1607.641 | 0 |
| 860.3493 | 0 | 735.3851 | 8.091743 | 871.1902 | 735.4825 | 2.636364 |
| 1182.98 | 0 | 316.6605 | 8.091743 | 1235.874 | 288.9396 | 5.272727 |
| 527.4761 | 0 | 62.80869 | 2.697248 | 557.1565 | 42.02757 | 0 |
| 937.1662 | 0 | 369.0011 | 0 | 942.101 | 362.4878 | 0 |
| 1777.031 | 0 | 397.7884 | 2.697248 | 1808.226 | 383.5016 | 2.636364 |
| 2029.141 | 0 | 425.8729 | 2.384615 | 2011.083 | 418.0382 | 0 |
| 706.7155 | 0 | 842.6833 | 2.697248 | 719.2384 | 832.6713 | 0 |
| 1215.656 | 0 | 1418.721 | 2.384615 | 1218.167 | 1406.363 | 4.129032 |
| 502.715 | 0 | 1780.457 | 4.769231 | 518.2746 | 1777.953 | 4.129032 |
| 306.1991 | 0 | 900.4904 | 14.30769 | 358.8055 | 898.008 | 2.064516 |
| 860.3493 | 0 | 2428.603 | 0 | 886.3854 | 2406.079 | 5.272727 |
| 2365.961 | 0 | 2583.008 | 18.88073 | 2355.253 | 2579.442 | 7.909091 |
| 537.7183 | 0 | 403.0225 | 0 | 572.3517 | 383.5016 | 0 |
| 804.0169 | 0 | 1431.515 | 2.697248 | 785.0842 | 1423.684 | 5.272727 |
| 1674.609 | 0 | 1661.813 | 0 | 1484.062 | 1759.905 | 0 |
| 1730.941 | 0 | 2193.07 | 5.394495 | 1706.925 | 2185.434 | 5.272727 |
| 278.7783 | 0 | 954.3658 | 4.769231 | 296.7897 | 959.9396 | 6.193548 |
| 1049.831 | 0 | 1936.601 | 0 | 977.5564 | 1959.536 | 2.636364 |
| 1864.09 | 0 | 2125.028 | 2.697248 | 1894.332 | 2104.005 | 0 |
| 1387.825 | 0 | 1737.707 | 2.697248 | 1392.891 | 1731.011 | 0 |
| 460.9014 | 0 | 758.9384 | 2.697248 | 465.9854 | 745.9894 | 2.636364 |
| 1505.611 | 0 | 2248.028 | 10.78899 | 1499.258 | 2258.982 | 5.272727 |
| 885.955 | 0 | 1044.195 | 5.394495 | 881.3203 | 1042.809 | 0 |
| 635.0197 | 0 | 492.0014 | 2.697248 | 658.4577 | 480.6904 | 2.636364 |
| 1510.732 | 0 | 1415.813 | 2.697248 | 1524.583 | 1394.79 | 7.909091 |
| 1561.944 | 0 | 981.3859 | 2.697248 | 1585.364 | 969.2609 | 2.636364 |
| 880.8338 | 0 | 787.7257 | 0 | 850.9299 | 809.0308 | 0 |
| 967.893 | 0 | 1130.557 | 2.697248 | 997.8167 | 1113.731 | 0 |
| 629.8986 | 0 | 795.5768 | 2.697248 | 663.5228 | 777.5101 | 0 |
| 1823.121 | 0 | 994.471 | 16.18349 | 1833.551 | 990.2747 | 2.636364 |
| 1500.49 | 0 | 813.896 | 10.78899 | 1509.388 | 798.5239 | 2.636364 |
| 1080.558 | 0 | 834.8322 | 8.091743 | 1088.988 | 822.1644 | 5.272727 |
| 1520.975 | 0 | 1452.451 | 8.091743 | 1473.932 | 1463.085 | 2.636364 |
| 1351.978 | 0 | 1298.046 | 8.091743 | 1357.436 | 1292.348 | 7.909091 |
| 1756.547 | 0 | 1172.429 | 2.697248 | 1747.445 | 1161.012 | 2.636364 |
| 2458.141 | 0 | 2101.474 | 10.78899 | 2421.098 | 2119.766 | 7.909091 |
| 1326.372 | 0 | 1154.11 | 13.48624 | 1281.46 | 1174.145 | 7.909091 |
| 1131.769 | 0 | 806.0449 | 8.091743 | 1083.923 | 816.9109 | 2.636364 |


| 788.6535 | 0 | 772.0235 | 5.394495 | 785.0842 | 774.8834 | 2.636364 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1812.879 | 0 | 1065.131 | 0 | 1782.901 | 1061.196 | 7.909091 |
| 1029.347 | 0 | 669.9594 | 2.697248 | 957.2962 | 706.5886 | 2.636364 |
| 1095.921 | 0 | 1206.45 | 5.394495 | 1154.833 | 1155.758 | 0 |
| 1341.735 | 0 | 1915.665 | 2.697248 | 1296.655 | 1917.508 | 2.636364 |
| 1285.403 | 0 | 1177.663 | 5.394495 | 1286.525 | 1158.385 | 5.272727 |
| 2227.69 | 0 | 1271.876 | 2.697248 | 2152.65 | 1279.214 | 10.54545 |
| 1474.885 | 0 | 2268.964 | 5.394495 | 1413.152 | 2301.01 | 2.636364 |
| 1408.31 | 0 | 1049.429 | 8.091743 | 1392.891 | 1058.569 | 5.272727 |
| 1725.82 | 0 | 845.3004 | 2.697248 | 1686.665 | 856.3118 | 0 |
| 1095.921 | 0 | 1141.025 | 2.697248 | 1124.443 | 1124.238 | 0 |
| 1095.921 | 0 | 1300.663 | 0 | 1068.727 | 1308.108 |  |
| 1398.068 | 0 | 426.5757 | 2.697248 | 1423.282 | 420.2757 | 0 |
| 1439.037 | 0 | 1499.558 | 2.697248 | 1392.891 | 1505.112 | 2.636364 |
| 2381.324 | 0 | 541.725 | 5.394495 | 2466.684 | 499.0774 | 0 |
| 1136.89 | 0 | 405.6395 | 2.697248 | 1124.443 | 391.3818 | 2.636364 |
| 1085.679 | 0 | 1316.366 | 2.697248 | 1099.118 | 1308.108 | 0 |
| 1147.132 | 0 | 1572.834 | 10.78899 | 1139.638 | 1573.407 | 5.272727 |
| 517.447 | 0 | 1101.571 | 1.8 | 567.0971 | 1080.199 | 0 |
| 786.1214 | 0 | 717.21 | 3.6 | 809.4853 | 688.3037 | 2.666667 |
| 457.7416 | 0 | 766.7411 | 1.8 | 484.7765 | 744.0046 | 2.666667 |
| 393.0607 | 0 | 404.1736 | 0 | 384.1625 | 393.8848 | 2.666667 |
| 945.3359 | 0 | 1172.896 | 1.8 | 987.8465 | 1127.943 | 0 |
| 422.9134 | 0 | 768.7223 | 0 | 471.0564 | 742.0153 | 0 |
| 328.3798 | 0 | 455.6859 | 0 | 347.5756 | 437.6498 | 0 |
| 0 | 0 | 481.4528 | 9.5625 | 120.2526 | 407.2572 | 1.25 |
| 0 | 0 | 591.7547 | 22.3125 | 128.138 | 525.0709 | 0 |
| 0 | 0 | 384.566 | 22.3125 | 130.1094 | 331.6237 | 2.5 |
| 0 | 0 | 262.3396 | 19.125 | 94.625 | 212.3555 | 1.25 |
| 0 | 0 | 250.4151 | 6.375 | 86.73958 | 218.1735 | 0 |
| 0 | 0 | 56.64151 | 0 | 23.65625 | 45.08919 | 0 |
| 0 | 0 | 263.8302 | 19.125 | 70.96875 | 223.9914 | 0 |
| 0 | 0 | 474 | 3.1875 | 102.5104 | 417.4386 | 0 |
| 1517.951 | 0 | 1338.633 | 8.545455 | 1574.871 | 1271.106 | 0 |
| 1630.391 | 0 | 1018.907 | 6.409091 | 1654.755 | 964.3481 | 1.230769 |
| 489.9205 | 0 | 1185.797 | 2.136364 | 502.1327 | 1167.09 | 1.230769 |
| 522.0465 | 0 | 1017.15 | 0 | 566.8013 | 976.6889 | 0 |
| 421.6529 | 0 | 347.8337 | 4.272727 | 426.052 | 334.9655 | 1.230769 |
| 622.44 | 0 | 1270.12 | 4.272727 | 665.7062 | 1239.372 | 0 |
| 758.9753 | 0 | 1719.845 | 4.272727 | 810.2596 | 1681.879 | 1.230769 |
| 887.479 | 0 | 1632.008 | 2.136364 | 874.9282 | 1620.175 | 1.230769 |
| 722.8336 | 0 | 1480.928 | 2.136364 | 753.199 | 1454.456 | 2.461538 |
| 248.976 | 0 | 293.3749 | 0 | 243.4583 | 289.1281 | 0 |
| 767.0067 | 0 | 1185.797 | 0 | 776.0233 | 1158.275 | 1.230769 |
| 477.8733 | 0 | 374.1848 | 0 | 479.3085 | 356.1212 | 0 |
| 827.2429 | 0 | 1668.899 | 8.545455 | 912.9685 | 1616.649 | 2.461538 |
| 509.9993 | 0 | 902.9623 | 2.136364 | 536.369 | 881.4882 | 0 |


| 309.2121 | 0 | 602.5605 | 2.136364 | 346.1672 | 578.2562 | 3.692308 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 555.5512 | 0 | 807.5618 | 3.6 | 544.7076 | 827.3089 | 0 |
| 348.2163 | 0 | 653.085 | 3.6 | 356.0528 | 650.7958 | 0 |
| 438.593 | 0 | 344.1315 | 0 | 467.6514 | 339.212 | 0 |
| 398.7209 | 0 | 637.7903 | 0 | 406.5378 | 635.4469 | 2 |
| 544.9186 | 0 | 489.4314 | 1.8 | 542.0505 | 494.2365 | 1 |
| 0 | 0 | 818.3458 | 40.01111 | 262.069 | 731.3222 | 0 |
| 0 | 0 | 455.833 | 9.233333 | 175.5862 | 418.1483 | 0 |
| 0 | 0 | 224.3273 | 6.155556 | 83.86207 | 195.9524 | 0 |
| 0 | 0 | 538.3854 | 18.46667 | 220.1379 | 484.6322 | 1.8 |
| 0 | 0 | 328.4151 | 3.077778 | 60.27586 | 306.1756 | 0 |
| 0 | 0 | 581.4562 | 12.31111 | 89.10345 | 545.8673 | 1.8 |
| 0 | 0 | 615.554 | 24.62222 | 180.8276 | 535.3699 | 0 |
| 0 | 0 | 1202.394 | 120.0333 | 623.7241 | 1020.002 | 1.8 |
| 0 | 0 | 260.2196 | 9.233333 | 136.2759 | 208.1994 | 0 |
| 0 | 0 | 777.0696 | 33.85556 | 220.1379 | 696.3307 | 3.6 |
| 159.2294 | 0 | 674.5867 | 0 | 160.3541 | 666.6378 | 0 |
| 243.5273 | 0 | 709.6062 | 2.5 | 249.7823 | 708.9932 | 0 |
| 221.6723 | 0 | 1164.86 | 2.5 | 243.6148 | 1169.378 | 0 |
| 593.2075 | 0 | 374.156 | 2.5 | 579.7416 | 370.1497 | 2.6 |
| 739.9484 | 0 | 1190.664 | 2.5 | 737.012 | 1191.477 | 2.6 |
| 277.8709 | 0 | 602.7045 | 0 | 296.0383 | 600.3423 | 0 |
| 368.4131 | 0 | 707.7631 | 0 | 416.3038 | 683.2116 | 2.6 |
| 730.5819 | 0 | 589.8026 | 2.5 | 721.5933 | 596.6592 | 2.6 |
| 405.8788 | 0 | 798.0766 | 2.5 | 447.1411 | 760.5564 | 2.6 |
| 468.3217 | 0 | 563.9987 | 5 | 496.4809 | 557.9869 | 0 |
| 349.6802 | 0 | 346.509 | 0 | 363.8804 | 353.5758 | 0 |
| 215.428 | 0 | 86.62725 | 0 | 222.0287 | 81.0278 | 0 |
| 1514.24 | 0 | 685.6455 | 0 | 1511.029 | 674.0039 | 0 |
| 658.1679 | 0 | 604.1218 | 0 | 785.356 | 499.0805 | 0 |
| 894.8489 | 0 | 546.5864 | 0 | 985.8025 | 462.618 | 0 |
| 603.0504 | 0 | 1316.123 | 4 | 745.9239 | 1171.358 | 2 |
| 547.9329 | 0 | 918.1693 | 0 | 676.9177 | 783.9437 | 0 |
| 1329.902 | 0 | 803.4009 | 2.968085 | 1369.881 | 789.5793 | 0 |
| 2973.502 | 0 | 1352.427 | 8.904255 | 2996.343 | 1339.313 | 11.68085 |
| 3291.618 | 0 | 964.505 | 11.87234 | 3435.575 | 927.5435 | 5.840426 |
| 1811.495 | 0 | 866.9946 | 14.84043 | 1843.904 | 851.1326 | 8.760638 |
| 998.5312 | 0 | 409.1197 | 2.968085 | 1017.626 | 399.0347 | 0 |
| 3022.103 | 0 | 1384.224 | 26.71277 | 2983.297 | 1413.602 | 17.52128 |
| 2279.832 | 0 | 1199.802 | 8.904255 | 2300.531 | 1188.614 | 0 |
| 1458.032 | 0 | 691.052 | 0 | 1469.904 | 674.963 | 0 |
| 1537.561 | 0 | 813.9999 | 23.74468 | 1513.393 | 840.5199 | 5.840426 |
| 1515.47 | 0 | 724.9686 | 14.84043 | 1548.183 | 713.1684 | 2.920213 |
| 1409.431 | 0 | 828.8384 | 11.87234 | 1435.114 | 823.5397 | 2.920213 |
| 2858.627 | 0 | 1078.974 | 8.904255 | 2939.809 | 1031.547 | 2.920213 |
| 2602.367 | 0 | 1282.474 | 14.84043 | 2609.298 | 1286.25 | 8.760638 |
| 1665.691 | 0 | 1180.724 | 11.87234 | 1630.811 | 1192.859 | 5.840426 |
| 0 |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 1701.038 | 0 | 763.1249 | 20.7766 | 1709.09 | 776.8442 | 11.68085 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005.899 | 0 | 1153.166 | 11.87234 | 2043.95 | 1141.919 | 2.920213 |
| 1851.259 | 0 | 883.953 | 17.80851 | 1817.811 | 899.9506 | 5.840426 |
| 2014.736 | 0 | 646.5363 | 2.968085 | 1956.973 | 664.3504 | 0 |
| 3194.416 | 0 | 1172.245 | 23.74468 | 3178.994 | 1178.001 | 11.68085 |
| 1873.351 | 0 | 744.0467 | 11.87234 | 1948.276 | 706.8009 | 5.840426 |
| 1405.013 | 0 | 602.0207 | 8.904255 | 1391.625 | 611.2872 | 2.920213 |
| 1868.932 | 0 | 782.203 | 8.904255 | 1835.206 | 800.192 | 2.920213 |
| 1793.822 | 0 | 943.3071 | 11.87234 | 1822.16 | 933.911 | 8.760638 |
| 1458.032 | 0 | 595.6613 | 5.93617 | 1491.649 | 573.0818 | 5.840426 |
| 852.728 | 0 | 262.8541 | 2.968085 | 856.7194 | 265.3156 | 2.920213 |
| 1206.19 | 0 | 137.7864 | 0 | 1187.23 | 137.9641 | 2.920213 |
| 2045.664 | 0 | 826.7186 | 5.93617 | 2004.81 | 836.2749 | 11.68085 |
| 1241.537 | 0 | 877.5936 | 20.7766 | 1282.905 | 870.2353 | 5.840426 |
| 2019.154 | 0 | 977.2238 | 17.80851 | 2017.857 | 991.2192 | 2.920213 |
| 631.814 | 0 | 226.8177 | 5.93617 | 652.3244 | 220.7426 | 2.920213 |
| 2399.126 | 0 | 782.203 | 8.904255 | 2439.693 | 768.3541 | 2.920213 |
| 2642.131 | 0 | 629.578 | 17.80851 | 2731.065 | 590.062 | 8.760638 |
| 1891.024 | 0 | 1066.255 | 20.7766 | 1970.02 | 1037.915 | 8.760638 |
| 1356.412 | 0 | 807.6405 | 8.904255 | 1382.928 | 798.0694 | 2.920213 |
| 901.3291 | 0 | 406.9999 | 2.968085 | 913.2542 | 403.2798 | 0 |
| 998.5312 | 0 | 498.151 | 8.904255 | 995.8819 | 498.7934 | 5.840426 |
| 1709.874 | 0 | 858.5155 | 5.93617 | 1783.02 | 825.6623 | 2.920213 |
| 3017.685 | 0 | 919.9894 | 14.84043 | 3070.274 | 906.3182 | 8.760638 |
| 1471.287 | 0 | 629.578 | 5.93617 | 1461.207 | 636.7575 |  |
| 1564.071 | 0 | 373.0833 | 0 | 1587.323 | 352.3392 | 0 |
| 2019.154 | 0 | 712.2499 | 2.968085 | 2070.043 | 696.1882 | 2.920213 |
| 2483.073 | 0 | 996.3019 | 11.87234 | 2557.112 | 953.0138 | 2.920213 |
| 2536.093 | 0 | 748.2863 | 17.80851 | 2578.856 | 732.2712 | 2.920213 |
| 1723.129 | 0 | 1064.135 | 5.93617 | 1752.578 | 1048.527 | 0 |
| 985.2764 | 0 | 489.6718 | 5.93617 | 1030.673 | 475.4456 | 2.920213 |
| 2676.412 | 0 | 1588.193 | 5.884615 | 2708.123 | 1517.193 | 11.03226 |
| 1493.379 | 0 | 1040.818 | 14.84043 | 1552.532 | 1008.199 | 5.840426 |
| 1449.196 | 0 | 640.177 | 8.904255 | 1439.463 | 647.3702 | 2.920213 |
| 1639.182 | 0 | 680.453 | 14.84043 | 1769.974 | 624.0224 | 11.68085 |
| 1126.661 | 0 | 411.2395 | 2.968085 | 1121.998 | 409.6473 | 0 |
| 2341.688 | 0 | 663.4947 | 5.93617 | 2435.344 | 619.7773 | 8.760638 |
| 1016.204 | 0 | 608.3801 | 8.904255 | 1026.324 | 600.6746 | 0 |
| 1113.429 | 0 | 727.5522 | 0 | 1144.978 | 689.835 |  |
| 1066.383 | 0 | 896.1313 | 8.826923 | 1140 | 851.7576 | 0 |
| 632.1778 | 0 | 480.8298 | 3.779006 | 653.5181 | 470.6754 | 5.870968 |
| 893.8799 | 0 | 525.7008 | 0 | 920.961 | 496.8586 | 0 |
| 757.9684 | 0 | 607.7722 | 2.942308 | 791.5286 | 583.3652 | 2.758065 |
| 871.1718 | 0 | 548.6647 | 0 | 865.0615 | 553.8551 | 2.935484 |
| 972.2904 | 0 | 856.2047 | 5.884615 | 985.6771 | 836.2308 | 5.516129 |
| 994.5235 | 0 | 580.587 | 3.779006 | 1019.942 | 570.0853 | 2.935484 |
| 1364.343 | 0 | 869.5135 | 0 | 1453.625 | 809.6134 | 0 |


| 813.3506 | 0 | 504.7715 | 3.779006 | 838.6186 | 492.9919 | 2.935484 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 799.7873 | 0 | 658.7896 | 11.76923 | 831.354 | 641.0363 | 2.758065 |
| 871.1718 | 0 | 606.5239 | 3.779006 | 917.9474 | 588.3443 | 0 |
| 648.1936 | 0 | 476.9016 | 5.884615 | 662.0963 | 461.3687 | 2.758065 |
| 1572.735 | 0 | 798.0578 | 18.89503 | 1624.351 | 783.1065 | 5.870968 |
| 285.2509 | 0 | 235.427 | 0 | 271.9844 | 241.424 | 2.935484 |
| 713.1273 | 0 | 492.8007 | 3.779006 | 732.8469 | 486.9056 | 2.935484 |
| 670.7252 | 0 | 347.1551 | 3.779006 | 672.4059 | 346.9202 | 0 |
| 2279.832 | 0 | 1089.573 | 11.87234 | 2361.414 | 1057.017 | 2.920213 |
| 2514.001 | 0 | 896.6717 | 17.80851 | 2578.856 | 893.5831 | 11.68085 |
| 2435.953 | 0 | 1315.361 | 14.71154 | 2499.04 | 1248.801 | 11.03226 |
| 1421.844 | 0 | 1439.577 | 5.884615 | 1593.014 | 1333.089 | 8.274194 |
| 1437.526 | 0 | 767.4788 | 5.884615 | 1488.472 | 718.6705 |  |
| 2337.27 | 0 | 797.0415 | 14.84043 | 2357.066 | 802.3145 | 5.840426 |
| 2354.943 | 0 | 409.1197 | 5.93617 | 2396.205 | 386.2996 | 2.920213 |
| 1923.671 | 0 | 1140.127 | 2.942308 | 1976.332 | 1080.224 | 0 |
| 1092.52 | 0 | 975.9846 | 5.884615 | 1125.066 | 942.7005 | 5.516129 |
| 1897.535 | 0 | 1322.015 | 8.826923 | 1966.376 | 1255.455 | 5.516129 |
| 904.3347 | 0 | 545.6641 | 2.942308 | 911.0046 | 514.6036 | 2.758065 |
| 3013.267 | 0 | 907.2707 | 11.87234 | 3052.878 | 902.0732 | 14.60106 |
| 551.2282 | 0 | 347.1551 | 7.558011 | 585.522 | 336.7764 | 2.935484 |
| 2062.287 | 0 | 1011.538 | 11.33702 | 2092.769 | 1008.3 | 2.935484 |
| 967.5403 | 0 | 351.1454 | 3.779006 | 1008.609 | 336.7764 | 2.935484 |
| 948.2666 | 0 | 309.2474 | 0 | 940.6127 | 310.4023 | 2.935484 |
| 1807.874 | 0 | 758.1549 | 0 | 1835.895 | 740.5023 | 5.870968 |
| 1545.752 | 0 | 345.16 | 7.558011 | 1563.91 | 332.7188 | 2.935484 |
| 1237.372 | 0 | 883.849 | 0 | 1239.04 | 884.5452 | 2.935484 |
| 1946.645 | 0 | 470.8541 | 3.779006 | 1979.442 | 466.6179 |  |
| 3079.939 | 0 | 959.6645 | 11.33702 | 3192.039 | 921.0631 | 0 |
| 2713.739 | 0 | 1240.98 | 26.45304 | 2780.285 | 1221.322 | 14.67742 |
| 1973.628 | 0 | 644.4317 | 11.33702 | 2005.885 | 639.0636 | 8.806452 |
| 2332.119 | 0 | 317.228 | 11.33702 | 2455.415 | 284.0283 | 2.935484 |
| 2370.667 | 0 | 1039.47 | 11.33702 | 2466.747 | 1010.329 | 8.806452 |
| 3052.956 | 0 | 1025.504 | 11.33702 | 3176.929 | 985.9839 | 11.74194 |
| 2100.835 | 0 | 594.553 | 15.11602 | 2183.43 | 568.0565 | 5.870968 |
| 2216.477 | 0 | 748.1792 | 3.779006 | 2251.426 | 750.6462 | 0 |
| 2274.298 | 0 | 829.9801 | 11.33702 | 2304.312 | 825.7108 | 5.870968 |
| 1742.344 | 0 | 716.2569 | 11.33702 | 1794.342 | 689.783 | 2.935484 |
| 2043.013 | 0 | 686.3297 | 11.33702 | 2043.661 | 683.6966 | 2.935484 |
| 1904.243 | 0 | 796.0626 | 3.779006 | 1960.554 | 779.049 | 5.870968 |
| 1811.729 | 0 | 770.1258 | 3.779006 | 1790.564 | 783.1065 | 0 |
| 1524.307 | 0 | 485.4322 | 0 | 1513.393 | 488.1808 | 0 |
| 1800.165 | 0 | 666.3783 | 11.33702 | 1869.893 | 639.0636 | 2.935484 |
| 2305.136 | 0 | 375.0872 | 15.11602 | 2304.312 | 338.8052 | 5.870968 |
| 3072.23 | 0 | 424.9658 | 18.89503 | 3158.041 | 375.3231 | 11.74194 |
| 2370.667 | 0 | 550.6599 | 7.558011 | 2462.97 | 515.3084 | 2.935484 |
| 737.8527 | 0 | 322.2083 | 5.93617 | 743.6498 | 320.5013 |  |


| 914.5839 | 0 | 351.8854 | 5.93617 | 926.3007 | 356.5842 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2425.636 | 0 | 621.0988 | 5.93617 | 2478.833 | 617.6548 | 2.920213 |
| 1977.483 | 0 | 588.5676 | 3.779006 | 2092.769 | 549.7976 | 2.935484 |
| 547.3734 | 0 | 145.6455 | 3.779006 | 608.1873 | 129.8415 | 0 |
| 1857.986 | 0 | 608.5191 | 15.11602 | 1952.999 | 576.1716 | 8.806452 |
| 1599.417 | 0 | 703.7707 | 2.968085 | 1617.765 | 711.0459 | 2.920213 |
| 1642.12 | 0 | 177.5679 | 7.558011 | 1631.906 | 174.4745 | 2.935484 |
| 1437.819 | 0 | 472.8492 | 3.779006 | 1473.249 | 470.6754 | 0 |
| 1528.725 | 0 | 604.1405 | 14.84043 | 1561.23 | 604.9197 | 2.920213 |
| 1219.445 | 0 | 436.677 | 8.904255 | 1248.114 | 428.7501 | 2.920213 |
| 1569.303 | 0 | 569.3561 | 2.968085 | 1602.669 | 557.0578 | 0 |
| 424.0217 | 0 | 69.83006 | 3.779006 | 438.1971 | 66.94952 | 2.935484 |
| 1322.177 | 0 | 476.8395 | 3.779006 | 1427.918 | 434.1575 | 0 |
| 2278.153 | 0 | 668.3734 | 15.11602 | 2398.751 | 618.7759 | 11.74194 |
| 1268.21 | 0 | 446.9124 | 3.779006 | 1386.365 | 419.9561 | 2.935484 |
| 2085.428 | 0 | 773.7238 | 8.904255 | 2191.81 | 740.7613 | 14.60106 |
| 1241.537 | 0 | 551.1457 | 14.84043 | 1261.161 | 543.3664 | 8.760638 |
| 1884.969 | 0 | 335.1843 | 15.11602 | 1934.111 | 324.6037 | 5.870968 |
| 1372.288 | 0 | 714.2617 | 15.11602 | 1511.024 | 671.524 | 2.935484 |
| 958.7667 | 0 | 502.3905 | 0 | 974.1378 | 496.6709 | 0 |
| 1453.238 | 0 | 610.5142 | 3.779006 | 1488.359 | 596.4594 | 5.870968 |
| 1800.165 | 0 | 818.0092 | 15.11602 | 1839.672 | 815.5669 | 11.74194 |
| 2505.583 | 0 | 700.2957 | 26.45304 | 2625.405 | 653.265 | 14.67742 |
| 1669.103 | 0 | 670.3685 | 3.779006 | 1749.011 | 645.1499 | 11.74194 |
| 932.257 | 0 | 432.4374 | 11.87234 | 961.0913 | 422.3825 | 2.920213 |
| 1652.437 | 0 | 294.651 | 2.968085 | 1674.299 | 282.2958 | 0 |
| 1295.193 | 0 | 676.354 | 3.779006 | 1291.926 | 691.8117 | 2.935484 |
| 982.9593 | 0 | 570.6113 | 7.558011 | 970.8332 | 584.2867 | 0 |
| 2914.185 | 0 | 662.388 | 7.558011 | 2988.051 | 641.0924 | 8.806452 |
| 1272.065 | 0 | 905.7956 | 3.779006 | 1246.595 | 937.2933 | 0 |
| 1210.389 | 0 | 831.9752 | 3.779006 | 1227.707 | 829.7683 | 0 |
| 2081.561 | 0 | 706.2811 | 11.33702 | 2107.879 | 701.9556 | 5.870968 |
| 1106.311 | 0 | 395.0386 | 7.558011 | 1121.936 | 397.6396 | 2.935484 |
| 736.2558 | 0 | 566.621 | 0 | 781.9552 | 563.999 | 0 |
| 1306.758 | 0 | 399.0289 | 15.11602 | 1325.924 | 405.7547 | 8.806452 |
| 1522.623 | 0 | 995.5771 | 3.779006 | 1507.247 | 1008.3 | 2.935484 |
| 1036.926 | 0 | 532.7036 | 7.558011 | 1027.497 | 535.5962 | 5.870968 |
| 1379.998 | 0 | 1530.276 | 11.33702 | 1341.034 | 1584.472 | 2.935484 |
| 1036.926 | 0 | 764.1403 | 0 | 1042.607 | 770.9339 | 0 |
| 1734.634 | 0 | 841.951 | 3.779006 | 1798.119 | 821.6532 | 5.870968 |
| 1568.88 | 0 | 1191.101 | 11.33702 | 1601.686 | 1190.89 | 0 |
| 1626.701 | 0 | 341.1697 | 3.779006 | 1673.46 | 318.5174 | 0 |
| 3980.87 | 0 | 1579.245 | 11.87234 | 3935.691 | 1600.384 | 8.760638 |
| 1665.249 | 0 | 654.4074 | 11.33702 | 1722.568 | 647.1787 | 0 |
| 1642.12 | 0 | 484.8201 | 7.558011 | 1639.462 | 488.9344 | 5.870968 |
| 2752.286 | 0 | 620.4899 | 15.11602 | 2799.173 | 600.5169 | 8.806452 |
| 2328.264 | 0 | 758.1549 | 18.89503 | 2372.308 | 738.4735 | 14.67742 |


| 2197.203 | 0 | 1007.548 | 11.33702 | 2270.314 | 975.84 | 2.935484 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3149.325 | 0 | 905.7956 | 11.33702 | 3188.262 | 892.6603 | 2.935484 |
| 3053.031 | 0 | 801.2811 | 8.904255 | 3144.204 | 751.3739 | 2.920213 |
| 1497.797 | 0 | 773.7238 | 8.904255 | 1517.741 | 766.2316 | 2.920213 |
| 462.5691 | 0 | 247.3979 | 3.779006 | 472.1951 | 245.4816 | 2.935484 |
| 2014.736 | 0 | 820.3592 | 11.87234 | 2048.299 | 810.8046 | 8.760638 |
| 1117.875 | 0 | 438.9318 | 18.89503 | 1171.044 | 415.8985 | 8.806452 |
| 1272.465 | 0 | 93.27082 | 5.93617 | 1274.207 | 517.8961 | 5.840426 |
| 1734.634 | 0 | 740.1986 | 15.11602 | 1767.899 | 732.3872 | 8.806452 |
| 1153.171 | 0 | 544.7864 | 17.80851 | 1148.091 | 556.1016 | 2.920213 |
| 1642.12 | 0 | 688.3248 | 18.89503 | 1635.684 | 706.0131 | 14.67742 |
| 2019.154 | 0 | 669.854 | 11.87234 | 2056.996 | 668.5954 | 8.760638 |
| 1279.774 | 0 | 456.8881 | 15.11602 | 1337.257 | 442.2726 | 2.935484 |
| 1290.138 | 0 | 589.302 | 0 | 1274.207 | 592.1845 | 0 |
| 666.8704 | 0 | 351.1454 | 3.779006 | 661.0732 | 357.0641 | 0 |
| 1800.165 | 0 | 620.4899 | 15.11602 | 1881.225 | 600.5169 | 8.806452 |
| 1674.528 | 0 | 765.2447 | 17.80851 | 1739.532 | 755.6189 | 5.840426 |
| 1184.099 | 0 | 400.6406 | 11.87234 | 1200.277 | 401.1572 | 2.920213 |
| 1329.902 | 0 | 565.9843 | 17.80851 | 1335.091 | 568.8367 | 5.840426 |
| 1241.537 | 0 | 780.0832 | 8.904255 | 1278.556 | 770.4766 |  |
| 2147.284 | 0 | 606.2603 | 11.87234 | 2157.019 | 611.2872 | 0 |
| 1029.459 | 0 | 317.9687 | 8.904255 | 1017.626 | 322.6238 | 8.760638 |
| 1642.12 | 0 | 654.4074 | 3.779006 | 1673.46 | 647.1787 | 5.870968 |
| 998.5312 | 0 | 748.2863 | 5.93617 | 1017.626 | 740.7613 | 5.840426 |
| 852.728 | 0 | 512.9895 | 11.87234 | 861.0682 | 522.1412 | 0 |
| 2456.564 | 0 | 1057.776 | 23.74468 | 2548.414 | 1020.935 | 8.760638 |
| 1992.644 | 0 | 771.604 | 14.84043 | 2004.81 | 759.864 | 8.760638 |
| 1166.426 | 0 | 1013.26 | 5.93617 | 1195.928 | 993.3417 | 8.760638 |
| 1838.004 | 0 | 680.453 | 14.84043 | 1852.601 | 674.963 | 8.760638 |
| 618.5592 | 0 | 256.4947 | 0 | 621.8826 | 246.2129 | 0 |
| 1427.104 | 0 | 404.8801 | 0 | 1413.37 | 413.8924 | 2.920213 |
| 3296.037 | 0 | 1178.604 | 11.87234 | 3300.762 | 1173.756 | 8.760638 |
| 636.2323 | 0 | 248.0156 | 8.904255 | 652.3244 | 244.0904 | 2.920213 |
| 1265.023 | 0 | 1807.79 | 0 | 1349.083 | 1761.186 | 0 |
| 1134.339 | 0 | 807.4054 | 0 | 1135.022 | 785.2141 | 2.758065 |
| 1150.021 | 0 | 769.6969 | 11.76923 | 1199.738 | 734.1973 | 5.516129 |
| 2204.722 | 0 | 1034.458 | 2.968085 | 2226.601 | 1027.302 | 2.920213 |
| 1471.287 | 0 | 807.6405 | 5.93617 | 1487.3 | 793.8244 | 5.840426 |
| 1634.764 | 0 | 574.4634 | 0 | 1639.509 | 575.2043 | 0 |
| 2045.664 | 0 | 881.8332 | 5.93617 | 2056.996 | 874.4803 | 8.760638 |
| 1542.074 | 0 | 1364.16 | 5.884615 | 1712.49 | 1266.546 | 0 |
| 2637.713 | 0 | 1373.625 | 11.87234 | 2696.274 | 1349.926 | 14.60106 |
| 1811.495 | 0 | 1019.62 | 14.84043 | 1809.113 | 1035.792 | 2.920213 |
| 1533.143 | 0 | 784.3228 | 2.968085 | 1526.439 | 791.7019 | 0 |
| 2575.857 | 0 | 975.104 | 14.84043 | 2591.902 | 969.994 | 14.60106 |
| 1447.981 | 0 | 827.3688 | 8.826923 | 1478.516 | 787.4322 | 8.274194 |
| 1625.711 | 0 | 1228.853 | 11.76923 | 1792.14 | 1137.895 | 2.758065 |


| 2147.284 | 0 | 951.7863 | 2.968085 | 2183.112 | 933.911 | 2.920213 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742.2863 | 0 | 783.0058 | 2.942308 | 826.3758 | 738.6336 | 0 |
| 1228.282 | 0 | 922.1092 | 11.87234 | 1195.928 | 944.5237 | 5.840426 |
| 2107.519 | 0 | 780.0832 | 2.968085 | 2139.624 | 770.4766 | 2.920213 |
| 1316.647 | 0 | 496.0312 | 5.93617 | 1326.393 | 490.3033 |  |
| 1798.215 | 0 | 1663.61 | 11.76923 | 1926.551 | 1572.646 | 8.274194 |
| 1952.88 | 0 | 811.8801 | 11.87234 | 2004.81 | 783.2118 | 5.840426 |
| 1573.438 | 0 | 807.4054 | 5.884615 | 1602.97 | 774.1235 | 2.758065 |
| 1356.412 | 0 | 652.8957 | 5.93617 | 1391.625 | 634.635 | 5.840426 |
| 2420.271 | 0 | 1801.135 | 2.942308 | 2518.953 | 1721.26 | 2.758065 |
| 1228.431 | 0 | 1055.838 | 5.884615 | 1284.367 | 1015.898 |  |
| 1312.229 | 0 | 794.9217 | 11.87234 | 1339.439 | 793.8244 |  |
| 1824.75 | 0 | 805.5207 | 8.904255 | 1926.531 | 781.0892 | 2.920213 |
| 3685.294 | 0 | 1233.29 | 14.71154 | 3743.582 | 1175.603 | 5.516129 |
| 2153.676 | 0 | 1259.907 | 8.826923 | 2284.979 | 1184.475 | 2.758065 |
| 1061.156 | 0 | 652.1352 | 2.942308 | 1070.306 | 625.5095 | 2.758065 |
| 648.1936 | 0 | 337.1583 | 0 | 672.0526 | 314.9729 |  |
| 1343.434 | 0 | 860.641 | 0 | 1388.909 | 816.2677 |  |
| 1505.482 | 0 | 736.4247 | 8.826923 | 1538.254 | 696.4893 |  |
| 2673.059 | 0 | 877.5936 | 14.84043 | 2744.111 | 868.1128 | 2.920213 |
| 1813.897 | 0 | 1084.674 | 8.826923 | 1956.42 | 993.7172 | 5.516129 |
| 2070.038 | 0 | 1410.741 | 11.76923 | 2110.743 | 1359.707 | 13.79032 |
| 1202.295 | 0 | 845.1139 | 5.884615 | 1254.498 | 805.1771 |  |
| 1547.301 | 0 | 1215.544 | 11.76923 | 1568.123 | 1173.385 | 5.516129 |
| 1897.535 | 0 | 1466.195 | 8.826923 | 1996.245 | 1397.415 | 2.758065 |
| 1291.16 | 0 | 563.4093 | 0 | 1304.28 | 527.9123 | 2.758065 |
| 3053.031 | 0 | 1072.614 | 8.904255 | 3087.669 | 1063.385 | 2.920213 |
| 2699.569 | 0 | 953.9061 | 2.968085 | 2731.065 | 931.7885 | 8.760638 |
| 1745.941 | 0 | 767.4788 | 11.76923 | 1802.097 | 709.798 | 13.79032 |
| 2127.539 | 0 | 1228.853 | 14.71154 | 2205.328 | 1160.076 | 2.758065 |
| 1223.204 | 0 | 1208.89 | 8.826923 | 1324.193 | 1137.895 | 2.758065 |
| 1298.974 | 0 | 368.8437 | 17.80851 | 1356.835 | 345.9716 | 11.68085 |
| 1458.436 | 0 | 638.8263 | 5.884615 | 1488.472 | 603.3283 | 2.758065 |
| 3207.671 | 0 | 1233.719 | 8.904255 | 3279.017 | 1203.472 | 2.920213 |
| 1249.341 | 0 | 638.8263 | 2.942308 | 1289.345 | 596.674 | 2.758065 |
| 1782.532 | 0 | 1091.328 | 2.942308 | 1856.856 | 1026.989 | 2.758065 |
| 491.3726 | 0 | 363.7761 | 0 | 497.8167 | 359.3352 | 2.758065 |
| 1400.935 | 0 | 776.3514 | 11.76923 | 1498.428 | 716.4524 | 5.516129 |
| 1970.718 | 0 | 749.7336 | 8.826923 | 1986.289 | 709.798 | 2.758065 |
| 1348.661 | 0 | 472.4653 | 0 | 1383.931 | 439.1875 | 0 |
| 525.7753 | 0 | 222.5781 | 2.968085 | 500.1154 | 235.6003 | 5.840426 |
| 420.1741 | 0 | 774.9092 | 5 | 399.0867 | 755.8908 | 6.615385 |
| 508.0183 | 0 | 1882.758 | 0 | 650.558 | 1734.371 | 1.8 |
| 604.6408 | 0 | 889.8809 | 2.5 | 631.4663 | 861.2574 | 0 |
| 355.6128 | 0 | 959.7174 | 0 | 439.6875 | 853.4208 | 1.8 |
| 471.4149 | 0 | 984.1576 | 7.5 | 454.6557 | 966.624 | 0 |
| 650.7575 | 0 | 977.2593 | 0 | 636.518 | 957.4616 | 3.307692 |


| 1403.996 | 0 | 1404.954 | 15 | 1374.071 | 1372.056 | 6.615385 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 835.2242 | 0 | 1255.491 | 10 | 843.6389 | 1230.04 | 0 |
| 1204.158 | 0 | 1154.316 | 5 | 1172.001 | 1138.417 | 3.307692 |
| 424.8881 | 0 | 1566.927 | 10 | 529.4196 | 1447.276 | 0 |
| 1255.398 | 0 | 1874.038 | 0 | 1343.76 | 1779.779 | 3.307692 |
| 1228.481 | 0 | 1711.598 | 5 | 1395.335 | 1525.932 | 5.4 |
| 1424.493 | 0 | 1618.801 | 0 | 1404.381 | 1580.499 | 0 |
| 1322.011 | 0 | 1625.7 | 12.5 | 1267.984 | 1585.08 | 6.615385 |
| 799.3557 | 0 | 1662.491 | 7.5 | 803.2251 | 1624.02 | 6.615385 |
| 379.1815 | 0 | 703.6267 | 5 | 363.7246 | 687.1734 | 0 |
| 1588.463 | 0 | 1425.649 | 22.5 | 1651.916 | 1353.732 | 3.307692 |
| 717.3705 | 0 | 1280.785 | 2.5 | 681.9836 | 1255.237 | 3.307692 |
| 681.5019 | 0 | 1034.745 | 2.5 | 631.4663 | 1039.922 | 0 |
| 778.8594 | 0 | 1230.197 | 2.5 | 793.1216 | 1188.81 | 0 |
| 0 | 0 | 1561.901 | 264.6875 | 948.3933 | 1290.466 | 2.8 |
| 0 | 0 | 1294.316 | 128.5625 | 469.0424 | 1138.646 | 5.6 |
| 0 | 0 | 973.2147 | 196.625 | 711.295 | 764.6518 | 5.6 |
| 0 | 0 | 1464.777 | 158.8125 | 670.0605 | 1251.585 | 0 |
| 0 | 0 | 1684.791 | 98.3125 | 608.2088 | 1462.651 | 0 |
| 1843.156 | 0 | 1571.313 | 10.2381 | 1773.735 | 1608.335 | 0 |
| 1515.719 | 0 | 1539.887 | 6.142857 | 1491.429 | 1578.94 | 0 |
| 1748.094 | 0 | 1464.464 | 6.142857 | 1784.388 | 1461.359 | 2.5 |
| 1357.281 | 0 | 2074.133 | 10.2381 | 1342.286 | 2091.255 | 2.5 |
| 1478.75 | 0 | 1106.204 | 10.2381 | 1438.163 | 1140.112 | 5 |
| 518.4342 | 0 | 1399.671 | 3.733333 | 552.2896 | 1366.621 | 1.421053 |
| 712.5147 | 0 | 2045.9 | 7.466667 | 774.6717 | 1993.05 | 1.421053 |
| 470.5787 | 0 | 1345.329 | 2.488889 | 562.0646 | 1282.407 | 0 |
| 428.0405 | 0 | 848.9088 | 1.244444 | 449.6517 | 825.8821 | 0 |
| 122.2973 | 0 | 207.0867 | 1.244444 | 136.8505 | 196.4979 | 0 |
| 369.5505 | 0 | 831.2844 | 2.488889 | 383.6702 | 806.6755 | 0 |
| 194.0805 | 0 | 688.8204 | 0 | 234.6009 | 660.4102 | 0 |
| 215.3496 | 0 | 624.1976 | 1.244444 | 237.0446 | 599.8356 | 0 |
| 677.9524 | 0 | 873.8767 | 4.977778 | 698.9151 | 830.3143 | 2.842105 |
| 273.8396 | 0 | 414.1735 | 1.244444 | 303.0261 | 395.9506 | 0 |
| 342.9642 | 0 | 1202.866 | 1.244444 | 412.9953 | 1142.052 | 2.842105 |
| 356.2573 | 0 | 609.5106 | 1.244444 | 356.7889 | 593.9259 | 1.421053 |
| 241.936 | 0 | 747.5685 | 1.244444 | 254.151 | 735.759 | 2.842105 |
| 308.4019 | 0 | 710.8509 | 2.488889 | 400.7765 | 655.9779 | 1.421053 |
| 374.8678 | 0 | 1100.057 | 6.222222 | 422.7704 | 1057.838 | 0 |
| 287.1328 | 0 | 575.7305 | 1.244444 | 312.8012 | 556.9902 | 1.421053 |
| 313.7192 | 0 | 916.469 | 0 | 361.6764 | 880.5469 | 1.421053 |
| 491.8478 | 0 | 1170.554 | 4.977778 | 520.5207 | 1133.187 | 2.842105 |
| 491.8478 | 0 | 1223.427 | 2.488889 | 535.1833 | 1174.555 | 1.421053 |
| 316.3778 | 0 | 945.843 | 3.733333 | 369.0076 | 908.618 | 2.842105 |
| 616.8038 | 0 | 837.1592 | 3.733333 | 659.815 | 780.0818 | 0 |
| 552.9965 | 0 | 572.7931 | 1.244444 | 586.5022 | 527.4417 | 1.421053 |
| 372.2092 | 0 | 425.9231 | 0 | 381.2264 | 400.3829 | 1.421053 |
| 0 |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 438.993 | 0 | 1446.194 | 0 | 455.9282 | 1422.626 | 2.125 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 856.8806 | 0 | 2332.897 | 0 | 900.0652 | 2292.009 | 2.125 |
| 721.8058 | 0 | 1500.73 | 0 | 770.3615 | 1459.104 | 2.125 |
| 692.2582 | 0 | 1343.183 | 1.677419 | 731.0573 | 1321.3 | 2.125 |
| 270.1496 | 0 | 1215.934 | 0 | 318.3637 | 1179.442 | 0 |
| 291.255 | 0 | 1090.705 | 0 | 369.4591 | 1053.797 | 0 |
| 612.0576 | 0 | 1854.199 | 0 | 660.3098 | 1805.641 | 2.125 |
| 363.0135 | 0 | 1034.15 | 0 | 381.2503 | 1011.24 | 0 |
| 375.6767 | 0 | 1084.646 | 3.354839 | 420.5545 | 1063.93 | 0 |
| 1477.38 | 0 | 1767.347 | 10.06452 | 1509.28 | 1724.58 | 4.25 |
| 704.9215 | 0 | 1569.404 | 5.032258 | 770.3615 | 1515.847 | 6.375 |
| 835.7752 | 0 | 1246.232 | 8.387097 | 907.926 | 1193.628 | 4.25 |
| 531.8569 | 0 | 939.2185 | 1.677419 | 526.6757 | 930.1787 | 2.125 |
| 1084.819 | 0 | 1577.483 | 1.677419 | 1100.516 | 1532.059 | 6.375 |
| 890.6493 | 0 | 1292.688 | 0 | 943.2998 | 1240.238 | 2.125 |
| 937.0813 | 0 | 1397.719 | 1.677419 | 986.5344 | 1349.671 | 2.125 |
| 1198.789 | 0 | 2092.538 | 5.032258 | 1375.646 | 1961.684 | 4.25 |
| 1211.452 | 0 | 1753.208 | 5.032258 | 1249.872 | 1722.553 | 2.125 |
| 738.6902 | 0 | 1129.082 | 1.677419 | 793.944 | 1067.983 | 2.125 |
| 1105.925 | 0 | 1173.518 | 5.032258 | 1159.473 | 1124.726 | 0 |
| 1595.571 | 0 | 2029.924 | 1.677419 | 1631.123 | 1967.764 | 4.25 |
| 0 | 0 | 150.4984 | 0 | 46.68642 | 136.0768 | 0 |
| 0 | 0 | 608.8343 | 2.889831 | 254.1816 | 501.1611 | 0 |
| 0 | 0 | 1484.461 | 54.90678 | 503.1759 | 1257.881 | 2 |
| 0 | 0 | 1433.155 | 31.78814 | 469.4579 | 1188.183 | 0 |
| 0 | 0 | 407.0297 | 23.11864 | 134.8719 | 351.8084 | 0 |
| 0 | 0 | 299.2865 | 5.779661 | 59.65488 | 278.7916 | 0 |
| 0 | 0 | 622.516 | 43.34746 | 295.6807 | 532.6911 | 2 |
| 0 | 0 | 1542.608 | 92.47458 | 575.7992 | 1320.941 | 2 |
| 0 | 0 | 822.6104 | 86.69492 | 373.4914 | 738.4658 | 0 |
| 464.7263 | 0 | 1338.697 | 1.5 | 598.5571 | 1227.53 | 0 |
| 586.2701 | 0 | 1236.82 | 1.5 | 653.8586 | 1154.401 | 0 |
| 253.812 | 0 | 924.0404 | 1.5 | 361.0861 | 835.7654 | 1.384615 |
| 418.2536 | 0 | 882.9322 | 1.5 | 520.4844 | 799.2006 | 0 |
| 561.2464 | 0 | 1501.342 | 4.5 | 744.9433 | 1356.378 | 1.384615 |
| 521.9234 | 0 | 1467.383 | 0 | 647.3525 | 1340.707 | 1.384615 |
| 586.2701 | 0 | 1638.965 | 3 | 764.4615 | 1488.707 | 1.384615 |
| 711.3887 | 0 | 1655.051 | 4.5 | 946.6311 | 1464.331 | 4.153846 |
| 693.5146 | 0 | 1462.021 | 1.5 | 839.2811 | 1312.848 | 4.153846 |
| 550.5219 | 0 | 2536.196 | 4.5 | 790.4857 | 2326.214 | 4.153846 |
| 529.073 | 0 | 1415.551 | 0 | 653.8586 | 1298.919 | 0 |
| 612.2687 | 0 | 967.437 | 5.294118 | 639.7005 | 955.5207 | 2.833333 |
| 798.6113 | 0 | 1439.09 | 7.941176 | 832.487 | 1425.522 | 5.666667 |
| 412.6158 | 0 | 366.3537 | 0 | 433.7695 | 361.3686 | 0 |
| 1011.574 | 0 | 1145.13 | 5.294118 | 981.4583 | 1172.785 | 2.833333 |
| 266.2038 | 0 | 820.4568 | 7.941176 | 525.7813 | 831.3695 | 2.833333 |
| 0 | 0 | 456.2968 | 0 | 280.4167 | 452.265 | 0 |
|  |  |  |  |  |  | 0 |


| 922.8397 | 0 | 1274.56 | 7.941176 | 863.1576 | 1314.672 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 598.9585 | 0 | 892.85 | 0 | 556.4518 | 904.53 | 0 |
| 918.403 | 0 | 1522.452 | 0 | 858.776 | 1554.107 | 0 |
| 763.1175 | 0 | 989.3744 | 10.58824 | 758.0013 | 999.8604 | 2.833333 |
| 0 | 0 | 293.0738 | 29 | 119.9753 | 267.889 | 0 |
| 0 | 0 | 161.8012 | 0 | 64.78668 | 156.8853 | 0 |
| 0 | 0 | 297.6531 | 21.75 | 105.5783 | 285.6496 | 0 |
| 0 | 0 | 178.5919 | 7.25 | 71.9852 | 148.005 | 0 |
| 0 | 0 | 265.5981 | 3.625 | 67.18619 | 245.6882 | 0 |
| 0 | 0 | 273.2303 | 7.25 | 105.5783 | 244.2082 | 0 |
| 0 | 0 | 164.854 | 0 | 28.79408 | 156.8853 | 0 |
| 0 | 0 | 183.1711 | 14.5 | 98.37978 | 171.6857 | 0 |
| 0 | 0 | 456.4014 | 10.875 | 119.9753 | 401.0934 | 3.5 |
| 0 | 0 | 937.2256 | 25.375 | 290.3403 | 837.7081 | 0 |
| 0 | 0 | 633.4668 | 7.25 | 131.9729 | 590.5398 | 0 |
| 0 | 0 | 917.3821 | 14.5 | 227.9531 | 833.2679 | 0 |
| 0 | 0 | 433.505 | 36.25 | 191.9605 | 378.8927 | 3.5 |
| 0 | 0 | 950.9634 | 14.5 | 189.561 | 877.6694 | 0 |
| 0 | 0 | 409.0822 | 10.875 | 131.9729 | 375.9326 | 0 |
| 370.142 | 0 | 867.5547 | 14.72414 | 407.6548 | 866.8136 | 0 |
| 675.5091 | 0 | 1079.762 | 18.93103 | 671.9585 | 1106.66 | 0 |
| 1475.941 | 0 | 1716.385 | 12.62069 | 1446.951 | 1746.251 | 0 |
| 855.9533 | 0 | 1441.764 | 10.51724 | 878.0257 | 1434.871 | 2.333333 |
| 1184.454 | 0 | 1487.534 | 4.206897 | 1124.41 | 1506.404 | 4.666667 |
| 364.6212 | 0 | 207.4401 | 1 | 375.3821 | 205.8583 | 0 |
| 82.59375 | 0 | 158.6307 | 0 | 84.31042 | 159.7707 | 0 |
| 308.2157 | 0 | 53.38533 | 0 | 323.1899 | 49.1602 | 0 |
| 410.9543 | 0 | 147.9536 | 0 | 429.5817 | 147.4806 | 0 |
| 282.0274 | 0 | 417.9309 | 1 | 275.0126 | 430.1518 | 0 |
| 598.3011 | 0 | 285.2302 | 0 | 608.2395 | 285.7437 | 4 |
| 110.7965 | 0 | 227.269 | 0 | 120.4435 | 227.3659 | 0 |
| 368.6502 | 0 | 190.6619 | 1 | 379.3969 | 195.1046 | 0 |
| 116.8399 | 0 | 120.4983 | 1 | 120.4435 | 121.3642 | 0 |
| 496.2751 | 0 | 637.5492 | 0 | 485.1618 | 631.6363 | 0 |
| 239.3383 | 0 | 358.972 | 0 | 232.331 | 351.3243 | 0 |
| 510.3538 | 0 | 532.8491 | 0 | 529.578 | 515.774 | 0 |
| 144.3069 | 0 | 424.4096 | 2.769231 | 174.2482 | 411.1242 | 0 |
| 278.0548 | 0 | 476.7597 | 1.384615 | 324.5801 | 452.2366 | 0 |
| 559.6294 | 0 | 562.7634 | 1.384615 | 591.0774 | 532.5927 | 0 |
| 351.9682 | 0 | 155.1806 | 0 | 338.2466 | 156.9747 | 6 |
| 271.0155 | 0 | 504.8044 | 0 | 269.9139 | 497.0866 | 0 |
| 644.1017 | 0 | 278.5772 | 1.384615 | 686.7431 | 250.412 | 0 |
| 351.9682 | 0 | 319.7094 | 0 | 355.3297 | 313.9494 | 0 |
| 337.8894 | 0 | 411.3221 | 1.384615 | 368.9963 | 388.6993 | 0 |
| 587.7868 | 0 | 613.2438 | 1.384615 | 563.7443 | 620.4238 | 0 |
| 274.5352 | 0 | 684.2904 | 2.769231 | 297.247 | 670.88 | 0 |
| 235.8187 | 0 | 551.5455 | 0 | 252.8308 | 538.199 | 0 |
| 0 |  |  |  |  |  | 0 |


| 594.8262 | 0 | 731.0315 | 2.769231 | 621.8271 | 723.2049 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 147.8266 | 0 | 286.0558 | 0 | 163.9983 | 274.7057 | 0 |
| 397.724 | 0 | 846.9496 | 1.384615 | 406.5792 | 837.1984 | 0 |
| 225.2596 | 0 | 824.5138 | 0 | 276.7472 | 792.3485 | 0 |
| 168.9447 | 0 | 616.9831 | 0 | 201.5813 | 599.8676 | 0 |
| 1140.377 | 0 | 265.4897 | 1.384615 | 1117.239 | 265.362 | 0 |
| 939.9027 | 0 | 822.3837 | 4.392157 | 1027.734 | 744.0967 | 6.292683 |
| 701.7941 | 0 | 1084.753 | 2.196078 | 783.405 | 998.656 | 2.097561 |
| 1081.932 | 0 | 672.4586 | 4.392157 | 1167.351 | 591.7962 | 2.097561 |
| 409.3799 | 0 | 610.7247 | 0 | 496.4151 | 539.5789 | 0 |
| 497.1041 | 0 | 798.1311 | 6.588235 | 570.1017 | 746.2724 | 0 |
| 509.6362 | 0 | 2266.516 | 6.588235 | 678.6925 | 2136.558 | 10.4878 |
| 601.5378 | 0 | 1144.282 | 4.392157 | 729.1096 | 1057.401 | 2.097561 |
| 463.6854 | 0 | 1450.747 | 4.392157 | 585.6146 | 1357.65 | 10.4878 |
| 355.0744 | 0 | 751.8307 | 2.196078 | 422.7284 | 696.2308 | 2.097561 |
| 313.3009 | 0 | 1053.886 | 2.196078 | 399.459 | 981.2503 | 2.097561 |
| 242.286 | 0 | 531.3525 | 2.196078 | 259.8423 | 509.1188 | 0 |
| 150.3844 | 0 | 368.1986 | 2.196078 | 186.1556 | 339.4125 | 0 |
| 480.3947 | 0 | 1018.609 | 4.392157 | 562.3452 | 950.7902 | 2.097561 |
| 568.119 | 0 | 1296.412 | 0 | 701.9619 | 1192.295 | 0 |
| 1432.83 | 0 | 2356.912 | 13.17647 | 1648.253 | 2171.37 | 6.292683 |
| 467.8627 | 0 | 1197.197 | 2.196078 | 624.3971 | 1076.982 | 0 |
| 467.8627 | 0 | 1657.996 | 4.392157 | 519.6845 | 1594.804 | 2.097561 |
| 1056.868 | 0 | 2412.032 | 8.784314 | 1272.064 | 2232.29 | 4.195122 |
| 534.7002 | 0 | 2555.343 | 0 | 605.0058 | 2460.741 | 2.097561 |
| 680.9073 | 0 | 1040.657 | 0 | 795.0397 | 948.6145 | 2.097561 |
| 346.7197 | 0 | 467.4138 | 0 | 356.7983 | 439.4957 | 0 |
| 538.8776 | 0 | 1497.047 | 4.392157 | 643.7883 | 1412.043 | 2.097561 |
| 743.5675 | 0 | 1274.364 | 4.392157 | 826.0657 | 1198.822 | 6.292683 |
| 371.7838 | 0 | 1470.59 | 2.196078 | 484.7803 | 1401.164 | 0 |
| 263.1728 | 0 | 1086.958 | 0 | 318.0159 | 1048.698 | 2.097561 |
| 346.7197 | 0 | 937.0324 | 2.196078 | 387.8243 | 905.1 | 2.097561 |
| 543.0549 | 0 | 1490.433 | 2.196078 | 620.5188 | 1368.529 | 0 |
| 1077.755 | 0 | 2134.229 | 4.392157 | 1334.115 | 1932.04 | 0 |
| 735.2128 | 0 | 1710.911 | 8.784314 | 915.2653 | 1566.519 | 6.292683 |
| 1061.046 | 0 | 1239.088 | 0 | 1147.96 | 1150.957 | 2.097561 |
| 405.2025 | 0 | 945.8515 | 0 | 539.0757 | 848.5313 | 0 |
| 513.8135 | 0 | 1560.986 | 2.196078 | 624.3971 | 1459.909 | 2.097561 |
| 956.6121 | 0 | 1602.877 | 2.196078 | 1078.151 | 1494.72 | 4.195122 |
| 814.5824 | 0 | 1924.775 | 2.196078 | 1016.1 | 1786.267 | 2.097561 |
| 756.0995 | 0 | 1607.286 | 0 | 950.1694 | 1466.436 | 0 |
| 476.2174 | 0 | 1170.739 | 2.196078 | 585.6146 | 1087.861 | 0 |
| 1712.522 | 0 | 1450.474 | 3.708333 | 1695.419 | 1456.318 | 0 |
| 1942.21 | 0 | 558.1527 | 7.416667 | 1962.94 | 544.9801 | 5.853659 |
| 1313.947 | 0 | 1526.34 | 1.854167 | 1384.425 | 1483.658 | 3.902439 |
| 2053.676 | 0 | 1051.278 | 11.125 | 2106.733 | 1017.053 | 9.756098 |
| 1732.789 | 0 | 997.0883 | 9.270833 | 1738.891 | 1006.117 | 0 |
|  |  |  |  |  |  | 0 |


| 1425.413 | 0 | 1136.175 | 5.5625 | 1431.241 | 1130.059 | 1.95122 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 516.7967 | 0 | 637.6307 | 1.854167 | 525.0113 | 637.9365 | 0 |
| 2266.474 | 0 | 935.6734 | 11.125 | 2327.439 | 889.4658 | 5.853659 |
| 2178.653 | 0 | 1264.424 | 3.708333 | 2173.614 | 1257.646 | 5.853659 |
| 1628.079 | 0 | 1092.823 | 5.5625 | 1655.291 | 1069.911 | 1.95122 |
| 719.4621 | 0 | 491.3189 | 3.708333 | 725.6526 | 490.2998 | 1.95122 |
| 743.1064 | 0 | 498.5441 | 1.854167 | 749.0608 | 492.1225 | 1.95122 |
| 1253.148 | 0 | 1184.945 | 3.708333 | 1290.792 | 1151.931 | 3.902439 |
| 1087.638 | 0 | 686.4013 | 1.854167 | 1136.967 | 657.986 | 1.95122 |
| 1483.774 | 0 | 89.2491 | 0 | 1478.617 | 82.70084 | 0 |
| 3107.536 | 0 | 236.6278 | 3.708333 | 3113.284 | 211.4304 | 1.95122 |
| 1901.677 | 0 | 675.5634 | 3.708333 | 1869.308 | 692.6168 | 0 |
| 472.8859 | 0 | 314.2996 | 1.854167 | 494.9151 | 309.8549 | 1.95122 |
| 317.5091 | 0 | 269.1416 | 0 | 364.4983 | 235.1252 | 1.95122 |
| 2065.08 | 0 | 66.11044 | 2.387097 | 2100.019 | 51.27452 | 2.125 |
| 1624.701 | 0 | 552.7337 | 1.854167 | 1625.194 | 543.1574 | 0 |
| 1734.281 | 0 | 72.72149 | 0 | 1727.178 | 66.16067 | 2.125 |
| 1348.886 | 0 | 208.2479 | 2.387097 | 1363.897 | 200.136 | 0 |
| 1124.793 | 0 | 272.7542 | 1.854167 | 1080.119 | 297.0962 | 0 |
| 905.6803 | 0 | 54.54112 | 2.387097 | 914.5757 | 51.27452 | 2.125 |
| 655.2847 | 0 | 218.5646 | 1.854167 | 658.7722 | 211.4304 | 0 |
| 1263.281 | 0 | 314.2996 | 3.708333 | 1290.792 | 304.3869 | 1.95122 |
| 1367.991 | 0 | 538.2832 | 5.5625 | 1381.081 | 523.108 | 1.95122 |
| 2126.101 | 0 | 117.346 | 4.774194 | 2157.379 | 104.2031 | 4.25 |
| 668.7957 | 0 | 410.0345 | 1.854167 | 668.8043 | 410.1021 | 0 |
| 560.7075 | 0 | 252.8847 | 0 | 535.0434 | 262.4653 | 0 |
| 104.7104 | 0 | 81.28437 | 1.854167 | 127.0728 | 71.08436 | 0 |
| 361.4199 | 0 | 50.57694 | 0 | 361.1543 | 49.21225 | 0 |
| 2723.464 | 0 | 168.5816 | 4.774194 | 2721.42 | 157.1316 | 2.125 |
| 222.9319 | 0 | 162.5687 | 1.854167 | 227.3934 | 162.2182 | 0 |
| 1131.548 | 0 | 289.0111 | 1.854167 | 1143.655 | 277.0467 | 1.95122 |
| 1530.124 | 0 | 812.8437 | 11.125 | 1524.874 | 811.0908 | 5.853659 |
| 1085.532 | 0 | 28.09694 | 2.387097 | 1086.656 | 24.81025 | 2.125 |
| 1131.548 | 0 | 915.8039 | 1.854167 | 1140.311 | 924.0967 | 1.95122 |
| 810.6615 | 0 | 886.9028 | 11.125 | 825.9733 | 885.8205 | 7.804878 |
| 1418.658 | 0 | 1027.796 | 11.125 | 1474.713 | 1004.294 | 5.853659 |
| 861.3279 | 0 | 720.7214 | 1.854167 | 869.4455 | 714.4889 | 5.853659 |
| 1391.636 | 0 | 1380.028 | 1.854167 | 1317.544 | 1418.042 | 7.804878 |
| 1290.303 | 0 | 870.6459 | 5.5625 | 1260.696 | 878.5298 | 1.95122 |
| 982.9271 | 0 | 632.2118 | 1.854167 | 1006.55 | 619.7098 | 1.95122 |
| 1530.124 | 0 | 1287.906 | 0 | 1501.466 | 1303.213 | 0 |
| 1395.013 | 0 | 1018.764 | 0 | 1344.297 | 1038.925 | 1.95122 |
| 1590.923 | 0 | 1533.565 | 7.416667 | 1524.874 | 1578.437 | 0 |
| 830.9281 | 0 | 708.0772 | 0 | 849.3814 | 705.3756 | 0 |
| 1300.436 | 0 | 644.856 | 1.854167 | 1317.544 | 627.0005 | 0 |
| 1418.658 | 0 | 1349.321 | 7.416667 | 1384.425 | 1372.475 | 1.95122 |
| 1519.99 | 0 | 1195.783 | 7.416667 | 1508.154 | 1212.079 | 3.902439 |


| 2344.163 | 0 | 695.4329 | 9.270833 | 2401.007 | 661.6313 | 7.804878 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1111.282 | 0 | 632.2118 | 0 | 1106.871 | 634.2912 | 0 |
| 1486.213 | 0 | 966.3808 | 5.5625 | 1474.713 | 966.0182 | 1.95122 |
| 1719.278 | 0 | 908.5786 | 0 | 1742.235 | 889.4658 | 0 |
| 1023.46 | 0 | 1024.183 | 1.854167 | 986.4863 | 1055.329 | 0 |
| 1023.46 | 0 | 830.9069 | 9.270833 | 1036.647 | 823.8495 | 3.902439 |
| 976.1716 | 0 | 1004.314 | 5.5625 | 909.5738 | 1049.861 | 1.95122 |
| 874.8389 | 0 | 789.3615 | 0 | 866.1015 | 794.6867 | 0 |
| 911.9942 | 0 | 778.5236 | 0 | 859.4135 | 803.8 | 1.95122 |
| 1543.635 | 0 | 935.6734 | 0 | 1518.186 | 944.1461 | 3.902439 |
| 1334.214 | 0 | 1060.309 | 1.854167 | 1337.609 | 1064.443 | 1.95122 |
| 668.7957 | 0 | 897.7407 | 1.854167 | 662.1162 | 916.806 | 0 |
| 1449.057 | 0 | 778.5236 | 14.83333 | 1504.81 | 747.2971 | 5.853659 |
| 1803.722 | 0 | 1036.827 | 3.708333 | 1805.771 | 1029.812 | 5.853659 |
| 1459.191 | 0 | 1394.479 | 5.5625 | 1411.177 | 1421.687 | 7.804878 |
| 1175.459 | 0 | 865.2269 | 7.416667 | 1130.279 | 889.4658 | 3.902439 |
| 925.5052 | 0 | 534.6705 | 7.416667 | 912.9178 | 539.5121 | 3.902439 |
| 722.8399 | 0 | 514.801 | 3.708333 | 715.6206 | 513.9946 | 1.95122 |
| 979.5493 | 0 | 1295.131 | 9.270833 | 993.1743 | 1312.327 | 0 |
| 1246.392 | 0 | 733.3656 | 1.854167 | 1243.976 | 730.893 | 1.95122 |
| 1178.837 | 0 | 1154.238 | 3.708333 | 1200.504 | 1148.286 | 1.95122 |
| 562.0356 | 0 | 1380.056 | 0 | 621.4016 | 1357.948 | 0 |
| 1030.934 | 0 | 145.443 | 0 | 1038.856 | 135.6294 | 0 |
| 924.9501 | 0 | 904.0603 | 4.774194 | 959.1891 | 901.4392 | 0 |
| 1159.399 | 0 | 479.3007 | 2.387097 | 1156.763 | 486.2809 | 2.125 |
| 1156.188 | 0 | 829.6861 | 7.16129 | 1156.763 | 840.2406 | 2.125 |
| 1657.202 | 0 | 451.2038 | 2.387097 | 1688.938 | 441.6225 | 0 |
| 205.5445 | 0 | 580.1191 | 0 | 200.7605 | 585.522 | 0 |
| 1615.451 | 0 | 247.9142 | 4.774194 | 1644.324 | 229.9083 | 6.375 |
| 1332.827 | 0 | 314.0246 | 4.774194 | 1351.15 | 314.2632 | 4.25 |
| 1249.325 | 0 | 456.1621 | 2.387097 | 1249.177 | 456.5086 | 4.25 |
| 2212.815 | 0 | 295.8442 | 4.774194 | 2224.299 | 279.5288 | 0 |
| 976.3362 | 0 | 318.9829 | 0 | 981.4958 | 325.8413 | 2.125 |
| 2553.248 | 0 | 211.5534 | 7.16129 | 2571.647 | 203.4441 | 4.25 |
| 2126.101 | 0 | 211.5534 | 2.387097 | 2138.259 | 200.136 | 2.125 |
| 1043.78 | 0 | 1218.085 | 2.387097 | 1096.216 | 1192.546 | 2.125 |
| 1788.879 | 0 | 530.5363 | 7.16129 | 1787.725 | 529.2854 | 2.125 |
| 388.6075 | 0 | 505.7449 | 2.387097 | 452.5078 | 482.9729 | 2.125 |
| 767.5801 | 0 | 1128.836 | 0 | 815.7887 | 1108.191 | 2.125 |
| 0 | 0 | 396.7442 | 28.16418 | 349.3924 | 263.0674 | 0 |
| 0 | 0 | 1098.26 | 34.42289 | 441.6319 | 852.8198 | 2.181818 |
| 0 | 0 | 1783.545 | 68.84577 | 637.2917 | 1463.205 | 4.363636 |
| 0 | 0 | 524.7844 | 21.90547 | 293.4896 | 390.3026 | 2.181818 |
| 0 | 0 | 1038.748 | 28.16418 | 508.7153 | 808.1155 | 0 |
| 0 | 0 | 483.3066 | 46.9403 | 645.6771 | 268.2256 | 2.181818 |
| 0 | 0 | 1287.615 | 46.9403 | 528.2813 | 1053.989 | 4.363636 |
| 07.3699 | 0 | 494.8503 | 0 | 500.6436 | 463.1614 | 0 |
| 0 |  |  |  |  |  | 0 |


| 687.8844 | 0 | 860.0969 | 4.5 | 740.9525 | 820.3597 | 1.5 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 578.1156 | 0 | 545.3452 | 0 | 590.2169 | 522.9793 | 0 |
| 406.1445 | 0 | 528.5135 | 0 | 420.5406 | 509.3067 | 0 |
| 0 | 0 | 546.4249 | 6.258706 | 290.6944 | 435.0069 | 0 |
| 0 | 0 | 618.5603 | 53.199 | 371.7535 | 455.6396 | 0 |
| 0 | 0 | 952.186 | 56.32836 | 519.8958 | 687.7579 | 2.181818 |
| 387.8497 | 0 | 447.7217 | 2.25 | 410.5277 | 423.8525 | 1.5 |
| 0 | 0 | 521.1776 | 40.68159 | 360.5729 | 374.8281 | 0 |
| 0 | 0 | 802.5053 | 18.77612 | 293.4896 | 649.9312 | 0 |
| 0 | 0 | 1282.205 | 37.55224 | 436.0417 | 1062.586 | 4.363636 |
| 0 | 0 | 533.8013 | 21.90547 | 268.3333 | 410.9354 | 0 |
| 32.93064 | 0 | 504.3463 | 15.64677 | 185.9412 | 427.8096 | 0 |
| 0 | 0 | 869.2304 | 50.06965 | 477.9688 | 651.6506 | 2.181818 |
| 0 | 0 | 389.5307 | 12.51741 | 262.7431 | 278.542 | 0 |
| 614.7052 | 0 | 1043.562 | 2.25 | 667.5248 | 1008.359 | 0 |
| 0 | 0 | 926.9387 | 40.68159 | 413.6806 | 768.5695 | 0 |
| 138.0253 | 0 | 292.1143 | 0 | 169.9535 | 253.3758 | 1 |
| 28.55696 | 0 | 94.77486 | 0 | 27.34884 | 92.25478 | 0 |
| 80.91139 | 0 | 206.4274 | 0 | 117.2093 | 181.9108 | 0 |
| 52.35443 | 0 | 136.32 | 0 | 68.37209 | 120.8408 | 0 |
| 61.87342 | 0 | 305.0971 | 2 | 97.67442 | 278.0637 | 0 |
| 14.27848 | 0 | 101.2663 | 0 | 23.44186 | 93.55414 | 0 |
| 920.7238 | 0 | 1569.017 | 3.25 | 960.1637 | 1562.335 | 4.6 |
| 729.9763 | 0 | 1258.283 | 0 | 798.3383 | 1252.943 | 1.533333 |
| 880.3734 | 0 | 1689.858 | 3.25 | 920.6064 | 1671.871 | 7.666667 |
| 1100.467 | 0 | 1379.124 | 6.5 | 1136.373 | 1375.931 | 3.066667 |
| 1181.168 | 0 | 976.3199 | 0 | 1204.7 | 962.7672 | 0 |
| 1133.481 | 0 | 650.2406 | 3.25 | 1193.911 | 630.3147 | 1.533333 |
| 264.112 | 0 | 563.9255 | 0 | 269.7089 | 572.6639 | 0 |
| 572.2427 | 0 | 1133.605 | 1.625 | 586.1673 | 1143.406 | 1.533333 |
| 766.6585 | 0 | 870.8237 | 1.625 | 769.5694 | 878.2128 | 0 |
| 388.8316 | 0 | 1003.174 | 0 | 435.1304 | 983.9058 | 0 |
| 352.1494 | 0 | 301.1439 | 1.625 | 391.9769 | 290.1753 | 0 |
| 473.2007 | 0 | 613.7964 | 0 | 467.4954 | 624.5496 | 0 |
| 454.8596 | 0 | 1039.618 | 3.25 | 496.2644 | 1045.4 | 1.533333 |
| 212.7569 | 0 | 537.0719 | 1.625 | 190.5943 | 551.5253 | 1.533333 |
| 1051.821 | 0 | 1670.737 | 0 | 1199.181 | 1490.611 | 7.333333 |
| 1121.942 | 0 | 1494.87 | 0 | 1337.269 | 1306.443 | 0 |
| 1005.073 | 0 | 1858.732 | 0 | 1228.252 | 1663.269 | 0 |
| 446.0208 | 37.42857 | 458.3804 | 0 | 457.9254 | 479.1899 | 0 |
| 598.4583 | 34.7551 | 421.9183 | 3.666667 | 616.0187 | 437.0633 | 5.5 |
| 1725.37 | 0 | 1054.347 | 0 | 1931.409 | 885.8201 | 0 |
| 911.5779 | 0 | 1182.554 | 0 | 1148.307 | 1027.313 | 0 |
| 677.84 | 0 | 1152.232 | 7.636364 | 886.6674 | 995.6594 | 0 |
| 989.4906 | 0 | 1391.775 | 0 | 1213.717 | 1208.604 | 3.666667 |
| 973.908 | 0 | 576.1161 | 3.818182 | 1053.826 | 500.7073 | 3.666667 |
| 763.5439 | 0 | 1413.001 | 7.636364 | 937.5418 | 1274.789 | 3.666667 |
|  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 2142.598 | 0 | 1491.838 | 11.45455 | 2253.007 | 1332.342 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2321.797 | 0 | 3226.25 | 3.818182 | 2732.68 | 2845.974 | 3.666667 |
| 2002.355 | 0 | 2537.943 | 3.818182 | 2318.417 | 2256.061 | 3.666667 |
| 1269.976 | 0 | 2519.75 | 3.818182 | 1606.176 | 2235.917 | 7.333333 |
| 2015.563 | 50.79592 | 648.5041 | 0 | 2038.858 | 655.5949 | 0 |
| 604.1042 | 21.38776 | 1403.79 | 3.666667 | 605.1157 | 1427.038 | 2.75 |
| 813 | 26.73469 | 226.5858 | 0 | 834.0784 | 234.3291 | 0 |
| 1202.563 | 90.89796 | 1305.677 | 3.666667 | 1286.552 | 1343.274 | 2.75 |
| 565.5993 | 0 | 450.5332 | 3.333333 | 608.2164 | 402.9714 | 3.2 |
| 259.0128 | 0 | 654.155 | 1.666667 | 339.0058 | 584.7035 | 1.6 |
| 285.4426 | 0 | 525.8893 | 1.666667 | 341.4985 | 477.2445 | 0 |
| 222.0109 | 0 | 426.4834 | 1.666667 | 251.7617 | 395.07 | 1.6 |
| 118.9344 | 0 | 549.9391 | 1.666667 | 164.5175 | 512.0107 | 1.6 |
| 824.7964 | 0 | 1935.093 | 5.166667 | 1041.238 | 1720.538 | 0 |
| 582.5124 | 0 | 1411.062 | 7.75 | 801.3217 | 1219.922 | 5.7 |
| 840.2613 | 0 | 1976.033 | 7.75 | 988.4567 | 1804.852 | 3.8 |
| 1257.814 | 0 | 1986.951 | 7.75 | 1492.282 | 1744.251 | 7.6 |
| 1051.615 | 0 | 2229.861 | 2.583333 | 1434.702 | 1894.436 | 1.9 |
| 752.6753 | 0 | 1521.869 | 0 | 912.5946 | 1380.445 | 4 |
| 210.9772 | 0 | 618.1081 | 0 | 258.1339 | 578.5335 | 0 |
| 302.2105 | 0 | 671.3655 | 2.25 | 370.2526 | 615.4953 | 2 |
| 450.4647 | 0 | 1681.641 | 2.25 | 594.4902 | 1566.862 | 2 |
| 561.6554 | 0 | 1592.879 | 2.25 | 659.6755 | 1510.615 | 0 |
| 593.0169 | 0 | 1483.137 | 2.25 | 651.8533 | 1427.049 | 2 |
| 478.1167 | 0 | 945.3529 | 4.5 | 663.1352 | 800.3738 | 0 |
| 680.8382 | 0 | 479.4706 | 0 | 713.8669 | 422.4195 | 0 |
| 290.695 | 0 | 813.3529 | 0 | 376.8637 | 726.2651 | 0 |
| 126.2228 | 0 | 382.4118 | 0 | 177.5608 | 329.7836 | 0 |
| 852.9602 | 0 | 487.2353 | 4.5 | 913.1698 | 420.5668 | 0 |
| 455.1671 | 0 | 1083.176 | 0 | 612.4036 | 948.5912 | 6 |
| 0 | 0 | 483.3865 | 16.33333 | 112.1726 | 441.3694 | 1.571429 |
| 0 | 0 | 475.0999 | 14.51852 | 84.56086 | 438.6449 | 0 |
| 0 | 0 | 882.5257 | 16.33333 | 220.8937 | 765.5852 | 3.142857 |
| 0 | 0 | 205.7846 | 5.444444 | 62.12635 | 186.6284 | 0 |
| 0 | 0 | 660.1679 | 18.14815 | 160.4931 | 589.8548 | 0 |
| 0 | 0 | 828.6626 | 14.51852 | 215.7165 | 734.2535 | 0 |
| 0 | 0 | 943.2943 | 32.66667 | 229.5223 | 843.2336 | 1.571429 |
| 0 | 0 | 749.9397 | 10.88889 | 227.7966 | 625.2733 | 1.571429 |
| 0 | 0 | 453.0022 | 9.074074 | 139.7843 | 386.8794 | 0 |
| 0 | 0 | 339.7517 | 10.88889 | 70.75501 | 305.1443 | 0 |
| 0 | 0 | 470.9566 | 9.074074 | 98.36672 | 419.5734 | 0 |
| 0 | 0 | 781.7051 | 16.33333 | 176.0247 | 674.3144 | 1.571429 |
| 0 | 0 | 317.654 | 23.59259 | 143.2357 | 253.3787 | 0 |
| 0 | 0 | 745.7964 | 27.22222 | 191.5562 | 659.3296 | 0 |
| 0 | 0 | 133.9671 | 3.62963 | 34.51464 | 115.7914 | 0 |
| 0 | 0 | 182.3058 | 16.33333 | 72.48074 | 160.7457 | 1.571429 |
| 1288.067 | 0 | 972.6145 | 0 | 1281.817 | 945.3674 | 5.55814 |


| 1437.618 | 0 | 905.2278 | 0 | 1482.978 | 860.0373 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 902.1293 | 0 | 485.1841 | 2.621053 | 930.9544 | 462.5788 | 2.77907 |
| 916.6019 | 0 | 554.817 | 0 | 916.9199 | 543.4178 | 0 |
| 1066.153 | 0 | 393.089 | 0 | 1085.334 | 363.7756 | 5.55814 |
| 1591.993 | 0 | 824.3638 | 0 | 1585.897 | 803.8991 | 0 |
| 1447.266 | 0 | 610.9726 | 0 | 1450.23 | 595.065 | 0 |
| 1625.762 | 0 | 855.8109 | 0 | 1693.495 | 803.8991 | 0 |
| 1210.879 | 0 | 660.3895 | 10.48421 | 1249.069 | 633.239 | 5.55814 |
| 1442.442 | 0 | 923.1976 | 0 | 1487.656 | 889.2292 | 2.77907 |
| 853.8871 | 0 | 545.8321 | 2.621053 | 935.6326 | 498.5073 | 2.77907 |
| 1008.262 | 0 | 509.8926 | 2.621053 | 1057.265 | 473.8065 | 0 |
| 1852.501 | 0 | 707.5602 | 0 | 1913.369 | 644.4666 | 0 |
| 1645.059 | 0 | 833.3486 | 7.863158 | 1688.817 | 792.6715 | 5.55814 |
| 858.7113 | 0 | 712.0526 | 2.621053 | 898.2073 | 684.8861 | 5.55814 |
| 1186.758 | 0 | 768.2082 | 2.621053 | 1239.713 | 727.5512 | 0 |
| 1206.055 | 0 | 842.3335 | 2.621053 | 1216.322 | 824.1089 | 2.77907 |
| 2103.36 | 0 | 986.0918 | 0 | 2151.955 | 929.6487 | 0 |
| 738.1058 | 0 | 361.6419 | 0 | 809.3222 | 314.374 | 0 |
| 1505.157 | 0 | 1019.785 | 0 | 1534.437 | 983.5414 | 2.77907 |
| 2412.11 | 0 | 1087.172 | 0 | 2376.507 | 1059.889 | 0 |
| 1485.86 | 0 | 1017.539 | 5.242105 | 1571.863 | 965.5772 | 2.77907 |
| 1278.418 | 0 | 889.5042 | 2.621053 | 1319.242 | 860.0373 | 5.55814 |
| 1717.423 | 0 | 745.746 | 5.242105 | 1777.702 | 693.8682 | 0 |
| 1596.817 | 0 | 851.3184 | 0 | 1599.932 | 821.8634 | 0 |
| 892.4808 | 0 | 1323.025 | 5.242105 | 944.9889 | 1288.933 | 5.55814 |
| 1485.86 | 0 | 1839.656 | 5.242105 | 1613.966 | 1756.003 | 2.77907 |
| 1095.098 | 0 | 1502.723 | 0 | 1150.828 | 1468.575 | 2.77907 |
| 786.348 | 0 | 909.7202 | 0 | 785.9314 | 893.7203 | 2.77907 |
| 1331.485 | 0 | 754.7308 | 0 | 1356.667 | 732.0422 | 2.77907 |
| 1095.098 | 0 | 777.1931 | 0 | 1113.403 | 754.4975 | 0 |
| 786.348 | 0 | 610.9726 | 2.621053 | 799.9659 | 595.065 | 2.77907 |
| 1355.606 | 0 | 1756.546 | 0 | 1389.414 | 1711.093 | 2.77907 |
| 1495.508 | 0 | 1920.52 | 2.621053 | 1581.219 | 1854.806 | 2.77907 |
| 1674.005 | 0 | 860.3033 | 2.621053 | 1721.564 | 817.3723 | 5.55814 |
| 1635.411 | 0 | 988.338 | 2.621053 | 1749.633 | 916.1755 | 0 |
| 1693.301 | 0 | 869.2882 | 0 | 1740.277 | 824.1089 | 2.77907 |
| 506.5432 | 0 | 664.8819 | 0 | 537.9887 | 646.7121 | 2.77907 |
| 2045.47 | 0 | 1060.217 | 2.621053 | 2072.426 | 1012.733 | 2.77907 |
| 1114.395 | 0 | 1403.889 | 0 | 1155.506 | 1378.754 | 0 |
| 1702.95 | 0 | 1217.453 | 0 | 1824.484 | 1140.728 | 0 |
| 2503.771 | 0 | 835.5949 | 0 | 2498.139 | 799.4081 | 0 |
| 1186.758 | 0 | 545.8321 | 2.621053 | 1178.897 | 534.4357 | 0 |
| 1365.254 | 0 | 644.6659 | 2.621053 | 1384.736 | 619.7658 | 5.55814 |
| 1876.622 | 0 | 2589.895 | 7.863158 | 2016.288 | 2501.519 | 16.67442 |
| 1365.254 | 0 | 1808.209 | 5.242105 | 1515.725 | 1720.075 | 5.55814 |
| 1558.223 | 0 | 1556.632 | 5.242105 | 1623.323 | 1504.504 | 8.337209 |
| 800.8206 | 0 | 604.2339 | 5.242105 | 828.0348 | 588.3284 | 0 |


| 1427.969 | 0 | 1215.207 | 7.863158 | 1436.196 | 1190.13 | 5.55814 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 873.184 | 0 | 1329.764 | 5.242105 | 954.3452 | 1284.442 | 0 |
| 1022.735 | 0 | 1648.728 | 2.621053 | 1113.403 | 1592.08 | 0 |
| 125.4297 | 0 | 71.87913 | 0 | 116.9541 | 71.85691 | 0 |
| 1307.364 | 0 | 673.8668 | 0 | 1351.989 | 630.9934 | 0 |
| 1447.266 | 0 | 1942.983 | 5.242105 | 1515.725 | 1883.998 | 5.55814 |
| 747.7542 | 0 | 941.1673 | 0 | 823.3567 | 900.4568 | 0 |
| 231.5626 | 0 | 323.4561 | 0 | 257.299 | 307.6374 | 0 |
| 757.4027 | 0 | 1017.539 | 2.621053 | 785.9314 | 1001.506 | 2.77907 |
| 1128.868 | 0 | 831.1024 | 5.242105 | 1160.184 | 815.1268 | 0 |
| 2069.591 | 0 | 799.6553 | 0 | 2058.392 | 779.1983 | 0 |
| 646.4456 | 0 | 577.2792 | 0 | 626.8738 | 579.3463 | 0 |
| 1278.418 | 0 | 961.3833 | 0 | 1323.92 | 927.4032 | 2.77907 |
| 1254.297 | 0 | 1037.755 | 0 | 1337.955 | 981.2959 | 2.77907 |
| 1206.055 | 0 | 516.6312 | 2.621053 | 1192.932 | 516.4715 | 2.77907 |
| 583.7307 | 0 | 503.1539 | 0 | 650.2646 | 464.8244 | 0 |
| 1886.27 | 0 | 1246.654 | 7.863158 | 1978.863 | 1176.657 | 2.77907 |
| 2450.704 | 0 | 1055.725 | 2.621053 | 2512.173 | 994.769 | 2.77907 |
| 564.4338 | 0 | 601.9877 | 2.621053 | 617.5175 | 568.1187 | 2.77907 |
| 1664.356 | 0 | 1071.448 | 7.863158 | 1768.346 | 1003.751 | 5.55814 |
| 1553.399 | 0 | 1013.046 | 2.621053 | 1548.472 | 990.278 | 5.55814 |
| 1495.508 | 0 | 350.4108 | 0 | 1497.012 | 330.0927 | 0 |
| 815.2933 | 0 | 327.9485 | 0 | 823.3567 | 314.374 | 0 |
| 1804.259 | 0 | 1109.634 | 2.621053 | 1857.231 | 1057.644 | 0 |
| 2030.997 | 0 | 1242.161 | 10.48421 | 2095.817 | 1183.393 | 11.11628 |
| 2113.009 | 0 | 907.474 | 7.863158 | 2119.208 | 886.9837 | 5.55814 |
| 1640.235 | 0 | 1006.308 | 2.621053 | 1744.955 | 938.6308 | 0 |
| 583.7307 | 0 | 521.1237 | 0 | 650.2646 | 485.0341 | 0 |
| 858.7113 | 0 | 658.1433 | 0 | 940.3107 | 617.5203 | 0 |
| 800.8206 | 0 | 296.5014 | 13.10526 | 790.6095 | 289.6731 | 0 |
| 2383.165 | 0 | 1141.081 | 2.621053 | 2427.967 | 1089.081 | 0 |
| 569.258 | 0 | 276.2854 | 0 | 547.3451 | 278.4455 | 0 |
| 1746.368 | 0 | 790.6704 | 2.621053 | 1777.702 | 761.2341 | 2.77907 |
| 1775.313 | 0 | 799.6553 | 5.242105 | 1871.265 | 743.2699 | 5.55814 |
| 2585.782 | 0 | 732.2686 | 0 | 2582.346 | 698.3593 | 5.55814 |
| 2407.286 | 0 | 1015.293 | 2.621053 | 2442.001 | 970.0682 | 0 |
| 1365.254 | 0 | 532.3548 | 2.621053 | 1403.449 | 494.0162 | 5.55814 |
| 1109.571 | 0 | 763.7157 | 7.863158 | 1136.794 | 736.5333 | 5.55814 |
| 1900.743 | 0 | 743.4997 | 2.621053 | 1946.116 | 687.1317 | 5.55814 |
| 1587.169 | 0 | 685.0979 | 5.242105 | 1637.357 | 642.2211 | 0 |
| 1736.719 | 0 | 1183.759 | 5.242105 | 1885.3 | 1109.291 | 5.55814 |
| 1683.653 | 0 | 1013.046 | 2.621053 | 1730.92 | 965.5772 | 5.55814 |
| 1563.048 | 0 | 795.1629 | 2.621053 | 1642.035 | 734.2877 | 2.77907 |
| 1085.45 | 0 | 1289.332 | 2.621053 | 1174.219 | 1226.058 | 2.77907 |
| 1037.207 | 0 | 694.0828 | 2.621053 | 1090.012 | 662.4308 | 2.77907 |
| 1818.731 | 0 | 1266.87 | 0 | 1904.012 | 1201.358 | 2.77907 |
| 1259.122 | 0 | 795.1629 | 0 | 1328.598 | 745.5154 | 0 |
|  |  |  |  |  |  | 0 |


| 1288.067 | 0 | 862.5495 | 2.621053 | 1291.173 | 853.3007 | 2.77907 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1317.012 | 0 | 781.6855 | 5.242105 | 1370.702 | 745.5154 | 0 |
| 1090.274 | 0 | 685.0979 | 2.621053 | 1136.794 | 648.9577 | 0 |
| 904.7 | 0 | 1300.496 | 3.384615 | 973.7745 | 1277.509 | 1.615385 |
| 603.1333 | 0 | 765.5874 | 0 | 597.0588 | 771.5484 | 1.615385 |
| 534.1 | 0 | 640.2183 | 1.692308 | 561.5196 | 630.35 | 1.615385 |
| 519.5667 | 0 | 815.735 | 1.692308 | 511.7647 | 818.6145 | 1.615385 |
| 1282.567 | 0 | 989.5802 | 5.076923 | 1250.98 | 996.7935 | 3.230769 |
| 406.9333 | 0 | 379.4505 | 1.692308 | 405.1471 | 379.8909 | 1.615385 |
| 592.2333 | 0 | 1303.839 | 3.384615 | 625.4902 | 1296 | 3.230769 |
| 363.3333 | 0 | 367.7494 | 0 | 348.2843 | 374.8481 | 0 |
| 457.8 | 0 | 344.3472 | 3.384615 | 497.549 | 339.5485 | 0 |
| 425.1 | 0 | 725.4693 | 5.076923 | 408.701 | 724.4823 | 3.230769 |
| 308.8333 | 0 | 698.7238 | 1.692308 | 305.6373 | 705.992 | 1.615385 |
| 454.1667 | 0 | 1136.68 | 3.384615 | 462.0098 | 1146.397 | 0 |
| 635.8333 | 0 | 1375.717 | 3.384615 | 614.8284 | 1396.856 | 0 |
| 675.8 | 0 | 1335.599 | 8.461538 | 671.6912 | 1343.066 | 1.615385 |
| 446.9 | 0 | 840.8088 | 1.692308 | 465.5637 | 837.1048 | 0 |
| 191.2562 | 0 | 415.9533 | 0 | 202.2777 | 410.6384 | 2.5 |
| 216.4215 | 0 | 394.4954 | 0 | 235.1479 | 389.3703 | 0 |
| 140.9256 | 0 | 373.0375 | 0 | 144.1229 | 371.3742 | 0 |
| 226.4876 | 0 | 415.9533 | 0 | 242.7333 | 405.7304 | 0 |
| 70.46281 | 0 | 282.254 | 0 | 80.91109 | 274.8496 | 0 |
| 168.6074 | 0 | 0 | 79.76684 | 1.75 | 486.599 | 65.06846 |


| 319.3864 | 0 | 1047.846 | 1.75 | 360.5371 | 1019.406 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 370.0826 | 0 | 527.5489 | 0 | 398.3557 | 516.9328 | 0 |
| 935.3458 | 0 | 431.4661 | 0 | 940.4219 | 419.3301 | 0 |
| 169.8324 | 0 | 105.1472 | 0 | 166.4017 | 103.0251 | 2.6 |
| 821.2793 | 0 | 763.2237 | 5.25 | 847.1361 | 750.0947 | 2.6 |
| 157.1584 | 0 | 402.46 | 1.75 | 181.5292 | 384.9884 | 2.6 |
| 93.78806 | 0 | 386.144 | 0 | 113.4557 | 372.3362 | 0 |
| 119.1362 | 0 | 246.5521 | 0 | 126.0619 | 234.9694 | 0 |
| 119.1362 | 0 | 371.641 | 0 | 131.1044 | 361.4914 | 0 |
| 395.4308 | 0 | 482.2268 | 0 | 416.0043 | 457.2867 | 0 |
| 233.2028 | 0 | 460.4722 | 3.5 | 234.4752 | 453.6718 | 2.6 |
| 101.3925 | 0 | 135.9662 | 0 | 95.80706 | 137.3667 | 0 |
| 215.4591 | 0 | 540.2391 | 1.75 | 247.0814 | 522.3551 | 0 |
| 271.2249 | 0 | 393.3956 | 0 | 274.815 | 386.7958 | 0 |
| 35.48738 | 0 | 273.7453 | 0 | 45.38229 | 263.8888 | 0 |
| 134.3451 | 0 | 369.8281 | 1.75 | 163.8805 | 339.802 | 2.6 |
| 372.6174 | 0 | 837.5519 | 0 | 423.568 | 797.0886 | 0 |
| 121.8132 | 0 | 228.7149 | 0 | 148.8987 | 207.0549 | 0 |
| 344.5573 | 0 | 493.8162 | 2 | 386.503 | 454.8419 | 0 |
| 393.2826 | 0 | 1294.318 | 4 | 554.41 | 1171.048 | 0 |
| 535.978 | 0 | 777.9772 | 0 | 620.9392 | 695.8403 | 0 |
| 417.6452 | 0 | 668.8178 | 0 | 487.8808 | 604.193 | 0 |
| 0 | 0 | 0 | 827.072 | 339.4781 | 1602.551 | 382.0602 |


| 1197.783 | 0 | 949.2363 | 20 | 1185.989 | 960.2838 | 2.2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 491.1262 | 0 | 514.7164 | 0 | 503.4541 | 505.18 | 0 |
| 399.2609 | 0 | 377.6531 | 1.818182 | 418.9819 | 368.207 | 2.2 |
| 628.9243 | 0 | 675.1097 | 3.636364 | 621.7151 | 661.2997 | 4.4 |
| 183.7307 | 0 | 192.4719 | 3.636364 | 195.9754 | 189.9948 | 2.2 |
| 554.7253 | 0 | 873.414 | 7.272727 | 604.8207 | 857.1858 | 0 |
| 113.065 | 0 | 115.1915 | 0 | 135.1555 | 107.5164 | 0 |
| 328.5953 | 0 | 291.624 | 1.818182 | 324.3731 | 294.5656 | 0 |
| 720.7896 | 0 | 571.5831 | 1.818182 | 682.5351 | 581.767 | 0 |
| 176.4369 | 0 | 655.3816 | 0 | 255.7453 | 622.6713 | 0 |
| 449.1121 | 0 | 1612.328 | 3.5 | 526.3596 | 1548.582 | 0 |
| 567.8061 | 0 | 1152.516 | 3.5 | 657.206 | 1076.058 | 2.285714 |
| 333.6262 | 0 | 980.8331 | 1.75 | 404.4345 | 922.9667 | 6.857143 |
| 583.8458 | 0 | 773.3205 | 1.75 | 624.4944 | 722.7697 | 2.285714 |
| 400.993 | 0 | 1019.648 | 0 | 481.7528 | 959.7676 | 0 |
| 477.9836 | 0 | 1121.165 | 5.25 | 544.2022 | 1061.338 | 2.285714 |
| 269.4673 | 0 | 609.1018 | 5.25 | 327.1161 | 575.5661 | 0 |
| 445.9042 | 0 | 782.2779 | 0 | 505.5431 | 724.2418 | 0 |
| 413.8248 | 0 | 1276.427 | 0 | 437.1461 | 1235.038 | 2.285714 |
| 757.6561 | 29.54545 | 799.9331 | 5 | 808.8801 | 787.5789 | 1.5 |
| 919.1238 | 38.63636 | 358.7444 | 0 | 940.373 | 375.6842 | 1.5 |
| 794.9179 | 25 | 409.9935 | 0 | 820.834 | 398.3158 | 0 |
| 534.0854 | 13.63636 | 514.7202 | 0 | 533.9406 | 525.0526 | 0 |
| 774.2169 | 43.18182 | 679.6089 | 0 | 784.9723 | 708.3684 | 0 |
| 448.5308 | 0 | 879.0715 | 0 | 598.2332 | 746.6701 | 0 |
| 439.9052 | 0 | 978.1515 | 0 | 594.245 | 843.7979 | 0 |
| 828.0569 | 0 | 356.2664 | 0 | 881.3969 | 283.2895 | 0 |
| 526.1611 | 0 | 1307.013 | 0 | 642.1037 | 1171.604 | 0 |
| 487.346 | 0 | 1433.498 | 0 | 670.0212 | 1260.638 | 0 |
| 773.5428 | 0 | 0 | 1389.399 | 3.416667 | 1165.471 | 1374.527 |


| 1192.631 | 0 | 1438.257 | 6.833333 | 1207.962 | 1429.692 | 5.75 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 577.7101 | 0 | 1486.629 | 4.533333 | 645.0637 | 1415.228 | 4.285714 |
| 611.6931 | 0 | 1654.926 | 4.533333 | 726.4231 | 1556.018 | 4.285714 |
| 489.3544 | 0 | 2245.444 | 3.4 | 636.3466 | 2139.708 | 2.142857 |
| 468.9647 | 0 | 1678.547 | 2.266667 | 569.5157 | 1607.347 | 2.142857 |
| 642.2777 | 0 | 2400.455 | 2.266667 | 842.6508 | 2249.699 | 2.142857 |
| 0 | 0 | 586.5394 | 5.886364 | 203.8917 | 531.008 | 0 |
| 0 | 0 | 510.5628 | 14.71591 | 152.9188 | 446.6975 | 1.3 |
| 0 | 0 | 665.555 | 26.48864 | 183.0391 | 610.881 | 1.3 |
| 0 | 0 | 305.4259 | 11.77273 | 74.14243 | 283.9931 | 1.3 |
| 0 | 0 | 679.2308 | 35.31818 | 203.8917 | 606.4436 | 2.6 |
| 0 | 0 | 530.3167 | 17.65909 | 180.7222 | 483.6758 | 0 |
| 0 | 0 | 878.2895 | 26.48864 | 324.3731 | 775.0645 | 1.3 |
| 0 | 0 | 632.1253 | 14.71591 | 136.7001 | 565.028 | 0 |
| 0 | 0 | 662.516 | 32.375 | 215.4764 | 596.0897 | 0 |
| 0 | 0 | 577.4222 | 23.54545 | 132.0662 | 504.3836 | 2.6 |
| 0 | 0 | 313.0236 | 17.65909 | 113.5306 | 272.1601 | 1.3 |
| 0 | 0 | 603.2542 | 17.65909 | 213.1595 | 529.5288 | 0 |
| 0 | 0 | 718.7386 | 14.71591 | 176.0883 | 670.0463 | 1.3 |
| 394.0412 | 0 | 1388.393 | 9.75 | 428.8905 | 1358.345 | 1.263158 |
| 198.3984 | 0 | 447.8688 | 0 | 197.3422 | 444.2633 | 0 |
| 264.5312 | 0 | 891.8431 | 3.25 | 313.1164 | 855.1086 | 1.263158 |
| 159.8209 | 0 | 403.0819 | 0 | 176.2924 | 387.2561 | 0 |
| 289.331 | 0 | 889.8958 | 0 | 344.6911 | 835.4509 | 1.263158 |
| 90.93259 | 0 | 188.8838 | 0 | 102.618 | 178.8848 | 0 |
| 239.7314 | 0 | 634.8053 | 1.625 | 242.0732 | 632.9769 | 0 |
| 157.0654 | 0 | 459.5523 | 1.625 | 163.1363 | 452.1264 | 1.263158 |
| 493.2404 | 0 | 1076.832 | 4.875 | 528.8772 | 1043.822 | 1.263158 |
| 396.7967 | 0 | 200.5673 | 1.625 | 394.6845 | 182.8163 | 1.263158 |
| 515.2847 | 0 | 317.4027 | 3.25 | 523.6148 | 296.8308 | 1.263158 |
| 859.7263 | 0 | 239.5124 | 1.625 | 831.4687 | 226.0632 | 1.263158 |
| 352.7082 | 0 | 227.8289 | 0 | 342.0599 | 229.9947 | 0 |
| 250.7535 | 0 | 288.1938 | 0 | 268.3855 | 269.3101 | 0 |
| 209.4205 | 0 | 965.8388 | 3.25 | 242.0732 | 933.7393 | 1.263158 |
| 573.1509 | 0 | 1413.708 | 0 | 634.1264 | 1362.276 | 0 |
| 708.172 | 0 | 1581.172 | 1.625 | 784.1065 | 1505.777 | 1.263158 |
| 730.2162 | 0 | 1289.083 | 6.5 | 781.4753 | 1246.296 | 1.263158 |
| 476.7072 | 0 | 1292.978 | 4.875 | 510.4586 | 1265.954 | 1.263158 |
| 308.6197 | 0 | 864.5815 | 8.125 | 360.4785 | 831.5194 | 0 |
| 333.4195 | 0 | 1228.718 | 3.25 | 360.4785 | 1216.81 | 3.789474 |
| 429.8631 | 0 | 802.2693 | 1.625 | 428.8905 | 798.1014 | 1.263158 |
| 349.9527 | 0 | 850.9507 | 1.625 | 368.3722 | 833.4852 | 0 |
| 719.1941 | 0 | 736.0626 | 1.625 | 702.5384 | 725.368 | 0 |
| 107.4658 | 0 | 395.2929 | 0 | 105.2492 | 393.1534 | 0 |
| 259.0201 | 0 | 1316.345 | 1.625 | 326.2725 | 1250.228 | 1.263158 |
| 206.665 | 0 | 288.1938 | 1.625 | 218.3921 | 271.2758 | 1.263158 |
| 507.0181 | 0 | 1143.039 | 1.625 | 570.9769 | 1098.864 | 1.263158 |
| 0 |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |


| 250.7535 | 0 | 882.1068 | 0 | 257.8605 | 866.9032 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 579.0823 | 0 | 1332.349 | 0 | 525.915 | 1366.923 | 0 |
| 472.9172 | 0 | 1013.084 | 1 | 490.6402 | 1003.247 | 1 |
| 302.4096 | 0 | 881.0981 | 1 | 311.0595 | 883.2153 | 0 |
| 485.7857 | 0 | 1314.513 | 3 | 448.9518 | 1340.051 | 2 |
| 659.5104 | 0 | 1747.927 | 1 | 660.6006 | 1757.473 | 1 |
| 511.5227 | 0 | 1243.169 | 0 | 509.881 | 1239.726 | 1 |
| 514.7398 | 0 | 1123.668 | 1 | 490.6402 | 1139.401 | 1 |
| 482.5686 | 0 | 1681.934 | 2 | 458.5722 | 1710.894 | 0 |
| 347.4494 | 0 | 902.5013 | 2 | 365.5751 | 901.1304 | 1 |
| 614.4706 | 0 | 1084.428 | 2 | 647.7734 | 1071.324 | 1 |
| 485.7857 | 0 | 717.007 | 1 | 471.3994 | 732.7283 | 0 |
| 292.7583 | 0 | 813.3213 | 0 | 278.9915 | 825.8869 | 0 |
| 457.0441 | 0 | 395.914 | 1.352941 | 475.5266 | 378.6176 | 2.857143 |
| 767.7314 | 0 | 721.0689 | 0 | 802.7707 | 705.0702 | 0 |
| 518.668 | 0 | 486.89 | 1.352941 | 534.3282 | 477.8996 | 0 |
| 439.0705 | 0 | 257.7653 | 5.411765 | 432.0645 | 259.1427 | 11.42857 |
| 546.9123 | 0 | 535.7475 | 2.705882 | 570.1206 | 530.0647 | 0 |
| 364.6082 | 0 | 550.9101 | 1.352941 | 370.7062 | 548.5749 | 2.857143 |
| 174.6011 | 0 | 215.6468 | 0 | 191.7446 | 203.6122 | 0 |
| 896.1145 | 0 | 690.7436 | 6.764706 | 897.3647 | 700.022 | 2.857143 |
| 364.6082 | 0 | 365.5887 | 4.058824 | 355.3666 | 373.5694 | 0 |
| 536.6417 | 0 | 129.725 | 0 | 565.0074 | 114.4267 | 0 |
| 507.9056 | 0 | 784.3255 | 0 | 538.1481 | 774.5646 | 0 |
| 797.6505 | 0 | 2365.012 | 0 | 846.1448 | 2392.097 | 2.8 |
| 882.8695 | 0 | 1121.325 | 10.5 | 876.606 | 1132.675 | 5.6 |
| 651.0737 | 0 | 591.7545 | 0 | 680.3004 | 587.462 | 0 |
| 242.0221 | 0 | 629.8675 | 0 | 240.3051 | 631.7228 | 0 |
| 691.9788 | 0 | 1121.325 | 3.5 | 700.6079 | 1124.628 | 2.8 |
| 794.2417 | 0 | 1213.598 | 3.5 | 802.1453 | 1235.28 | 0 |
| 313.6062 | 0 | 665.9746 | 0 | 314.7659 | 665.9244 | 2.8 |
| 910.1396 | 0 | 762.26 | 3.5 | 917.221 | 768.529 | 0 |
| 1288.512 | 0 | 525.5582 | 0 | 1282.756 | 529.1182 | 0 |
| 999.9106 | 0 | 2628.059 | 0 | 1358.358 | 2127.841 | 0 |
| 1469.142 | 0 | 1661.417 | 0 | 1738.475 | 1340.435 | 0 |
| 921.7053 | 0 | 1211.324 | 0 | 1185.07 | 945.4146 | 0 |
| 1027.841 | 0 | 1954.43 | 0 | 1235.38 | 1614.315 | 0 |
| 1463.556 | 0 | 1477.151 | 0 | 1766.425 | 1161.359 | 0 |
| 2217.679 | 0 | 842.7914 | 0 | 2465.169 | 632.032 | 0 |
| 1525.003 | 0 | 1456.005 | 0 | 1732.885 | 1171.893 | 0 |
| 2267.954 | 0 | 1658.396 | 0 | 2554.608 | 1332.534 | 0 |
| 1821.066 | 0 | 1301.947 | 0 | 1995.613 | 1061.287 | 0 |
| 1712.124 | 0 | 1077.175 | 0 | 1821.115 | 854.4532 | 14 |
| 608.8841 | 0 | 610.1931 | 0 | 681.9742 | 505.6256 | 0 |
| 1939.506 | 0 | 1538.115 | 0 | 2134.544 | 1218.856 | 137 |
| 647.9868 | 0 | 724.9818 | 0 | 782.5934 | 571.4623 | 0 |
| 1477.64 | 0 | 603.536 | 0 | 1338.081 | 840.0039 | 0 |
|  |  |  |  |  |  | 0 |


| 798.8113 | 0 | 1241.531 | 0 | 1045.321 | 974.3827 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1335.076 | 0 | 1501.317 | 0 | 1593.136 | 1192.96 | 0 |
| 1776.377 | 0 | 1232.469 | 0 | 2252.751 | 876.9444 | 0 |
| 1796.366 | 0 | 1836.214 | 0 | 2179.069 | 1395.749 | 0 |
| 709.4338 | 0 | 1250.594 | 0 | 860.8527 | 1032.319 | 0 |
| 1793.136 | 0 | 1268.718 | 0 | 2124.182 | 963.8488 | 0 |
| 580.9536 | 0 | 1042.161 | 0 | 693.1541 | 861.1436 | 0 |
| 469.2318 | 0 | 1235.49 | 0 | 681.9742 | 984.9166 | 0 |
| 575.8575 | 0 | 1101.855 | 29.75 | 733.7628 | 937.3922 | 0 |
| 1907.339 | 0 | 1732.151 | 0 | 2179.069 | 1341.651 | 0 |
| 4529.062 | 0 | 1779.147 | 0 | 5131.596 | 1365.995 | 0 |
| 1441.212 | 0 | 646.4421 | 0 | 1665.806 | 474.024 | 0 |
| 787.6391 | 0 | 1386.528 | 0 | 983.8317 | 1119.223 | 0 |
| 1212.196 | 0 | 662.8579 | 0 | 1109.82 | 907.6313 | 0 |
| 1274.133 | 0 | 384.3028 | 0 | 1137.369 | 555.2568 | 0 |
| 1318.373 | 0 | 237.2877 | 0 | 1204.273 | 323.8998 | 0 |
| 1243.164 | 0 | 394.6197 | 0 | 1149.176 | 519.6634 | 0 |
| 508.3344 | 0 | 410.823 | 0 | 603.7149 | 313.3825 | 0 |
| 1234.526 | 0 | 1199.241 | 0 | 1442.208 | 963.8488 | 0 |
| 944.0497 | 0 | 740.0856 | 0 | 1095.631 | 579.3627 | 0 |
| 971.9801 | 0 | 1021.016 | 0 | 1151.53 | 813.7412 | 0 |
| 944.0497 | 0 | 872.999 | 0 | 1062.091 | 708.4026 | 0 |
| 798.8113 | 0 | 933.4141 | 0 | 983.8317 | 729.4703 | 0 |
| 1575.278 | 0 | 734.0441 | 0 | 1755.245 | 566.1953 | 0 |
| 2561.537 | 0 | 812.4523 | 0 | 2321.964 | 1099.836 | 0 |
| 1552.457 | 0 | 668.8782 | 193.75 | 1467.176 | 836.4223 | 0 |
| 1329.49 | 0 | 712.8988 | 0 | 1565.187 | 518.7929 | 0 |
| 938.4636 | 0 | 770.2932 | 0 | 1162.71 | 584.6296 | 0 |
| 942.3272 | 0 | 201.1787 | 0 | 889.4304 | 238.4757 | 0 |
| 1102.789 | 0 | 1762.363 | 0 | 1241.995 | 1406.569 | 0 |
| 950.2014 | 0 | 1446.816 | 0 | 1123.001 | 1125.255 | 0 |
| 1186.018 | 0 | 960.0682 | 0 | 1346.114 | 735.7438 | 0 |
| 1714.93 | 0 | 791.4385 | 0 | 1867.044 | 613.5977 | 0 |
| 2893.596 | 0 | 1232.469 | 0 | 3270.122 | 900.6456 | 0 |
| 215.0091 | 0 | 349.1157 | 0 | 267.7354 | 267.7891 | 0 |
| 596.4768 | 0 | 1060.775 | 0 | 728.8354 | 827.7118 | 0 |
| 1647.897 | 0 | 1117.68 | 0 | 1850.274 | 898.0122 | 0 |
| 2122.348 | 0 | 1376.321 | 0 | 2491.427 | 1041.402 | 0 |
| 1186.018 | 0 | 1124.555 | 0 | 1420.485 | 854.7612 | 0 |
| 2826.563 | 0 | 894.1443 | 0 | 3046.524 | 687.3348 | 0 |
| 6.935777 | 0 | 1342.753 | 0 | 795.7693 | 1044.107 | 0 |
| 1165.211 | 0 | 1685.155 | 0 | 1435.359 | 1292.962 | 0 |
| 1519.417 | 0 | 990.8085 | 0 | 1716.115 | 782.1396 | 0 |
| 1300.677 | 0 | 600.9568 | 0 | 1180.66 | 815.0885 | 0 |
| 1375.886 | 0 | 518.422 | 0 | 1227.886 | 718.9864 | 0 |
| 1234.316 | 0 | 562.2686 | 0 | 1125.562 | 765.2578 | 0 |
| 1480.315 | 0 | 1169.033 | 0 | 1693.756 | 940.1476 | 0 |
|  |  |  |  |  |  | 0 |


| 1835.99 | 0 | 851.1405 | 0 | 1711.957 | 1146.107 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1256.436 | 0 | 698.9669 | 0 | 1141.304 | 953.9027 | 0 |
| 1206.596 | 0 | 613.2138 | 0 | 1324.819 | 487.1913 | 0 |
| 558.6093 | 0 | 993.8293 | 0 | 743.4637 | 792.6735 | 0 |
| 1269.247 | 0 | 1513.954 | 0 | 1457.671 | 1190.174 | 0 |
| 1536.175 | 0 | 1030.078 | 0 | 1704.936 | 840.0759 | 0 |
| 2074.89 | 0 | 508.1051 | 0 | 1896.927 | 669.1556 | 0 |
| 1398.007 | 0 | 861.4574 | 0 | 1259.37 | 1210.175 | 0 |
| 1831.566 | 0 | 920.7793 | 0 | 1672.601 | 1252.887 | 0 |
| 2021.801 | 0 | 484.8922 | 0 | 1912.669 | 622.8842 | 0 |
| 2172.219 | 0 | 608.6944 | 0 | 1999.251 | 804.4105 | 0 |
| 1650.179 | 0 | 348.1939 | 0 | 1471.889 | 484.07 | 0 |
| 1628.058 | 0 | 505.5259 | 0 | 1538.793 | 654.9183 | 0 |
| 1579.394 | 0 | 603.536 | 178.5 | 1471.889 | 811.5292 | 53.5 |
| 1849.262 | 0 | 660.2787 | 0 | 1684.408 | 889.8346 | 26.75 |
| 2207.612 | 0 | 665.4371 | 0 | 1617.504 | 772.3764 | 0 |
| 1725.388 | 0 | 603.536 | 0 | 1617.504 | 772.3764 | 0 |
| 1817.089 | 0 | 720.4837 | 0 | 1689.547 | 977.748 | 26.75 |
| 2154.523 | 0 | 567.427 | 0 | 1955.96 | 786.6138 | 0 |
| 1517.457 | 0 | 490.0506 | 0 | 1428.598 | 615.7655 | 0 |
| 1760.78 | 0 | 923.3585 | 0 | 1578.149 | 1284.921 | 0 |
| 1734.236 | 0 | 456.5208 | 0 | 1554.535 | 640.6809 | 0 |
| 1513.032 | 0 | 306.9264 | 0 | 1385.307 | 384.4085 | 0 |
| 2105.858 | 0 | 438.4663 | 0 | 1928.411 | 580.1722 | 0 |
| 1698.843 | 0 | 531.318 | 0 | 1542.729 | 708.3083 | 0 |
| 2061.617 | 0 | 701.5461 | 0 | 1833.958 | 964.5807 | 0 |
| 2154.523 | 0 | 616.4321 | 0 | 1967.766 | 854.2412 | 0 |
| 1831.566 | 0 | 379.1444 | 0 | 1648.988 | 512.5447 | 0 |
| 1765.205 | 0 | 353.3523 | 0 | 1578.149 | 491.1887 | 0 |
| 1822.717 | 0 | 0 | 324.9809 | 0 | 1645.053 | 441.358 |
| 2588.082 | 0 | 0 | 611.2737 | 0 | 1763.072 | 89.355 |


| 341.2567 | 0 | 507.4135 | 7.555556 | 353.5249 | 502.8046 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 202.8224 | 0 | 396.9919 | 0 | 236.7354 | 382.341 | 0 |
| 302.6239 | 0 | 294.4576 | 1.888889 | 293.5519 | 293.3027 | 0 |
| 467.422 | 0 | 330.3254 | 0 | 514.9457 | 264.5063 | 0 |
| 263.5838 | 0 | 534.2299 | 0 | 338.0318 | 450.0555 | 1.5 |
| 130.0347 | 0 | 379.2625 | 1.333333 | 192.7097 | 313.8545 | 1.5 |
| 168.6936 | 0 | 807.462 | 2.666667 | 319.0768 | 671.1354 | 0 |
| 186.2659 | 0 | 768.7202 | 0 | 322.236 | 647.4483 | 0 |
| 0 | 0 | 807.2576 | 47.15789 | 330.3343 | 665.4311 | 0 |
| 0 | 0 | 704.4099 | 34.29665 | 319.9027 | 578.796 | 0 |
| 0 | 0 | 1796.924 | 158.622 | 792.8024 | 1498.602 | 0 |
| 0 | 0 | 822.7818 | 77.16746 | 632.8511 | 606.4455 | 0 |
| 0 | 0 | 1511.668 | 124.3254 | 945.7994 | 1174.182 | 3.666667 |
| 0 | 0 | 1327.318 | 51.44498 | 584.1702 | 1061.74 | 0 |
| 0 | 0 | 913.9864 | 60.01914 | 375.538 | 757.5961 | 3.666667 |
| 0 | 0 | 1141.028 | 102.89 | 587.6474 | 894.0002 | 0 |
| 881.7647 | 0 | 1485.007 | 2.75 | 1109.448 | 1303.887 | 0 |
| 1029.674 | 0 | 1009.077 | 8.25 | 1143.66 | 865.8426 | 7.411765 |
| 944.3416 | 0 | 2093.574 | 2.75 | 1148.548 | 1900.755 | 2.470588 |
| 0 | 0 | 1222.53 | 158.622 | 751.076 | 980.6353 | 0 |
| 477.8596 | 0 | 1586.435 | 2.75 | 733.1155 | 1411.477 | 0 |
| 534.7476 | 0 | 840.0304 | 0 | 659.8039 | 722.3893 | 0 |
| 0 | 0 | 584.0975 | 81.45455 | 399.8784 | 475.5712 | 3.666667 |
| 722.4782 | 0 | 1872.513 | 0 | 894.4009 | 1708.63 | 0 |
| 477.8596 | 0 | 840.0304 | 2.75 | 581.605 | 735.1977 | 2.470588 |
| 733.8558 | 0 | 1354.972 | 2.75 | 845.5265 | 1227.037 | 2.470588 |
| 938.6528 | 0 | 1461.601 | 0 | 1148.548 | 1273.147 | 0 |
| 568.8805 | 0 | 631.9733 | 2.75 | 596.2673 | 571.2511 | 2.470588 |
| 392.5275 | 0 | 762.009 | 0 | 449.6442 | 696.7727 | 0 |
| 182.0417 | 0 | 418.7148 | 0 | 249.2593 | 366.318 | 0 |
| 824.8767 | 0 | 1282.152 | 8.25 | 962.825 | 1142.502 | 4.941176 |
| 739.5446 | 0 | 1261.346 | 11 | 977.4873 | 1091.269 | 2.470588 |
| 290.129 | 0 | 907.6489 | 2.75 | 434.9819 | 799.2393 | 0 |
| 648.5237 | 0 | 1851.708 | 0 | 879.7386 | 1665.082 | 0 |
| 483.5484 | 0 | 962.2639 | 0 | 596.2673 | 853.0342 | 0 |
| 529.0588 | 0 | 879.0411 | 2.75 | 654.9165 | 778.746 | 2.470588 |
| 648.5237 | 0 | 1058.49 | 2.75 | 781.9899 | 935.0075 | 0 |
| 1097.939 | 0 | 1029.882 | 8.25 | 1128.998 | 927.3225 | 4.941176 |
| 426.6603 | 0 | 1191.127 | 5.5 | 576.7175 | 1063.091 | 9.882353 |
| 455.1044 | 0 | 785.4154 | 0 | 615.817 | 678.8411 | 0 |
| 961.408 | 0 | 1419.989 | 0 | 1153.435 | 1232.161 | 0 |
| 264.5508 | 0 | 513.7405 | 1.625 | 321.7915 | 454.0248 | 0 |
| 169.3125 | 0 | 506.7413 | 1.625 | 249.0387 | 445.7447 | 2 |
| 91.71094 | 0 | 356.9587 | 0 | 123.1202 | 329.8235 | 0 |
| 141.0938 | 0 | 382.1558 | 1.625 | 204.2677 | 331.2035 | 0 |
| 211.6406 | 0 | 496.9425 | 0 | 277.0205 | 434.7046 | 0 |
| 402.1172 | 0 | 887.4972 | 0 | 419.7281 | 815.5885 | 0 |


| 158.7305 | 0 | 187.5783 | 3.25 | 176.2858 | 162.8417 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 359.7891 | 0 | 537.5378 | 0 | 481.2882 | 431.9445 | 0 |
| 261.0234 | 0 | 652.3245 | 0 | 358.168 | 567.1859 | 0 |
| 74.07422 | 0 | 293.966 | 0 | 114.7257 | 256.6827 | 0 |
| 218.6953 | 0 | 666.3229 | 0 | 307.8006 | 590.6462 | 0 |
| 243.3867 | 0 | 918.2937 | 0 | 363.7644 | 821.1086 | 2 |
| 130.5117 | 0 | 348.5596 | 0 | 148.3039 | 322.9234 | 0 |
| 98.76563 | 0 | 433.9498 | 3.25 | 137.1112 | 402.9642 | 0 |
| 328.043 | 0 | 461.9465 | 0 | 377.7553 | 397.4442 | 0 |
| 208.1133 | 0 | 382.1558 | 1.625 | 265.8278 | 324.3034 | 2 |
| 250.4414 | 0 | 610.3293 | 0 | 305.0024 | 547.8657 | 0 |
| 675.0472 | 0 | 1694.654 | 2.428571 | 754.6197 | 1585.823 | 1.833333 |
| 442.7053 | 0 | 1080.563 | 0 | 538.6235 | 982.0466 | 0 |
| 178.966 | 0 | 1266.562 | 2.428571 | 257.0082 | 1195.915 | 1.833333 |
| 106.7516 | 0 | 487.1393 | 0 | 161.3136 | 445.1945 | 0 |
| 166.407 | 0 | 885.7078 | 0 | 287.0836 | 800.1861 | 0 |
| 219.7828 | 0 | 810.4226 | 2.428571 | 284.3495 | 752.175 | 1.833333 |
| 200.9443 | 0 | 845.8509 | 0 | 276.1471 | 778.3629 | 1.833333 |
| 125.5902 | 0 | 611.1384 | 0 | 174.9843 | 565.9498 | 0 |
| 213.5033 | 0 | 1231.134 | 0 | 322.6273 | 1140.629 | 0 |
| 521.1992 | 0 | 1507.179 | 9.714286 | 642.5204 | 1386.504 | 5.5 |
| 395.609 | 0 | 690.8521 | 0 | 462.0679 | 627.055 | 0 |
| 304.5562 | 0 | 1142.563 | 4.857143 | 393.7146 | 1057.701 | 0 |
| 458.4041 | 0 | 991.9927 | 2.428571 | 478.4726 | 932.5806 | 1.833333 |
| 361.0717 | 0 | 800.0893 | 0 | 418.3218 | 731.8066 | 0 |
| 317.1152 | 0 | 1198.658 | 7.285714 | 426.5242 | 1102.802 | 1.833333 |
| 185.2455 | 0 | 622.9478 | 0 | 246.0716 | 570.3145 | 0 |
| 546.3172 | 0 | 1328.562 | 2.428571 | 691.7347 | 1197.369 | 5.5 |
| 709.5845 | 0 | 1021.516 | 2.428571 | 809.3023 | 907.8476 | 0 |
| 169.5467 | 0 | 429.5683 | 4.857143 | 205.0597 | 394.2735 | 1.833333 |
| 546.3172 | 0 | 974.2785 | 0 | 604.2426 | 893.2987 | 0 |
| 326.5344 | 0 | 752.8516 | 0 | 415.5877 | 675.0661 | 0 |
| 238.6213 | 0 | 1096.801 | 0 | 298.0201 | 1030.058 | 0 |
| 135.0094 | 0 | 225.8555 | 0 | 164.0478 | 194.9544 | 0 |
| 401.8885 | 0 | 1011.183 | 0 | 522.2187 | 907.8476 | 0 |
| 276.2984 | 0 | 1715.321 | 4.857143 | 385.5122 | 1622.196 | 3.666667 |
| 496.0812 | 0 | 875.3745 | 2.428571 | 612.445 | 771.0885 | 1.833333 |
| 546.3172 | 0 | 1392.037 | 0 | 713.6078 | 1262.839 | 0 |
| 461.5439 | 0 | 2211.317 | 0 | 664.3934 | 2041.202 | 1.833333 |
| 464.6836 | 0 | 1431.894 | 2.428571 | 617.9132 | 1302.121 | 1.833333 |
| 207.2238 | 0 | 915.2314 | 0 | 254.274 | 862.7462 | 0 |
| 587.134 | 0 | 1068.754 | 0 | 656.191 | 982.0466 | 0 |
| 0 | 0 | 828.398 | 25.81068 | 188.6042 | 751.5524 | 0 |
| 0 | 0 | 722.8493 | 33.75243 | 205.369 | 666.649 | 1.444444 |
| 0 | 0 | 502.1563 | 11.91262 | 129.9273 | 452.8182 | 1.444444 |
| 0 | 0 | 1260.189 | 45.66505 | 408.6424 | 1138.335 | 1.444444 |
| 0 | 0 | 356.627 | 17.86893 | 161.3614 | 287.7282 | 0 |
|  |  |  |  |  |  | 0 |


| 0 | 0 | 279.8642 | 9.927184 | 81.72849 | 270.4331 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 391.8099 | 17.86893 | 113.1625 | 356.9088 | 2.888889 |
| 0 | 0 | 818.8027 | 25.81068 | 264.0459 | 729.5404 | 0 |
| 0 | 0 | 486.1641 | 33.75243 | 222.1338 | 424.517 | 0 |
| 0 | 0 | 132.7356 | 0 | 69.15488 | 108.4877 | 0 |
| 0 | 0 | 1444.099 | 51.62136 | 293.3843 | 1323.864 | 1.444444 |
| 0 | 0 | 548.5338 | 17.86893 | 207.4646 | 466.9688 | 0 |
| 0 | 0 | 1309.764 | 57.57767 | 435.8853 | 1128.901 | 0 |
| 0 | 0 | 791.6159 | 25.81068 | 203.2734 | 709.1007 | 4.333333 |
| 0 | 0 | 1255.391 | 33.75243 | 303.8623 | 1146.196 | 0 |
| 0 | 0 | 507.5814 | 9.887218 | 131.7575 | 455.4937 | 1.888889 |
| 0 | 0 | 806.0595 | 23.72932 | 225.2629 | 708.1763 | 3.777778 |
| 0 | 0 | 413.1476 | 9.887218 | 95.63046 | 375.6992 | 0 |
| 0 | 0 | 839.7858 | 45.4812 | 191.2609 | 774.6717 | 1.888889 |
| 0 | 0 | 301.8507 | 0 | 40.3773 | 285.9303 | 1.888889 |
| 0 | 0 | 753.7837 | 11.86466 | 131.7575 | 698.202 | 0 |
| 0 | 0 | 524.4446 | 13.84211 | 97.75558 | 508.69 | 3.777778 |
| 0 | 0 | 430.0108 | 19.77444 | 129.6324 | 400.6349 | 0 |
| 0 | 0 | 166.9454 | 1.977444 | 44.62755 | 161.2514 | 0 |
| 0 | 0 | 1134.891 | 43.50376 | 308.1426 | 1000.756 | 1.888889 |
| 0 | 0 | 399.6571 | 25.70677 | 136.0078 | 342.4514 | 0 |
| 0 | 0 | 443.5014 | 15.81955 | 110.5063 | 415.5964 | 1.888889 |
| 0 | 0 | 286.6739 | 5.932331 | 46.75267 | 265.9817 | 0 |
| 0 | 0 | 681.272 | 7.909774 | 112.6314 | 621.7322 | 0 |
| 0 | 0 | 397.9708 | 5.932331 | 99.8807 | 379.0239 | 0 |
| 0 | 0 | 1032.026 | 13.84211 | 212.5121 | 929.2736 | 0 |
| 0 | 0 | 234.3981 | 7.909774 | 76.50436 | 219.4349 | 0 |
| 438.8652 | 0 | 888.8719 | 4.846154 | 465.2345 | 853.5888 | 0 |
| 789.9574 | 0 | 2276.419 | 0 | 973.0395 | 2138.785 | 0 |
| 394.9787 | 0 | 1687.076 | 0 | 489.5605 | 1610.908 | 1.714286 |
| 546.8936 | 0 | 1392.404 | 0 | 668.9647 | 1298.033 | 0 |
| 506.383 | 0 | 1225.639 | 0 | 580.783 | 1163.255 | 1.714286 |
| 273.4468 | 0 | 1450.691 | 1.615385 | 361.8491 | 1379.862 | 0 |
| 246.4397 | 0 | 895.3482 | 0 | 294.9526 | 855.1933 | 0 |
| 820.3404 | 0 | 1717.838 | 6.461538 | 954.795 | 1606.095 | 6.857143 |
| 81.02128 | 0 | 158.6693 | 0 | 94.2632 | 146.0086 | 0 |
| 445.617 | 0 | 1617.455 | 3.230769 | 556.457 | 1524.266 | 0 |
| 513.1348 | 0 | 1515.454 | 1.615385 | 602.0682 | 1436.019 | 0 |
| 1130.922 | 0 | 2354.134 | 3.230769 | 1271.033 | 2210.987 | 1.714286 |
| 0 | 0 | 1732.058 | 107.625 | 580.2392 | 1460.913 | 0 |
| 0 | 0 | 1196.848 | 24.66406 | 302.6497 | 1025.922 | 0 |
| 0 | 0 | 525.3768 | 15.69531 | 227.4692 | 424.0478 | 0 |
| 0 | 0 | 1452.512 | 53.8125 | 451.083 | 1218.795 | 1.666667 |
| 0 | 0 | 512.734 | 15.69531 | 117.59 | 450.0378 | 1.666667 |
| 0 | 0 | 774.0176 | 58.29688 | 339.2761 | 610.0817 | 1.666667 |
| 0 | 0 | 446.7107 | 38.11719 | 179.2766 | 367.9641 | 0 |
| 0 | 0 | 1231.966 | 38.11719 | 416.3843 | 1024.554 | 5 |


| 0 | 0 | 543.6385 | 40.35938 | 254.4571 | 441.8305 | 1.666667 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 848.4694 | 47.08594 | 289.1557 | 696.2592 | 1.666667 |
| 0 | 0 | 546.448 | 33.63281 | 206.2644 | 455.5094 | 1.666667 |
| 0 | 0 | 1276.918 | 51.57031 | 289.1557 | 1118.939 | 0 |
| 0 | 0 | 733.2799 | 35.875 | 283.3726 | 607.3459 | 0 |
| 0 | 0 | 125.0228 | 13.45313 | 36.62639 | 110.7996 | 0 |
| 187.7148 | 0 | 635.904 | 0 | 193.5238 | 643.8677 | 0 |
| 460.7546 | 0 | 654.9335 | 0 | 505.0498 | 640.6802 | 0 |
| 631.4044 | 0 | 432.9222 | 0 | 651.3726 | 423.9327 | 0 |
| 158.4606 | 0 | 231.5261 | 0 | 184.0836 | 226.3099 | 0 |
| 324.2347 | 0 | 342.5318 | 0 | 344.5667 | 329.9025 | 0 |
| 226.7205 | 0 | 459.8807 | 0 | 236.0046 | 458.9948 | 0 |
| 348.6132 | 0 | 336.1886 | 0 | 354.0069 | 334.6837 | 0 |
| 224.2826 | 0 | 604.1881 | 0 | 269.0452 | 581.7121 | 0 |
| 214.5312 | 0 | 263.242 | 0 | 226.5644 | 258.1846 | 0 |
| 321.7968 | 0 | 466.2239 | 0 | 342.2066 | 460.5885 | 0 |
| 97.5142 | 0 | 410.721 | 0 | 108.5621 | 411.1828 | 0 |
| 365.6782 | 0 | 209.325 | 0 | 382.3274 | 194.4353 | 0 |
| 302.294 | 0 | 534.4131 | 0 | 325.6863 | 527.5252 | 0 |
| 822.8196 | 0 | 2074.964 | 5.190476 | 855.1098 | 2056.314 | 0 |
| 974.2839 | 0 | 1894.982 | 5.190476 | 1014.2 | 1877.685 | 8.114286 |
| 1470.987 | 0 | 1768.619 | 6.920635 | 1451.193 | 1770.165 | 2.028571 |
| 1082.584 | 0 | 1888.904 | 10.35294 | 1268.229 | 1667.861 | 8.4375 |
| 1219.902 | 0 | 1431.58 | 1.730159 | 1189.199 | 1431.111 | 0 |
| 1293.587 | 0 | 1845.332 | 5.190476 | 1336.358 | 1804.987 | 2.028571 |
| 634.5126 | 0 | 1355.036 | 0 | 628.4063 | 1356.336 | 0 |
| 1522.83 | 0 | 1568.118 | 6.920635 | 1555.107 | 1534.966 | 4.057143 |
| 1485.988 | 0 | 1437.786 | 6.920635 | 1654.538 | 1333.488 | 6.085714 |
| 1404.115 | 0 | 1075.754 | 12.11111 | 1499.425 | 1040.619 | 8.114286 |
| 1338.617 | 0 | 1822.575 | 10.38095 | 1411.925 | 1775.907 | 4.057143 |
| 1973.802 | 0 | 2153.729 | 5.176471 | 2202.713 | 1873.137 | 0 |
| 1971.326 | 0 | 1667.358 | 9.494865 | 2189.157 | 1456.576 | 5.0625 |
| 1716.825 | 0 | 1597.056 | 10.35294 | 2115.426 | 1483.114 | 5.0625 |
| 818.726 | 0 | 1861.882 | 1.730159 | 799.4282 | 1861.068 | 4.057143 |
| 675.4489 | 0 | 1572.256 | 1.730159 | 731.8149 | 1532.889 | 4.057143 |
| 708.198 | 0 | 1640.525 | 0 | 731.8149 | 1613.895 | 0 |
| 1007.033 | 0 | 1288.836 | 5.190476 | 1026.132 | 1271.176 | 4.057143 |
| 863.7559 | 0 | 1779.131 | 6.920635 | 863.0643 | 1767.599 | 2.028571 |
| 1629.265 | 0 | 1369.517 | 8.650794 | 1650.561 | 1323.103 | 10.14286 |
| 2362.024 | 0 | 1774.994 | 13.84127 | 2402.262 | 1742.674 | 6.085714 |
| 1146.216 | 0 | 964.041 | 3.460317 | 1201.131 | 934.6881 | 0 |
| 1503.589 | 0 | 1324.124 | 2.588235 | 1591.704 | 1170.069 | 5.0625 |
| 1835.699 | 0 | 1595.729 | 4.318394 | 1908.992 | 1469.273 | 3.716071 |
| 890.1722 | 0 | 881.9091 | 0 | 976.397 | 806.6543 | 0 |
| 1158.695 | 0 | 1224.263 | 8.636788 | 1230.715 | 1164.645 | 5.744643 |
| 1234.77 | 0 | 3506.496 | 10.07407 | 1547.057 | 3211.387 | 0 |
| 915.8557 | 0 | 1193.789 | 2.518519 | 1073.704 | 1044.959 | 0 |
| 0 |  |  |  |  |  | 0 |


| 862.7033 | 0 | 1439.202 | 0 | 996.736 | 1298.649 | 2.148936 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1537.329 | 0 | 2264.872 | 2.518519 | 1777.961 | 2017.436 | 6.446809 |
| 1214.326 | 0 | 1543.191 | 2.518519 | 1466.241 | 1326.836 | 0 |
| 1345.163 | 0 | 1615.983 | 7.555556 | 1539.361 | 1433.547 | 2.148936 |
| 719.6009 | 0 | 2104.73 | 7.555556 | 1027.523 | 1848.309 | 8.595745 |
| 997.6285 | 0 | 1613.903 | 10.07407 | 1239.185 | 1425.493 | 10.74468 |
| 1668.166 | 0 | 732.0799 | 2.518519 | 1797.203 | 597.9824 | 2.148936 |
| 1933.927 | 0 | 1605.584 | 15.11111 | 2128.166 | 1407.373 | 4.297872 |
| 1058.958 | 0 | 1306.097 | 5.037037 | 1246.882 | 1133.549 | 8.595745 |
| 997.6285 | 0 | 742.4787 | 2.518519 | 1119.885 | 610.0628 | 4.297872 |
| 879.0579 | 0 | 314.0456 | 5.037037 | 927.4648 | 257.7163 | 0 |
| 2122.005 | 0 | 1160.513 | 5.037037 | 2178.195 | 1044.959 | 6.446809 |
| 1283.833 | 0 | 2052.735 | 12.59259 | 1527.815 | 1836.229 | 8.595745 |
| 1414.67 | 0 | 1663.818 | 5.037037 | 1573.996 | 1485.896 | 2.148936 |
| 1271.567 | 0 | 2192.08 | 0 | 1508.573 | 1955.02 | 4.297872 |
| 1189.795 | 0 | 1441.282 | 5.037037 | 1373.879 | 1274.488 | 4.297872 |
| 1324.72 | 0 | 1659.658 | 2.518519 | 1527.815 | 1469.788 | 4.297872 |
| 1222.504 | 0 | 740.399 | 5.037037 | 1377.728 | 606.036 | 2.148936 |
| 813.6396 | 0 | 1622.222 | 2.518519 | 1085.249 | 1417.44 | 0 |
| 1341.074 | 0 | 1811.482 | 5.037037 | 1627.874 | 1572.472 | 4.297872 |
| 1013.983 | 0 | 2726.582 | 2.518519 | 1385.425 | 2418.104 | 6.446809 |
| 1627.279 | 0 | 734.1596 | 5.037037 | 1747.174 | 616.1031 | 2.148936 |
| 1794.914 | 0 | 1719.972 | 2.518519 | 1978.078 | 1546.298 | 0 |
| 1852.155 | 0 | 1085.641 | 2.518519 | 1997.32 | 922.1412 | 2.148936 |
| 1602.747 | 0 | 1799.003 | 7.555556 | 1789.507 | 1610.727 | 4.297872 |
| 234.0442 | 0 | 367.1364 | 4 | 248.669 | 367.0136 | 1.5 |
| 478.4138 | 0 | 401.1636 | 0 | 483.7123 | 395.5196 | 0 |
| 326.9735 | 0 | 232.8182 | 2 | 350.8617 | 229.8289 | 0 |
| 227.1605 | 0 | 222.0727 | 0 | 241.8561 | 222.7025 | 0 |
| 502.5066 | 0 | 356.3909 | 0 | 531.4022 | 345.6342 | 0 |
| 340.7408 | 0 | 351.0182 | 2 | 347.4553 | 358.1056 | 0 |
| 227.1605 | 0 | 39.4 | 2 | 235.0433 | 39.19563 | 1.5 |
| 660.953 | 0 | 169.9053 | 0 | 691.0154 | 152.9478 | 0 |
| 337.7283 | 0 | 223.394 | 1.166667 | 348.5835 | 228.6334 | 0 |
| 136.7489 | 0 | 73.94028 | 0 | 137.3829 | 75.68553 | 0 |
| 151.2526 | 0 | 360.2622 | 0 | 159.9383 | 357.9295 | 0 |
| 37.29515 | 0 | 188.7837 | 1.166667 | 47.16129 | 189.2138 | 2.5 |
| 538.7078 | 0 | 300.4807 | 2.333333 | 561.8345 | 291.7046 | 2.5 |
| 99.45374 | 0 | 12.58558 | 0 | 98.42356 | 14.19104 | 0 |
| 420.6065 | 0 | 215.528 | 0 | 420.3506 | 216.0191 | 0 |
| 136.7489 | 0 | 116.4166 | 0 | 141.4839 | 115.1051 | 0 |
| 180.2599 | 0 | 303.6271 | 0 | 186.5947 | 309.0492 | 0 |
| 122.2452 | 0 | 195.0765 | 2.333333 | 131.2314 | 195.5209 | 0 |
| 0 | 0 | 836.5821 | 22.97037 | 219.7704 | 728.0674 | 0 |
| 0 | 0 | 423.077 | 19.68889 | 98.25029 | 374.3277 | 2.727273 |
| 0 | 0 | 817.4383 | 19.68889 | 209.4282 | 716.8375 | 2.727273 |
| 0 | 0 | 719.8052 | 6.562963 | 168.0597 | 636.3571 | 2.727273 |
|  |  |  |  |  |  |  |


| 0 | 0 | 283.3276 | 0 | 134.4478 | 226.4683 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 101.4619 | 0 | 31.02641 | 93.58192 | 0 |
| 0 | 0 | 220.1532 | 0 | 46.53961 | 194.6504 | 0 |
| 0 | 0 | 275.6701 | 9.844444 | 41.36854 | 260.1577 | 2.727273 |
| 0 | 0 | 155.0644 | 9.844444 | 54.29621 | 127.2714 | 0 |
| 0 | 0 | 555.1689 | 13.12593 | 100.8358 | 497.8558 | 0 |
| 0 | 0 | 218.2388 | 9.844444 | 82.73708 | 204.0086 | 0 |
| 0 | 0 | 1627.219 | 42.65926 | 491.2514 | 1394.371 | 0 |
| 0 | 0 | 568.5695 | 6.562963 | 134.4478 | 520.3155 | 0 |
| 0 | 0 | 1629.134 | 55.78519 | 390.4156 | 1439.29 | 2.727273 |
| 0 | 0 | 430.7345 | 16.40741 | 103.4214 | 409.8888 | 0 |
| 0 | 0 | 1271.145 | 32.81481 | 284.4087 | 1164.159 | 0 |
| 0 | 0 | 2973.025 | 85.31852 | 868.7394 | 2595.963 | 13.63636 |
| 0 | 0 | 359.9026 | 0 | 93.07922 | 321.9218 | 0 |
| 0 | 0 | 1230.943 | 26.25185 | 253.3823 | 1108.01 | 0 |
| 0 | 0 | 2362.339 | 65.62963 | 698.0941 | 2019.498 | 2.727273 |
| 553.9512 | 0 | 760.0187 | 4.769231 | 621.379 | 725.6775 | 2 |
| 589.5623 | 0 | 2000.34 | 0 | 701.3225 | 1925.977 | 0 |
| 629.1302 | 0 | 1354.416 | 0 | 686.7874 | 1301.088 | 0 |
| 850.7107 | 0 | 1580.765 | 2.384615 | 941.1531 | 1504.498 | 4 |
| 625.1735 | 0 | 1001.09 | 0 | 708.5901 | 934.5846 | 0 |
| 486.6857 | 0 | 1578.925 | 2.384615 | 592.3087 | 1506.33 | 6 |
| 854.6675 | 0 | 2313.18 | 9.538462 | 883.0123 | 2266.826 | 4 |
| 367.9818 | 0 | 800.5039 | 4.769231 | 432.4217 | 756.8303 | 2 |
| 823.0131 | 0 | 1518.197 | 2.384615 | 864.8433 | 1456.852 | 6 |
| 292.8028 | 0 | 901.7171 | 2.384615 | 334.3092 | 864.9489 | 2 |
| 245.3212 | 0 | 669.847 | 2.384615 | 308.8726 | 630.3865 | 0 |
| 0 | 0 | 1526.664 | 126.9221 | 627.5994 | 1300.761 | 0 |
| 0 | 0 | 695.232 | 58.57944 | 349.8687 | 595.0288 | 1.705882 |
| 0 | 0 | 1061.144 | 107.3956 | 313.7997 | 960.7442 | 0 |
| 059.0229 | 0 | 0 | 413.8059 | 2.333333 | 737.1196 | 329.6289 |

$\left.\begin{array}{rrrrrrr}316.4615 & 0 & 244.7618 & 0 & 362.6153 & 193.6995 & 0 \\ 531.7858 & 0 & 567.0021 & 2.333333 & 627.1461 & 463.8592 & 4.5 \\ 195.7494 & 0 & 558.1977 & 0 & 249.6695 & 499.5407 & 0 \\ 349.0864 & 0 & 510.654 & 0 & 404.2269 & 446.868 & 0 \\ 391.4987 & 0 & 611.024 & 2.333333 & 505.2836 & 499.5407 & 0 \\ 561.1482 & 0 & 1692.202 & 0 & 864.9266 & 1435.755 & 0 \\ 848.2472 & 0 & 1352.353 & 0 & 1070.012 & 1140.108 & 4.5 \\ 0 & 0 & 998.6461 & 51.07389 & 412.5175 & 856.7471 & 1.909091 \\ 0 & 0 & 685.8952 & 38.30542 & 274.0698 & 569.0493 & 1.909091 \\ 0 & 0 & 662.1693 & 35.1133 & 242.9897 & 571.1647 & 5.727273 \\ 0 & 0 & 1777.288 & 70.2266 & 423.8193 & 1698.686 & 1.909091 \\ 0 & 0 & 931.7821 & 28.72906 & 259.9425 & 812.3232 & 0 \\ 0 & 0 & 1766.504 & 105.3399 & 607.4743 & 1478.682 & 1.909091 \\ 0 & 0 & 411.9685 & 9.576355 & 96.06571 & 404.0462 & 3.818182 \\ 0 & 0 & 1158.257 & 60.65025 & 420.9938 & 968.8646 & 0 \\ 0 & 0 & 1619.834 & 86.18719 & 457.7248 & 1449.066 & 0 \\ 0 & 0 & 873.5458 & 51.07389 & 178.0041 & 816.554 & 0 \\ 0 & 0 & 1891.604 & 47.88177 & 387.0883 & 1747.341 & 3.818182 \\ 0 & 0 & 845.506 & 63.84236 & 367.3101 & 723.4753 & 0 \\ 0 & 0 & 440.6919 & 13.76289 & 131.7328 & 389.837 & 1.857143 \\ 0 & 0 & 1887.345 & 68.81443 & 570.0438 & 1666.629 & 1.857143 \\ 0 & 0 & 1301.832 & 57.80412 & 572.439 & 1101.516 & 0 \\ 0 & 0 & 1354.777 & 104.5979 & 701.7767 & 1080.362 & 0 \\ 0 & 0 & 1178.812 & 60.5567 & 344.9005 & 1051.653 & 1.857143 \\ 0 & 0 & 1242.658 & 52.29897 & 359.2713 & 1112.093 & 3.714286 \\ 18671.589 & 0 & 0 & 883.3464 & 10.80952 & 721.6989 & 547.7081\end{array}\right) 8.1481480$

| 1132.629 | 0 | 437.5454 | 0 | 1148.157 | 426.9315 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 3997.909 | 0 | 762.2646 | 18.01587 | 4094.001 | 752.7476 | 0 |
| 2696.735 | 0 | 654.9422 | 10.80952 | 2670.286 | 679.7198 | 4.074074 |
| 2002.326 | 0 | 500.8381 | 10.80952 | 2007.635 | 511.1942 | 0 |
| 1361.851 | 0 | 624.6717 | 14.4127 | 1371.228 | 637.5884 | 4.074074 |
| 2474.254 | 0 | 465.064 | 7.206349 | 2460.337 | 460.6366 | 4.074074 |
| 1287.691 | 0 | 343.9822 | 7.206349 | 1279.375 | 348.2862 | 4.074074 |
| 1240.498 | 0 | 371.5008 | 7.206349 | 1161.279 | 404.4614 | 0 |
| 1671.976 | 0 | 608.1606 | 7.206349 | 1679.59 | 612.3096 | 4.074074 |
| 1523.655 | 0 | 778.7758 | 3.603175 | 1548.372 | 778.0264 | 0 |
| 2009.067 | 0 | 580.642 | 3.603175 | 2047.001 | 570.1782 | 4.074074 |
| 1658.492 | 0 | 668.7015 | 7.206349 | 1666.468 | 668.4848 | 0 |
| 1793.329 | 0 | 668.7015 | 3.603175 | 1837.052 | 657.2497 | 4.074074 |
| 1395.56 | 0 | 489.8307 | 7.206349 | 1443.398 | 471.8716 | 4.074074 |
| 2413.578 | 0 | 718.2349 | 7.206349 | 2434.094 | 727.4687 | 8.148148 |
| 2966.408 | 0 | 809.0462 | 7.206349 | 3018.014 | 778.0264 | 8.148148 |
| 3101.245 | 0 | 679.7089 | 10.80952 | 3142.671 | 665.676 | 8.148148 |
| 1213.531 | 0 | 354.9897 | 3.603175 | 1253.132 | 342.6687 | 0 |
| 2292.225 | 0 | 390.7638 | 7.206349 | 2368.485 | 367.9475 | 8.148148 |
| 1928.165 | 0 | 330.2229 | 3.603175 | 1968.27 | 303.346 | 0 |
| 2689.993 | 0 | 517.3493 | 10.80952 | 2709.651 | 494.3417 | 4.074074 |
| 4321.517 | 0 | 580.642 | 0 | 4402.363 | 553.3256 | 0 |
| 4058.586 | 0 | 608.1606 | 3.603175 | 4251.463 | 525.238 | 0 |
| 2959.666 | 0 | 550.3716 | 3.603175 | 3070.501 | 522.4293 | 4.074074 |
| 2123.679 | 0 | 836.5648 | 18.01587 | 2132.292 | 848.2454 | 8.148148 |
| 2541.673 | 0 | 382.5082 | 3.603175 | 2624.36 | 362.33 | 0 |
| 0 | 0 | 1365.274 | 79.56989 | 723.232 | 1042.057 | 9.333333 |
| 17474.4965 | 0 | 0 | 1282.39 | 99.46237 | 602.6933 | 1059.497 |


| 665.11 | 0 | 753.4707 | 0 | 751.1059 | 706.362 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1408.794 | 0 | 1013.658 | 2.489362 | 1450.481 | 982.1668 | 6.363636 |
| 812.9122 | 0 | 1954.809 | 2.97561 | 1016.882 | 1880.986 | 0 |
| 655.2531 | 0 | 577.4002 | 7.468085 | 695.31 | 561.9747 | 6.363636 |
| 1338.588 | 0 | 1070.115 | 4.978723 | 1427.458 | 1023.413 | 0 |
| 907.9936 | 0 | 184.7681 | 0 | 902.5216 | 188.1842 | 0 |
| 1230.94 | 0 | 1203.559 | 4.978723 | 1307.735 | 1190.974 | 0 |
| 819.0706 | 0 | 1093.323 | 5.95122 | 889.7717 | 1058.22 | 3.772727 |
| 1390.073 | 0 | 816.0589 | 4.978723 | 1390.62 | 812.0277 | 3.181818 |
| 825.2291 | 0 | 2065.458 | 0 | 947.549 | 2018.555 | 0 |
| 695.9021 | 0 | 1812.545 | 5.95122 | 762.6614 | 1796.329 | 7.545455 |
| 1254.342 | 0 | 564.5691 | 4.978723 | 1257.084 | 559.3968 | 0 |
| 677.4268 | 0 | 1098.592 | 0 | 768.4392 | 1060.866 | 0 |
| 985.3481 | 0 | 1095.957 | 5.95122 | 1039.993 | 1060.866 | 3.772727 |
| 964.1581 | 0 | 1082.946 | 4.978723 | 994.6156 | 1067.236 | 3.181818 |
| 931.3955 | 0 | 818.6251 | 7.468085 | 962.3827 | 822.3391 | 3.181818 |
| 1219.368 | 0 | 911.5415 | 8.926829 | 1242.214 | 883.6139 | 0 |
| 1511.763 | 0 | 787.8305 | 0 | 1501.133 | 793.9826 | 0 |
| 1198.177 | 0 | 667.218 | 4.978723 | 1238.665 | 652.2 | 0 |
| 996.9208 | 0 | 384.9335 | 2.489362 | 1008.43 | 389.2577 | 3.181818 |
| 851.829 | 0 | 893.0456 | 4.978723 | 907.1263 | 863.585 | 3.181818 |
| 320.2381 | 0 | 439.9637 | 0 | 346.6643 | 439.1614 | 0 |
| 716.098 | 0 | 1021.357 | 2.489362 | 741.357 | 1013.101 | 3.181818 |
| 1142.013 | 0 | 61.58935 | 2.489362 | 1141.966 | 48.97945 | 0 |
| 2040.645 | 0 | 392.6321 | 4.978723 | 2113.558 | 368.6348 | 3.181818 |
| 2691.218 | 0 | 207.8641 | 7.468085 | 2712.169 | 185.6063 | 0 |
| 711.4177 | 0 | 959.7674 | 0 | 750.5664 | 943.4988 | 0 |
| 831.3875 | 0 | 1867.87 | 0 | 935.9936 | 1822.784 | 0 |
| 1151.373 | 0 | 410.5957 | 4.978723 | 1201.827 | 402.147 | 0 |
| 1083.883 | 0 | 1475.327 | 0 | 1091.992 | 1449.762 | 0 |
| 757.4864 | 0 | 1090.688 | 0 | 779.9946 | 1074.094 | 0 |
| 472.7183 | 0 | 1018.791 | 4.978723 | 515.7266 | 1007.945 | 0 |
| 911.447 | 0 | 1061.709 | 2.97561 | 970.66 | 1031.765 | 0 |
| 1939.904 | 0 | 1572.804 | 8.926829 | 1964.431 | 1537.065 | 11.31818 |
| 1146.693 | 0 | 615.8935 | 12.44681 | 1201.827 | 595.487 | 3.181818 |
| 622.001 | 0 | 1293.546 | 5.95122 | 716.4395 | 1253.991 | 0 |
| 1015.642 | 0 | 597.93 | 0 | 990.0109 | 621.2656 | 0 |
| 504.9909 | 0 | 389.9079 | 2.97561 | 543.1074 | 373.0226 | 0 |
| 911.447 | 0 | 1135.475 | 2.97561 | 930.2158 | 1119.068 | 3.772727 |
| 2666.598 | 0 | 353.0247 | 8.926829 | 2715.537 | 285.7195 | 7.545455 |
| 726.6942 | 0 | 1053.805 | 0 | 797.3278 | 1015.891 | 3.772727 |
| 1558.082 | 0 | 961.5973 | 2.97561 | 1606.211 | 918.006 | 3.772727 |
| 1009.982 | 0 | 2091.803 | 11.90244 | 1178.659 | 2002.682 | 7.545455 |
| 825.2291 | 0 | 648.0902 | 0 | 826.2165 | 626.9955 | 0 |
| 1581.968 | 0 | 1147.102 | 4.978723 | 1611.646 | 1147.15 | 6.363636 |
| 1385.392 | 0 | 459.3539 | 2.489362 | 1473.505 | 415.0364 | 3.181818 |
| 500.8006 | 0 | 184.7681 | 0 | 506.5172 | 180.4506 | 0 |
|  |  |  |  |  |  | 0 |


| 865.8702 | 0 | 628.7246 | 7.468085 | 874.8934 | 626.4213 | 6.363636 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1216.899 | 0 | 615.8935 | 2.489362 | 1220.246 | 618.6877 | 6.363636 |
| 794.4369 | 0 | 223.9336 | 0 | 803.1056 | 206.3529 | 0 |
| 1046.932 | 0 | 1045.902 | 11.90244 | 1097.77 | 1010.6 | 3.772727 |
| 541.9415 | 0 | 1077.516 | 0 | 577.7738 | 1055.575 | 11.31818 |
| 812.9122 | 0 | 2010.133 | 0 | 947.549 | 1939.189 | 0 |
| 1071.566 | 0 | 1859.966 | 5.95122 | 1103.548 | 1838.658 | 3.772727 |
| 326.3966 | 0 | 969.5008 | 2.97561 | 375.553 | 947.1071 | 3.772727 |
| 1071.566 | 0 | 848.3132 | 0 | 1086.215 | 820.1207 | 0 |
| 911.447 | 0 | 877.2928 | 2.97561 | 953.3268 | 851.8673 | 0 |
| 672.6992 | 0 | 1051.055 | 3.2 | 671.1615 | 1042.14 | 4.666667 |
| 619.6786 | 0 | 1080.802 | 0 | 628.6 | 1057.135 | 0 |
| 609.7372 | 0 | 1152.69 | 3.2 | 651.5177 | 1127.111 | 4.666667 |
| 662.7579 | 0 | 1179.958 | 3.2 | 690.8052 | 1149.603 | 0 |
| 487.127 | 0 | 1410.496 | 6.4 | 500.9156 | 1412.012 | 4.666667 |
| 0 | 0 | 344.9903 | 13.2 | 235.322 | 219.7864 | 1 |
| 0 | 0 | 321.2524 | 22 | 193.9228 | 230.2524 | 1 |
| 0 | 0 | 259.534 | 19.8 | 246.2166 | 164.466 | 0 |
| 0 | 0 | 501.6602 | 13.2 | 248.3955 | 370.7961 | 0 |
| 0 | 0 | 528.5631 | 8.8 | 233.1431 | 400.699 | 0 |
| 514.6003 | 0 | 101.5771 | 0 | 502.2108 | 105.5107 | 0 |
| 392.3472 | 0 | 200.8456 | 2.1 | 398.9786 | 194.6086 | 0 |
| 719.3032 | 0 | 267.7941 | 8.4 | 744.9461 | 250.881 | 0 |
| 1228.217 | 0 | 898.0336 | 6.3 | 1291.798 | 853.4644 | 0 |
| 588.5208 | 0 | 80.79993 | 0 | 585.9126 | 72.68515 | 6.25 |
| 997.9266 | 0 | 182.377 | 0 | 998.8415 | 164.1278 | 0 |
| 787.5375 | 0 | 295.4969 | 4.2 | 834.228 | 260.2597 | 0 |
| 594.207 | 0 | 422.4682 | 6.3 | 647.294 | 379.8385 | 0 |
| 790.3806 | 0 | 487.1082 | 2.1 | 831.4379 | 447.8343 | 6.25 |
| 1091.749 | 0 | 392.4568 | 4.2 | 1129.974 | 354.047 | 6.25 |
| 1034.887 | 0 | 563.291 | 0 | 1065.803 | 541.6216 | 6.25 |
| 1077.533 | 0 | 512.5024 | 2.1 | 1082.543 | 499.4173 | 0 |
| 235.9769 | 0 | 16.15999 | 0 | 234.3651 | 11.72341 | 0 |
| 796.0668 | 0 | 752.5937 | 2.1 | 850.9684 | 708.0941 | 0 |
| 813.1254 | 0 | 1066.559 | 0 | 845.3882 | 1029.316 | 0 |
| 423.6213 | 0 | 844.9365 | 4.2 | 474.3102 | 806.5707 | 0 |
| 309.6717 | 0 | 98.73684 | 2 | 318.1351 | 94.63291 | 1.5 |
| 222.8847 | 0 | 14.73684 | 0 | 220.5476 | 13.51899 | 0 |
| 195.2707 | 0 | 150.3158 | 0 | 193.2232 | 154.7173 | 0 |
| 226.8296 | 0 | 175.3684 | 0 | 230.3064 | 171.2405 | 1.5 |
| 220.9123 | 0 | 13.26316 | 0 | 228.3546 | 10.51477 | 0 |
| 142.015 | 0 | 209.2632 | 0 | 160.0434 | 199.7806 | 0 |
| 256.416 | 0 | 66.31579 | 0 | 267.3896 | 67.59494 | 0 |
| 1740.486 | 0 | 659.4773 | 2.9375 | 1826.493 | 639.7551 | 5.6 |
| 1201.346 | 0 | 700.8563 | 20.5625 | 1198.272 | 727.1112 | 2.8 |
| 1916.293 | 0 | 964.6472 | 5.875 | 1983.548 | 950.6401 | 0 |
| 949.356 | 0 | 473.2719 | 2.9375 | 959.7814 | 467.6122 | 0 |
|  |  |  |  |  |  | 0 |


| 1371.292 | 0 | 662.0635 | 5.875 | 1390.229 | 660.3095 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1793.228 | 0 | 695.6839 | 8.8125 | 1820.676 | 688.5718 | 5.6 |
| 2838.009 | 0 | 683.8245 | 12.5 | 2844.611 | 698.741 | 10 |
| 2144.511 | 0 | 518.3327 | 2.5 | 2144.073 | 525.6295 | 0 |
| 2016.48 | 0 | 505.8428 | 5 | 2027.316 | 525.6295 | 0 |
| 270.5243 | 0 | 603.2877 | 0 | 302.2853 | 589.8567 | 0 |
| 391.9842 | 0 | 420.2904 | 0 | 427.5566 | 412.0917 | 0 |
| 518.965 | 0 | 50.27397 | 0 | 514.7019 | 50.50143 | 0 |
| 441.6723 | 0 | 64.35068 | 0 | 430.2799 | 66.66189 | 0 |
| 433.391 | 0 | 28.15342 | 0 | 446.6197 | 14.1404 | 0 |
| 386.4633 | 0 | 301.6438 | 0 | 427.5566 | 276.7479 | 0 |
| 2320.792 | 0 | 1499.463 | 9.9 | 2577.231 | 1261.174 | 8.4 |
| 1440.036 | 0 | 1177.463 | 6.6 | 1676.701 | 980.6596 | 4.2 |
| 1484.074 | 0 | 1196.687 | 0 | 1659.548 | 1026.272 | 2.1 |
| 1299.115 | 0 | 470.9851 | 6.6 | 1359.372 | 399.1056 | 4.2 |
| 1144.983 | 0 | 485.403 | 9.9 | 1222.148 | 412.7893 | 2.1 |
| 0 | 0 | 902.5818 | 13 | 432.8194 | 719.2967 | 1 |
| 0 | 0 | 535.9079 | 8 | 204.5516 | 457.7342 | 0 |
| 0 | 0 | 618.5103 | 9 | 281.629 | 501.9691 | 0 |
| 1759.491 | 0 | 270.7951 | 7.857143 | 1767.363 | 266.3213 | 5.090909 |
| 2037.756 | 0 | 156.3126 | 0 | 2035.017 | 157.5734 | 0 |
| 1357.077 | 0 | 233.3681 | 0 | 1376.504 | 230.8118 | 0 |
| 2791.212 | 0 | 418.3013 | 10.47619 | 2812.487 | 419.456 | 7.636364 |
| 971.7868 | 0 | 200.3443 | 0 | 951.6572 | 217.4957 | 2.545455 |
| 1502.631 | 0 | 647.2663 | 2.619048 | 1537.946 | 648.0485 | 0 |
| 1421.292 | 0 | 259.7871 | 13.09524 | 1410.492 | 272.9793 | 0 |
| 2067.723 | 0 | 264.1903 | 7.857143 | 2111.489 | 244.1278 | 10.18182 |
| 2508.666 | 0 | 182.7316 | 7.857143 | 2506.597 | 184.2056 | 2.545455 |
| 491.7265 | 19.93846 | 232.024 | 0 | 503.9249 | 234.8062 | 0 |
| 436.6619 | 0 | 255.384 | 0 | 467.3317 | 244.1278 | 0 |
| 2072.004 | 0 | 722.1202 | 0 | 2069.005 | 739.0416 | 2.545455 |
| 920.4149 | 0 | 557.0013 | 0 | 917.6695 | 559.2747 | 0 |
| 1104.498 | 0 | 204.7475 | 2.619048 | 1108.851 | 199.741 | 2.545455 |
| 1635.342 | 0 | 486.5505 | 13.09524 | 1622.915 | 503.7911 | 10.18182 |
| 2183.31 | 0 | 253.1824 | 2.619048 | 2179.465 | 253.0052 | 7.636364 |
| 1311.271 | 97.47692 | 1096.841 | 7.5 | 1397.246 | 1116.761 | 3.833333 |
| 1326.881 | 115.2 | 855.229 | 2.5 | 1423.97 | 897.2271 | 1.916667 |
| 1182.485 | 66.46154 | 594.4417 | 2.5 | 1248.359 | 591.7881 | 5.75 |
| 1532.598 | 0 | 614.2425 | 2.619048 | 1537.946 | 614.7583 | 2.545455 |
| 1486.887 | 106.3385 | 1982.751 | 2.5 | 1465.963 | 2042.623 | 1.916667 |
| 2324.583 | 0 | 1331.96 | 18.33333 | 2374.895 | 1327.168 | 10.18182 |
| 1365.907 | 66.46154 | 828.3833 | 10 | 1427.787 | 830.4123 | 7.666667 |
| 2405.922 | 0 | 675.8869 | 10.47619 | 2396.137 | 690.216 | 7.636364 |
| 1755.21 | 0 | 713.3139 | 0 | 1750.37 | 725.7255 | 0 |
| 1545.426 | 104.1231 | 1422.825 | 0 | 1656.844 | 1427.927 | 1.916667 |
| 2123.376 | 0 | 860.8201 | 5.238095 | 2107.241 | 874.4216 | 2.545455 |
| 738.3424 | 0 | 143.6005 | 0 | 745.1455 | 142.3953 | 2.545455 |
|  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |


| 1078.812 | 0 | 554.7997 | 2.619048 | 1070.614 | 554.836 | 5.090909 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 650.7119 | 0 | 554.7997 | 2.619048 | 645.7674 | 565.9327 | 2.545455 |
| 1845.618 | 0 | 964.4915 | 2.384615 | 2036.489 | 795.3146 | 5.555556 |
| 741.58 | 0 | 449.098 | 2.384615 | 858.713 | 363.2145 | 0 |
| 1637.309 | 0 | 1039.341 | 2.384615 | 1874.988 | 868.375 | 2.777778 |
| 1491.492 | 0 | 1065.004 | 9.538462 | 1681.974 | 916.3861 | 0 |
| 641.5916 | 0 | 220.2719 | 0 | 653.8824 | 198.3068 | 0 |
| 1266.519 | 0 | 951.6601 | 11.92308 | 1374.729 | 860.0252 | 8.333333 |
| 1291.516 | 0 | 968.7686 | 2.384615 | 1433.814 | 853.7629 | 5.555556 |
| 1062.376 | 0 | 885.3647 | 0 | 1201.41 | 778.615 | 2.777778 |
| 603.3606 | 0 | 543.6143 | 0 | 613.9291 | 535.4072 | 4.2 |
| 995.6803 | 0 | 205.5851 | 3.857143 | 1009.752 | 198.299 | 4.2 |
| 641.2398 | 0 | 984.4361 | 7.714286 | 657.0118 | 981.5799 | 0 |
| 922.6277 | 0 | 770.944 | 0 | 942.435 | 763.451 | 0 |
| 600.655 | 0 | 713.6174 | 3.857143 | 616.6217 | 705.9443 | 8.4 |
| 1114.729 | 0 | 251.051 | 7.714286 | 1149.771 | 228.0438 | 4.2 |
| 673.7076 | 0 | 446.7521 | 3.857143 | 705.4799 | 434.2747 | 0 |
| 1650 | 0 | 1085 | 5 | 1853 | 895 | 3 |
| 1559.74 | 0 | 1652.766 | 6.25641 | 1681.737 | 1509.791 | 9.9375 |
| 862.835 | 0 | 1831.359 | 3.128205 | 1089.906 | 1644.028 | 0 |
| 509.857 | 0 | 1091.922 | 3.128205 | 720.7443 | 939.6603 | 1.65625 |
| 461.5865 | 0 | 383.8177 | 4.692308 | 559.6023 | 321.2643 | 6.625 |
| 645.6178 | 0 | 645.4404 | 0 | 791.0608 | 545.9984 | 0 |
| 2120.885 | 0 | 753.536 | 4.692308 | 2267.708 | 641.0202 | 3.3125 |
| 1752.822 | 0 | 534.2116 | 3.128205 | 1878.037 | 443.4352 | 6.625 |
| 790.4293 | 0 | 202.0918 | 0 | 835.0087 | 173.4525 | 0 |
| 630.5333 | 0 | 415.1498 | 0 | 711.9548 | 363.4962 | 0 |
| 715.0066 | 0 | 371.2849 | 3.128205 | 764.6922 | 478.1257 | 0 |
| 283.5891 | 0 | 1939.454 | 3.128205 | 290.0556 | 1847.647 | 8.28125 |
| 657.6854 | 0 | 813.0669 | 1.564103 | 755.9026 | 720.9592 | 0 |
| 612.4318 | 0 | 827.1663 | 3.128205 | 700.2353 | 748.1083 | 1.65625 |
| 829.649 | 0 | 1723.263 | 4.692308 | 978.5716 | 1589.73 | 0 |
| 1134.356 | 0 | 2329.538 | 4.692308 | 1297.926 | 2128.187 | 1.65625 |
| 546.0599 | 0 | 766.0688 | 1.564103 | 612.3397 | 701.3516 | 3.3125 |
| 1279.168 | 0 | 1330.046 | 4.692308 | 1435.629 | 1346.897 | 4.96875 |
| 1025.748 | 0 | 1218.817 | 9.384615 | 1215.89 | 1064.848 | 4.96875 |
| 2005.272 | 0 | 853.7707 | 0 | 2066.263 | 823.856 | 2.714286 |
| 2257.591 | 0 | 1272.941 | 4.666667 | 2368.222 | 1195.501 | 2.714286 |
| 1655.567 | 0 | 1254.94 | 4.666667 | 1729.794 | 1192.902 | 5.428571 |
| 1646.714 | 0 | 1146.933 | 0 | 1682.344 | 1114.934 | 2.714286 |
| 1549.327 | 0 | 1005.495 | 4.666667 | 1552.933 | 984.9887 | 5.428571 |
| 1084.529 | 0 | 948.9199 | 0 | 1147.445 | 914.818 | 0 |
| 1295.162 | 0 | 671.8385 | 5 | 1322.352 | 660.809 | 2.5 |
| 1594.405 | 0 | 737.6513 | 0 | 1646.194 | 688.9286 | 0 |
| 1089.432 | 0 | 611.5102 | 0 | 1115.454 | 579.2624 | 2.5 |
| 0 | 0 | 127.5157 | 34 | 552.7238 | 32.57143 | 0 |
| 0 | 0 | 735.3403 | 47.6 | 775.6976 | 453.9643 | 3.666667 |
|  |  |  |  |  |  |  |


| 0 | 0 | 412.3006 | 34 | 621.8143 | 217.8214 | 7.333333 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 569.5699 | 47.6 | 907.5976 | 313.5 | 0 |
| 0 | 0 | 1134.889 | 40.8 | 744.2929 | 863.1429 | 0 |
| 0 | 0 | 74.38413 | 17 | 354.8738 | 0 | 0 |
| 2194.114 | 0 | 696.9967 | 4.831461 | 2209.113 | 695.0255 | 0 |
| 2619.378 | 0 | 518.6529 | 4.831461 | 2658.269 | 502.4723 | 5.269231 |
| 2311.216 | 0 | 939.0347 | 4.831461 | 2367.999 | 911.4187 | 10.53846 |
| 1602.443 | 0 | 473.157 | 2.41573 | 1616.35 | 465.7955 | 2.634615 |
| 375.9577 | 0 | 212.9207 | 0 | 391.1017 | 205.3901 | 0 |
| 2452.97 | 0 | 829.8446 | 12.07865 | 2517.717 | 814.2251 | 5.269231 |
| 1596.28 | 0 | 993.6298 | 7.247191 | 1579.684 | 1017.781 | 5.269231 |
| 1852.054 | 0 | 535.0314 | 2.41573 | 1842.456 | 535.4814 | 5.269231 |
| 1093.975 | 0 | 620.5636 | 14.49438 | 1115.251 | 612.5027 | 10.53846 |
| 1898.278 | 0 | 593.2661 | 4.831461 | 1876.066 | 612.5027 | 10.53846 |
| 452.9982 | 0 | 120.1091 | 7.247191 | 439.9894 | 126.535 | 2.634615 |
| 1220.322 | 0 | 966.3322 | 12.07865 | 1200.804 | 999.443 | 7.903846 |
| 1482.26 | 0 | 1517.742 | 0 | 1536.907 | 1505.583 | 0 |
| 813.5479 | 0 | 491.3554 | 4.831461 | 828.0356 | 482.3 | 0 |
| 915.2413 | 0 | 1426.75 | 9.662921 | 1008.309 | 1404.722 | 5.269231 |
| 640.9771 | 0 | 873.5207 | 2.41573 | 647.7622 | 876.5757 | 0 |
| 921.4046 | 0 | 937.2149 | 14.49438 | 950.2549 | 937.0924 | 13.17308 |
| 1768.85 | 0 | 1526.841 | 2.41573 | 1781.346 | 1529.423 | 5.269231 |
| 1579.156 | 0 | 738.6891 | 7.247191 | 1615.437 | 714.9855 | 2.634615 |
| 674.8749 | 0 | 778.8893 | 2.41573 | 687.4834 | 781.216 | 2.634615 |
| 431.4269 | 0 | 669.6992 | 2.41573 | 464.4333 | 667.5179 | 0 |
| 810.4662 | 0 | 460.4182 | 4.831461 | 831.0911 | 452.9586 | 0 |
| 505.3858 | 0 | 678.7983 | 0 | 522.4874 | 680.3548 | 0 |
| 819.7111 | 0 | 922.6562 | 0 | 821.9246 | 929.7571 | 0 |
| 1326.773 | 7 | 1068.856 | 9.662921 | 1325.775 | 1082.148 | 5.269231 |
| 1858.217 | 0 | 544.1306 | 12.07865 | 1921.898 | 520.8107 | 2.634615 |
| 1417.546 | 0 | 333.0298 | 7.247191 | 1405.522 | 341.0943 | 2.634615 |
| 967.6289 | 0 | 265.6959 | 2.41573 | 950.2549 | 271.4084 | 0 |
| 961.4657 | 0 | 25.47769 | 7.247191 | 959.4213 | 27.50761 | 2.634615 |
| 409.8556 | 0 | 94.6314 | 9.662921 | 400.2681 | 95.3597 | 5.269231 |
| 416.0188 | 0 | 20.01818 | 2.41573 | 409.4346 | 23.83992 | 0 |
| 841.2825 | 0 | 23.65785 | 0 | 818.8692 | 25.67377 | 2.634615 |
| 835.1192 | 0 | 25.47769 | 0 | 831.0911 | 29.34145 | 0 |
| 832.0376 | 0 | 30.93719 | 7.247191 | 824.9801 | 42.17833 | 0 |
| 1072.404 | 0 | 36.39669 | 2.41573 | 1060.252 | 42.17833 | 2.634615 |
| 1491.504 | 0 | 456.7785 | 7.247191 | 1494.131 | 452.9586 | 5.269231 |
| 517.7123 | 0 | 16.37851 | 0 | 522.4874 | 11.00304 | 0 |
| 1368.24 | 0 | 40.03636 | 0 | 1368.856 | 42.17833 | 2.634615 |
| 727.2625 | 0 | 383.9851 | 0 | 721.0937 | 381.4388 | 0 |
| 1075.486 | 0 | 744.3124 | 2.41573 | 1066.363 | 751.8745 | 0 |
| 1211.077 | 0 | 464.0579 | 4.831461 | 1206.915 | 463.9616 | 5.269231 |
| 483.8145 | 0 | 7.279339 | 0 | 476.6552 | 5.501521 | 0 |
| 884.4251 | 0 | 63.69421 | 2.41573 | 879.9788 | 64.18441 | 2.634615 |
|  |  |  |  |  |  |  |


| 454.525 | 0 | 884.4397 | 9.662921 | 1433.021 | 900.4156 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1673.32 | 0 | 1377.615 | 0 | 1677.46 | 1391.885 | 2.634615 |
| 1879.66 | 0 | 613.4058 | 9.517241 | 1894.408 | 612.6381 | 5.517857 |
| 573.8495 | 42.59535 | 538.7797 | 12.27273 | 651.7651 | 535.8013 | 3.352941 |
| 977.5459 | 44.83721 | 746.0027 | 0 | 1006.687 | 748.5164 | 5.029412 |
| 1145.103 | 38.11163 | 167.7519 | 2.045455 | 1173.848 | 156.6616 | 1.676471 |
| 1377.906 | 62.77209 | 586.145 | 4.090909 | 1471.311 | 563.8958 | 3.352941 |
| 1244.97 | 0 | 636.9161 | 4.758621 | 1280.287 | 610.496 | 1.839286 |
| 547.5076 | 0 | 309.9088 | 2.37931 | 551.6682 | 308.4611 | 1.839286 |
| 1914.533 | 0 | 284.2612 | 11.89655 | 1942.983 | 269.9035 | 7.357143 |
| 453.3503 | 0 | 442.4216 | 2.37931 | 492.6849 | 424.134 |  |
| 1129.888 | 0 | 406.0874 | 9.517241 | 1144.972 | 409.1394 | 3.678571 |
| 1258.919 | 0 | 609.1312 | 7.137931 | 1339.27 | 578.3646 | 1.839286 |
| 1733.193 | 0 | 181.6707 | 4.758621 | 1790.32 | 154.2306 |  |
| 1632.061 | 0 | 495.8541 | 9.517241 | 1637.657 | 496.9651 | 7.357143 |
| 1213.584 | 0 | 506.5407 | 11.89655 | 1238.651 | 496.9651 | 8571 |
| 920.8282 | 49.32093 | 637.4573 | 2.045455 | 935.7024 | 664.2331 | 0 |
| 1421.278 | 60.53023 | 505.2293 | 4.090909 | 1448.725 | 515.7339 | 5.029412 |
| 1088.041 | 0 | 874.1567 | 11.89655 | 1172.729 | 835.4155 | 7.357143 |
| 1558.827 | 0 | 235.1033 | 11.89655 | 1596.021 | 227.0617 | 5.517857 |
| 1182.198 | 0 | 245.7898 | 2.37931 | 1193.546 | 235.63 | 5.517857 |
| 1799.452 | 0 | 109.0024 | 7.137931 | 1814.607 | 98.53619 | 1.839286 |
| 1157.787 | 0 | 192.3572 | 4.758621 | 1144.972 | 205.6408 | 1.839286 |
| 1161.274 | 0 | 316.3207 | 0 | 1172.729 | 314.8874 |  |
| 1283.33 | 0 | 136.7873 | 11.89655 | 1332.331 | 115.6729 | 9.196429 |
| 2542.249 | 0 | 645.4653 | 19.03448 | 2598.739 | 619.0643 | 9.196429 |
| 2598.046 | 0 | 222.2794 | 2.37931 | 2650.783 | 194.9303 |  |
| 2489.939 | 0 | 1028.042 | 16.65517 | 2550.165 | 1008.925 | 9.196429 |
| 1258.919 | 0 | 66.25637 | 0 | 1283.756 | 47.12601 |  |
| 1283.33 | 0 | 55.56986 | 0 | 1290.696 | 53.55228 | 1.839286 |
| 1848.274 | 0 | 109.0024 | 9.517241 | 1870.121 | 83.54155 | 5.517857 |
| 1788.99 | 0 | 104.7278 | 4.758621 | 1811.137 | 100.6783 |  |
| 804.0565 | 44.83721 | 479.5732 | 2.045455 | 884.0774 | 463.5584 |  |
| 1258.919 | 0 | 765.1542 | 7.137931 | 1255.999 | 775.437 | 3.678571 |
| 924.1371 | 0 | 628.3669 | 0 | 922.9167 | 638.3432 |  |
| 1321.69 | 0 | 57.70716 | 4.758621 | 1360.088 | 36.41555 | 0 |
| 1565.802 | 0 | 230.8287 | 2.37931 | 1519.69 | 250.6247 | 3.678571 |
| 1719.244 | 0 | 318.458 | 2.37931 | 1731.336 | 312.7453 | 1.839286 |
| 1914.533 | 0 | 109.0024 | 4.758621 | 1956.861 | 98.53619 | 1.839286 |
| 1182.198 | 0 | 551.424 | 9.517241 | 1186.607 | 569.7962 | 1.839286 |
| 1124.345 | 69.49767 | 949.2785 | 2.045455 | 1213.187 | 937.1506 | 8.382353 |
| 1234.444 | 82.94884 | 860.4687 | 0 | 1255.132 | 909.0562 | 1.676471 |
| 1070.963 | 40.35349 | 603.9069 | 4.090909 | 1138.976 | 591.9902 | 1.676471 |
| 944.1826 | 56.04651 | 728.2407 | 2.045455 | 948.6086 | 754.5367 | 3.352941 |
| 1508.023 | 60.53023 | 726.2672 | 0 | 1487.444 | 766.5772 | 6.705882 |
| 1060.954 | 56.04651 | 678.9019 | 2.045455 | 1100.257 | 676.2736 | 8.382353 |
| 977.5459 | 71.73953 | 1105.189 | 4.090909 | 1093.804 | 1095.684 | 3.352941 |


| 1267.807 | 76.22326 | 1162.422 | 0 | 1319.663 | 1187.994 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1488.005 | 71.73953 | 826.9183 | 4.090909 | 1503.577 | 864.9077 | 5.029412 |
| 727.3208 | 35.86977 | 487.4674 | 0 | 790.5072 | 467.5719 | 0 |
| 0 | 0 | 1254 | 95 | 591 | 988 | 5 |
| 1560.513 | 0 | 213.2865 | 0 | 1585.382 | 200.9517 | 0 |
| 2292.998 | 0 | 226.3448 | 6.25 | 2325.65 | 203.0895 | 4.8 |
| 1745.227 | 0 | 435.2785 | 10.41667 | 1798.249 | 395.4901 | 4.8 |
| 1474.525 | 0 | 339.5172 | 0 | 1505.954 | 309.9787 | 1.6 |
| 1652.87 | 0 | 167.5822 | 4.166667 | 1677.518 | 160.3338 | 4.8 |
| 1710.195 | 0 | 87.0557 | 2.083333 | 1734.706 | 74.82244 | 0 |
| 1735.672 | 0 | 171.935 | 2.083333 | 1785.54 | 160.3338 | 0 |
| 616.9821 | 45.65169 | 1569.191 | 0 | 681.296 | 1574.535 | 0 |
| 747.8571 | 134.2697 | 2168.248 | 0 | 800.744 | 2254.226 | 2.333333 |
| 729.1607 | 59.07865 | 1719.561 | 4 | 729.96 | 1765.24 | 4.666667 |
| 1002.784 | 0 | 353.3975 | 3.882353 | 1031.564 | 357.0292 | 0 |
| 1016.558 | 0 | 41.66695 | 0 | 1026.106 | 34.00278 | 0 |
| 809.9407 | 0 | 206.7916 | 5.176471 | 813.2433 | 204.0167 | 4.2 |
| 1126.754 | 0 | 172.8407 | 1.294118 | 1132.537 | 173.1051 | 1.4 |
| 622.6074 | 0 | 324.0763 | 1.294118 | 638.587 | 319.9352 | 0 |
| 1380.205 | 0 | 33.95085 | 1.294118 | 1394.521 | 23.18371 | 0 |
| 779.6368 | 0 | 35.49407 | 0 | 799.5983 | 27.82045 | 0 |
| 1157.058 | 0 | 49.38306 | 1.294118 | 1170.743 | 37.09394 | 1.4 |
| 1143.284 | 0 | 375.0026 | 1.294118 | 1176.201 | 350.8468 | 1.4 |
| 1187.362 | 0 | 396.6077 | 2.588235 | 1214.407 | 384.8496 | 4.2 |
| 575.7741 | 0 | 345.6814 | 1.294118 | 584.0069 | 346.2101 | 2.8 |
| 1121.244 | 0 | 266.9772 | 0 | 1137.995 | 253.4753 | 0 |
| 856.774 | 0 | 27.77797 | 0 | 859.6364 | 27.82045 | 0 |
| 939.421 | 0 | 564.8187 | 3.882353 | 952.4225 | 561.0458 | 4.2 |
| 655.6663 | 0 | 847.2281 | 1.294118 | 720.4571 | 819.1578 | 1.4 |
| 669.4408 | 0 | 293.2119 | 3.882353 | 687.7091 | 287.478 | 2.8 |
| 801.676 | 0 | 554.0162 | 0 | 832.3463 | 547.1356 | 1.4 |
| 1308.578 | 0 | 38.58051 | 0 | 1296.277 | 35.54836 | 2.8 |
| 1239.705 | 0 | 44.7534 | 1.294118 | 1225.323 | 46.36742 | 1.4 |
| 1462.852 | 0 | 41.66695 | 2.588235 | 1438.185 | 43.27626 | 1.4 |
| 396.7056 | 0 | 597.2264 | 5.176471 | 436.6407 | 581.1384 | 0 |
| 691.48 | 0 | 885.8086 | 2.588235 | 701.3541 | 880.9811 | 2.8 |
| 1614.372 | 0 | 748.462 | 56.94118 | 1651.048 | 746.5155 | 0 |
| 366.4017 | 0 | 643.523 | 1.294118 | 425.7247 | 621.3235 | 0 |
| 451.8036 | 0 | 757.7213 | 1.294118 | 477.5758 | 761.9713 | 0 |
| 509.6565 | 0 | 617.2882 | 0 | 545.8009 | 604.3221 | 4.2 |
| 782.3917 | 0 | 797.845 | 0 | 862.3654 | 755.789 | 1.4 |
| 1344.391 | 0 | 1057.106 | 3.882353 | 1361.773 | 1044.813 | 1.4 |
| 1487.646 | 0 | 618.8314 | 3.882353 | 1500.952 | 618.2323 | 0 |
| 2192.901 | 0 | 268.5204 | 2.588235 | 2177.745 | 270.4766 | 1.4 |
| 1225.931 | 0 | 490.7441 | 0 | 1247.155 | 476.0389 | 0 |
| 0 | 0 | 993.6536 | 207.3884 | 917.1037 | 588.6704 | 1.8 |
| 0 | 0 | 1018.038 | 181.9196 | 710.8347 | 715.3463 | 3.6 |
|  |  |  |  |  |  |  |


| 0 | 0 | 1393.96 | 229.2188 | 913.9303 | 985.464 | 3.6 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 847.3488 | 196.4732 | 1009.131 | 400.5194 | 0 |
| 873.3698 | 0 | 290.3777 | 0 | 877.5754 | 284.4531 | 0 |
| 591.102 | 0 | 495.3501 | 0 | 586.1418 | 496.3612 | 1.96875 |
| 823.5578 | 0 | 838.8688 | 3.628866 | 900.4972 | 824.7232 | 1.96875 |
| 919.8609 | 0 | 552.2869 | 1.814433 | 959.4388 | 547.9064 | 0 |
| 474.874 | 0 | 1026.76 | 1.814433 | 582.8673 | 981.2678 | 1.96875 |
| 796.9914 | 0 | 575.0616 | 1.814433 | 835.0065 | 572.7244 | 0 |
| 694.0467 | 0 | 406.1491 | 0 | 713.8487 | 402.8162 | 0 |
| 1534.208 | 0 | 428.9239 | 5.443299 | 1591.424 | 402.8162 | 1.96875 |
| 1501 | 0 | 461.188 | 1.814433 | 1532.482 | 454.3614 | 1.96875 |
| 720.6131 | 0 | 626.3048 | 0 | 753.1431 | 618.5424 | 0 |
| 438.3453 | 0 | 163.2188 | 3.628866 | 464.984 | 154.6356 | 1.96875 |
| 1371.489 | 0 | 375.7829 | 7.257732 | 1427.697 | 343.6346 | 3.9375 |
| 810.2746 | 0 | 87.30309 | 1.814433 | 798.9866 | 85.90866 | 3.9375 |
| 1401.377 | 0 | 415.6386 | 0 | 1430.972 | 404.7253 | 0 |
| 1185.525 | 0 | 381.4765 | 1.814433 | 1221.402 | 360.8164 | 1.96875 |
| 2553.693 | 0 | 216.3598 | 9.072165 | 2629.452 | 181.3627 | 1.96875 |
| 1414.66 | 0 | 149.9336 | 1.814433 | 1421.148 | 137.4539 | 0 |
| 972.9937 | 0 | 301.765 | 7.257732 | 998.7332 | 286.3622 | 3.9375 |
| 1019.485 | 0 | 66.42626 | 0 | 1031.479 | 57.27244 | 0 |
| 730.5755 | 0 | 125.261 | 0 | 704.0251 | 135.5448 | 0 |
| 909.8985 | 0 | 53.14101 | 0 | 897.2226 | 51.5452 | 1.96875 |
| 1437.905 | 0 | 60.73258 | 1.814433 | 1444.07 | 53.45428 | 1.96875 |
| 1298.432 | 0 | 144.2399 | 5.443299 | 1309.814 | 131.7266 | 5.90625 |
| 1042.73 | 0 | 83.5073 | 1.814433 | 1038.028 | 76.36326 | 1.96875 |
| 660.8387 | 0 | 227.7472 | 1.814433 | 681.1033 | 227.1807 | 1.96875 |
| 713.9715 | 0 | 273.2966 | 7.257732 | 707.2996 | 284.4531 | 0 |
| 664.1595 | 0 | 256.2156 | 1.814433 | 684.3778 | 263.4532 | 1.96875 |
| 843.4826 | 0 | 41.75365 | 3.628866 | 874.3009 | 22.90898 | 1.96875 |
| 1574.058 | 0 | 626.3048 | 5.443299 | 1620.895 | 626.1787 | 1.96875 |
| 1600.624 | 0 | 404.2512 | 0 | 1643.817 | 391.3617 | 3.9375 |
| 757.1418 | 0 | 675.65 | 1.814433 | 805.5356 | 645.2695 | 3.9375 |
| 1358.206 | 0 | 483.9628 | 1.814433 | 1404.776 | 454.3614 | 0 |
| 1408.018 | 0 | 341.6208 | 0 | 1447.345 | 309.2712 | 1.96875 |
| 713.9715 | 0 | 421.3323 | 7.257732 | 740.0449 | 418.0888 | 1.96875 |
| 830.1994 | 0 | 628.2026 | 1.814433 | 880.85 | 620.4514 | 0 |
| 674.1219 | 0 | 535.2059 | 0 | 684.3778 | 542.1791 | 0 |
| 1547.492 | 0 | 339.7229 | 9.072165 | 1617.62 | 309.2712 | 1.96875 |
| 1916.1 | 0 | 204.9725 | 5.443299 | 1895.956 | 208.0899 | 1.96875 |
| 2321.237 | 0 | 345.4166 | 7.257732 | 2367.489 | 307.3621 | 7.875 |
| 1275.186 | 0 | 170.8104 | 1.814433 | 1273.794 | 162.2719 | 1.96875 |
| 966.3521 | 0 | 237.2366 | 0 | 992.1841 | 221.4534 | 1.96875 |
| 1627.191 | 0 | 149.9336 | 1.814433 | 1670.013 | 108.8176 | 0 |
| 1886.213 | 0 | 218.2577 | 0 | 1922.152 | 179.4536 | 1.96875 |
| 1537.529 | 0 | 62.63048 | 3.628866 | 1565.228 | 32.45438 | 5.90625 |
| 1610.587 | 0 | 104.3841 | 0 | 1637.268 | 87.81774 | 0 |
|  |  |  |  |  |  | 0 |


| 1341.602 | 0 | 66.42626 | 1.814433 | 1368.756 | 49.63612 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1740.098 | 0 | 104.3841 | 0 | 1778.073 | 74.45417 | 0 |
| 1218.733 | 0 | 269.5008 | 1.814433 | 1250.872 | 250.0897 | 1.96875 |
| 2636.713 | 0 | 371.9871 | 5.443299 | 2714.59 | 322.6348 | 3.9375 |
| 1587.341 | 0 | 75.91573 | 1.814433 | 1565.228 | 68.72693 | 1.96875 |
| 1766.664 | 0 | 87.30309 | 1.814433 | 1774.798 | 55.36336 | 0 |
| 1301.753 | 0 | 119.5673 | 5.443299 | 1329.461 | 97.36315 | 1.96875 |
| 1773.306 | 0 | 149.9336 | 3.628866 | 1784.622 | 146.9993 | 3.9375 |
| 1109.146 | 0 | 165.1167 | 0 | 1119.891 | 152.7265 | 1.96875 |
| 2513.844 | 0 | 195.483 | 1.814433 | 2534.49 | 175.6355 | 1.96875 |
| 1760.023 | 0 | 347.3145 | 1.814433 | 1784.622 | 328.362 | 1.96875 |
| 2151.877 | 0 | 406.1491 | 7.257732 | 2187.389 | 383.7254 | 1.96875 |
| 1441.226 | 0 | 83.5073 | 3.628866 | 1424.423 | 70.63601 | 3.9375 |
| 1248.62 | 0 | 151.8315 | 0 | 1283.618 | 124.0903 | 1.96875 |
| 1075.938 | 0 | 168.9125 | 1.814433 | 1100.244 | 146.9993 | 0 |
| 1723.494 | 0 | 159.423 | 5.443299 | 1778.073 | 120.2721 | 3.9375 |
| 1773.306 | 0 | 284.684 | 0 | 1827.191 | 257.726 | 1.96875 |
| 1026.126 | 0 | 100.5883 | 0 | 1038.028 | 87.81774 | 0 |
| 624.3099 | 0 | 68.32415 | 1.814433 | 635.2598 | 62.99969 | 1.96875 |
| 1570.737 | 0 | 210.6661 | 0 | 1591.424 | 185.1809 | 1.96875 |
| 1447.868 | 0 | 170.8104 | 0 | 1516.11 | 125.9994 | 0 |
| 1637.153 | 0 | 218.2577 | 1.814433 | 1633.993 | 219.5444 | 1.96875 |
| 1451.189 | 0 | 220.1556 | 5.443299 | 1525.933 | 167.9992 | 1.96875 |
| 1348.244 | 0 | 96.79255 | 3.628866 | 1408.05 | 61.0906 | 1.96875 |
| 1317.967 | 0 | 432.6698 | 2.772727 | 1421.476 | 348.4858 | 1.515152 |
| 1293.409 | 0 | 752.0214 | 5.545455 | 1433.001 | 653.1619 | 1.515152 |
| 1117.407 | 0 | 1137.304 | 0 | 1352.323 | 967.7948 | 1.515152 |
| 1207.454 | 0 | 890.0637 | 5.545455 | 1367.69 | 760.6947 | 6.060606 |
| 740.8449 | 0 | 1275.346 | 0 | 941.2476 | 1117.146 | 0 |
| 1101.035 | 0 | 935.391 | 2.772727 | 1336.956 | 780.6082 | 15.15152 |
| 904.5675 | 0 | 1015.744 | 2.772727 | 1194.808 | 810.4784 | 1.515152 |
| 1481.69 | 0 | 152.4646 | 8.318182 | 1540.573 | 107.5328 | 3.030303 |
| 1710.901 | 0 | 609.8584 | 8.318182 | 1813.342 | 513.7676 | 4.545455 |
| 1592.203 | 0 | 902.4257 | 8.318182 | 1763.399 | 752.7293 | 1.515152 |
| 1317.967 | 0 | 1061.071 | 5.545455 | 1486.787 | 910.0457 | 3.030303 |
| 695.8212 | 0 | 974.5373 | 5.545455 | 956.6149 | 778.6168 | 4.545455 |
| 1039.639 | 0 | 1448.414 | 2.772727 | 1267.803 | 1260.523 | 1.515152 |
| 867.7299 | 0 | 1052.83 | 0 | 1160.232 | 834.3745 | 1.515152 |
| 1006.894 | 0 | 945.6926 | 0 | 1190.966 | 794.5476 | 1.515152 |
| 650.7974 | 0 | 1164.088 | 0 | 845.202 | 995.6737 | 0 |
| 1563.551 | 0 | 1155.847 | 0 | 1867.128 | 933.9419 | 0 |
| 1379.363 | 0 | 933.3306 | 0 | 1521.364 | 814.4611 | 0 |
| 1743.646 | 0 | 290.5069 | 0 | 1917.072 | 191.1693 | 1.515152 |
| 1940.113 | 0 | 218.3952 | 2.772727 | 1967.015 | 173.2472 | 0 |
| 0 | 0 | 909.1078 | 72.12658 | 571.2032 | 649.8503 | 0 |
| 0 | 0 | 903.4786 | 19.67089 | 631.3298 | 616.7207 | 1.571429 |
| 0 | 0 | 607.9482 | 19.67089 | 310.6544 | 445.9757 | 0 |
| 0 |  |  |  |  | 0 |  |


| 0 | 0 | 931.6244 | 39.34177 | 506.066 | 652.3987 | 3.142857 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 1376.327 | 72.12658 | 776.6359 | 1011.728 | 0 |
| 0 | 0 | 959.7701 | 72.12658 | 571.2032 | 711.0127 | 1.571429 |
| 0 | 0 | 1165.234 | 65.56962 | 671.4142 | 840.9827 | 0 |
| 0 | 0 | 537.5838 | 39.34177 | 375.7916 | 356.7806 | 1.571429 |
| 0 | 0 | 1187.751 | 52.4557 | 566.1926 | 874.1124 | 1.571429 |
| 0 | 0 | 1424.175 | 65.56962 | 716.5092 | 1075.439 | 1.571429 |
| 1603.122 | 0 | 1460.341 | 0 | 1824.902 | 1286.637 | 0 |
| 1573.652 | 0 | 1674.434 | 3.8 | 1893.867 | 1460.984 | 3.75 |
| 1119.828 | 0 | 1243.994 | 3.8 | 1230.748 | 1132.152 | 7.5 |
| 901.7559 | 0 | 1023.14 | 0 | 1013.245 | 913.6665 | 0 |
| 1296.642 | 0 | 836.0903 | 11.4 | 1326.237 | 752.5611 | 3.75 |
| 1254.993 | 0 | 460.4941 | 4.592593 | 1280.133 | 459.535 | 0 |
| 1281.217 | 0 | 2122.956 | 2.296296 | 1324.919 | 2113.861 | 3.857143 |
| 1228.77 | 0 | 1139.528 | 2.296296 | 1298.794 | 1116.572 | 1.928571 |
| 745.5035 | 0 | 1436.117 | 4.592593 | 843.4695 | 1409.893 | 1.928571 |
| 745.5035 | 0 | 1162.943 | 4.592593 | 772.5584 | 1167.414 | 3.857143 |
| 1281.217 | 0 | 669.2774 | 0 | 1295.062 | 664.8592 | 0 |
| 1206.292 | 0 | 698.5461 | 4.592593 | 1276.401 | 684.4138 | 3.857143 |
| 333.1403 | 0 | 196.2428 | 0 | 353.6531 | 189.3247 | 0 |
| 1928.73 | 0 | 375.4555 | 2.571429 | 2033.671 | 343.6079 | 4.5 |
| 1273.725 | 0 | 731.7173 | 4.592593 | 1309.99 | 731.3451 | 1.928571 |
| 483.2661 | 0 | 366.8343 | 0 | 477.7173 | 359.8061 | 0 |
| 340.1537 | 0 | 679.3021 | 5.142857 | 402.6744 | 656.0757 | 0 |
| 540.0379 | 0 | 1218.97 | 7.714286 | 598.7593 | 1197.807 | 0 |
| 1006.434 | 0 | 124.5387 | 2.571429 | 1116.984 | 80.60359 | 2.25 |
| 1676.294 | 0 | 105.0039 | 5.142857 | 1746.525 | 72.6075 | 4.5 |
| 255.992 | 0 | 383.0509 | 0 | 287.1243 | 380.5239 | 0 |
| 764.4693 | 0 | 1207.648 | 5.142857 | 899.8897 | 1145.321 | 2.25 |
| 957.3399 | 0 | 1749.203 | 2.571429 | 1057.458 | 1702.048 | 2.25 |
| 723.9972 | 0 | 1497.204 | 0 | 804.0702 | 1473.354 | 0 |
| 1178.265 | 0 | 652.8848 | 2.571429 | 1299.063 | 611.0876 | 2.25 |
| 610.1595 | 0 | 175.4193 | 2.296296 | 626.0813 | 173.9557 | 0 |
| 340.1537 | 0 | 333.9902 | 2.571429 | 392.1698 | 309.2928 | 0 |
| 663.086 | 0 | 677.0824 | 0 | 656.8612 | 680.5029 | 0 |
| 1153.845 | 0 | 52.68364 | 4.592593 | 1194.293 | 41.06483 | 1.928571 |
| 1292.456 | 0 | 987.3305 | 2.296296 | 1358.508 | 973.8231 | 0 |
| 1813.184 | 0 | 815.6209 | 9.185185 | 1810.101 | 819.3411 | 3.857143 |
| 2719.776 | 0 | 401.9567 | 16.07407 | 2758.071 | 396.96 | 3.857143 |
| 1001.638 | 59.62632 | 1678.603 | 8.518519 | 1062.912 | 1688.978 | 5.079365 |
| 1450.76 | 55.77946 | 1259.414 | 2.12963 | 1525.591 | 1237.838 | 2.539683 |
| 914.3988 | 42.31546 | 987.9569 | 2.12963 | 962.8728 | 984.3053 | 2.539683 |
| 846.5459 | 44.23888 | 1178.162 | 2.12963 | 887.8437 | 1178.184 | 2.539683 |
| 1583.235 | 57.70289 | 962.1038 | 2.12963 | 1628.756 | 948.8852 | 2.539683 |
| 688.2224 | 28.85145 | 1104.296 | 2.12963 | 753.4167 | 1096.158 | 5.079365 |
| 791.6173 | 34.62174 | 939.944 | 0 | 734.6594 | 986.1695 | 0 |
| 1489.533 | 80.78405 | 1388.68 | 8.518519 | 1594.367 | 1355.284 | 22.85714 |
| 10 |  |  |  |  |  |  |


| 665.6048 | 34. | 1107.989 | 2.12963 | 700 | 1112.936 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 484.6637 | 19.2343 | 1128.302 | 2.12963 | 543.9606 | 1099.887 |  |
| 1050.105 | 32.69 | 1240.948 | 2.12963 | 110 | 46 |  |
| 1773.869 | 98.0949 | 1024.89 | 4.259259 | 1806 | 105 | 8 |
| 1554.155 | 90.4012 | 1427.459 | 6.388889 | 1656.891 | 435.445 | . 539683 |
| 1444.298 | 109.6355 | 1506.865 | 8.518519 | 1503.707 | 1545.434 | 079365 |
| 1117.957 | 61.54 | 925.1708 | 6.388889 | 162 | 922.7862 | 65 |
| 1712.478 | 101.9 | 1543 | 2.12963 | 1885 | 1491.372 | 2.539683 |
| 491.1258 | 15. | 72 | 0 | 50 | 72 |  |
| 898.2433 | 32.698 | 11 | 2963 | 878 | 1148.356 | 5 |
| 707.6089 | 44.23888 | 801.4454 | 4.259259 | 662.7566 | 857.5387 | 2.539683 |
| 911.1677 | 48.08574 | 982.4169 | 12963 | 1019.14 | 947.02 | 2.539683 |
| 1906.344 | 53.85603 | 491.2085 | 2.12963 | 1903.862 | 486.56 | 5.079365 |
| 1079.184 | 73.0903 | 1154 | 0 | 115 | 1163.27 | 2.539683 |
| 1431.373 | 65.39 | 468 | 63 | 14 | 1496.964 | 3 |
| 1121.189 | 48.08 | 810. | 0 | 11 | 831 |  |
| 17 | 78.86 | 159 | 963 | 1828 | 1606.953 | 683 |
| 98.2433 | 59.62632 | 1115 | 0 | 959.746 | 1103 | 2.539683 |
| 1001.638 | 44.23888 | 1281 | 4.259259 | 1056.659 | 1275.123 | 2.539683 |
| 988.7139 | 44.23 | 103 | 963 | 1025 | 1040.232 | 2.539683 |
| 1722.172 | 82.70 | 856.8 | 963 | 1788 | 850.0818 |  |
| 714.0711 | 55.7 | 908 | 963 | 719. | 935.83 |  |
| 849.7769 | 59.626 | 1787.5 | 2.12963 | 875.338 | 1804.56 | 9683 |
| 565.4409 | 38.4686 | 13 | 2.12963 | 647.1255 | 1355 | 2.539683 |
| 439.4284 | 51.9 | 1408 | 8.518519 | 518.950 | 1411.21 | 539683 |
| 361.8822 | 28.85145 | 910.3 | 0 | 415 | 902.2798 |  |
| 452.3527 | 36.5451 | 967.6 | 0 | 500.193 | 958.206 |  |
| 1861.108 | 90.40 | 1056 | 10.64815 | 1906 | 1084 | 12.69841 |
| 1117.957 | 42.315 | 936.250 | 2.12963 | 1150.4 | 930.2 | 10.15873 |
| 694.6846 | 36.54517 | 1117.222 | 4.259259 | 737.7856 | 1120.39 | 2.539683 |
| 99 | 100.0 | 1246.488 | 4.259259 | 1685.0 | 1224.7 | 2.539683 |
| 1437.836 | 51.9326 | 107 | 63 | 1469 | 106 | 2.539683 |
| 238 | 38.468 | 666. | 0 | 2422.8 | 618. | 2.539683 |
| 149 | 67.32 | 11 | . 12963 | 1538.095 | 1131.578 | 2.5 |
| 1657.55 | 71.1 | 805.13 | 4.259259 | 171 | 794.155 | 5.079365 |
| 1395.831 | 88.477 | 1296.34 | 2.12963 | 1416.17 | 1342.234 |  |
| 1777.1 | 65.396 | 674.026 | 8.518519 | 1810.07 | 687.8952 | 9048 |
| 1518.613 | 46.16231 | 736.8127 | 4.259259 | 1563.105 | 723.3152 |  |
| 962.8651 | 57.7028 | 1615.81 | 6.388889 | 991.008 | 1623.731 | 539683 |
| 1066.26 | 65.39 | 1126 | 4.259259 | 1059.7 | 1178.184 |  |
| 681.7602 | 34.62 | 1039.66 | 6.388889 | 747.1643 | 1008.54 | 7.619048 |
| 1431.373 | 59.62632 | 611.2406 | 0 | 1519.338 | 576.0423 | 2.539683 |
| 1043.642 | 80.78405 | 1002.73 | 2.12963 | 1012.89 | 1073.788 | 2.539683 |
| 1421.68 | 53.85603 | 1191.088 | 2.12963 | 1441.183 | 1202.418 | 2.539683 |
| 856.2391 | 51.9326 | 928.8641 | 2.12963 | 909.7272 | 924.6504 | 7.619048 |
| 966.0962 | 42.31546 | 712.8063 | 6.388889 | 981.63 | 730.7721 | 2.539683 |
| 948.348 | 103.8652 | 854.9982 | 8.518519 | 2041.4 | 844.4892 | 7.6 |


| 53 | 32.69831 | 758.9725 | 0 | 728.407 | 786.6985 | 2.539683 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 720.5333 | 34.62174 | 834.6851 | 2.12963 | 765.9215 | 827.7112 | 0 |
| 138 | 69.2 | 1154.155 | 0 | 1422.426 | 1165.134 |  |
| 336 | 46.16231 | 823.6052 | 2963 | 1084.79 | 814.6617 |  |
| 933.7853 | 46.16231 | 1763.549 | 0 | 956.6204 | 1771.004 | 0 |
| 2668.881 | 53.85603 | 360.0964 | 4.259259 | 2632.269 | 367.2503 | 5.079365 |
| 285.974 | 61.54975 | 1473.625 | 0 | 1359.901 | 1472.729 | 0 |
| 1334.441 | 73.09033 | 1617.664 | 2963 | 1309.882 | 1661.015 | 2.539683 |
| 109 | 34.62174 | 1002.73 | 4.259259 | 117 | 965.6631 | 7.619048 |
| 529 | 57.70289 | 1192.935 | 963 | 149 | 1196.826 | 7.619048 |
| 823.9282 | 55.77946 | 1312.967 | 2.12963 | 856.5816 | 1332.913 | 2.539683 |
| 972.5584 | 28.85145 | 565.0744 | 2.12963 | 1028.52 | 542.4864 |  |
| 1101.802 | 57.70289 | 1185.548 | 2.12963 | 1144.193 | 1189.369 |  |
| 1243.97 | 32.69831 | 446.8889 | 2.12963 | 1241.105 | 453.0041 | 83 |
| 1386.138 | 84.63091 | 1355 | 8.518519 | 1531 | 1325.457 | 5.079365 |
| 726.9955 | 21.1 | 542.9 | 48.9814 | 756. | 527.5727 | 7.619048 |
| 23.9282 | 61.54975 | 1307.427 | 4.259259 | 897.222 | 1312.407 | 2.539683 |
| 1512.151 | 53.85603 | 699.8797 | 4.259259 | 1544.348 | 691.6236 | 12.69841 |
| 1399.062 | 50.00917 | 677.7199 | 6.388889 | 1434.93 | 672.9814 | 5.079365 |
| 743.1509 | 42.31546 | 1401.606 | 0 | 797.183 | 1385.111 | 0 |
| 1709.247 | 59.62632 | 642.6336 | 2.12963 | 1706.911 | 656.2035 | 83 |
| 1453.991 | 73.09033 | 1154.155 | 6.388889 | 1559.9 | 1114.8 | 41 |
| 069.491 | 65.39661 | 847.6116 | 2.12963 | 1100.426 | 866.8597 |  |
| 1670.474 | 65.39661 | 618.6272 | 0 | 1678.77 | 624.5119 |  |
| 1641.394 | 50.00917 | 683.2599 | 4.259259 | 1685.02 | 682.3025 | 39683 |
| 1434.604 | 76.93719 | 1000.883 | . 12963 | 1550. | 984.3053 | 5.079365 |
| 817.466 | 44.23888 | 1191.088 | 12963 | 872.2127 | 1196.826 |  |
| 1192.273 | 82.70 | 1565 | 963 | 1275.49 | 1573.397 |  |
| 1541.23 | 30.77488 | 851.3049 | 2.12963 | 1550 | 851.946 | 683 |
| 079.184 | 80.78405 | 1554.878 | 0 | 1141.067 | 1573.397 | 5.079365 |
| 846.5459 | 25.00459 | 975.0303 | 4.259259 | 862.834 | 965.6631 | 5.079365 |
| 801.3106 | 44.23888 | 1010.117 | 2.12963 | 790.93 | 1038.367 | 2.539683 |
| 946.7097 | 30.77488 | 1089.523 | 4.259259 | 997.2 | 1068.195 | 2.539683 |
| 927 | 44.2 | 1093.216 | 0 | 897. | 1131.578 | 2.539683 |
| 672.0669 | 36.54517 | 917.7842 | 4.259259 | 728.40 | 900.4156 | 7.619048 |
| 1460.453 | 53.85603 | 788.5188 | 2.12963 | 1478.697 | 801.6122 | 2.539683 |
| 924.092 | 48.08574 | 1165.235 | 8.518519 | 909.7272 | 1206.147 | 2.539683 |
| 2407.163 | 67.32004 | 328.7034 | 10.64815 | 2419.687 | 335.5586 | 2.539683 |
| 39.9198 | 42.31546 | 679.5666 | 0 | 806.562 | 667.3888 |  |
| 765.7686 | 61.54975 | 908.551 | 0 | 828.44 | 917.1935 | 0 |
| 1360.289 | 53.85603 | 620.4738 | 2.12963 | 1381.785 | 613.3266 | 5.079365 |
| 1366.752 | 55.77946 | 781.1323 | 2.12963 | 1416.17 | 782.9701 | 2.539683 |
| 962.8651 | 30.77488 | 421.0358 | 0 | 956.6204 | 438.0904 | 2.539683 |
| 917.6299 | 36.54517 | 566.921 | 0 | 912.8534 | 581.6349 |  |
| 358.6511 | 30.77488 | 879.0046 | 0 | 431.417 | 851.946 | 0 |
| 1119.722 | 0 | 1182.45 | 1.777778 | 1260.117 | 1049.923 | 1.714286 |
| 1098.106 | 0 | 1551.563 | 5.333333 | 1283.968 | 1385.728 | 3.428571 |


| 1271.036 | 0 | 1397.05 | 7.111111 | 1407.197 | 1268.834 | 5.142857 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1085.136 | 0 | 1806.937 | 1.777778 | 1323.719 | 1619.516 | 1.714286 |
| 2777.184 | 102.7692 | 1281.789 | 2.333333 | 2824.271 | 1317.81 | 5.5 |
| 1934.816 | 64.23077 | 686.2105 | 4.666667 | 1986.729 | 702.1905 | 5.5 |
| 904.5291 | 0 | 981.1957 | 0 | 993.1134 | 925.3713 | 0 |
| 666.4951 | 0 | 717.0276 | 15.42857 | 740.6971 | 665.8159 | 16.76471 |
| 1631.615 | 0 | 845.7818 | 0 | 1617.947 | 819.2921 | 0 |
| 1527.745 | 0 | 1050.013 | 1.285714 | 1597.257 | 990.8244 | 1.117647 |
| 882.8896 | 0 | 628.2316 | 1.285714 | 922.7678 | 593.5918 | 1.117647 |
| 1012.726 | 0 | 1087.751 | 0 | 1026.217 | 1081.104 | 0 |

LocalityCoc LocalityNar PrecinctNa GE21ATGD GE21ATGR GE21ATGU GE21GOVL GE21GOVC GE21GOVR GE21GOVV

| 1 ACCOMACI 101 - CHIN | 722.8198 | 1281.65 | 0 | 711.8482 | 11.40426 | 1299.341 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ACCOMACI 201 - ATLA | 143.706 | 550.0358 | 0 | 135.3822 | 2.851064 | 552.5174 | 0 |
| 1 ACCOMACI 202 - GREE | 356.0477 | 890.6603 | 1.166667 | 329.7211 | 4.276596 | 908.0849 | 0 |
| 1 ACCOMACI 301 - NEW | 476.1602 | 555.3373 | 1.166667 | 476.0212 | 8.553191 | 560.4483 | 0 |
| 1 ACCOMACI 401 - BLOX | 135.1265 | 369.7831 | 1.166667 | 141.9329 | 1.425532 | 372.751 | 0 |
| 1 ACCOMACI 402 - PARK | 235.9352 | 471.8379 | 0 | 218.3583 | 0 | 489.0705 | 0 |
| 1 ACCOMACI 403 - SAXIS | 57.91138 | 164.348 | 0 | 45.85525 | 1.425532 | 170.5138 | 0 |
| 1 ACCOMACI 501 - MAPF | 240.225 | 209.4112 | 1.166667 | 244.5613 | 7.12766 | 208.8463 | 1 |
| 1 ACCOMACI 502 - RUE | 246.6596 | 117.9595 | 0 | 251.1121 | 4.276596 | 116.3195 | 0 |
| 1 ACCOMACI 601 - ACCC | 319.585 | 531.4803 | 0 | 318.8032 | 5.702128 | 527.403 | 1 |
| 1 ACCOMACI 602 - TANE | 32.17299 | 205.435 | 0 | 24.01942 | 1.425532 | 203.5591 | 1 |
| 1 ACCOMACI 701 - NAN[ | 504.0435 | 685.2253 | 0 | 484.7555 | 4.276596 | 700.5604 | 0 |
| 1 ACCOMACI 801 - BOBT | 218.7763 | 359.18 | 0 | 220.5419 | 0 | 360.8547 | 0 |
| 1 ACCOMACI 802 - MELF | 338.8888 | 396.2908 | 0 | 331.9047 | 7.12766 | 403.1527 | 0 |
| 1 ACCOMACI $803-\mathrm{WACl}$ | 147.9957 | 363.1561 | 0 | 146.3001 | 1.425532 | 366.1419 | 0 |
| 1 ACCOMACI 901 - PAIN ${ }^{-}$ | 857.9463 | 632.2098 | 2.333333 | 866.8826 | 5.702128 | 638.4352 | 0 |
| 3 ALBEMARL 101 - WOO | 1434.593 | 668.9913 | 3 | 1432.962 | 22.14894 | 673.6036 | 1.5 |
| 3 ALBEMARL 103 - BRAN | 459.2893 | 168.2823 | 1.5 | 460.3969 | 7.382979 | 166.693 | 1.5 |
| 3 ALBEMARL 104 - AGNC | 1103.392 | 358.6345 | 7.5 | 1092.749 | 13.28936 | 368.9107 | 4.5 |
| 3 ALBEMARL 105 - DUNL | 1709.069 | 539.3311 | 1.5 | 1704.763 | 8.859574 | 557.4651 | 0 |
| 3 ALBEMARL 106 - NORT | 1511.446 | 1044.178 | 1.5 | 1506.921 | 14.76596 | 1054.811 | 1.5 |
| 3 ALBEMARL 201 - JACK | 1268.078 | 768.3054 | 0 | 1240.668 | 14.76596 | 791.1085 | 1.5 |
| 3 ALBEMARL 202 - UNIV | 913.0891 | 195.8696 | 0 | 907.8508 | 16.24255 | 203.5841 | 1.5 |
| 3 ALBEMARL 203 - GEOR | 1280.887 | 373.8075 | 0 | 1272.101 | 16.24255 | 383.9404 | 3 |
| 3 ALBEMARL 301 - IVY | 1976.225 | 991.7623 | 0 | 1995.053 | 8.859574 | 997.4252 | 1.5 |
| 3 ALBEMARL 302 - RED - | 1286.376 | 878.6545 | 0 | 1246.215 | 13.28936 | 899.049 | 3 |
| 3 ALBEMARL 304 - EAST | 475.7579 | 233.1124 | 0 | 464.0948 | 1.476596 | 244.5741 | 0 |
| 3 ALBEMARL 305 - COUN | 1055.816 | 502.0883 | 0 | 1033.582 | 14.76596 | 519.2077 | 0 |
| 3 ALBEMARL 306 - PORT | 735.5948 | 521.3994 | 1.5 | 724.8015 | 16.24255 | 539.7027 | 0 |
| 3 ALBEMARL 307 - YELLC | 351.3289 | 252.4235 | 0 | 338.364 | 13.28936 | 256.8712 | 0 |
| 3 ALBEMARL 401 - SCOT | 521.5038 | 735.2007 | 0 | 506.6214 | 4.429787 | 744.6531 | 0 |
| 3 ALBEMARL 402 - MON | 455.6296 | 606.9199 | 1.5 | 443.756 | 7.382979 | 610.7522 | 1.5 |
| 3 ALBEMARL 405 - MOU | 1485.828 | 478.6391 | 3 | 1506.921 | 14.76596 | 461.8215 | 1.5 |
| 3 ALBEMARL 406-STON | 957.0052 | 1019.35 | 1.5 | 906.0019 | 8.859574 | 1060.277 | 0 |
| 3 ALBEMARL 407 - BISCL | 706.3174 | 228.9743 | 3 | 682.2749 | 17.71915 | 241.8415 | 0 |
| 3 ALBEMARL 501 -KESW | 633.1239 | 475.8804 | 1.5 | 639.7482 | 2.953191 | 474.1186 | 1.5 |
| 3 ALBEMARL 502-STON | 638.6134 | 622.0929 | 1.5 | 648.9932 | 7.382979 | 616.2175 | 0 |
| 3 ALBEMARL 503 - HOLL | 1394.336 | 704.8547 | 1.5 | 1377.493 | 14.76596 | 711.861 | 4.5 |
| 3 ALBEMARL 504 - FREE | 940.5367 | 390.3599 | 1.5 | 939.2836 | 7.382979 | 394.8711 | 0 |
| 3 ALBEMARL 506 - BAKE | 1447.402 | 998.6591 | 3 | 1412.623 | 17.71915 | 1027.485 | 0 |
| 3 ALBEMARL 507 - PANT | 944.1963 | 529.6756 | 3 | 930.0386 | 5.906383 | 541.069 | 1.5 |
| 3 ALBEMARL 601 - CROZ | 1498.637 | 1008.315 | 0 | 1458.848 | 17.71915 | 1035.683 | 0 |
| 3 ALBEMARL 602 - FREE | 671.5505 | 600.0231 | 0 | 647.1442 | 1.476596 | 625.7819 | 0 |
| 3 ALBEMARL 603 - EARL' | 1419.954 | 1200.046 | 1.5 | 1395.982 | 11.81277 | 1220.138 | 0 |
| 3 ALBEMARL 604 - BROV | 1337.611 | 786.2372 | 1.5 | 1327.57 | 17.71915 | 785.6432 | 3 |
| 3 ALBEMARL 606-MECF | 1668.812 | 926.9322 | 1.5 | 1675.179 | 7.382979 | 931.8411 | 3 |


| AN 101 - ARRIT | 121.922 | 506.9635 | 0 | 110.1659 | 4.333333 | 518.7109 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ALLEGHAN 103-DAM | 40.64067 | 197.1525 | 0 | 32.90669 | 1.444444 | 203.6587 |  |
| 5 ALLEGHAN 201-HUM | 67.26731 | 286.1527 | 0 | 64.38266 | 1.444444 | 292.5484 |  |
| 5 ALLEGHAN 202 - DOLL | 96.69676 | 359.3808 | 3 | 92.99717 | 1.444444 | 361.1848 |  |
| 5 ALLEGHAN 301 - CALL $/$ | 50.45048 | 322.2035 | 0 | 41.49105 | 1.444444 | 330.8048 |  |
| 5 ALLEGHAN 302 - GRIFF | 163.9641 | 483.3052 | 0 | 150.2262 | 1.444444 | 497.3323 |  |
| 5 ALLEGHAN 401 - LOW | 92.49255 | 332.3427 | 0 | 95.85862 | 0 | 331.93 |  |
| 5 ALLEGHAN 402 -JACK | 124.7248 | 392.0518 | 0 | 117.3195 | 0 | 403.9419 |  |
| 5 ALLEGHAN 501 -IRON | 88.28834 | 161.1017 | 0 | 84.41282 | 2.888889 | 165.4024 |  |
| 5 ALLEGHAN 502 - PETEF | 172.3725 | 582.4447 | 0 | 151.6569 | 2.888889 | 596.3487 |  |
| 5 ALLEGHAN 601 - DISTF | 329.3295 | 512.5964 | 0 | 326.2055 | 1.444444 | 519.8361 |  |
| 5 ALLEGHAN 701 - DISTF | 250.851 | 305.3047 | 0 | 250.377 | 7.222222 | 308.301 |  |
| 7 AMELIA CC 101 - NUM | 251.1486 | 881.4208 | 0 | 260.7459 | 1.4375 | 875.2607 |  |
| 7 AMELIA CC 201 - NUM | 360.9099 | 961.55 | 0 | 347.036 | 1.4375 | 980.1172 |  |
| 7 AMELIA CC 301 - NUM | 288.3559 | 932.4121 | 0 | 273.877 | 7.1875 | 937.8834 |  |
| 7 AMELIA CC 401 - NUM | 241.8468 | 839.1709 | 0 | 230.732 | 2.875 | 853.4156 |  |
| 7 AMELIA CC501-NUM | 509.7387 | 1066.446 | 2 | 504.609 | 10.0625 | 1073.323 |  |
| 9 AMHERST (101-WRIG | 490.0535 | 500.6949 | 1 | 476.3384 | 4.153846 | 517.0999 |  |
| 9 AMHERST (102-NEW | 288.8737 | 873.2435 | 0 | 279.5899 | 4.153846 | 883.4341 |  |
| 9 AMHERST ( $103-\mathrm{COOL}$ | 127.242 | 516.548 | 2 | 120.8105 | 4.153846 | 522.3899 |  |
| 9 AMHERST ( 201 - COUF | 601.8201 | 1122.93 | 1 | 593.6971 | 11.07692 | 1133.388 |  |
| 9 AMHERST ( 202 - TEMF | 187.424 | 671.1161 | 0 | 184.6674 | 1.384615 | 674.4781 |  |
| 9 AMHERST ( 301 - MON | 214.9358 | 636.7676 | 0 | 212.2812 | 9.692308 | 636.1254 |  |
| 9 AMHERST ( 302 -ELON | 490.0535 | 1603.809 | 1 | 474.6125 | 11.07692 | 1628.005 |  |
| 9 AMHERST ( 303 - PLEA | 120.364 | 388.4018 | 0 | 108.7294 | 2.769231 | 403.3644 |  |
| 9 AMHERST ( 401 - AMEL | 598.3812 | 1430.745 | 1 | 564.3574 | 11.07692 | 1457.402 |  |
| 9 AMHERST ( 402 -LONC | 147.8758 | 424.0714 | 0 | 139.795 | 1.384615 | 431.137 |  |
| 9 AMHERST ( 501 - MADI | 747.9764 | 1438.672 | 1 | 742.1213 | 11.07692 | 1444.177 |  |
| 11 APPOMATר101-VERA | 76.34831 | 473.5983 | 2.4 | 76.57988 | 3.714286 | 474.236 | 1.666667 |
| 11 APPOMATר102-PAMF | 234.1348 | 731.5525 | 0 | 219.529 | 0 | 743.4708 |  |
| 11 APPOMAT1201-CHAP | 103.4944 | 268.8728 | 0 | 97.00118 | 0 | 278.8016 |  |
| 11 APPOMAT1202-SPOU | 149.3034 | 1052.289 | 0 | 115.7207 | 7.428571 | 1078.306 |  |
| 11 APPOMAT1301-US 41 | 120.4607 | 676.959 | 0 | 115.7207 | 5.571429 | 680.6038 | 1.666667 |
| 11 APPOMAT1302-STON | 201.8989 | 758.8492 | 0 | 199.1077 | 1.857143 | 762.6043 |  |
| 11 APPOMAT7401-COUF | 237.5281 | 872.1306 | 1.2 | 233.1432 | 3.714286 | 880.1382 |  |
| 11 APPOMAT7501-OAKV | 283.3371 | 760.214 | 1.2 | 282.4947 | 3.714286 | 768.071 | 1.666667 |
| 11 APPOMAT7502-AGEE | 103.4944 | 297.5344 | 1.2 | 98.70296 | 0 | 304.7684 | 0 |
| 13 ARLINGTOI 001 - ARLIA | 1351.898 | 310.868 | 3.257143 | 1335.628 | 14.34304 | 327.3706 | 4.519481 |
| 13 ARLINGTOI 002 - ASHT | 1568.748 | 416.9461 | 3.257143 | 1547.135 | 12.55016 | 445.7501 | 0 |
| 13 ARLINGTOI 003 - AURC | 949.4542 | 391.8999 | 3.257143 | 961.5735 | 0 | 391.6755 | 1.506494 |
| 13 ARLINGTOr 004 - BALLS | 1687.919 | 465.5653 | 3.257143 | 1703.806 | 8.964401 | 464.7493 | 1.506494 |
| 13 ARLINGTOI 005 - BARC | 1582.424 | 427.2593 | 3.257143 | 1586.303 | 10.75728 | 426.7509 | 1.506494 |
| 13 ARLINGTOI 006 - CRYS | 1144.815 | 353.5939 | 1.628571 | 1131.954 | 14.34304 | 358.0616 | 1.506494 |
| 13 ARLINGTOI 007 - CHER | 1523.815 | 486.1916 | 0 | 1539.301 | 10.75728 | 480.8256 | 4.519481 |
| 13 ARLINGTOI 008 - HUM | 1859.836 | 511.2378 | 4.885714 | 1862.437 | 19.72168 | 508.5936 | 7.532468 |
| 13 ARLINGTOI 009 - COLU | 1721.13 | 443.4657 | 3.257143 | 1703.806 | 17.9288 | 457.4419 | 4.519481 |
| 13 ARLINGTOI 010 - WILSI | 1467.161 | 403.6864 | 1.628571 | 1433.547 | 16.13592 | 436.9813 | 1.506494 |


| 13 ARLINGTOI 011 -EAST | 1256.171 | 38 | 0 | 12 | 5.3 | 390.2141 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 ARLINGTOI 012 - FAIRL | 1836.393 | 521.551 | 1.628571 | 1848.728 | 19.72168 | 508.5936 |  |
| 13 ARLINGTOI013-GLEN | 1078.392 | 349.174 | 0 | 1094.745 | 10.75728 | 336.1394 | 87 |
| 13 ARLINGTOI 014 - CLAR | 1088.16 | 281.4018 | 0 | 1071.244 | 7.171521 | 290.8337 |  |
| 13 ARLINGTOIO15-LYON | 908.4284 | 246.0424 | 1.628571 | 893.0296 | 7.171521 | 261.6042 | 94 |
| 13 ARLINGTOI016-LYON | 1447.62 | 424.3127 | 6.514286 | 142 | 7.171521 | 444.2887 | 68 |
| 13 ARLINGTOI017-OVER | 1807.089 | 551.0171 | 4.885714 | 1784.101 | 3.585761 | 568 | .532468 |
| 13 ARLINGTOI018-PARK | 1719 | 542. | 1.628571 | 172 | 19.72168 | 549 | 3.012987 |
| 13 ARLINGTOI 019 -ROSS | 1371 | 409.5 | 1.628571 | 1363.04 | 14.3430 | 415.059 | . 506494 |
| 13 ARLINGTOI 020 -THRIF | 1109.65 | 474.4051 | 3.257143 | 1100.62 | 5.378641 | 488.1329 | 494 |
| 13 ARLINGTOIO21-VIRGI | 865.449 | 260.7755 | 1.628571 | 881.2792 | 3.585761 | 260.1427 |  |
| 13 ARLINGTOI 022 -ABINI | 1721.13 | 428.7326 | 1.628571 | 1709.682 | 16.13592 | 431.1354 | 74 |
| 023 - WEST | 1752.38 | 428.732 | 1.628571 | 174 | 5.378641 | 438.4428 | 6.025974 |
| 24 | 2035.66 | 514. | 1.6285 | 202 | 14.34304 | 524.6698 | . 506494 |
| 13 ARLINGTOI 025 - A | 1461.3 | 405.1597 | 1.628571 | 1468.79 | 10.75728 | 403.3673 | 494 |
| 13 ARLINGTOI 026 -FILLN | 1779.738 | 418.4194 | 1.628571 | 1748.85 | 23.30744 | 439.9042 |  |
| 13 ARLINGTOI 027 -JEFFE | 1652.754 | 418.4194 | 3.257143 | 1654.846 | 16.13592 | 425.2895 |  |
| 028-WAKI | 1738.712 | 402.2131 | 1.628571 | 1739.058 | 8.964401 | 410.6747 | 987 |
| 13 ARLINGTOI 029 - DOM | 1603.913 | 440.5191 | 3.257143 | 1611.762 | 8.964401 | 448.6731 |  |
| Or030-GLEB | 1471.06 | 310.868 | 1.628571 | 1462.923 | 3.585761 | 324.4476 |  |
| 13 ARLINGTOI 031 - LEX | 1766.063 | 474.4051 | 1.628571 | 1784.101 | 5.378641 | 480.8256 | 481 |
| 032-O | 572.4076 | 269.6153 | 0 | 573.8 | 7.171521 | 261.6042 |  |
| 13 ARLINGTOI033-ROCK | 1322.594 | 623.2092 | 1.628571 | 1312.127 | 5.378641 | 628.4346 |  |
| 13 ARLINGTOI 034 - YOR | 1418.32 | 493.5581 | 0 | 1419.839 | 3.585761 | 507.1321 | 506494 |
| 13 ARLINGTOI 035 - MADI | 1072.532 | 627.6292 | 4.885714 | 1081.03 | 1.79288 | 634.2805 | 3.012987 |
| 13 ARLINGTOIO36 | 1457.393 | 512 | 1.628571 | 1445.298 | 25.10032 | 512.978 | 3.012987 |
| 13 ARLINGTOI 037 | 1461.3 | 511.237 | 3.257143 | 1466.8 | 5.378641 | 520.2854 | 1.506494 |
| 13 ARLINGTOI 038 - A | 1250.3 | 269.6153 | 6.514286 | 1235.749 | 30.47896 | 276.2189 | 3.012987 |
| 039 - A | 974.8511 | 260.7755 | 0 | 983.1159 | 3.585761 | 254.2968 | 1.506494 |
| 13 ARLINGTOI 040 - VIRGI | 1666.429 | 548.0705 | 1.628571 | 1682.264 | 14.34304 | 545.1305 | . 506494 |
| 13 ARLINGTOI 041 - NAVY | 1035.413 | 299.081 | 3.257143 | 1035.99 | 7.171521 | 302.5255 | 3.012987 |
| 13 ARLINGTOI 042 -SHIRL | 120 | 265 | 0 | 1182 | 8.964401 | 276.2189 |  |
| 13 ARLINGTOI 043 - C | 1146.769 | 228.3627 | 6.514286 | 1131.95 | 17.9288 | 239.682 | . 519481 |
| 13 ARLINGTOI 044 - DAW | 1045.181 | 256.3556 | 1.628571 | 1055.577 | 5.378641 | 248.4509 | 4.519481 |
| 13 ARLINGTOI 045 -BUCK | 1051.042 | 294.6616 | 0 | 1049.701 | 8.964401 | 301.064 | . 506494 |
| 13 ARLINGTOI 046 -CENT | 1672.29 | 537.7574 | 1.628571 | 1668.555 | 16.13592 | 546.592 | 494 |
| 047 - F | 1170.212 | 250.4623 | 1.628571 | 1176.99 | 8.964401 | 246.9894 |  |
| 048-AUSA | 886.938 | 299.0815 | 1.628571 | 873.4456 | 3.585761 | 325.9091 |  |
| 13 ARLINGTOIO49-MON | 1060 | 321.1 | 1.628571 | 1077.119 | 0 | 320.0632 | 3.012987 |
| 13 ARLINGTOI 050 -CRYS | 1269.846 | 415.4728 | 0 | 1259.25 | 10.75728 | 423.828 | 1.506494 |
| 13 ARLINGTOI 051 -TAYL( | 552.8715 | 117.8646 | 0 | 554.2267 | 1.79288 | 121.3025 |  |
| 13 ARLINGTOI052-GUNS | 1162.398 | 262.2488 | 1.628571 | 1159.372 | 7.171521 | 268.9116 |  |
| 13 ARLINGTOI 053 -MET । | 1685.965 | 465.5653 | 3.257143 | 1703.806 | 14.34304 | 454.519 | 1.506494 |
| 13 ARLINGTOI 054 -GARF | 683.7633 | 195.9499 | 1.628571 | 687.3978 | 3.585761 | 192.9148 | 3.012987 |
| 15 AUGUSTA (101-JOLIV | 230.4414 | 611.1958 | 0 | 230.7167 | 3.89313 | 615.4515 |  |
| 15 AUGUSTA (102-STUA | 334.6887 | 747.0171 | 1.1875 | 313.2495 | 7.78626 | 763.214 |  |
| AUGUSTA (103-VERO | 338.3465 | 1071.63 | 2.375 | 322.6283 | 16.87023 | 1076.362 |  |


| 201 - CRIM | 336.5176 | 1460.079 | 0 | 301.9951 | 9.083969 | 1481.693 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 AUGUSTA ( 202 - NEW | 241.4148 | 977.9133 | 0 | 217.5865 | 6.48855 | 996.3807 | 0 |
| 15 AUGUSTA ( 203 - WEYE | 468.1984 | 1335.123 | 1.1875 | 435.173 | 7.78626 | 1367.821 |  |
| 15 AUGUSTA (301-FORT | 546.8411 | 1589.109 | 1.1875 | 525.2088 | 14.27481 | 1609.121 | 0 |
| 15 AUGUSTA (302-NORT | 122.5363 | 622.0615 | 0 | 120.0477 | 0 | 627.652 | 0 |
| 15 AUGUSTA (303-MOU | 138.9964 | 969.764 | 0 | 116.2962 | 9.083969 | 984.1801 | 0 |
| 15 AUGUSTA (304-CHUR | 184.7189 | 714.42 | 0 | 170.6929 | 3.89313 | 727.9679 | 0 |
| 15 AUGUSTA (401-BUFF, | 197.5212 | 854.3159 | 0 | 166.9414 | 9.083969 | 873.0193 | 0 |
| 15 AUGUSTA (402-CHUR | 186.5478 | 832.5845 | 0 | 163.1899 | 5.19084 | 851.3293 | 0 |
| 15 AUGUSTA (403-CRAIC | 118.8785 | 715.7782 | 0 | 110.669 | 2.59542 | 725.2567 |  |
| 15 AUGUSTA ( 404 - DEER | 85.9583 | 338.195 | 0 | 82.53281 | 2.59542 | 342.9718 |  |
| 15 AUGUSTA (405-CEDA | 336.5176 | 854.3159 | 1.1875 | 332.007 | 2.59542 | 871.6636 | 0 |
| 15 AUGUSTA ( 501 - GREE | 303.5974 | 1348.705 | 1.1875 | 294.4921 | 3.89313 | 1361.042 | 2 |
| 15 AUGUSTA (502-MIDC | 190.2056 | 753.8081 | 1.1875 | 176.3201 | 3.89313 | 768.6365 | 0 |
| 15 AUGUSTA (503-SPOT | 177.4033 | 827.1516 | 1.1875 | 174.4444 | 5.19084 | 832.3507 | 0 |
| 15 AUGUSTA ( 504 - WHIT | 296.2818 | 1259.063 | 0 | 270.1074 | 6.48855 | 1281.061 | 0 |
| 15 AUGUSTA (601-SHER. | 277.9928 | 1041.749 | 0 | 256.9772 | 3.89313 | 1060.095 |  |
| 15 AUGUSTA (602-RIDGI | 490.1452 | 1963.976 | 1.1875 | 465.185 | 9.083969 | 1981.916 |  |
| 15 AUGUSTA (603-LYND | 471.8562 | 1265.854 | 0 | 446.4275 | 9.083969 | 1281.061 |  |
| 15 AUGUSTA (801-DOOI | 296.2818 | 1043.107 | 2.375 | 285.1134 | 7.78626 | 1053.317 |  |
| 15 AUGUSTA (802-FISHE | 669.3774 | 1508.975 | 1.1875 | 647.1323 | 10.38168 | 1531.851 |  |
| 15 AUGUSTA (803-WILSI | 590.7347 | 1134.108 | 3.5625 | 605.8659 | 9.083969 | 1130.587 |  |
| 17 BATH COUI 101 - WARI | 100.8 | 236.7805 | 0 | 93.17647 | 1.375 | 242.8174 |  |
| 17 BATH COUI 102 - MOU | 14.4 | 57.75134 | 1 | 13.10294 | 0 | 60.12622 |  |
| 17 BATH COUI 201 -HOT! | 84.96 | 188.2694 | 0 | 78.61765 | 2.75 | 195.4102 |  |
| 17 BATH COUI 301 - FAIR\} | 36 | 278.3615 | 0 | 34.94118 | 1.375 | 278.6619 | 0 |
| 17 BATH COUI302-BUR^ | 11.52 | 66.99156 | 0 | 10.19118 | 0 | 68.22014 | 0 |
| 17 BATH COUI 401 - MILLE | 70.56 | 366.1435 | 0 | 61.14706 | 4.125 | 374.6326 |  |
| 17 BATH COUI501-HEAL | 113.76 | 310.7022 | 0 | 104.8235 | 1.375 | 319.1315 |  |
| 19 BEDFORD (101-GOOI | 355.8389 | 1492.659 | 0 | 334.085 | 7.192982 | 1506.268 |  |
| 19 BEDFORD (102-HARC | 203.866 | 678.6035 | 0 | 198.9495 | 2.877193 | 682.7161 | 2 |
| 19 BEDFORD ( 103 -CHAN | 283.5591 | 1012.541 | 1.444444 | 262.7635 | 12.94737 | 1019.38 |  |
| 19 BEDFORD (104-STEW | 244.6393 | 974.9895 | 0 | 236.4872 | 2.877193 | 987.1887 |  |
| 19 BEDFORD ( 201 - BEDF | 116.7596 | 447.9319 | 0 | 106.9823 | 5.754386 | 453.3557 | 0 |
| 19 BEDFORD ( 202 - STAU | 185.3328 | 789.9159 | 1.444444 | 170.7963 | 2.877193 | 807.456 |  |
| 19 BEDFORD ( 203 - MON | 359.5456 | 1338.431 | 2.888889 | 356.6076 | 4.315789 | 1352.019 |  |
| 19 BEDFORD ( 204 - Quak | 120.4663 | 485.4831 | 1.444444 | 110.736 | 5.754386 | 489.5705 | 0 |
| 19 BEDFORD ( $205-$ SAUN | 355.8389 | 1137.264 | 0 | 362.2383 | 5.754386 | 1140.096 | 1 |
| 19 BEDFORD ( 301 - NEW | 277.3441 | 1424.38 | 0 | 265.7685 | 5.860465 | 1430.906 | 2.25 |
| 19 BEDFORD ( 302 - BEDF | 185.3328 | 749.6825 | 1.444444 | 185.8113 | 2.877193 | 749.7805 | 2 |
| 19 BEDFORD ( 303 - BETH | 126.0263 | 639.7112 | 0 | 127.628 | 2.877193 | 639.7948 | 0 |
| 19 BEDFORD ( 304 - RIVEF | 167.4531 | 597.4878 | 1.363636 | 167.2053 | 1.465116 | 599.5559 | 0 |
| 19 BEDFORD ( 305 - HUDL | 116.7596 | 535.1043 | 0 | 114.4898 | 1.438596 | 537.8569 | 1 |
| 19 BEDFORD ( 306 - FORE | 127.3341 | 843.7409 | 0 | 119.6838 | 2.930233 | 852.0687 | 0 |
| 19 BEDFORD ( 401 - FORE | 395.9567 | 1574.724 | 1.363636 | 411.8531 | 7.325581 | 1568.169 | 1.125 |
| 19 BEDFORD ( 402 - THON | 289.5542 | 764.6807 | 4.090909 | 278.0889 | 11.72093 | 778.2572 | 0 |
| 19 BEDFORD ( 403 -KNIG\| | 544.2224 | 1757.469 | 5.454545 | 531.537 | 8.790698 | 1770.179 | 1.125 |


| 19 BEDFORD ( 404 -FORE | 254.6682 | 1302.549 | 1.363636 | 260.4883 | 2.930233 | 1298.822 | 2.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 BEDFORD ( 502 -BIG IS | 95.93665 | 408.2617 | 0 | 102.0833 | 2.930233 | 404.0204 | 0 |
| 19 BEDFORD (503-SEDA | 125.5898 | 540.4607 | 0 | 114.4036 | 5.860465 | 546.4635 | 1.125 |
| 19 BEDFORD (504-SUCK | 155.2429 | 728.3907 | 0 | 154.8849 | 0 | 734.2294 | 0 |
| 19 BEDFORD (505-BOON | 591.3186 | 1220.897 | 0 | 586.0987 | 8.790698 | 1227.6 | 0 |
| 19 BEDFORD (506-BOON | 591.3186 | 1982.985 | 1.363636 | 566.7381 | 1.465116 | 2007.153 | 0 |
| 19 BEDFORD ( $601-\mathrm{MON}$ | 211.0606 | 997.9731 | 0 | 204.1665 | 2.930233 | 1003.576 | 1.125 |
| 19 BEDFORD (602-SHAD | 246.4926 | 1138.605 | 0 | 247.7484 | 4.315789 | 1141.437 | 0 |
| 19 BEDFORD ( 603 -THAX | 64.86647 | 272.246 | 0 | 63.81399 | 0 | 277.6468 | 0 |
| 19 BEDFORD ( 604 - BEDF | 378.0788 | 1079.596 | 0 | 362.2383 | 7.192982 | 1090.468 | 0 |
| 19 BEDFORD (701-GOOI | 309.5057 | 1590.561 | 2.888889 | 294.6705 | 2.877193 | 1605.523 | 2 |
| 19 BEDFORD ( 702 -LIBER | 135.2929 | 630.3234 | 0 | 131.3818 | 0 | 635.771 | 0 |
| 19 BEDFORD ( 703 -THAX | 122.3196 | 582.0433 | 1.444444 | 114.4898 | 2.877193 | 587.4846 | 0 |
| 19 BEDFORD ( 704 - BEDF | 461.4786 | 972.3073 | 0 | 456.0824 | 7.192982 | 987.1887 | 0 |
| 21 BLAND COI 101 - BAST | 51.69231 | 259.8462 | 1.5 | 48.96861 | 0 | 263.5267 |  |
| 21 BLAND COI 102 -CERE! | 54.92308 | 319.2396 | 0 | 58.76233 | 1.714286 | 317.9641 | 0 |
| 21 BLAND COI 201 - DAVI! | 24.23077 | 91.56484 | 0 | 26.11659 | 0 | 90.31665 | 0 |
| 21 BLAND COI 202 - SEDD | 84 | 524.6418 | 0 | 79.98206 | 1.714286 | 529.5277 | 0 |
| 21 BLAND COI 301 -HOLL | 33.92308 | 326.6637 | 1.5 | 32.64574 | 3.428571 | 327.8618 |  |
| 21 BLAND COI 302 - MECF | 19.38462 | 167.044 | 0 | 21.21973 | 0 | 168.2612 | 0 |
| 21 BLAND COI 401 -ROCK | 109.8462 | 563 | 0 | 96.30493 | 5.142857 | 576.5419 | 0 |
| 23 BOTETOUR 101 - DALE' | 574.555 | 1324.354 | 1.6 | 558.3616 | 5.545455 | 1343.622 | 2 |
| 23 BOTETOUR 102-GREE | 405.1099 | 1493.894 | 1.6 | 403.3715 | 6.931818 | 1500.309 | 2 |
| 23 BOTETOUR 201 -BLUE | 442.1152 | 1459.152 | 1.6 | 431.1902 | 6.931818 | 1468.417 |  |
| 23 BOTETOUR 202 -RAINI | 459.644 | 1424.411 | 1.6 | 457.0219 | 5.545455 | 1429.592 |  |
| 23 BOTETOUR 301 -BUCH | 317.466 | 1284.054 | 3.2 | 311.9671 | 4.159091 | 1297.864 | 0 |
| 23 BOTETOUR 302 -MILL | 352.5236 | 1165.932 | 1.6 | 335.8118 | 9.704545 | 1175.843 | 2 |
| 23 BOTETOUR 403 -EAGL | 222.0314 | 883.8294 | 0 | 206.6534 | 9.704545 | 890.2018 | 0 |
| 23 BOTETOUR 406-FINC/ | 409.0052 | 1484.166 | 3.2 | 391.4492 | 2.772727 | 1501.696 | 0 |
| 23 BOTETOUR501-TROU | 303.8325 | 915.7918 | 0 | 286.1355 | 1.386364 | 930.4135 | 2 |
| 23 BOTETOUR502-CLOV | 605.7173 | 1531.415 | 1.6 | 608.0378 | 8.318182 | 1528.041 | 0 |
| 25 BRUNSWIC 101-BROL | 185.7008 | 181.2851 | 2 | 183.4783 | 5.1 | 179.2304 | 1.666667 |
| 25 BRUNSWIC 102-ROCK | 177.2598 | 355.7033 | 0 | 171.5862 | 0 | 359.829 | 0 |
| 25 BRUNSWIC 103-TILLN | 259.9811 | 449.0926 | 0 | 254.8309 | 0 | 452.8646 | 0 |
| 25 BRUNSWIC 201 -DRON | 101.2913 | 116.7366 | 0 | 96.83575 | 0 | 120.399 | 0 |
| 25 BRUNSWIC 202 -EDGE | 339.326 | 130.4703 | 0 | 339.7746 | 1.7 | 131.3444 | 0 |
| 25 BRUNSWIC 203 -FITZH | 281.9276 | 175.7916 | 0 | 276.9163 | 3.4 | 180.5986 | 0 |
| 25 BRUNSWIC 301 -ALBEI | 101.2913 | 79.65557 | 0 | 100.2335 | 0 | 79.35392 | 0 |
| 25 BRUNSWIC 302 -DANI | 263.3575 | 395.5311 | 0 | 258.2287 | 6.8 | 398.1378 | 0 |
| 25 BRUNSWIC $303-E L M C$ | 140.1197 | 159.3111 | 2 | 137.6087 | 3.4 | 161.4442 | 0 |
| 25 BRUNSWIC 304 -SEYM | 153.6252 | 162.0579 | 0 | 151.1997 | 5.1 | 160.076 | 0 |
| 25 BRUNSWIC 401-STUR | 450.7465 | 384.5441 | 0 | 446.8035 | 1.7 | 389.9287 | 0 |
| 25 BRUNSWIC 402 - KING' | 244.7874 | 100.2562 | 0 | 244.6377 | 0 | 102.6128 | 0 |
| 25 BRUNSWIC501-TOTA | 516.5858 | 156.5644 | 0 | 502.8663 | 6.8 | 164.1805 | 3.333333 |
| 27 BUCHANA 102 - BLAC | 17.56098 | 268.9583 | 0 | 16.15122 | 1.333333 | 276.8904 | 0 |
| 27 BUCHANA 103 -HURL | 67.31707 | 485.0645 | 0 | 57.26341 | 0 | 505.4722 | 0 |
| 27 BUCHANAP 201 -GRAS | 24.87805 | 62.24798 | 0 | 24.96098 | 0 | 64.80413 | 0 |


| 27 BUCHANA「 202 －BULL | 43.90244 | 347.6491 | 0 | 46.98537 | 0 | 352.2988 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 BUCHANA「 203 －ROCK | 42.43902 | 333.5552 | 1.166667 | 42.58049 | 1.333333 | 331.0902 | 3.6 |
| 27 BUCHANA「 301 －SLATE | 83.41463 | 358.2195 | 0 | 74.88293 | 0 | 373.5074 |  |
| 27 BUCHANA「 302 －NORT | 49.7561 | 311.2399 | 1.166667 | 55.79512 | 0 | 313.4163 |  |
| 27 BUCHANA 403 －SOUT | 89.26829 | 489.7624 | 0 | 77.81951 | 1.333333 | 500.7592 |  |
| 27 BUCHANA「 404－OAKV | 17.56098 | 52.85206 | 0 | 16.15122 | 0 | 54.19981 |  |
| 27 BUCHANA「 501 －PRAT | 86.34146 | 328.8573 | 0 | 83.69268 | 0 | 338.1597 |  |
| 27 BUCHANA「 502 －FOX | 30.73171 | 82.21432 | 0 | 30.83415 | 0 | 83.65624 | 0 |
| 27 BUCHANA「 503 －VANS | 74.63415 | 346.4746 | 0 | 66.07317 | 0 | 353.4771 | 1.2 |
| 27 BuCHANA「 601 －COUN | 51.21951 | 233.7236 | 0 | 39.6439 | 0 | 243.8992 |  |
| 27 BUCHANA「 602 －GARC | 70.2439 | 340.6022 | 1.166667 | 67.54146 | 2.666667 | 347.5858 |  |
| 27 BUCHANA「 603 －HURF | 73.17073 | 193.7909 | 0 | 71.94634 | 1.333333 | 200.3037 |  |
| 27 BUCHANA「 701 －WHIT | 83.41463 | 394.6287 | 0 | 83.69268 | 0 | 404.1421 |  |
| 27 BUCHANA「702－CONT | 54.14634 | 324.1593 | 3.5 | 46.98537 | 0 | 339.338 | ． 2 |
| 29 BUCKINGH． 101 －NEW | 383.842 | 544.8641 | 0 | 373.9641 | 7.368421 | 547.3603 | 0 |
| 29 BUCKINGH． 102 －GEOI | 97.31205 | 183.8916 | 0 | 96.21405 | 0 | 186.0753 |  |
| 29 BUCKINGH． 201 －WHIT | 227.0615 | 292.8645 | 0 | 228.7353 | 3.684211 | 289.2996 |  |
| 29 BUCKINGH． 301 －CURL | 254.0926 | 419.5454 | 0 | 241.4428 | 3.684211 | 427.8375 |  |
| 29 BUCKINGH． 302 －NEW | 106.3224 | 393.6643 | 2.5 | 101.6601 | 1.842105 | 397.9567 |  |
| 29 BUCKINGH． 401 －MAYS | 299.1445 | 619.7829 | 0 | 283.1961 | 3.684211 | 630.2114 |  |
| 29 BUCKINGH． 501 －WRIG | 73.88508 | 292.8645 | 0 | 81.69118 | 1.842105 | 287.9414 |  |
| 29 BUCKINGH． 502 －GLEN | 239.676 | 355.5238 | 0 | 235.9967 | 1.842105 | 362.6432 |  |
| 29 BUCKINGH． 601 －SLATE | 373.0295 | 416.821 | 0 | 384.8562 | 3.684211 | 418.33 |  |
| 29 BUCKINGH．701－GOLD | 203.6345 | 339.1779 | 2.5 | 194.2435 | 7.368421 | 346.3446 |  |
| 31 CAMPBELL 101－BROC | 421.5504 | 1511.143 | 1.083333 | 402.8003 | 8.716981 | 1524.935 | 1.5 |
| 31 CAMPBELL 102 －NEW | 358.9104 | 1593.593 | 1.083333 | 340.831 | 7.264151 | 1606.007 |  |
| 31 CAMPBELL 201 －WALk | 358.9104 | 1082.149 | 3.25 | 349.4378 | 5.811321 | 1097.696 |  |
| 31 CAMPBELL 202 －BEDF | 384.305 | 1750.762 | 1.083333 | 370.0943 | 8.716981 | 1764.292 | 1.5 |
| 31 CAMPBELL 301 －EVIN | 194.692 | 662.1719 | 0 | 182.4651 | 8.716981 | 667.8829 |  |
| 31 CAMPBELL 302－OTTE | 132.0519 | 556.5336 | 1.083333 | 123.9385 | 0 | 566.2206 |  |
| 31 CAMPBELL 303 －ALTA＇ | 584.0759 | 1259.93 | 3.25 | 566.3303 | 14.5283 | 1268.849 | 4.5 |
| 31 CAMPBELL 401－THRE | 191.306 | 1104.049 | 0 | 173.8582 | 0 | 1119.573 | 1.5 |
| 31 CAMPBELL 402 －COUF | 362.2964 | 1602.611 | 0 | 351.1592 | 5.811321 | 1613.729 | 1.5 |
| 31 CAMPBELL 501－SPRII | 391.0769 | 1449.306 | 1.083333 | 376.9797 | 4.358491 | 1467.026 | 1.5 |
| 31 CAMPBELL 502 －YELLC | 314.8931 | 899.214 | 0 | 308.125 | 2.90566 | 903.3792 |  |
| 31 CAMPBELL 601 －KING！ | 304.7353 | 926.2677 | 0 | 304.6823 | 0 | 930.4034 |  |
| 31 CAMPBELL 602 －CONC | 379.2261 | 1395.199 | 0 | 364.9302 | 2.90566 | 1410.404 |  |
| 31 CAMPBELL 701 －BROC | 243.7882 | 743.3331 | 0 | 240.9916 | 2.90566 | 747.6686 |  |
| 31 CAMPBELL 702 －GLAD | 318.2791 | 955.898 | 0 | 328.7814 | 1.45283 | 956.1407 |  |
| 31 CAMPBELL 703 －MOR｜ | 143.9028 | 566.8398 | 1.083333 | 144.595 | 2.90566 | 568.7943 |  |
| 33 CAROLINE 101－BOW | 318.2749 | 749.6337 | 1.4 | 313.2151 | 2.757576 | 757.9595 |  |
| 33 CAROLINE 102－SPAR | 294.4043 | 631.9226 | 1.4 | 276.4602 | 2.757576 | 644.0179 |  |
| 33 CAROLINE 201 －NORT | 472.6382 | 490.6693 | 0 | 474.6167 | 2.757576 | 489.2059 |  |
| 33 CAROLINE 202 －SOUT | 517.1967 | 740.9602 | 0 | 498.5873 | 16.54545 | 746.8131 |  |
| 33 CAROLINE 301 －PORT | 240.2975 | 340.7426 | 0 | 242.9015 | 4.136364 | 338.1094 |  |
| 33 CAROLINE 1302－WOO | 521.9708 | 887.1698 | 0 | 509.7735 | 6.893939 | 894.1941 |  |
| 33 CAROLINE 401 －DAW | 770.2253 | 669.0945 | 1.4 | 768.6554 | 13.78788 | 665.0723 |  |


| LINE 1402-CARN | 318.2749 | 247.8128 | 1.4 | 322.8033 | 2.757576 | 247.6992 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33 CAROLINE 501 - WEST | 514.014 | 433.6724 | 0 | 504.9794 | 16.54545 | 429.7581 | 0 |
| 33 CAROLINE 502 - MILFI | 273.7164 | 491.9084 | 0 | 276.4602 | 4.136364 | 491.6829 | 0 |
| 33 CAROLINE 601 - CHILE | 542.6587 | 688.9195 | 1.4 | 512.9696 | 9.651515 | 703.4657 | 2 |
| 33 CAROLINE 602 -LAKE | 345.3283 | 510.4943 | 0 | 343.5778 | 8.272727 | 509.0218 | 0 |
| 35 CARROLL C 101 - MT B | 84.53015 | 407.9518 | 0 | 88.20604 | 2.774194 | 408.4977 | 0 |
| 35 CARroll C 102 -ST PA | 99.44724 | 608.9013 | 0 | 96.68739 | 1.387097 | 616.3723 | 0 |
| 35 CARroll C 103 -LAME | 61.3258 | 358.3196 | 0 | 59.36945 | 0 | 362.572 | 0 |
| 35 CARROLL C 105 -FANC | 111.0494 | 502.3738 | 0 | 128.9165 | 0 | 490.6807 | 0 |
| 35 CARROLL C 201 - HILLS | 243.6457 | 911.5361 | 1.166667 | 242.5666 | 1.387097 | 919.7242 | 0 |
| 35 CARroll C 202 -LAUR | 106.0771 | 447.8996 | 0 | 108.5613 | 4.16129 | 445.9635 |  |
| 35 CARROLL C 203 -GLAD | 127.624 | 573.7956 | 0 | 123.8277 | 2.774194 | 576.4894 |  |
| 35 CARROLL C 301 - HILLS | 233.701 | 1129.433 | 0 | 210.3375 | 9.709677 | 1146.936 |  |
| 35 CARROLL C 302 -SYLV/ | 89.50251 | 506.0054 | 1.166667 | 88.20604 | 0 | 511.2265 | 0 |
| 35 CARROLL C 303 -DUGS | 59.66834 | 260.266 | 0 | 55.97691 | 1.387097 | 265.8861 | 0 |
| 35 CARROLL C 401 - OAKL | 192.2647 | 964.7999 | 1.166667 | 184.8934 | 4.16129 | 976.5271 | 2 |
| 35 CARROLL C 402 - WOO | 140.8836 | 848.5881 | 1.166667 | 122.1314 | 6.935484 | 854.4612 | 2 |
| 35 CARROLL C 406 - Woo | 44.75126 | 147.6858 | 0 | 44.10302 | 1.387097 | 149.8631 |  |
| 35 CARROLL C 501 -VAUG | 61.3258 | 355.8986 | 0 | 54.28064 | 0 | 361.3634 |  |
| 35 CARROLL C $502-\mathrm{GLAD}$ | 139.2261 | 880.0621 | 0 | 130.6128 | 4.16129 | 885.8841 |  |
| 35 CARroll C $503-$ WOO | 87.84506 | 405.5307 | 2.333333 | 78.02842 | 2.774194 | 413.332 |  |
| 35 CARROLL C $504-$ LAUR | 96.13233 | 476.9525 | 0 | 93.29485 | 0 | 482.2207 |  |
| 36 CHARLES C 101 - PREC | 632.2543 | 709.6548 | 0 | 627.9089 | 8.181818 | 708.3645 |  |
| 36 CHARLES C 201 - PREC | 606.9642 | 386.1571 | 0 | 602.3668 | 4.090909 | 389.6729 |  |
| 36 CHARLES C 301 - PREC | 583.7815 | 453.1881 | 1 | 591.7243 | 2.727273 | 451.9626 |  |
| 37 CHARLOTTI 101 - COUN | 227.6024 | 447.0109 | 0 | 203.4022 | 7.875 | 466.8993 |  |
| 37 CHARLOTTI 201 -RED ( | 260.3633 | 551.7391 | 0 | 255.5567 | 1.3125 | 559 |  |
| 37 CHARLOTTI302-DRAK | 155.1834 | 408.6957 | 1 | 151.2478 | 2.625 | 414.4531 |  |
| 37 CHARLOTTI401-KEYSI | 232.7751 | 556.8478 | 0 | 219.0486 | 3.9375 | 567.9542 |  |
| 37 CHARLOTTI501-CULLI | 200.0142 | 390.8152 | 0 | 192.9714 | 1.3125 | 396.5446 |  |
| 37 CHARLOTTI 602 -PHEN | 184.4959 | 623.2609 | 0 | 177.325 | 0 | 635.7506 |  |
| 37 CHARLOTTI 702 - BACC | 196.5657 | 311.6304 | 2 | 196.4483 | 3.9375 | 313.3982 |  |
| 41 CHESTERFII 101 - BELLI | 769.9922 | 749.3173 | 3.538462 | 756.5251 | 18.5285 | 755.0853 | 0 |
| 41 CHESTERFII 102 - SOUT | 1030.069 | 1184.967 | 3.538462 | 999.0276 | 27.79275 | 1194.25 | 1.473684 |
| 41 CHESTERFII 103 - ENON | 1337.247 | 1953.453 | 0 | 1330.655 | 16.98446 | 1949.335 | 0 |
| 41 CHESTERFII 104 - NORT | 948.1553 | 1507.348 | 8.846154 | 926.4841 | 15.44041 | 1520.586 | 4.421053 |
| 41 CHESTERFII 105 - DREV | 802.7374 | 515.2616 | 6.294118 | 785.3473 | 15.83039 | 524.4177 | 0 |
| 41 CHESTERFII 106 - HARR | 1587.085 | 1411.505 | 5.307692 | 1552.431 | 27.79275 | 1423.379 | 1.473684 |
| 41 CHESTERFII 107 - WELL | 1116.079 | 1082.154 | 1.769231 | 1113.025 | 16.98446 | 1077.949 | 1.473684 |
| 41 CHESTERFII 108 -ECOF | 1009.591 | 1535.229 | 0 | 1003.173 | 16.98446 | 1532.736 | 1.473684 |
| 41 CHESTERFII 109 -ELIZA | 1550.224 | 1876.778 | 3.538462 | 1558.649 | 12.35233 | 1867.751 | 2.947368 |
| 41 CHESTERFII 110 - DUTC | 823.2364 | 1005.479 | 1.769231 | 808.3419 | 16.98446 | 1006.78 | 0 |
| 41 CHESTERFII111-IRON | 542.6807 | 838.1898 | 0 | 534.7492 | 15.44041 | 833.1976 | 0 |
| 41 CHESTERFII 112 - CARV | 884.6719 | 846.9028 | 0 | 905.7574 | 3.088083 | 833.1976 | 0 |
| 41 CHESTERFII 113 -IRON | 864.1934 | 717.9505 | 0 | 829.0686 | 16.98446 | 734.2554 | 1.473684 |
| 41 CHESTERFII201-GATE | 632.7862 | 829.4768 | 1.769231 | 628.0194 | 12.35233 | 833.1976 | 0 |
| 41 CHESTERFII202-BEUL. | 1542.252 | 699.7586 | 1.573529 | 1499.299 | 36.40989 | 703.0837 | 1.6875 |


| RD | 497.628 | 555.8889 | 0 | 470.4964 | 13.89637 | 569.3517 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII204-JACO | 751.0097 | 648.2324 | 0 | 748.6849 | 9.498233 | 653.4543 | 0 |
| 41 CHESTERFII 205 - FALLI | 1251.044 | 477.0326 | 0 | 1221.437 | 11.08127 | 502.9116 |  |
| CHESTERFIII206-BELM | 844.8859 | 194.4697 | 3.147059 | 845.1649 | 17.41343 | 190.2462 |  |
| 207 - CHIPF | 440.6434 | 181.1726 | 1.573529 | 430.3009 | 9.498233 | 188.5919 |  |
| 208 - MEAL | 1143.757 | 418.8579 | 3.147059 | 1146.183 | 14.24735 | 421.8502 |  |
| 209-SA | 788.4229 | 998.5088 | 3.538462 | 775.1791 | 10.80829 | 1006.78 | 2.947368 |
| 41 CHESTERFII 210 - FIVE I | 1689.772 | 950.7408 | 1.573529 | 1655.597 | 25.32862 | 964.4654 | 8.4375 |
| CHESTERFII 211 - NASH | 960.4424 | 1735.628 | 3.538462 | 947.2108 | 10.80829 | 1742.772 | 1.473684 |
| 41 CHESTERFII 212 - ST. Ll | 576.6682 | 663.1916 | 1.573529 | 569.2321 | 9.498233 | 663.3801 | 3.375 |
| CHESTERFII213-SOUT | 749.0939 | 269.2658 | 3.147059 | 737.1073 | 14.24735 | 279.5792 | . 375 |
| CHESTERFII214-HOPK | 218.4059 | 46.53976 | 0 | 212.256 | 6.332155 | 44.66649 |  |
| 215 - Nortr | 547.9305 | 272.59 | 0 | 534.4993 | 7.915194 | 281.2335 |  |
| 216 - RIDG | 1262.539 | 310.8191 | 0 | 1248.45 | 12.66431 | 320.937 |  |
| CHESTERFII 301 - ETTR | 1257.381 | 430.4218 | 7.076923 | 1249.821 | 15.44041 | 435.6929 | 053 |
| CHESTERFII302-DEER | 304.6187 | 487.0054 | 0 | 304.8769 | 3.166078 | 483.0599 | 0 |
| 41 CHESTERFII303-MATC | 1032.117 | 1381.88 | 0 | 1003.173 | 12.35233 | 1397.342 | 7368 |
| CHESTERFII304-WINF | 405.4746 | 1367.94 | 1.769231 | 418.6796 | 6.176166 | 1352.21 |  |
| 305-BEAC | 202.7373 | 709.2375 | 0 | 194.8311 | 4.632124 | 713.4254 |  |
| 306 - WINT | 634.1434 | 2145.815 | 0 | 638.6977 | 9.498233 | 2125.794 |  |
| CHESTERFII307-COSB | 1800.891 | 2282.11 | 4.720588 | 1802.247 | 30.07774 | 2263.102 | . 75 |
| CHESTERFII308-SOUT | 400.4108 | 324.1162 | 0 | 399.4273 | 6.332155 | 320.937 |  |
| 41 CHESTERFII309-SKINC | 831.475 | 1442.733 | 1.573529 | 833.5873 | 9.498233 | 1437.599 |  |
| CHESTERFII310-TOM, | 1099.693 | 1419.463 | 3.147059 | 1109.52 | 11.08127 | 1407.822 |  |
| 313 - WOO | 1404.312 | 1868.239 | 0 | 1393.171 | 17.41343 | 1874.338 |  |
| 314 -LON¢ | 204.7852 | 942.7457 | 0 | 219.7032 | 6.176166 | 921.7248 | 1.473684 |
| 315 - BAILE | 636.0592 | 1610.608 | 0 | 625.1905 | 18.99647 | 1607.994 | 1.6875 |
| CHESTERFII316-SPRIN | 967.4997 | 1371.261 | 6.294118 | 957.0818 | 28.4947 | 1356.538 | 1.6875 |
| 41 CHESTERFII317-BIRK[ | 1166.747 | 1682.08 | 0 | 1177.056 | 9.498233 | 1669.203 | 6875 |
| CHESTERFII318-WEST | 289.292 | 521.9102 | 0 | 299.0881 | 1.583039 | 511.1832 |  |
| 319 - MAG | 1427.302 | 2202.328 | 1.573529 | 1406.679 | 9.498233 | 2216.782 | 1.6875 |
| 401 - HARB | 628.3959 | 812.7837 | 1.573529 | 638.6977 | 6.332155 | 802.3426 | 3.375 |
| CHESTERFII 402 - GEN | 475.128 | 435.4 | 0 | 468.8929 | 4.749117 | 441.702 |  |
| CHESTERFII403-BRAN | 1182.074 | 1311.424 | 1.573529 | 1146.183 | 26.91166 | 1320.143 |  |
| CHESTERFII 404 - PROV | 1047.965 | 824.4186 | 1.573529 | 1022.688 | 20.57951 | 832.1202 | 0 |
| 41 CHESTERFII405-LA PR | 833.3909 | 919.1603 | 3.147059 | 812.3617 | 14.24735 | 926.4162 | . 6875 |
| STERFII406-SMOI | 827.6433 | 1022.213 | 1.573529 | 837.4465 | 12.66431 | 1005.823 | 5.0625 |
| 407 - MON | 486.6236 | 644.9081 | 3.147059 | 480.4705 | 11.08127 | 643.5284 | 1.6875 |
| CHESTERFII 408 - REAN | 1410.059 | 1007.253 | 3.147059 | 1375.805 | 39.57597 | 1015.749 |  |
| 41 CHESTERFII409-MAN | 785.4948 | 618.314 | 1.573529 | 775.6993 | 9.498233 | 622.0223 |  |
| 41 CHESTERFII410-WAG | 680.1236 | 696.4343 | 0 | 667.6417 | 26.91166 | 679.9233 | 0 |
| 41 CHESTERFII411-SWIF | 1030.723 | 1238.29 | 1.573529 | 1063.21 | 14.24735 | 1196.069 | 1.6875 |
| 41 CHESTERFII412-CLOV | 1021.143 | 1121.941 | 1.573529 | 1009.181 | 15.83039 | 1128.243 | 1.6875 |
| 41 CHESTERFII413-SHEN | 1040.302 | 962.3758 | 3.147059 | 1047.773 | 22.16254 | 944.6136 | 0 |
| 41 CHESTERFII414-CREN | 1433.049 | 1726.958 | 3.147059 | 1391.242 | 28.4947 | 1735.376 | 1.6875 |
| 41 CHESTERFII415-EVER | 929.1829 | 1088.698 | 3.147059 | 908.8418 | 30.07774 | 1085.23 | 0 |
| CHESTERFII416-EVER | 751.0097 | 772.8925 | 0 | 742.8961 | 9.498233 | 770.9106 |  |


| STERFII417-EDGE | 695.4503 | 787.8517 | 1.573529 | 688.8673 | 3.166078 | 792.4167 | 1.6875 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 CHESTERFII501-HUGI | 1092.029 | 852.6749 | 3.147059 | 1076.717 | 26.91166 | 848.6634 | 0 |
| 41 CHESTERFII502-CRES | 697.3662 | 570.1121 | 1.573529 | 690.7969 | 11.08127 | 564.1213 | 1.6875 |
| 41 CHESTERFII503-MIDL | 1093.945 | 1426.111 | 1.573529 | 1090.224 | 11.08127 | 1430.982 |  |
| 41 CHESTERFII504-ROBII | 1452.208 | 1924.752 | 3.147059 | 1489.651 | 7.915194 | 1890.882 | . 0625 |
| 41 CHESTERFII505-BON, | 1519.262 | 1100.333 | 3.147059 | 1503.159 | 30.07774 | 1086.885 | 1.6875 |
| 41 CHESTERFII506-GREE | 1459.871 | 1033.848 | 4.720588 | 1458.778 | 25.32862 | 1030.638 | 3.375 |
| 41 CHESTERFII507-SALIS | 1479.029 | 2057.722 | 4.720588 | 1462.637 | 7.915194 | 2079.473 | 5.0625 |
| 41 CHESTERFII508-BELG | 965.5839 | 995.6185 | 1.573529 | 955.1522 | 14.24735 | 995.8974 | 375 |
| 41 CHESTERFII509-CRAN | 982.8265 | 646.5703 | 1.573529 | 991.8146 | 7.915194 | 643.5284 |  |
| 41 CHESTERFII510-SYCAI | 1024.975 | 1314.748 | 0 | 1022.688 | 11.08127 | 1303.6 |  |
| 41 CHESTERFII511-BLAC | 812.3166 | 1100.333 | 0 | 798.8545 | 12.66431 | 1108.391 | 375 |
| 41 CHESTERFII513-BEAU | 693.5345 | 320.7919 | 0 | 685.0081 | 15.83039 | 315.9741 |  |
| 41 CHESTERFII514-WATr | 1132.262 | 1494.259 | 0 | 1144.253 | 23.74558 | 1464.068 |  |
| 41 CHESTERFII515-DAVI! | 1212.727 | 372.3181 | 3.147059 | 1186.704 | 28.4947 | 368.9121 | . 0625 |
| 41 CHESTERFII516-POCC | 789.3265 | 324.1162 | 4.720588 | 798.8545 | 11.08127 | 315.9741 | . 6875 |
| 41 CHESTERFII517-ROSE | 819.98 | 1243.276 | 1.573529 | 835.5169 | 4.749117 | 1227.501 |  |
| 41 CHESTERFII518-MIDL | 1005.817 | 1557.42 | 1.573529 | 1011.111 | 4.749117 | 1556.71 | . 6875 |
| 43 CLARKE CO 101 - RUSS | 483.9078 | 1003.047 | 1.5 | 451.1056 | 4.25 | 1032.504 |  |
| 43 CLARKE CO 201 - BERR | 557.2872 | 658.6958 | 0 | 548.2046 | 1.416667 | 679.8027 |  |
| 43 CLARKE CO 301 - MILLI | 358.9644 | 624.4037 | 3 | 347.938 | 5.666667 | 635.7151 |  |
| 43 CLARKE CO 302 - PINE | 234.021 | 345.7796 | 0 | 222.5185 | 7.083333 | 348.4344 |  |
| 43 CLARKE CO 401 - WHIT | 604.8847 | 980.1851 | 0 | 584.6167 | 8.5 | 1005.482 |  |
| 43 CLARKE CO 501 - BUCK | 388.7128 | 624.4037 | 0 | 392.4417 | 0 | 625.7598 |  |
| 43 CLARKE CO 502 - BLUE | 210.2222 | 301.4855 | 1.5 | 192.175 | 7.083333 | 314.3021 |  |
| 45 CRAIG COU 101 - COUF | 65.46713 | 351.198 | 0 | 60.96654 | 2.833333 | 359.0543 |  |
| 45 CRAIG COU 201 - AMM | 68.44291 | 474.1174 | 1.5 | 62.45353 | 2.833333 | 478.3207 | 2.666667 |
| 45 CRAIG COU 301 - GIVEI | 83.3218 | 277.1956 | 0 | 78.81041 | 4.25 | 281.2174 |  |
| 45 CRAIG COU 303 - MAR | 58.02768 | 203.1932 | 0 | 50.55762 | 4.25 | 205.8913 |  |
| 45 CRAIG COU 401 - BARB | 43.14879 | 185.6333 | 1.5 | 41.63569 | 2.833333 | 185.8043 | 333333 |
| 45 CRAIG COU 402 - PAIN ${ }^{-}$ | 11.90311 | 32.61125 | 0 | 11.89591 | 0 | 31.38587 |  |
| 45 CRAIG COU 403 - CRAIC | 40.17301 | 188.1418 | 0 | 40.1487 | 0 | 188.3152 |  |
| 45 CRAIG COU501-CRAIC | 59.51557 | 339.9095 | 3 | 53.5316 | 0 | 349.0109 |  |
| 47 CULPEPER 101-WEST | 1086.759 | 1128.011 | 5.416667 | 1072.057 | 20.80556 | 1149.251 | 4.285714 |
| 47 CULPEPER 201 - EAST | 1002.172 | 847.6307 | 0 | 980.2203 | 22.29167 | 868.0926 |  |
| 47 CULPEPER 302 -EGGB | 329.1537 | 995.6091 | 0 | 311.1216 | 5.944444 | 1005.433 |  |
| 47 CULPEPER 303 - CARD | 270.3106 | 781.4298 | 0 | 253.0205 | 4.458333 | 792.9443 |  |
| 47 CULPEPER 304 - WILL | 205.9509 | 231.054 | 0 | 191.1711 | 5.944444 | 243.5842 |  |
| 47 CULPEPER 401 - ELDO | 402.7076 | 1000.801 | 1.083333 | 397.336 | 1.486111 | 1008.024 |  |
| 47 CULPEPER 402 - BROV | 663.8239 | 1448.631 | 3.25 | 625.9916 | 8.916667 | 1480.94 |  |
| 47 CULPEPER 501 -JEFFE | 647.2743 | 1407.093 | 0 | 635.3627 | 8.916667 | 1416.157 | 1.428571 |
| 47 CULPEPER 502 - RIXEY | 443.1622 | 1272.095 | 0 | 421.7009 | 7.430556 | 1290.478 |  |
| 47 CULPEPER 601 - MITC | 104.8143 | 211.5832 | 0 | 99.33399 | 1.486111 | 215.0797 |  |
| 47 CULPEPER 602 -PEAR | 579.2369 | 1067.002 | 1.083333 | 554.771 | 5.944444 | 1088.355 |  |
| 47 CULPEPER 603 -SOUT | 240.889 | 305.0432 | 0 | 247.3979 | 4.458333 | 301.8889 | 0 |
| 47 CULPEPER 702 - BRAN | 524.0715 | 1375.94 | 1.083333 | 502.2926 | 2.972222 | 1403.2 | 4.285714 |
| 47 CULPEPER - 703 - LIGNI | 261.1163 | 678.8834 | 1.083333 | 253.0205 | 2.972222 | 691.8827 |  |

47 CULPEPER 704 -RICH/ 130.5582 49 CUMBERLA 101 - PREC 334.9399 49 CUMBERLA 201 - PREC 234.1328 49 CUMBERLA 301 - PREC 344.6955 49 CUMBERLA 401 - PREC 271.529 49 CUMBERLA 501 - PREC 357.7028 51 DICKENSOr 101 - SOUT 156.534 51 DICKENSOR 201 - NORf 69.35052 51 DICKENSOR 202 - FRYIN 21.79588 51 DICKENSOr 203 - CLINC 110.9608 51 DICKENSO 301 - WEST 11.88866 51 DICKENSO 302 - HERA 47.55464 51 DICKENSO 303 -RIDG| 57.46186 51 DICKENSOr 304 - LONG 27.74021 51 DICKENSO 401 - HAYS 259.5691 51 DICKENSO 501 - TARP 57.46186 51 DICKENSOT 502 - NORT 140.6825 53 DINWIDDIE 101 - WHIT 109.9831 53 DINWIDDIE 102-ROCK 157.1186 53 DINWIDDIE 103-CHUR 167.5932 53 DINWIDDIE 201 - ROHC 385.8136 53 DINWIDDIE 202-SUTH 553.4068 53 DINWIDDIE 301 - REAN 144.8983 53 DINWIDDIE 302 - NEW 282.8136 53 DINWIDDIE 303 - LITTL 448.661 53 DINWIDDIE 401 - DINM 371.8475 53 DINWIDDIE 402 - MCKE 267.1017 53 DINWIDDIE 403 - CHER 207.7458 53 DINWIDDIE 501 -EDGE 146.6441 53 DINWIDDIE 502-CHES 979.3729
57 ESSEX COU 101 - GREA 487.4313 57 ESSEX COU 201 - NORT 658.2241 57 ESSEX COU 301 - SOUT 456.7269 57 ESSEX COU 401 - CENT 435.6177 59 FAIRFAX C( 104 - CHAP 1204.662 59 FAIRFAX CC 105 - FAIR\ 1804.284 59 FAIRFAX C( 106 - HERI7 1376.241 59 FAIRFAX C( 108 - KING! 1145.061 59 FAIRFAX C( 109 - LITTL 688.1205 59 FAIRFAX C( 110 - NORT 1737.459 59 FAIRFAX C( 113 -CANT 1925.293 59 FAIRFAX C( 114 - OLDE 986.1254 59 FAIRFAX C( 115 - RAVE 926.5244 59 FAIRFAX C(116-WAKI 1219.111 59 FAIRFAX C(117-WOO 1161.316 59 FAIRFAX C( 118 - LAKE 1853.049 59 FAIRFAX C( 119 - LAUR 1791.642
471.1944 697.4545
572.7273
351.2727
582.9091
455.6364
653.92
285.42
125.96
359.12
205.02
352.42
250.58
217.08
649.9
171.52
548.06
493.3972
625.8061
1071.815
291.2995
1014.67
454.3714
575.6301
606.2932
748.4585
480.8532
294.087
62.71998
582.599
502.2794
440.4848
983.9606
727.2752
639.2632
955.3035
647.8825
662.248
313.1672
1078.846
923.6994
541.5781
563.1263
576.0552
673.7403
810.2123
1041.496

| 0 | 116.202 | 2.972222 | 480.6901 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 335.0324 | 6.352941 | 699.3261 | 0 |
| 0 | 230.4369 | 4.764706 | 571.1374 | 5 |
| 0 | 343.2039 | 3.176471 | 354.1052 | 0 |
| 0 | 251.6828 | 6.352941 | 595.2521 | 0 |
| 0 | 354.644 | 6.352941 | 458.1791 | 0 |
| 0 | 147.5801 | 3.666667 | 663.9086 | 0 |
| 0 | 64.69264 | 0 | 293.1371 | 0 |
| 0 | 26.28139 | 1.833333 | 121.8058 | 1 |
| 0 | 103.1039 | 0 | 366.756 | 0 |
| 0 | 12.12987 | 1.833333 | 203.4559 | 1 |
| 0 | 42.45455 | 0 | 356.0478 | 0 |
| 0 | 52.56277 | 1.833333 | 254.3198 | 0 |
| 0 | 24.25974 | 0 | 220.8567 | 0 |
| 1 | 266.8571 | 0 | 659.893 | 0 |
| 0 | 52.56277 | 1.833333 | 175.3468 | 0 |
| 1 | 141.5152 | 0 | 551.4725 | 1 |
| 1.25 | 110.5342 | 1.735294 | 495.1195 | 0 |
| 0 | 149.1334 | 1.735294 | 630.0256 | 0 |
| 0 | 171.9421 | 1.735294 | 1068.123 | 0 |
| 0 | 387.747 | 8.676471 | 282.3294 | 0 |
| 1.25 | 542.1439 | 12.14706 | 1026.399 | 1.166667 |
| 1.25 | 138.6064 | 0 | 460.3498 | 2.333333 |
| 0 | 275.4582 | 5.205882 | 578.5666 | 0 |
| 0 | 468.4545 | 6.941176 | 598.0375 | 0 |
| 0 | 361.4293 | 5.205882 | 749.6331 | 1.166667 |
| 0 | 263.1767 | 1.735294 | 486.7747 | 0 |
| 1.25 | 198.2598 | 0 | 304.5819 | 1.166667 |
| 0 | 143.8699 | 3.470588 | 62.58532 | 1.166667 |
| 0 | 970.2446 | 10.41176 | 592.4744 | 0 |
| 0 | 488.6726 | 9 | 501.4759 | 6 |
| 0 | 650.2655 | 10.5 | 444.7051 | 0 |
| 0 | 436.1062 | 3 | 996.6439 | 0 |
| 0 | 404.9558 | 16.5 | 741.1751 | 0 |
| 4.03125 | 1200.365 | 7.857143 | 646.0496 | 0 |
| 1.34375 | 1800.548 | 15.71429 | 960.4985 | 4.033333 |
| 2.6875 | 1381.689 | 18.85714 | 668.9186 | 0 |
| 4.03125 | 1151.408 | 14.14286 | 657.4841 | 2.688889 |
| 0 | 683.5916 | 7.857143 | 315.8782 | 0 |
| 4.03125 | 1747.964 | 14.14286 | 1087.707 | 4.033333 |
| 1.34375 | 1896.649 | 20.42857 | 934.7708 | 8.066667 |
| 2.6875 | 991.8425 | 6.285714 | 547.427 | 2.688889 |
| 1.34375 | 917.4996 | 11 | 566.008 | 2.688889 |
| 4.03125 | 1233.003 | 4.714286 | 564.5787 | 2.688889 |
| 2.6875 | 1129.649 | 11 | 696.0755 | 4.033333 |
| 6.71875 | 1829.56 | 12.57143 | 840.4362 | 5.377778 |
| 2.6875 | 1796.921 | 11 | 1044.828 | 1.344444 |

59 FAIRFAX CC 120 - SIDEE 1278.712 59 FAIRFAX C( 121 - VILLA 847.0565 59 FAIRFAX C( 123 - ROBII 1723.01 59 FAIRFAX C( 125 - SIGN/ 1309.416 59 FAIRFAX C( 126 - BON 1173.959 59 FAIRFAX C( 127 - BURK 2066.168 59 FAIRFAX C( 128 - CARD 1071.012 59 FAIRFAX C( 129 -KEEN 847.0565 59 FAIRFAX C( 130 - TERR، 1238.978 59 FAIRFAX C( 131 - EAGL 1329.283 59 FAIRFAX C( 132 - MON 1378.047 59 FAIRFAX C( 133 - DANE 415.4008 59 FAIRFAX CC 134 - UNIV 576.1429 59 FAIRFAX CC 201 - ARM؛ 1629.094 59 FAIRFAX CC 202 - FLINT 1345.537 59 FAIRFAX CC 203 - FLOR 1704.949 59 FAIRFAX CC 204 - MADI 399.146 59 FAIRFAX C( 208 - REST( 1715.786 59 FAIRFAX CC 209 - REST 1674.246 59 FAIRFAX C( 213 - VIEN 1890.977 59 FAIRFAX CC 214 - VIENI 1565.88 59 FAIRFAX CC 216 - VIEN 724.2423 59 FAIRFAX CC 218 - VIEN 996.962 59 FAIRFAX CC 219 - WEST 1482.8 59 FAIRFAX C(220-DOGI 1699.531 59 FAIRFAX C(221-HUN7 1369.017 59 FAIRFAX CC 222 -REST( 1130.613 59 FAIRFAX C( 223 -GLAD 1881.946 59 FAIRFAX CC 224 -SOUT 2423.774 59 FAIRFAX CC 225 - HUGF 1741.071 59 FAIRFAX CC 226 - WOLF 1739.265 59 FAIRFAX CC 227 - SUNR 881.3722 59 FAIRFAX CC 229 - FOX 12086.338 59 FAIRFAX CC 233 - NORT 1329.283 59 FAIRFAX CC 234 - ALDR 1181.183 59 FAIRFAX CC 235 - FRYIN 1425.005 59 FAIRFAX CC 236 - STUA 679.09 59 FAIRFAX CC 237 - MCN, 1441.26 59 FAIRFAX CC 238 - CAMI 1054.757 59 FAIRFAX C( 240 - COLV 994.7599 59 FAIRFAX C( 301 - CHAII 1125.749 59 FAIRFAX C( 302 - CHES 952.6459 59 FAIRFAX CC 303 - CHUR 698.61 59 FAIRFAX C(304-COOF 672.0325 59 FAIRFAX C( 305 - EL NII 1033.227 59 FAIRFAX C( 306 -GREA 645.4549 59 FAIRFAX C( 307 - HAYC 1196.179
897.8416 545.8877 973.9786 754.1869 534.3953 882.0396 505.6644 452.5122 603.3496 784.3544 564.5628 181.0049 86.19279 634.9536 813.0854 945.2476 179.5683 636.3901 505.6644 945.2476 775.7351 396.4869 545.8877 772.8621 685.2327 573.1821 260.0149 584.6745 771.4255 530.0857 985.4709 449.6391 1162.945 847.5625 564.5628 535.8319 333.2788 479.8066 551.6339 714.4891 826.9831 541.9707 398.2896 560.9499 527.6329 639.9998 610.7924
1.343751278 .334
$5.375 \quad 837.7171$
2.68751722 .578
$1.34375 \quad 1298.28$
5.3751155 .034
1.343752047 .148
4.031251080 .691
2.6875835 .9038

0
1.34375

0
1.3437

5
1.3437
5.375
$2.6875 \quad 1684.5$
$5.375 \quad 1679.061$
5.3751882 .144
$1.34375 \quad 1530.375$
707.1638
1.34375997 .2822
1.343751477 .791
4.031251693 .567
1.343751350 .864
$0 \quad 1147.781$ 1867.638
$2.6875 \quad 2411.61$
2.68751731 .645
$4.03125 \quad 1744.337$
1.34375883 .0481
$8.238806 \quad 2069.944$
4.031251327 .292
1.343751184 .046
1.343751403 .448
2.6875687 .2181
$0 \quad 1430.647$
$4.03125 \quad 1046.24$
$2.746269 \quad 969.0321$
2.7462691087 .533
970.9142
691.8927
667.0457
1008.602
628.8196
1189.863
3.142857
18.85714
7.857143
9.428571
12.57143
15.71429
12.57143

11
9.428571
12.57143

11
4.714286

11
17.28571
3.142857
7.857143
7.857143

22
17.28571

11
12.57143
9.428571
6.28571

11
15.71429

11
12.57143
14.14286
18.85714
$17.28571544 .5683 \quad 2.688889$
$9.428571 \quad 993.3727 \quad 2.688889$
7.857143448 .80431 .344444
16.60092
9.428571
9.428571
12.57143
7.857143
14.14286
4.714286
4.527523
6.036697
$\begin{array}{lll}0 & 537.695 & 1.428571\end{array}$
$\begin{array}{lll}1.509174 & 412.8832 & 1.457627\end{array}$
$3.018349 \quad 574.7092 \quad 2.915254$
$\begin{array}{llll}6.255507 & 546.2525 & 1.428571\end{array}$
$4.527523657 .8908 \quad 4.372881$
$6.255507 \quad 614.71231 .428571$

| 59 FAIRFAX C( 309 - KENN | 1159.92 | 892.3512 | 8.2 | 1142.961 | 10.56422 | 914.9975 | 7.288136 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C(310 | 888.1811 | 455.9436 | 2.793388 | 866.8236 | 1.563877 | 480.6451 | 71 |
| 311 | 746.07 | 600.4748 | 1.373134 | 741.5867 | 7.545872 | 612.519 |  |
| FAIRFAX C( 312 | 977.715 | 507.5599 | 1.396694 | 994.2449 | 0 | 514.8751 | 1 |
| 1 | 886.5513 | 477.3395 | 0 | 869.6442 | 0 | 509.6763 |  |
| 315 | 1219.458 | 692.5182 | 6.983471 | 1214.989 | 7.819383 | 717.4021 | 86 |
| 59 FAIRFAX CC 316 - SALO | 327 | 226.538 |  | 321 | 0 | 238.1832 | 3 |
| 59 FAIRFAX C( 317 - WEST | 89 | 42 |  | 888.3596 | 10.94714 | 9 |  |
| 31 | 657.1824 | 324.035 |  | 655.05 | 0 | 336.5942 |  |
| FAIRFAX CC 319 - HER | 1506.28 | 817.395 | 4.03125 | 1517.682 | 5714 | 816.1378 | 78 |
| X C( 320 - HERN | 1376.241 | 695.2885 | 0 | 1379.87 | 23.57143 | 711.798 | . 688889 |
| C( 321 - CLEAI | 1869.921 | 1135.582 | 4.119403 | 1871.168 | 27.16514 | 1120.683 | 54 |
| (322-FORE | 943.5032 | 944.0377 | 0 | 909 | 3.018349 | 981.5428 |  |
| 323 | 10 | 615 | 2.746269 | 10 | 9174 | 617.0562 | 27 |
| ( 32 | 1298 | 604. | 125 | 1296 | 14.14286 | 616.034 | 44 |
| C( 325 - HU | 984.319 | 264.3246 | 1.34375 | 990.029 | 11 | 271.5695 |  |
| FAIRFAX C( 327 - SUGA | 1587.06 | 966.8405 | 0 | 1594.029 | 6.036697 | 969.4437 | 627 |
| X CC328-HICKC | 951.0968 | 769.2159 | 1.373134 | 944.185 | 1.509174 | 795.5185 |  |
| 329-SEN | 1156 | 985.0828 | 2.746269 | 1144 | 4.527523 | 1010.278 | 881 |
| C(331 | 772. | 553.349 | 0 | 772.16 | 0 | 559 | 2.915254 |
| C(332-COA | 1641 | 624.8978 | 2.68 | 1619.224 | 143 | 640.3323 | 4.033333 |
| 333 - SALO | 694.786 | 400.026 | 1.39669 | 698.12 | 4.69163 | 400.7753 | 1.428571 |
| FAIRFAX CC 401 - BUSH | 1611.6 | 815.8237 | 2.793388 | 1633.146 | 6.255507 | 820.0919 | 5.714286 |
| 402-CAMI | 650.01 | 227.9718 | 1.396694 | 655.05 | 1.563877 | 228.1995 | 71 |
| 403 - FORE | 605.25 | 253.7 | 2.79338 | 594.034 | 7.819383 | 263.8556 | 1 |
| FAIRFAX CC 404 - FRAN | 161 | 666.7 | 1.3966 | 1606.22 | 10.94714 | 680.3197 |  |
| 405 | 836. | 256.647 | 2.7933 | 830.930 | 7.819383 | 270.9869 |  |
| 406 - HAYF | 1169 | 714.025 | 1.3966 | 1179.09 | 9.38326 | 708.8446 | 571 |
| FAIRFAX CC 408 - MOU | 1334.062 | 328.3368 | 2.793388 | 1311.901 | 18.76652 | 330.8892 | 2.857143 |
| FAIRFAX CC 409 - PION | 145 | 714.025 | 1.3966 | 1484.189 | 6.255507 | 713.1234 | 2.857143 |
| FAIRFAX CC 410 - ROSE | 1935 | 977.8414 | 6.98 | 1909 | 9.38326 | 1016 | . 285714 |
| 59 FAIRFAX CC411-VIRGI | 1126 | 474.582 | 5.5867 | 1136.02 | 14.07489 | 482. | 2.857143 |
| 59 FAIRFAX C(413-FAIRF | 1000 | 219 | 2.79 | 102 | 4.69163 | 222 | . 4 |
| FAIRFAX CC 415 - CRES | 1178 | 673.879 | 6.98 | 1155.76 | 18.76652 | 693.1559 | 5.714286 |
| FAIRFAX CC417-GAR | 1437.922 | 716.8925 | 1.396694 | 1455.47 | 12.51101 | 734.5171 |  |
| FAIRFAX CC 418 - LYNB | 802.2281 | 425.8342 | 1.396694 | 820.1623 | 3.127753 | 432.1528 | 851 |
| FAIRFAX CC 419 - LANE | 560.4853 | 186.3921 | 1.396694 | 556.3464 | 3.127753 | 198.2483 |  |
| 420-VIL | 1975 | 833.029 | 0 | 195 | 14.07489 | 848.6168 | 2.857143 |
| 59 FAIRFAX C( 421 - KING! | 149 | 609.358 | 2.793388 | 147 | 15.63877 | 623 | 1.428571 |
| FAIRFAX CC 422 - V | 1651.014 | 576.3816 | 1.396694 | 1613.405 | 18.76652 | 600.449 | 1.428571 |
| FAIRFAX CC 423 - CLER | 1271.388 | 646.6371 | 1.396694 | 1284.981 | 10.94714 | 640.3848 | 1.428571 |
| FAIRFAX CC 424 - HUN | 1319.737 | 586.4181 | 0 | 1326.258 | 6.255507 | 587.6136 |  |
| 59 FAIRFAX CC 426 - GREE | 1175.765 | 410.8523 | 4.03125 | 1222.124 | 3.142857 | 417.3595 | 2.688889 |
| 59 FAIRFAX CC 427 - ISLAN | 1403.899 | 547.7059 | 2.793388 | 1407.018 | 1.563877 | 561.9412 | 4.285714 |
| FAIRFAX CC428-PINEI | 1221.249 | 283.8894 | 1.396694 | 1238.319 | 17.20264 | 280.9706 | 2.857143 |
| FAIRFAX CC 429 - HYBL | 1292.877 | 302.5286 | 2.793388 | 1292.159 | 17.20264 | 309.4955 | 2.857143 |
| FAIRFAX CC 430 - LANE | 1051.134 | 387.122 | 2.793388 | 1042.701 | 12.51101 | 392.2178 |  |


| 59 FAIRFAX CC 501 - BAILE | 875.6463 | 318.3003 | 0 | 875.7969 | 7.819383 | 323.758 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC502-BARC | 661.0291 | 278.69 | 1.34375 | 663.646 | 3.142857 | 281.5747 |  |
| 59 FAIRFAX CC503 | 702.5692 | 300.2382 | 0 | 698.0976 | 4.714286 | 300.1558 | 2.6 |
| 59 FAIRFAX CC504-B | 998.7681 | 476.9335 | 2.6875 | 1022.668 | 11 | 497.401 | 2.688889 |
| 59 FAIRFAX CC505-GLE | 1201.551 | 478.8842 | 1.396694 | 1213.194 | 18.76652 | 482.0714 |  |
| 59 FAIRFAX CC506-HOLN | 213.0918 | 86.0271 | 0 | 217.1546 | 1.563877 | 91.27979 |  |
| 59 FAIRFAX CC507-LI | 1339.434 | 491.7883 | 4.190083 | 1349.589 | 7.819383 | 500.6126 |  |
| 59 FAIRFAX CC508-MASC | 1255.233 | 617 |  | 1263.8 | 9.428571 | 614.6047 |  |
| 59 FAIRFAX CC509-PLAZ, | 10.90 | 143. | 0 | 708.893 | 6.255507 | 145.4772 |  |
| 59 FAIRFAX CC510 | 877. | 448.7 | 0 | 891.948 | 3.127753 | 440.7102 | 2.857143 |
| 59 FAIRFAX CC511-RAVE | 1179.377 | 479.8066 | 4.03125 | 1153.22 | 18.85714 | 497.401 | 333 |
| 59 FAIRFAX C( 512 -SLEEF | 720.6301 | 341.8981 | 1.34375 | 716.23 | 1.571429 | 355.899 |  |
| 59 FAIRFAX CC513-SAIN 7 | 1088.302 | 491.2409 | 5.480888 | 1079.725 | 7.849591 | 500.1952 | 2.688889 |
| 59 FAIRFAX CC514-CROS | 587.3456 | 103.2325 |  | 579.6771 | 1.563877 | 116.9522 |  |
| 59 FAIRFAX CC515-WEST | 710.903 | 321.1678 | 1.396694 | 707.0983 | 4.69163 | 348.0042 |  |
| FAIRFAX CC516-WEY | 580.1828 | 336. | 4.190083 | 576.08 | 9.38326 | 350.8567 |  |
| 59 FAIRFAX CC 517 - WIL | 637.4848 | 311.131 | 2.793388 | 664.0263 | 3.127753 | 316.6268 | 2.8 |
| 59 FAIRFAX CC518-COLU | 1027.666 | 553.0704 | 6.71875 | 1026.294 | 11 | 568.8667 | 1.344444 |
| 59 FAIRFAX CC519-HUM | 796.4859 | 451.0756 | 1.34375 | 808.7052 | 6.285714 | 455.9509 |  |
| 59 FAIRFAX CC520-SKYLI | 956.2273 | 245.1772 | 0 | 952.9675 | 3.127753 | 261.0031 |  |
| 59 FAIRFAX CC521-BROC | 825.5071 | 520.464 | 2.793388 | 811.188 | 6.255507 | 540.5475 | 1.428571 |
| 59 FAIRFAX CC522-CAMI | 204.0882 | 97.6851 | 0 | 199.45 | 1.571429 | 110.0571 |  |
| 59 FAIRFAX C( 523 - POE | 1009.948 | 553.441 | 1.396694 | 979.8875 | 9.38326 | 579.0562 | 2.857143 |
| 59 FAIRFAX CC525-WALI | 1276.76 | 691.0844 | 0 | 1281.391 | 14.07489 | 700.2871 | 4.28 |
| 59 FAIRFAX CC526-BREN | 1685.037 | 550.5735 | 5.586777 | 1670.834 | 14.07489 | 570.4987 | 2.857143 |
| 59 FAIRFAX CC527-EDSA | 938.3204 | 529.0667 | 2.793388 | 936.8155 | 12.51101 | 544.8262 | . 857143 |
| 59 FAIRFAX CC528-RIDGI | 673.6718 | 377.8117 | 0 | 669.08 | 12.57143 | 373.0507 |  |
| 59 FAIRFAX CC $530-\mathrm{HOL}$ | 798 | 209.7 | 1.34375 | 799 | 6.28571 | 228.6901 |  |
| 59 FAIRFAX CC531-BAILE | 510.34 | 162.017 | 0 | 502.5064 | 4.69163 | 185.4121 |  |
| 59 FAIRFAX CC532-WEYt | 709.1124 | 260.948 | 2.793388 | 705.3037 | 6.255507 | 283.8231 | 1.428571 |
| 59 FAIRFAX CC534-CAME | 603.2342 | 336.1519 | 1.34375 | 609.2488 | 4.714286 | 338.7472 |  |
| 59 FAIRFAX CC601-BELLE | 786.1119 | 547.7059 | 2.793388 | 798.6263 | 9.38326 | 543.4 |  |
| 59 FAIRFAX CC602-BELLE | 945. | 520 | 1.396694 | 918.8689 | 7.81938 | 540.5475 | 28571 |
| 59 FAIRFAX CC 604 - BL | 1351. | 457. | 2.793388 | 1369. | 14.07489 | 463.5302 | 1.428571 |
| 59 FAIRFAX CC605-FO | 936.529 | 652.3 | 2.793388 | 920.6636 | 6.25550 | 666.0572 | 2.85 |
| 59 FAIRFAX CC606-HOLL | 1072.622 | 649.5046 | 0 | 1048.085 | 6.255507 | 670.336 | 1.42 |
| 59 FAIRFAX CC607-HUN | 1423.597 | 467.4139 | 1.396694 | 1403.429 | 23.45815 | 479.2189 | 4.285714 |
| 59 FAIRFAX CC608-KIRKS | 861.3208 | 311.1314 | 0 | 874.0022 | 0 | 308.0693 |  |
| 59 FAIRFAX CC609-MARI | 768.205 | 539.1032 | 2.793388 | 773.501 | 3.127753 | 549.105 | 857143 |
| 59 FAIRFAX CC610-SHER' | 769.995 | 293.9259 | 2.793388 | 778.885 | 1.563877 | 310.9218 |  |
| 59 FAIRFAX C(611-STRA | 1147.831 | 709.723 | 2.793388 | 1132.434 | 9.38326 | 720.2546 | 2.857143 |
| 59 FAIRFAX CC612-WAYI | 612.4152 | 367.049 | 0 | 597.6237 | 4.69163 | 376.5291 |  |
| 59 FAIRFAX CC613-WEST | 1156.784 | 1152.763 | 2.793388 | 1157.559 | 10.94714 | 1152.407 |  |
| 59 FAIRFAX CC614-RIVEF | 832.6698 | 553.441 | 2.793388 | 832.7249 | 4.69163 | 564.7937 | 2.857143 |
| 59 FAIRFAX CC615-WOO | 1104.854 | 635.1668 | 1.396694 | 1101.925 | 9.38326 | 634.6798 | 4.285714 |
| 59 FAIRFAX CC616-GUNS | 1015.32 | 934.8278 | 0 | 997.8342 | 9.38326 | 948.4541 | 1.428571 |
| 9 FAIRFAX C(617-LOR | 970.5528 | 371 | 0 | 974.5035 | 1.56387 | 38 |  |


|  | 2420.161 | 1231.12 | 12.09375 | 24 | 22 | 1252.078 | 6.722222 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 FAIRFAX CC619-BELVI | 1285.714 | 635.1668 | 1.396694 | 1279.597 | 5507 | 648 | 0 |
| 59 FAIRFAX CC 621 - GROS | 999.2038 | 329.7706 | 4.19008 | 1010.397 | 6.255507 | 3 |  |
| 622 - LORT | 1629.526 | 473.1491 | 2.793388 | 1620.583 | 23.45815 | 482.0714 |  |
| 623 - ALBA | 1454.038 | 610.7924 | 1.396694 | 145 | 23.45815 | 614.7123 |  |
| 626 | 147 | 861.7048 | 5.5 | 147 | 7.819383 | 67.158 | 86 |
| 59 FAIRFAX C( 627 - WOO | 148 | 560.6 | 4.19 | 149 | 18.76652 | 560.515 |  |
| 59 FAIRFAX C(628-LAUR | 21 | 71 | 5.3 | 20 | 25.14286 | 08 | 2 |
| 59 FAIRFAX C( 629 - SOUT | 145 | 892.0 | . 34375 | 147 | 17.28571 | 877.5983 | 889 |
| 630-ARM | 352.7655 | 192.1272 | 0 | 357.138 | 1.563877 | 189.6908 |  |
| 01-BLAK | 1782.61 | 744.1311 | . 34375 | 1778.78 | 15.71429 | 761.8239 | 4 |
| 03 -FORT | 916.832 | 331.2043 | 0 | 922.4582 | 6.255507 | 343.7255 | 1 |
| 704 - FREEI | 1085 | 508.5375 | 2.6875 | 1093 | 1.571429 | 517.4114 |  |
| 59 FAIRFAX CC 705 - GRAF | 1659 | 622 | 5.586 | 16 | 10.94714 | 621.8436 | 3 |
| 59 FAIRFAX CC 707 - MAN | 114 | 505. | . 343 | 11 | 4.714286 | 510.2648 |  |
| 08 | 1720.85 | 666 | 1.39669 | 1688 | 12.51101 | 686.0247 | 2857 |
| 709 - MOSI | 131 | 531.5222 | 2.6875 | 1300.09 | 17.28571 | 541.7097 | 033333 |
| 10 - PINE | 1049.343 | 378.5193 | 2.793388 | 1060.64 | 10.94714 | 375.1029 | 143 |
| CE | 922.9123 | 478.3 | 125 | 917 | 7.857143 | 488.825 | . 033333 |
| 59 FAIRFAX C( 712 - SHRE' | 744 | 334.0719 | 0 | 732.2236 | 6.255507 | 339.4467 | 1 |
| 59 FAIRFAX C( 713 - TIMB | 158 | 508.9937 | 2.793388 | 1568.53 | 20.3304 | 519.1538 | 3 |
| 59 FAIRFAX CC 714 - WALk | 1405.138 | 632.0805 | 375 | 1385.31 | 9.428571 | 654.6254 |  |
| FAIRFAX CC 717 - WOO | 935.5549 | 337.5884 | 0 | 942.88 | 7.857143 | 331.6007 | 44 |
| 18 - PINE | 919.300 | 482.6796 | 2.6875 | 901.180 | 17.28571 | 491.683 | 44 |
| - | 1388 | 696.7251 | . 34375 | 1367.18 | 18.85714 | 700.363 | 1.344444 |
| 59 FAIRFAX CC721-MERF | 1744 | 530.0857 | . 0312 | 1728.018 | 17.28571 | 541.709 | 1.344444 |
| 59 FAIRFAX CC 723 -GALLI | 75 | 24 | 1.3 | 75 | 11 | 242 | 1.344444 |
| 26 | 1498 | 606 | 2.793388 | 148 | 4714 | 616. | 1 |
| 727-O | 1049.339 | 657.9383 | 2.6875 | 1042.613 | 1.571429 | 676.0651 | . 722222 |
| FAIRFAX CC729-N | 1110 | 488.4258 | 2.6875 | 1087.944 | 4.714286 | 518.8407 | 889 |
| 59 FAIRFAX C( 730 - PEND | 171 | 811.6488 | 1.34375 | 1700.81 | 4.714286 | 829.0017 |  |
| 59 FAIRFAX CC731-TYSO | 1231 | 545.887 | 2.6875 | 1218 | 11 | 557.432 | 4 |
| 59 FAIRFAX C( 732 - OAK I | 13 | 998 | 0 | 130 | 4286 | 101 | 4 |
| FA | 1741 | 719.7098 | 2.6875 | 1708.07 | 15.71429 | 747.5308 | 1.344444 |
| FAIRFAX CC734-HU | 698.95 | 288.7459 | 4375 | 692.6578 | 6.285714 | 301.5851 |  |
| FAIRFAX CC 735 - ROTC | 608.6525 | 271.5073 | 1.34375 | 605.6223 | 6.285714 | 275.857 | 688889 |
| CC801-BURK | 1876.528 | 975.4151 | 2.6875 | 1847.692 | 18.85714 | 1011.954 | 688889 |
| 802 - CEDA | 496.674 | 239.9 | 1.34375 | 500.454 | 9.428571 | 247.2712 |  |
| (803-CLIFT | 1338 | 157 | 1.373134 | 1326 | 7.545872 | 1595.57 | 1.457627 |
| FAIRFAX CC 804 - COLC | 725.1876 | 667.3632 | 1.373134 | 724.384 | 7.545872 | 669.989 | 1.457627 |
| FAIRFAX CC 805 - FAIRF | 765.0539 | 594.3941 | 0 | 753.0545 | 1.509174 | 603.4447 | 1.457627 |
| FAIRFAX CC 806 - SYDEI | 1585.747 | 847.5625 | 0 | 1573.893 | 6.285714 | 863.3052 | 444 |
| FAIRFAX CC 807 - HUN7 | 1015.023 | 603.3496 | 0 | 1006.348 | 11 | 610.3167 | 1.344444 |
| FAIRFAX CC811-POHII | 944.5854 | 422.3447 | 1.34375 | 941.0718 | 0 | 435.9405 | 1.344444 |
| FAIRFAX C( 812 - VALLI | 1246.202 | 724.0195 | 5.375 | 1231.19 | 26.71429 | 731.8084 | 2.688889 |
| FAIRFAX CC 815 - WOO | 1032.728 | 944.0377 | 1.373134 | 1022.549 | 4.527523 | 957.3445 | 4.372881 |
| FAIRFAX C( 824 - ORAN | 1710.368 | 1047.242 | 6.71875 | 1684.5 | 25.14286 | 1063.40 | 5.37777 |


| 59 FAIRFAX C( 825 - CHER | 1267.876 | 79 | 0 | 12 | 7.85714 | 816.1378 | 1.3444 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C( 827 - IRVIN | 1164.928 | 583.2379 | 0 | 1178.606 | 4.714286 | 584.5891 | 1.344444 |
| 59 FAIRFAX C( 833 - WHIT | 1388.884 | 739.8215 | 775 | 1374.436 | 3.142857 | 771.8291 | 4.033333 |
| (838-SANG | 990.9632 | 734.2515 | 2.746269 | 982.4112 | 13.58257 | 735.0228 | 1.457627 |
| C( 839 - SILVE | 1662.996 | 1164.465 | 2.746269 | 1670.481 | 9.055046 | 1163.03 | 7 |
| EST | 1434 | 726.8926 | 0 | 140 | 6.285714 | 753.2481 |  |
| 59 FAIRFAX CC 841 - POPE | 656.8 | 611.1162 | 2.746269 | 665 | 3.018349 | 611.0066 | 7 |
| 59 FAIRFAX C( 842 - PARK | 839 | 738. | 0 | 81 | 4.714286 | 761.8239 |  |
| 59 FAIRFAX CC 843 - FAIR | 1448.4 | 741.258 | 2.6875 | 1443 | 12.5714 | 756.1067 |  |
| CC 844 - CE | 872.3417 | 423.7812 | 4.03125 | 864.9157 | 9.428571 | 425.9353 | 89 |
| FAIRFAX CC 845 - FOUN | 1520.616 | 1454.821 | 1.373134 | 1481.262 | 13.58257 | 1486.682 | 372881 |
| C( 846 - GREE | 1446.679 | 680.9231 | 1.34375 | 1416.141 | 15.71429 | 701.7928 |  |
| FAIRFAX CC 847 - GREE | 1089.6 | 649.1209 | 4.119403 | 1091.35 | 3.018349 | 654.866 | 1 |
| 59 FAIRFAX CC 848 - FAIR | 1164 | 624.8 | 4.03125 | 115 | 14. | 637.4737 | 2.688889 |
| 849 | 1887.006 | 1620.522 | 2.746269 | 1903.66 | 18.11009 | 1610.698 | 2.915254 |
| FAIRFAX CC 850 - SOUT | 1068.797 | 921.2348 | 1.373134 | 1064.597 | 1.509174 | 931.6338 | 2.915254 |
| FAIRFAX CC851-W | 1069.206 | 752.7504 | 2.6875 | 1067.999 | 4.714286 | 761.8239 | 889 |
| C901-CENT | 1202.85 | 588.9841 | 0 | 1203.99 | 12.57143 | 598.8822 |  |
| OC | 1680.081 | 940.9973 | 0 | 1695.32 | 9.055046 | 963.3941 | 27 |
| 903-CUB | 1594.65 | 1070.213 | 2.746269 | 1573.00 | 10.56422 | 1082.873 |  |
| FAIRFAX CC 904 - STO | 501.1768 | 475.8193 | 0 | 493.1169 | 4.527523 | 482.4532 | 27 |
| FAIRFAX CC 905 - FRAN | 516.3639 | 261.4726 | 0 | 517.963 | 4.527523 | 258.6191 |  |
| FAIRFAX CC 908 - HIDD | 1118.156 | 719.0496 | 1.373134 | 1121.937 | 1.509174 | 727.4608 | 5254 |
| FAIRFAX CC909-OAK | 1065.001 | 620.2373 | 1.373134 | 1074.15 | 1.509174 | 617.0562 | . 457627 |
| 59 FAIRFAX C(910-LONL | 1580 | 660.8114 | 0 | 1548.50 | 20.42857 | 687.4997 | 2.688889 |
| 59 FAIRFAX CC911-NAVY | 1537 | 942.5175 | 4.119403 | 1527.13 | 15.09174 | 954.3197 | . 372881 |
| c(913 | 1632 | 1216.152 | 1.373134 | 1618.87 | 9.055046 | 1237.137 | 254 |
| FAIRFAX C( 914 - VALE | 951.0968 | 728.1708 | 4.119403 | 969.0321 | 7.545872 | 718.3865 | 627 |
| FAIRFAX CC 915 - VIRGI | 1019.439 | 1015.487 | 1.373134 | 978.5886 | 4.527523 | 1060.187 |  |
| FAIRFAX CC 916 - WAPI | 1771.204 | 1316.484 | 1.373134 | 1771.781 | 6.036697 | 1338.467 |  |
| 917-STON | 869.4 | 480.3 | 2.746269 | 867.732 | 3.018349 | 491.5276 | 7627 |
| 18 | 1695 | 821 | 125 | 168 | 11 | 846. | 4 |
| FAIRFAX CC919-G | 1768.163 | 850.4356 | 125 | 1753.40 | 12.57143 | 879.0276 | 889 |
| FAIRFAX CC 920 - CHA | 1220.669 | 703.8477 | 0 | 1223 | 6.036697 | 713.8493 |  |
| FAIRFAX CC 921 - DEER | 1271.926 | 971.4011 | 2.746269 | 1261.462 | 7.545872 | 996.6667 |  |
| FAIRFAX CC 923 - BULL | 897.9417 | 899.9522 | 2.746269 | 909.7816 | 6.036697 | 896.8488 | 627 |
| 924 - S | 653.8 | 290.1824 | 1.34375 | 641.887 | 14.14286 | 303.0144 |  |
| 925 - OLD r | 759.358 | 497.102 | 1.373134 | 772.167 | 9.055046 | 496.0648 |  |
| CC926-P | 1688. | 984.0 | 0 | 1675 | 14.14286 | 991.9434 | 2.688889 |
| FAIRFAX CC927-ARM | 897.9417 | 500.1423 | 1.373134 | 883.0233 | 3.018349 | 523.2878 | 1.457627 |
| FAIRFAX CC 928 - POPL | 1220.669 | 872.5888 | 1.373134 | 1198.389 | 13.58257 | 892.3116 | . 457627 |
| FAIRFAX CC929- DIFFII | 339.813 | 307.0783 | 0 | 347.8577 | 0 | 303.9909 |  |
| FAIRFAX C( 930 -LEES | 1042.22 | 582.2326 | 2.746269 | 1030.194 | 12.07339 | 588.3207 |  |
| FAIRFAX CC 931 - CARS | 1252.942 | 557.9095 | 1.373134 | 1236.615 | 6.036697 | 574.7092 | 2.915254 |
| 59 FAIRFAX CC932-STON | 746.07 | 293.3966 | 0 | 726.2962 | 7.545872 | 311.5529 | 1.457627 |
| FAIRFAX CC933-COMI | 319.678 | 186.7511 | 0 | 310.0641 | 7.857143 | 188.6693 | 0 |
| FAUQUIER 101-KETTI | 232.3622 | 686.8423 | 4.8 | 221.5772 | 9.571429 | 691.8648 | 1.16666 |


| TLI | 403.4462 | 1515.492 | 0 | 394.8841 | 5.866667 | 1524.088 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 FAUQUIER 103 -CASA | 323.7183 | 714.134 | 0 | 314.2368 | 4.785714 | 716.0347 | 0 |
| 61 FAUQUIER 104-LOIS | 231.0646 | 661.4804 | 0 | 225.382 | 0 | 668.6766 | 0 |
| 61 FAUQUIER 105 - OPAL | 254.2082 | 771.75 | 0 | 239.7063 | 3.190476 | 777.9702 | 2.333333 |
| 61 FAUQUIER 106 - BALD | 456.7804 | 833.9145 | 1.2 | 451.2118 | 4.785714 | 847.4588 | 1.166667 |
| 61 FAUQUIER 201 - COUF | 1062.511 | 1217.515 | 2.4 | 1055.513 | 15.95238 | 1219.072 | 1.166667 |
| 61 FAUQUIER 202 - AIRLII | 659.3525 | 1087.121 | 3.6 | 632.5023 | 17.54762 | 1099.733 |  |
| 61 FAUQUIER 203 -WARI | 1002.931 | 1099.251 | 0 | 993.0688 | 4.785714 | 1119.371 |  |
| 61 FAUQUIER 301 - MORI | 302.5846 | 1067.17 | 0 | 294.3004 | 5.866667 | 1079.219 | 0 |
| 61 FAUQUIER 302 -REMI | 701.0586 | 1447.979 | 0 | 670.7747 | 14.35714 | 1463.792 | 0 |
| 61 FAUQUIER 303 - BEALI | 850.9046 | 1461.858 | 0 | 821.4335 | 10.26667 | 1487.016 | 0 |
| 61 FAUQUIER 401 - MARs | 776.5266 | 1278.163 | 1.2 | 779.549 | 4.785714 | 1282.518 | 1.166667 |
| 61 FAUQUIER 402 -LEED! | 844.0507 | 1184.159 | 0 | 821.8501 | 7.97619 | 1205.476 | 0 |
| 61 FAUQUIER 403 -WATE | 546.1504 | 1349.425 | 1.2 | 529.771 | 11.16667 | 1353.517 | 1.166667 |
| 61 FAUQUIER 404 -SPRIN | 353.5083 | 618.6129 | 0 | 342.4375 | 6.380952 | 628.4187 | 0 |
| 61 FAUQUIER 501 -THE F | 895.6867 | 1046.184 | 0 | 886.3089 | 3.190476 | 1060.456 | 2.333333 |
| 61 FAUQUIER 502 - NEW | 657.3665 | 1282.712 | 2.4 | 608.3302 | 15.95238 | 1318.773 | 0 |
| 61 FAUQUIER 503-BROA | 492.5284 | 1032.538 | 1.2 | 471.3552 | 4.785714 | 1045.35 | 2.333333 |
| 61 FAUQUIER 504 - VINT | 814.2606 | 1655.699 | 0 | 815.807 | 4.785714 | 1663.195 | 1.166667 |
| 63 FLOYD COL 101 -LOCU | 506.9172 | 1073.935 | 1.5 | 496.1344 | 15.82927 | 1074.604 |  |
| 63 FLOYD COL 201 - LITTL | 549.1603 | 1081.812 | 0 | 528.8017 | 23.02439 | 1082.476 |  |
| 63 FLOYD COL 301 - COUF | 474.732 | 708.9545 | 6 | 471.6339 | 7.195122 | 725.5871 |  |
| 63 FLOYD COL 401 - BURK | 400.3037 | 1075.248 | 0 | 389.9657 | 4.317073 | 1083.788 |  |
| 63 FLOYD COL 501 - INDIA | 327.8869 | 1259.051 | 1.5 | 316.4643 | 8.634146 | 1263.545 |  |
| 65 FLUVANNA 101 -PALN | 1377.968 | 1426.095 | 1.2 | 1340.505 | 15.47619 | 1452.571 | . 5 |
| 65 FLUVANNA 201 -COLU | 966.7807 | 1346.867 | 0 | 965.3635 | 7.738095 | 1355.948 |  |
| 65 FLUVANNA 301 - FORK | 1067.13 | 1280.575 | 2.4 | 1067.902 | 13.92857 | 1293.143 |  |
| 65 FLUVANNA 401 - CUNN | 773.4246 | 1778.576 | 1.2 | 737.7778 | 12.38095 | 1808.468 | 0 |
| 65 FLUVANNA 501 - RIVAI | 1250.696 | 1118.886 | 1.2 | 1200.452 | 15.47619 | 1157.87 | . 5 |
| 67 FRANKLIN (102-BURA | 432.5615 | 1288.317 | 0 | 409.4489 | 12.07895 | 1304.337 | . 5 |
| 67 FRANKLIN (103-SCRU | 723.1887 | 2033.145 | 2.166667 | 736.3199 | 8.052632 | 2038.027 | 2.5 |
| 67 FRANKLIN ( 201 - GLAD | 278.7994 | 1190.736 | 0 | 264.9375 | 1.342105 | 1206.759 |  |
| 67 FRANKLIN ( 202 - PENH | 322.7314 | 760.8852 | 0 | 316.5487 | 1.342105 | 770.7448 |  |
| 67 FRANKLIN ( 203 - HODC | 59.13926 | 187.7509 | 0 | 58.4927 | 2.684211 | 188.9807 |  |
| 67 FRANKLIN ( 204 - DUDL | 216.2807 | 676.8914 | 0 | 208.1652 | 4.026316 | 684.283 |  |
| 67 FRANKLIN (301-SNOV | 140.2445 | 545.9598 | 0 | 134.1891 | 1.342105 | 555.8255 | 0 |
| 67 FRANKLIN (302-FORK | 125.0373 | 510.1389 | 0 | 120.4262 | 6.710526 | 513.8298 | 0 |
| 67 FRANKLIN (303-SONT | 381.8707 | 697.8898 | 2.166667 | 369.8803 | 4.026316 | 715.1622 | 2.5 |
| 67 FRANKLIN (304-DICKI | 174.0384 | 332.2697 | 0 | 163.4355 | 1.342105 | 344.6118 | 0 |
| 67 FRANKLIN (401-HENR | 187.556 | 964.6937 | 0 | 172.0374 | 5.368421 | 977.0178 |  |
| 67 FRANKLIN ( 402 - FERRI | 185.8663 | 476.7885 | 0 | 175.4781 | 8.052632 | 485.421 | 0 |
| 67 FRANKLIN ( 403 -ENDII | 141.9342 | 542.2542 | 0 | 122.1465 | 1.342105 | 558.2959 | 0 |
| 67 FRANKLIN (501-WAIC | 206.1426 | 578.0751 | 0 | 189.2411 | 4.026316 | 589.1751 |  |
| 67 FRANKLIN (502-CALL) | 238.2468 | 888.1111 | 2.166667 | 223.6486 | 5.368421 | 901.6726 |  |
| 67 FRANKLIN (503-BOW | 185.8663 | 476.7885 | 0 | 187.5207 | 0 | 482.9506 | 0 |
| 67 FRANKLIN (504-GOGC | 250.0746 | 737.4163 | 0 | 242.5727 | 5.368421 | 742.3359 | 0 |
| 67 FRANKLIN (601-BOON | 337.9387 | 1074.627 | 0 | 325.1506 | 6.710526 | 1089.418 |  |


| O2-BONE | 285.5582 | 1057.334 | 2.166667 | 271.819 | 6.710526 | 1070.891 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 67 FRANKLIN (603-COOF | 216.2807 | 805.3525 | 2.166667 | 201.2837 | 6.710526 | 818.9163 |  |
| 67 FRANKLIN (701-ROCK | 415.6645 | 785.5893 | 0 | 402.5674 | 2.684211 | 804.0943 |  |
| 67 FRANKLIN (702-ROCK | 332.8696 | 527.4318 | 0 | 332.0321 | 4.026316 | 532.3574 |  |
| 67 FRANKLIN (703-ROCK | 277.1097 | 454.5548 | 2.166667 | 266.6579 | 2.684211 | 466.8935 | 5 |
| 69 FREDERICK 101 -RUSS | 340.591 | 1223.808 | 0 | 334.7171 | 3.861386 | 1233.611 |  |
| 69 FREDERICK 102 -GORE | 462.4692 | 1607.047 | 1.333333 | 449.6705 | 5.148515 | 1612.889 | 1.357143 |
| 69 FREDERICK 103 -KERN | 567.6517 | 1267.242 | 0 | 530.8141 | 2.574257 | 1294.909 | . 357143 |
| 69 FREDERICK 104-CEDA | 333.9128 | 869.9514 | 0 | 321.1932 | 3.861386 | 879.874 | 86 |
| 69 FREDERICK 201 -GAIN | 183.652 | 917.2175 | 0 | 160.5966 | 6.435644 | 927.1241 |  |
| 69 FREDERICK 202 - ALBIN | 392.3475 | 1129.276 | 0 | 371.9079 | 2.574257 | 1144.219 | 1.357143 |
| 69 FREDERICK 203 -REDL | 552.6257 | 1576.388 | 1.333333 | 532.5045 | 3.861386 | 1610.335 |  |
| 69 FREDERICK 204 - NAIN | 357.2867 | 997.6976 | 0 | 336.4076 | 2.574257 | 1021.624 | 43 |
| 69 FREDERICK 301 -CLEAI | 247.0955 | 829.0727 | 1.333333 | 213.0018 | 7.722772 | 855.6104 | 1.357143 |
| 69 FREDERICK 302 - NEFF' | 1026.782 | 1420.537 | 1.333333 | 1019.366 | 15.44554 | 1428.997 | 1.357143 |
| 69 FREDERICK 303 - WHIT | 667.825 | 1509.96 | 0 | 635.6245 | 5.148515 | 1543.93 | 1.357143 |
| 69 FREDERICK 401 - CARP | 555.9648 | 950.4315 | 1.333333 | 542.6475 | 7.722772 | 961.6039 |  |
| 69 FREDERICK 402 - SHEN | 333.9128 | 765.1996 | 0 | 324.5742 | 3.861386 | 776.4345 |  |
| 69 FREDERICK 403 - PARK | 569.3213 | 1171.432 | 1.333333 | 564.6239 | 9.009901 | 1185.084 | 1.357143 |
| 69 FREDERICK 404 - ARMI | 631.0952 | 995.1427 | 1.333333 | 622.1005 | 5.148515 | 1005.023 | 1.357143 |
| 69 FREDERICK 501 - STEPł | 751.3038 | 1202.091 | 0 | 743.8159 | 6.435644 | 1214.456 | 1.357143 |
| 69 FREDERICK 502 - NEW | 747.9647 | 1563.613 | 2.666667 | 733.6729 | 6.435644 | 1582.241 | 1.357143 |
| 69 FREDERICK 503 -CANT | 836.4515 | 1475.468 | 1.333333 | 828.3404 | 9.009901 | 1489.018 |  |
| 69 FREDERICK 601 - MILLE | 383.9997 | 767.7545 | 0 | 388.8128 | 3.861386 | 762.3872 | 143 |
| 69 FREDERICK 602 - ASH + | 587.6865 | 806.0784 | 0 | 552.7904 | 7.722772 | 840.286 |  |
| 69 FREDERICK 603-GREE | 995.0601 | 1655.59 | 2.666667 | 956.8177 | 11.58416 | 1693.342 |  |
| 71 GILES COUI 101 -GLEN | 17.90146 | 114.9637 | 0 | 22.51333 | 0 | 113.5805 |  |
| 71 GILES COUI 102 - RICH | 93.4854 | 456.7889 | 0 | 100.2867 | 1.326087 | 458.9265 |  |
| 71 GILES COUI 103 - NARR | 246.6423 | 1141.972 | 0 | 214.9 | 10.6087 | 1163.433 | 1.666667 |
| 71 GILES COUI 201 - PEAR | 280.4562 | 1109.782 | 0 | 251.74 | 10.6087 | 1138.875 |  |
| 71 GILES COUI 202 - STAFI | 75.58394 | 321.8982 | 0 | 67.54 | 1.326087 | 333.0671 |  |
| 71 GILES COUI 203 - WHIT | 39.78102 | 228.3945 | 0 | 28.65333 | 5.304348 | 230.2307 |  |
| 71 GILES COUI301-EGGL | 210.8394 | 504.3072 | 0 | 210.8067 | 1.326087 | 514.1819 |  |
| 71 GILES COUI302-PEME | 332.1715 | 1181.826 | 1.5 | 311.0933 | 19.8913 | 1189.525 | 1.666667 |
| 71 GILES COUI 303 - NEWI | 338.1387 | 633.0665 | 1.5 | 327.4667 | 10.6087 | 646.1809 | 1.666667 |
| 73 GLOUCESTI 101 - HARC | 352.6479 | 1023.882 | 2.75 | 354.1526 | 2.83871 | 1027.662 |  |
| 73 GLOUCESTI 102 -SALEI | 304.0068 | 875.7736 | 0 | 299.2589 | 5.677419 | 885.0735 |  |
| 73 GLOUCESTI 103 -PEASI | 234.5195 | 698.0431 | 0 | 228.4284 | 8.516129 | 715.5093 |  |
| 73 GLOUCESTI201-COUF | 394.3403 | 795.9236 | 0 | 393.1094 | 2.83871 | 804.1451 | 1.5 |
| 73 GLOUCESTI202-BOTE | 540.2635 | 1276.311 | 1.375 | 518.8335 | 14.19355 | 1288.431 |  |
| 73 GLOUCESTI301-WHIT | 397.8146 | 1134.642 | 1.375 | 386.0263 | 7.096774 | 1141.989 |  |
| 73 GLOUCESTI302-ROAN | 510.7314 | 1336.843 | 0 | 501.1259 | 5.677419 | 1346.237 |  |
| 73 GLOUCEST1401-HAYE | 587.1674 | 1244.114 | 1.375 | 571.9564 | 11.35484 | 1256.316 | . 5 |
| 73 GLOUCEST1402-SARA | 562.8469 | 1084.414 | 2.75 | 547.1657 | 12.77419 | 1095.744 |  |
| 73 GLOUCEST1501-ACHII | 548.9494 | 1852.004 | 0 | 525.9166 | 2.83871 | 1883.19 |  |
| 73 GLOUCEST1502-WALk | 411.7121 | 1123.051 | 1.375 | 386.0263 | 14.19355 | 1140.704 |  |
| 75 GOOCHLAP 101 - FIFE | 308.8728 | 751.8404 | 5.454545 | 309.409 | 8.125 | 750.4211 |  |


| OOCHLAr 102 - HADE | 560.6253 | 1174.751 | 0 | 571.8731 | 4.875 | 1164.908 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 75 GOOCHLAr 201 -thre | 209.4411 | 288.653 | 0 | 200.5824 | 1.625 | 297.4943 | 0 |
| 75 GOOCHLAR 202 - SAND | 681.2126 | 1060.632 | 2.181818 | 670.0304 | 11.375 | 1071.314 | 0 |
| 75 GOOCHLAP 301 -GOOC | 361.762 | 766.9444 | 0 | 367.023 | 1.625 | 767.1343 | 0 |
| 75 GOOCHLAR 302 -GOO( | 141.743 | 362.4945 | 0 | 134.4329 | 0 | 369.3609 | 0 |
| 75 GOOCHLAR 401 -SHAL | 645.248 | 1303.973 | 0 | 661.495 | 4.875 | 1283.571 | 0 |
| 75 GOOCHLAR 402 -CENT | 634.6701 | 1295.582 | 1.090909 | 638.0226 | 4.875 | 1298.613 | 1 |
| 75 GOOCHLAR 501 -MAN, | 746.7952 | 1589.27 | 1.090909 | 740.4476 | 13 | 1582.737 | 1 |
| 75 GOOCHLAR 502 - BLAIR | 615.63 | 996.8598 | 2.181818 | 616.6841 | 1.625 | 999.4473 | 1 |
| 77 GRAYSON (101-BRIDI | 76.16617 | 217.3294 | 0 | 73.70347 | 2.842105 | 221.3631 | 0 |
| 77 GRAYSON (102-FLATF | 28.14837 | 122.9941 | 0 | 28.47634 | 0 | 125.6385 | 0 |
| 77 GRAYSON (103-GRAN | 67.88724 | 235.2412 | 0 | 72.02839 | 0 | 234.5252 | 0 |
| 77 GRAYSON (104-MOU | 39.73887 | 130.1588 | 0 | 36.85174 | 1.421053 | 131.6213 | 0 |
| 77 GRAYSON ( 105 - MOU | 43.05045 | 168.3706 | 0 | 40.20189 | 0 | 172.3043 | 0 |
| 77 GRAYSON (106-RUGE | 49.67359 | 185.0882 | 0 | 46.90221 | 2.842105 | 184.2698 | 2 |
| 77 GRAYSON (107-TROU | 18.21365 | 112.2471 | 0 | 15.07571 | 0 | 116.0661 | 0 |
| 77 GRAYSON (108-COMI | 48.0178 | 155.2353 | 0 | 46.90221 | 0 | 156.749 | 1 |
| 77 GRAYSON ( 202 - ELK C | 79.47774 | 364.2059 | 0 | 70.35331 | 5.684211 | 368.5397 | 0 |
| 77 GRAYSON ( 203 -INDEI | 206.9733 | 840.6588 | 1 | 194.3091 | 7.105263 | 853.1454 | 0 |
| 77 GRAYSON (301-BAYM | 72.8546 | 579.1471 | 0 | 67.00315 | 0 | 589.9028 | 0 |
| 77 GRAYSON (302-FAIR | 125.8398 | 709.3059 | 1 | 118.9306 | 4.263158 | 715.5413 | 0 |
| 77 GRAYSON ( 401 - FRIES | 102.6588 | 284.2 | 2 | 103.8549 | 1.421053 | 289.5669 | 0 |
| 77 GRAYSON ( 402 - PROV | 105.9703 | 696.1706 | 1 | 93.80442 | 1.421053 | 707.1654 |  |
| 77 GRAYSON ( 403 - OLDT | 51.32938 | 274.6471 | 1 | 53.60252 | 0 | 277.6013 | 0 |
| 79 GReene CC 101 - DYKE | 273.9333 | 763.5684 | 0 | 257.4117 | 9.272727 | 773.0836 | 0 |
| 79 GREENE CC 102 - SWIF | 360.4386 | 885.5586 | 0 | 342.5064 | 9.272727 | 908.1856 | 0 |
| 79 GREENE CC 201 -RUCK | 912.4246 | 1466.895 | 2.5 | 880.7309 | 9.272727 | 1499.632 | 3.5 |
| 79 GREENE CC 301 - STAN | 502.5544 | 1278.638 | 0 | 470.1486 | 18.54545 | 1299.981 | 1.75 |
| 79 GREENE CC 401 - MIDV | 885.6491 | 1453.34 | 2.5 | 855.2024 | 21.63636 | 1480.117 | 1.75 |
| 81 GREENSVIL 101 - PREC | 247.5 | 181.332 | 1 | 241.07 | 2.4 | 187.6549 | 2 |
| 81 GREENSVIL 102 - PREC | 52.5 | 126.2608 | 0 | 51.22738 | 0 | 127.3373 | 0 |
| 81 GREENSVIL 103 - PREC | 214.5 | 47.012 | 0 | 206.4162 | 2.4 | 53.61569 | 0 |
| 81 GREENSVIL 201 - PREC | 304.5 | 120.888 | 0 | 310.3777 | 0 | 120.6353 | 0 |
| 81 GREENSVIL 202 - PREC | 175.5 | 372.0664 | 0 | 170.2557 | 0 | 377.9906 | 0 |
| 81 GREENSVIL 302 - PREC | 499.5 | 299.5336 | 0 | 498.7136 | 4.8 | 304.269 | 0 |
| 81 GREENSVIL 401 - PREC | 78 | 206.8528 | 0 | 82.86782 | 0 | 206.4204 | 0 |
| 81 GREENSVIL 402 - PREC | 280.5 | 188.048 | 0 | 277.2305 | 1.2 | 193.0165 | 0 |
| 81 GREENSVIL 403 - PREC | 76.5 | 137.0064 | 0 | 76.84107 | 1.2 | 138.0604 | 0 |
| 83 HALIFAX C( 101 - CHILE | 263.6336 | 496.8577 | 1.285714 | 259.4911 | 1.530612 | 498.2126 | 0 |
| 83 HALIFAX C( 102 -LIBER | 111.2739 | 255.0713 | 0 | 105.8451 | 4.591837 | 257.742 | 0 |
| 83 HALIFAX C( 103 - REPU | 279.0408 | 455.6743 | 1.285714 | 276.5629 | 3.061224 | 457.0271 | 2 |
| 83 HALIFAX C( 201 - CLAY! | 145.512 | 373.3075 | 0 | 143.403 | 1.530612 | 378.6416 | 0 |
| 83 HALIFAX C( 202 - CROS | 142.0882 | 358.694 | 0 | 139.9886 | 1.530612 | 368.0131 | 0 |
| 83 HALIFAX C( 203 - CLOV | 318.4146 | 394.5634 | 0 | 319.2424 | 3.061224 | 394.5844 | 0 |
| 83 HALIFAX C( 302 - MEAL | 208.8526 | 103.6227 | 0 | 201.4471 | 3.061224 | 108.9425 | 0 |
| 83 HALIFAX C( 304 -VERN | 166.0549 | 401.2059 | 2.571429 | 169.0107 | 1.530612 | 409.1986 | 0 |
| 83 HALIFAX C( 305 - SINAI | 397.1623 | 278.9843 | 1.285714 | 402.8941 | 3.061224 | 285.6419 |  |


| 83 HALIFAX C( 401 - COUF | 306.4313 | 398.5489 | 0 | 319.2424 | 7.653061 | 390.5987 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 HALIFAX C( 403 - CENT | 244.8026 | 487.5582 | 0 | 256.0768 | 3.061224 | 475.627 |  |
| 83 HALIFAX C( 502 - DAN | 309.8551 | 575.239 | 0 | 302.1706 | 10.71429 | 573.941 |  |
| 83 HALIFAX C(503-SCOT | 123.2573 | 556.64 | 0 | 126.3312 | 1.530612 | 554.0125 |  |
| 83 HALIFAX C(601-BLAC | 195.1573 | 464.9738 | 0 | 184.3753 | 0 | 474.2984 |  |
| 83 HALIFAX C(603-MT C. | 409.1456 | 619.0793 | 0 | 396.0654 | 9.183673 | 631.0693 |  |
| 83 HALIFAX C(605-UNIO | 89.01914 | 249.7573 | 0 | 93.89481 | 0 | 245.7849 |  |
| 83 HALIFAX C(701-HYCC | 260.2098 | 771.8564 | 1.285714 | 256.0768 | 1.530612 | 774.5546 |  |
| 83 HALIFAX C(702-MIDV | 111.2739 | 631.0358 | 0 | 109.2594 | 3.061224 | 632.3979 |  |
| 83 HALIFAX C( 703 - VIRGI | 56.49291 | 431.7613 | 0 | 59.75124 | 1.530612 | 431.7843 |  |
| 83 HALIFAX C( 801 - SOUT | 693.3221 | 301.5687 | 1.285714 | 682.8714 | 13.77551 | 298.9276 |  |
| 85 HANOVER 101 -ASHL | 696.3636 | 646.4789 | 3.142857 | 710.3548 | 7.931034 | 644.8558 | 3.043478 |
| 85 HANOVER 1104 - SLIDII | 665.4545 | 867.9997 | 1.571429 | 662.7537 | 14.27586 | 867.3235 | . 521739 |
| 85 HANOVER 105 - BERK | 632.7273 | 572.6387 | 3.142857 | 633.4607 | 9.517241 | 580.2199 |  |
| 85 HANOVER 1106 -KERSI | 296.3636 | 607.2984 | 1.571429 | 305.7455 | 6.344828 | 598.2578 | 1.5 |
| 85 HANOVER $1107-\mathrm{CHICl}$ | 536.3636 | 711.2775 | 0 | 532.7661 | 4.758621 | 712.498 | 1.521739 |
| 85 HANOVER 1201 - BEAV | 438.1818 | 1852.034 | 0 | 433.9023 | 11.10345 | 1848.887 |  |
| 85 HANOVER $1202-$ BLUN | 407.2727 | 785.1178 | 1.571429 | 400.9477 | 4.758621 | 786.1528 |  |
| 85 HANOVER 1203 - WILN | 461.8182 | 1202.541 | 1.571429 | 441.2255 | 7.931034 | 1216.057 |  |
| 85 HANOVER 1206 -COUF | 514.5455 | 729.3609 | 0 | 507.1347 | 3.172414 | 732.0391 | 1.521739 |
| 85 HANOVER 1208 -OAK I | 352.7273 | 917.7288 | 1.571429 | 351.5158 | 11.10345 | 915.4246 |  |
| 85 HANOVER 1209 - WEST | 143.6364 | 384.2707 | 0 | 151.9573 | 0 | 380.2995 |  |
| 85 HANOVER $1210-$ OAK I | 150.9091 | 370.7082 |  | 148.2957 | 1.586207 | 371.2806 |  |
| 85 HANOVER 1301 - CLAY | 480 | 1086.507 | 0 | 463.1953 | 9.517241 | 1092.798 |  |
| 85 HANOVER $1303-$ SHAD | 632.7273 | 1216.104 | 1.571429 | 613.3218 | 17.44828 | 1216.057 | 3.043478 |
| 85 HANOVER 1304 - ATLEI | 1761.818 | 2405.082 | 1.571429 | 1763.071 | 31.72414 | 2391.528 | 3.043478 |
| 85 HANOVER1305-COOL | 656.3636 | 1220.625 | 0 | 638.9531 | 12.68966 | 1234.095 |  |
| 85 HANOVER 1401 - BATT | 416.3636 | 1520.506 | 1.571429 | 410.1017 | 1.586207 | 1531.72 | 1.521739 |
| 85 HANOVER 1403 -COLD | 769.0909 | 1776.687 | 3.142857 | 767.1099 | 14.27586 | 1775.232 |  |
| 85 HANOVER 1404 - BLAC | 401.8182 | 2002.728 | 0 | 400.9477 | 4.758621 | 1999.203 | 39 |
| 85 HANOVER 1405 - PEBB | 494.5455 | 883.0691 | 0 | 488.8266 | 6.344828 | 879.3488 |  |
| 85 HANOVER 1406 - BEAV | 178.1818 | 351.1179 | 0 | 177.5887 | 4.758621 | 342.7205 | 1.521739 |
| 85 HANOVER 1502 -RURA | 620 | 1286.93 | 3.142857 | 611.491 | 9.517241 | 1295.724 |  |
| 85 HANOVER 1503 -NEWI | 550.9091 | 970.4719 | 3.142857 | 543.751 | 14.27586 | 965.0289 | 3.043478 |
| 85 HANOVER 1504 - STUD | 285.4545 | 1170.895 | 4.714286 | 270.9601 | 4.758621 | 1182.987 | 1.521739 |
| 85 HANOVER 1505 -TOTO | 201.8182 | 854.4372 | 1.571429 | 197.7276 | 4.758621 | 853.795 | 1.521739 |
| 85 HANOVER 1506 -GEOR | 410.9091 | 938.8261 | 1.571429 | 421.0866 | 4.758621 | 933.4625 |  |
| 85 HANOVER 1507 -LAUR | 509.0909 | 1198.02 | 0 | 505.3039 | 9.517241 | 1199.522 |  |
| 85 HANOVER 1601 -VILLA | 923.6364 | 1870.117 | 3.142857 | 942.8678 | 15.86207 | 1847.384 | 1.521739 |
| 85 HANOVER 1602 -LEE D | 654.5455 | 1515.986 | 1.571429 | 651.7688 | 14.27586 | 1512.179 |  |
| 85 HANOVER 1603 -MECF | 556.3636 | 890.6039 | 0 | 530.9353 | 7.931034 | 903.3993 | 1.521739 |
| 85 HANOVER 1604 -HANC | 401.8182 | 893.6177 | 3.142857 | 408.2709 | 4.758621 | 889.8709 |  |
| 85 HANOVER 1701 - FARR | 450.9091 | 1285.423 | 0 | 430.2407 | 9.517241 | 1301.737 |  |
| 85 HANOVER 1702 -MON | 612.7273 | 1213.09 | 0 | 607.8293 | 6.344828 | 1213.05 |  |
| 85 HANOVER $1703-$ ROCK | 587.2727 | 1493.381 | 0 | 569.3823 | 6.344828 | 1504.663 | 4.565217 |
| 85 HANOVER 1704 -ELMC | 758.1818 | 1365.291 | 0 | 750.6326 | 15.86207 | 1366.373 | 1.521739 |
| 85 HANOVER $1705-$ SOUT | 309.0909 | 874.0275 | 0 | 307.5763 | 7.931034 | 868.8266 |  |


| 87 HENRICO C 101 - COAL | 12 | 1332.678 | 1.459016 | 1188.237 | 18.83438 | 1337.772 | 2.558824 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 HENRICO C 102 - DUM | 1092.502 | 454.8577 | 0 | 1073.669 | 21.525 | 453.2945 | 2.558824 |
| 87 HENRICO C 103 -GLEN | 1074.592 | 1582.295 | 4.377049 | 1103.13 | 13.45313 | 1547.835 | 5.117647 |
| 87 HENRICO C 105 - GREE | 1190.192 | 769.6525 | 1.459016 | 1129.317 | 33.63281 | 793.2654 | 2.558824 |
| 87 HENRICO C 106 - HERN | 1063.195 | 857.0185 | 2.918033 | 1054.029 | 16.14375 | 862.3652 |  |
| 87 HENRICO C 108 | 1097.386 | 1088.608 | 4.377049 | 1109.676 | 17.48906 | 1072.429 | 24 |
| 87 HENRICO C 109 | 304.4677 | 492.3003 | 0 | 296.241 | 5.38125 | 497.5184 |  |
| 87 HENRICO C 110 - JOHN | 1427.905 | 736.3703 | 4.377049 | 1404.281 | 41.70469 | 722.7836 | 35 |
| 87 HENRICO C 111 -LAKES | 1465 | 1078.9 | 5.836066 | 142 | 41.70469 | 1080.72 | 5 |
| 87 HENRICO C 112 - LON | 856.4172 | 863.9523 | 0 | 857. | 13.45313 | 854.0732 | 1.279412 |
| 87 HENRICO C 113 - MAU | 433.0931 | 418.8019 | 0 | 422.2662 | 5.38125 | 422.8906 | 2.558824 |
| 87 HENRICO C 114 - MON | 521.0143 | 407.7078 |  | 513.9209 | 2.690625 | 420.1266 | . 279412 |
| 87 HENRICO C 115 - STAPI | 1042.029 | 1151.012 | 0 | 1039.299 | 14.79844 | 1147.056 | . 279412 |
| 87 HENRICO C 117 - WEST | 823.8538 | 549.1575 | 1.459016 | 816.7087 | 16.14375 | 547.2702 |  |
| 201-ADAn | 1120.78 | 86.2387 | 1.633333 | 1087.261 | 19.80588 | 100.3611 |  |
| 87 HENRICO C 202 - AZA | 1525.59 | 163.637 | 4.377049 | 1502.48 | 29.59688 | 165.8395 | 235 |
| 87 HENRICO C 203 - BELM | 1248.806 | 575.506 | 0 | 1242.248 | 29.59688 | 561.0902 |  |
| 87 HENRICO C 204 - BROC | 299.5832 | 238.523 | 1.459016 | 291.331 | 13.45313 | 236.3212 |  |
| 87 HENRICO C 205 -CANT | 382.6199 | 285.6728 | 0 | 397.7159 | 0 | 279.1631 |  |
| 87 HENRICO C 206 - CENT | 1366.06 | 63.33156 | 0 | 1341.06 | 33.95294 | 62.89292 |  |
| 87 HENRICO C 207 - CHAN | 1312.305 | 428.5093 | 2.918033 | 1286.439 | 21.525 | 432.5646 | 24 |
| 87 HENRICO C 208 - FAIRF | 1057.76 | 71.41645 | 1.633333 | 1046.103 | 16.97647 | 70.92181 | . 736842 |
| 87 HENRICO C 209 - GLEN | 953.8573 | 164.3926 | 4.9 | 939.777 | 15.56176 | 164.5921 | 526 |
| 87 HENRICO C 210 - GREE | 724.5355 | 221.8818 | 0 | 715.2339 | 6.726563 | 230.7932 |  |
| 87 HENRICO C 211 - HIGH | 551.8746 | 25.60212 | 1.633333 | 543.6304 | 11.31765 | 26.76295 |  |
| 87 HENRICO C 212 | 437.9776 | 177.5055 | 0 | 435.3597 | 10.7625 | 171.3674 |  |
| 87 HENRICO C 213 -HUN( | 757.098 | 248.2303 | 0 | 738.147 | 14.79844 | 252.9052 | 279412 |
| 87 HENRICO C 214 -LON | 828.738 | 409.0946 | 0 | 818.345 | 16.14375 | 402.1607 |  |
| 87 HENRICO C 215 - MA | 1739.086 | 84.89125 | 3.266667 | 1709.77 | 39.61176 | 84.30328 |  |
| 87 HENRICO C 216 - MOO | 413.5551 | 328.6624 | 0 | 399.3525 | 14.79844 | 326.1509 |  |
| 87 HENRICO C 217 - MOU | 338.6593 | 230.2024 | 0 | 333.8849 | 4.035938 | 230.7932 | 279412 |
| 87 HENRICO C 218 - OAK | 40.7042 | 47.14989 | 0 | 44.19065 | 0 | 44.22386 |  |
| 87 HENRICO C 219 - RAN | 214.918 | 49.92341 | 0 | 216.043 | 4.035938 | 45.60585 | . 279412 |
| 87 HENRICO C 220 -RA | 1861 | 115.883 | 0 | 1834 | 26.87941 | 131.1384 |  |
| 87 HENRICO C 221 - STRA | 161.1888 | 105.3939 | 0 | 148.938 | 14.79844 | 106.4137 |  |
| 87 HENRICO C 222 - WILD | 1079.476 | 245.4568 | 1.459016 | 1065.486 | 12.10781 | 250.1412 | 9412 |
| 87 HENRICO C 223 - YELLC | 1201.589 | 809.8686 | 2.918033 | 1217.698 | 12.10781 | 796.0294 |  |
| 87 HENRICO C 224 - ESSE> | 345.7733 | 13.4748 | 1.633333 | 342.9845 | 7.073529 | 13.38147 |  |
| 87 HENRICO C 301 -CAUS | 911.775 | 800.1613 | 1.459016 | 918.1835 | 6.726563 | 797.4114 |  |
| 87 HENRICO C 302 -CEDA | 753.8425 | 1017.883 | 0 | 741.4209 | 16.14375 | 1014.385 | 1.279412 |
| 87 HENRICO C 303 -INNSI | 1108.783 | 940.2242 | 1.459016 | 1099.856 | 6.726563 | 943.9029 | 2.558824 |
| 87 HENRICO C 304 -JACKS | 568.2312 | 624.0426 | 1.459016 | 566.295 | 8.071875 | 617.752 | 0 |
| 87 HENRICO C 305 - NUCK | 1248.806 | 1352.092 | 2.918033 | 1248.795 | 8.071875 | 1346.064 | 3.838235 |
| 87 HENRICO C 306 - POCA | 1084.361 | 802.9348 | 2.918033 | 1072.032 | 6.726563 | 815.3773 | 1.279412 |
| 87 HENRICO C 307 - RIDGI | 613.8199 | 542.2237 | 0 | 610.4857 | 12.10781 | 537.5962 | 1.279412 |
| 87 HENRICO C 308 - RIVEF | 1222.755 | 1214.803 | 1.459016 | 1206.241 | 9.417188 | 1225.83 | 1.279412 |
| 87 HENRICO C309-SADL | 1256.947 | 1055.325 | 1.459016 | 1245.52 | 6.726563 | 1072.429 | 1.279412 |

87 HENRICO C 310 - SHAD 1232.524 87 HENRICO C 311 - SHOR 706.6256 87 HENRICO C 312 - SPRIN 748.958 87 HENRICO C 313 -STON 1309.048 87 HENRICO C 314 - THRE 1017.606 87 HENRICO C 315 - TUCK 1253.691 87 HENRICO C 316 - COLO 898.7496 87 HENRICO C 401 - QUIO 1159.257 87 HENRICO C 402 - CRES 1108.783 87 HENRICO C 403 - DERB 815.713 87 HENRICO C 404 - FREEI 750.5862 87 HENRICO C 405 -GAYT 957.3637 87 HENRICO C 406 -GODI 926.4285 87 HENRICO C 407 - LAKE 592.6537 87 HENRICO C 408 - LAUD 897.1214 87 HENRICO C 409 - MAYE 897.1214 87 HENRICO C 410 - MOO 532.4115 87 HENRICO C 411 - PEME 841.7637 87 HENRICO C 412 - PINCI 1099.014 87 HENRICO C 413 - RIDG| 1152.744 87 HENRICO C 414 - ROLLI 934.5693 87 HENRICO C 415 - SKIPV 595.9101 87 HENRICO C 416 -SPOT 561.7185 87 HENRICO C 417 - TUCK 892.2369 87 HENRICO C 418 - WELE 789.6622 87 HENRICO C 419 - WEST 945.9665 87 HENRICO C501 - ANTI( 441.159 87 HENRICO C502-CEDA 703.4697 87 HENRICO C503-CHICl 746.0527 87 HENRICO C504-DON/ 739.2394 87 HENRICO C505-DORE 1166.772 87 HENRICO C506-EANE 1228.091 87 HENRICO C507 - ELKO 112.4189 87 HENRICO C508-HIGH 897.6478 87 HENRICO C509-LABU 727.3162 87 HENRICO C510-MEHI 1030.507 87 HENRICO C511-MON 1715.24 87 HENRICO C512-NINE 526.3248 87 HENRICO C513-PLEA؛ 1567.051 87 HENRICO C514-ROLF 1878.758 87 HENRICO C515-SAND 541.6547 87 HENRICO C516-SULLI 1422.269 87 HENRICO C517-TOWI 306.597 87 HENRICO C518-WHIT 674.5134 89 HENRY COI 101 - BASSI 186.1008 89 HENRY COI 102 -GUN 127.9443 89 HENRY COI 103 - SCOT 254.2269
1429.751 683.6733 554.7045 1357.639 940.2242 532.5164 619.8823 852.8582 685.0601 890.3008 655.9381 1187.068 805.7083 746.0776 784.9069 938.8374 809.8686 658.7116 897.2346 1234.218 789.0672 427.1225 452.0842 1396.469 626.8161 1022.043 1166.918 111.8408 776.1485 351.6923 780.191
417.7188
475.6605
196.7321
227.7241
386.7268
234.4615
266.8011
177.8674
177.8674
923.0239
416.3714
419.0663
1011.958
226.5
735.4741
1189.776
2.918033

715.2339
743.0576
1327.356 1000.018 1220.971 885.4497
4.377049
2.918033
2.918033
1.459016
1.459016
1.459016
1162.05
1078.579
798.7051
728.3274 983.6511
931.277
0595.7554 1.459016885 .4497
$\begin{array}{ll}0 & 877.2662\end{array}$
$0 \quad 523.741$
1.459016805 .2518
1.459016

0
1.459016
1157.14
928.0037
$0 \quad 572.8418$
1.459016
1.459016

0
4.377049
1.633333
4.9

0
3.266667

- 11.9824
$4.9 \quad 1215.88$
$0 \quad 111.47$
$6.533333 \quad 867.7508$
3.266667723 .6973
$\begin{array}{ll}0 & 1015.234\end{array}$
3.2666671694 .343
$1.633333 \quad 512.7618$
$0 \quad 1541.715$
1.6333331858 .976
$0 \quad 517.9066$
1.6333331413 .096
$0 \quad 293.2517$
1.633333668 .8198
0190.8362
0121.5948
3243.1895
5.38125
6.726563
5.38125
13.45313
18.83438
29.59688
10.7625
10.7625
22.87031
10.7625
16.14375
6.726563
8.071875
13.45313
13.45313
16.14375

0
22.87031
20.17969
14.79844
1.345313
10.7625
4.035938
8.071875
$16.14375 \quad 624.662$
6.726563
7.073529
19.80588
14.14706
12.73235
16.97647
25.46471
4.244118
22.63529
15.56176
9.902941
41.02647
18.391182
25.46471
19.80588
$18.39118 \quad 923.3217$
14.14706416 .1638
14.14706
$417.502 \quad 1.736842$
$\begin{array}{llll}9.902941 & 1006.287 & 3.473684\end{array}$
$0 \quad 230.1905$
$2.736842 \quad 751.6955 \quad 0$
5.4736841201 .672

1

| LD | 127.9443 | 315.0172 | 0 | 136.7941 | 2.736842 | 310.8222 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 HENRY COI 202 - HORS | 328.9996 | 710.7414 | 2 | 315.8086 | 1.368421 | 728.2863 |  |
| 89 HENRY COI 203 - HORS | 418.7267 | 173.1293 | 0 | 415.4488 | 5.473684 | 174.2685 |  |
| 89 HENRY COI 204 - SPEN | 260.8734 | 820.0862 | 0 | 253.3224 | 2.736842 | 828.4256 |  |
| 89 HENRY COI 302 - AXTO | 296.7187 | 359.167 | 0 | 289.5454 | 0 | 372.4402 |  |
| 89 HENRY COI 303 -IRISBI | 372.2152 | 614.5747 | 0 | 358.8231 | 5.866667 | 630.8951 |  |
| 89 HENRY COI $304-\mathrm{MOU}$ | 540.7654 | 501.5036 | 2 | 536.4583 | 4.4 | 515.5844 |  |
| 89 HENRY COI $305-\mathrm{MOU}$ | 222.978 | 393.7535 | 0 | 214.9386 | 5.866667 | 404.25 |  |
| 89 HENRY COI 401 - COLLI | 144.5604 | 391.819 | 0 | 124.9724 | 2.736842 | 407.06 |  |
| 89 HENRY COI 402 - DANI | 192.7472 | 373.5948 | 0 | 194.2139 | 2.736842 | 381.0498 |  |
| 89 HENRY COI 404 - COLLI | 309.0602 | 667.7845 | 0 | 293.854 | 1.368421 | 684.0689 |  |
| 89 HENRY COI 405 - MOU | 261.6041 | 367.1485 | 0 | 261.1237 | 1.466667 | 367.1385 |  |
| 89 HENRY COI 501 - BASSI | 194.4088 | 322.8276 | 1 | 195.9027 | 1.368421 | 329.0293 |  |
| 89 HENRY COI 502 - FIGSE | 151.2069 | 550.6293 | 0 | 141.8606 | 2.736842 | 559.2198 |  |
| 89 HENRY COI 503 - STAN | 164.4998 | 924.2241 | 1 | 155.3711 | 4.105263 | 935.0675 |  |
| 89 HENRY COI 504-OAK I | 109.6665 | 316.319 | 0 | 106.3954 | 1.368421 | 322.5268 |  |
| 89 HENRY COI 505 - DYER | 125.2799 | 334.4109 | 1 | 118.6548 | 1.368421 | 339.2035 |  |
| 89 HENRY COI 601 - FONT | 280.8128 | 615.7155 | 1 | 268.5218 | 9.578947 | 626.8464 |  |
| 89 HENRY COI 602 - HILLC | 142.8988 | 251.2328 | 0 | 135.1053 | 2.736842 | 257.5012 |  |
| 89 HENRY COI 603 -RIDGI | 284.4286 | 871.3126 | 0 | 268.2291 | 4.4 | 886.6992 |  |
| 89 HENRY COI 604 -RIDGI | 219.333 | 648.2586 | 0 | 206.0356 | 1.368421 | 658.0586 |  |
| 91 HIGHLAND 001 -MON | 109.1455 | 278.4375 | 0 | 98.14356 | 1.6 | 288.4072 |  |
| 91 HIGHLAND 003 -WILSI | 25.30909 | 83.16964 | 0 | 22.52475 | 0 | 86.88418 |  |
| 91 HIGHLAND 005 - BLUE | 71.18182 | 150.6696 | 0 | 70.79208 | 1.6 | 152.0473 |  |
| 91 HIGHLAND 007 - MILL | 52.2 | 103.6607 | 0 | 45.0495 | 1.6 | 108.6052 |  |
| 91 HIGHLAND 008 - MCD | 71.18182 | 248.3036 | 0 | 69.18317 | 3.2 | 250.9988 |  |
| 91 HIGHLAND $010-$ HEAD | 18.98182 | 80.75893 | 0 | 19.30693 | 0 | 82.05729 | 0 |
| 93 ISLE OF WII 101-SMITI | 754.3196 | 1478.194 | 0 | 730.0103 | 5.515152 | 1497.129 | 1.454545 |
| 93 ISLE OF WII 102 - CYPR | 644.631 | 1158.731 | 3.8 | 640.0323 | 5.515152 | 1167.436 | 1.454545 |
| 93 ISLE OF WII 201 - BART | 897.7584 | 1647.401 | 3.8 | 889.594 | 15.16667 | 1651.165 | 2.909091 |
| 93 ISLE OF WII 202 - CARR | 874.1332 | 1308.986 | 5.066667 | 869.2216 | 9.651515 | 1321.473 | 2.909091 |
| 93 ISLE OF WII301-RUSH | 698.6316 | 800.0114 | 1.266667 | 697.7541 | 5.515152 | 809.3683 | 1.454545 |
| 93 ISLE OF WII302-PONS | 777.9448 | 580.7189 | 0 | 774.1505 | 8.272727 | 583.718 | 0 |
| 93 ISLE OF WII401-COUF | 151.8764 | 513.0361 | 1.266667 | 129.0251 | 2.757576 | 529.6701 | 1.454545 |
| 93 ISLE OF WII402-WINE | 334.1281 | 927.2551 | 0 | 332.7489 | 4.136364 | 928.2738 | 0 |
| 93 ISLE OF WII403-LONG | 631.1309 | 896.121 | 1.266667 | 624.753 | 11.0303 | 890.4403 | 1.454545 |
| 93 ISLE OF WII501-WALT | 197.4394 | 721.4993 | 0 | 183.3514 | 2.757576 | 737.7548 |  |
| 93 ISLE OF WII502-CAMI | 189.0018 | 207.1095 | 0 | 186.7468 | 6.893939 | 208.0847 | 0 |
| 93 ISLE OF WII503-CARR | 214.3145 | 443.9995 | 1.266667 | 207.1192 | 5.515152 | 449.9493 | 1.454545 |
| 93 ISLE OF WII504-ZUNI | 207.5644 | 768.8773 | 1.266667 | 213.91 | 5.515152 | 772.8859 | 0 |
| 93 ISLE OF WII505-RAYN | 91.12585 | 448.0605 | 0 | 86.58262 | 2.757576 | 452.6517 | 1.454545 |
| 95 JAMES CIT 101 - BERK | 1303.32 | 1455.423 | 1.785714 | 1316.87 | 5.024096 | 1445.334 |  |
| 95 JAMES CIT) 102 - BERK | 1023.036 | 1076.263 | 1.785714 | 1037.106 | 5.024096 | 1068.29 |  |
| 95 JAMES CIT) 103 - BERK | 1306.123 | 1692.398 | 1.785714 | 1297.089 | 5.024096 | 1702.588 |  |
| 95 JAMES CIT 104- BERKE | 506.6541 | 434.6373 | 0 | 500.1731 | 2.848485 | 440.1244 |  |
| 95 JAMES CIT 201 - JAME | 390.7825 | 356.2322 | 4 | 382.6209 | 8.545455 | 357.1779 |  |
| 95 JAMES CIT) 202 -JAME | 1294.911 | 861.0101 | 0 | 1297.089 | 26.79518 | 854.2395 |  |


| 95 JAMES CIT\203-JAME | 927.7395 | 965.6742 | 0 | 938.1996 | 5.024096 | 962.2468 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 JAMES CIT 204 - JAME | 826.8374 | 1018.994 | 0 | 796.9045 | 6.698795 | 1034.906 | 0 |
| 95 JAMES CIT) 301 - POW | 868.8799 | 1200.675 | 3.571429 | 850.5966 | 5.024096 | 1221.464 | 0 |
| 95 JAMES CIT) 302 - POW | 591.3989 | 452.2278 | 3.571429 | 613.2208 | 8.373494 | 441.848 | 0 |
| 95 JAMES CIT\303-POW | 426.0315 | 1046.641 | 0 | 429.5372 | 3.349398 | 1042.761 | 2 |
| 95 JAMES CIT) 304 - POW | 1356.574 | 977.5229 | 5.357143 | 1370.563 | 13.39759 | 981.8845 | 2 |
| 95 JAMES CIT 401 - STON | 1765.788 | 2193.996 | 3.571429 | 1735.104 | 18.42169 | 2201.385 | 2 |
| 95 JAMES CIT 402 - STON | 1712.534 | 2012.315 | 1.785714 | 1732.278 | 23.44578 | 1985.37 | 0 |
| 95 JAMES CIT\403-STON | 1210.826 | 2047.861 | 1.785714 | 1226.442 | 13.39759 | 2022.682 | 0 |
| 95 JAMES CIT\501-ROBE | 906.5246 | 402.2526 | 0 | 928.8929 | 5.69697 | 394.4192 | 0 |
| 95 JAMES CIT\502-ROBE | 799.741 | 1568.103 | 0 | 806.7308 | 4.272727 | 1557.363 | 0 |
| 95 JAMES CIT\503-ROBE | 363.5186 | 156.8103 | 0 | 357.2665 | 7.121212 | 159.1219 | 0 |
| 95 JAMES CIT\504-ROBE | 1242.779 | 1170.964 | 0 | 1219.316 | 18.51515 | 1174.794 | 0 |
| 97 KING \& QU 101-OWEI | 353.119 | 335.5791 | 0 | 347.2396 | 3.6 | 339.4286 | 0 |
| 97 KING \& QU 201 - CLAR | 194.7241 | 489.4913 | 0 | 189.8047 | 1.2 | 496.5714 | 0 |
| 97 KING \& QU301-SHAC | 245.5848 | 421.3662 | 2 | 239.8307 | 4.8 | 424.9143 | 1 |
| 97 KING \& QU 401 - COUF | 235.4127 | 388.5652 | 0 | 233.9453 | 7.2 | 385.9429 | 0 |
| 97 KING \& QU 501 - OLDN | 119.1595 | 462.9982 | 0 | 119.1797 | 1.2 | 465.1429 | 0 |
| 99 KING GEOR 101 - COUF | 669.6444 | 1457.732 | 3.2 | 610.023 | 12.77193 | 1503.768 | 0 |
| 99 KING GEOR 102 - PASS, | 454.48 | 858.4423 | 0 | 435.0899 | 3.192982 | 879.6236 | 0 |
| 99 KING GEOR 201 - MON | 627.9289 | 1747.659 | 1.6 | 616.7512 | 25.54386 | 1759.247 | 3.5 |
| 99 KING GEOR 301 - DAHL | 937.5022 | 1423.718 | 0 | 926.2481 | 20.75439 | 1429.388 | 3.5 |
| 99 KING GEOR 401 - SHILC | 768.4444 | 1697.448 | 3.2 | 728.8878 | 28.73684 | 1713.972 | 0 |
| 101 KING WILLI 101 - WEST | 576.3997 | 1088.839 | 0 | 570.1106 | 14.90323 | 1088.349 | 0 |
| 101 KING WILLI 201 - SWEE | 146.4622 | 517.356 | 0 | 148.1013 | 1.064516 | 517.1229 | 0 |
| 101 KING WILLI 202 - COUF | 288.1999 | 650.786 | 1.166667 | 289.8327 | 4.258065 | 654.2674 | 1.2 |
| 101 KING WILLI 301 - AYLE ${ }^{-}$ | 340.1703 | 1334.3 | 2.333333 | 318.4975 | 6.387097 | 1350.056 | 1.2 |
| 101 KING WILLI 401 - MAN | 444.1113 | 1397.239 | 3.5 | 428.3792 | 5.322581 | 1409.191 | 3.6 |
| 101 KING WILLI 501 - MAN | 497.6566 | 1252.48 | 0 | 492.0787 | 1.064516 | 1267.014 | 0 |
| 103 LANCASTEF 101 - PREC | 313.4467 | 720.8721 | 1 | 322.5503 | 1.777778 | 714.9201 | 3 |
| 103 LANCASTEF 201 - PREC | 480.3709 | 404.6475 | 0 | 468.8231 | 1.777778 | 417.0367 | 0 |
| 103 LANCASTEF 301 - PREC | 344.9768 | 644.4386 | 0 | 343.1785 | 5.333333 | 646.4069 | 0 |
| 103 LANCASTEF 302 - PREC | 140.9583 | 338.705 | 1 | 144.3975 | 0 | 336.6082 | 0 |
| 103 LANCASTEF 401 - PREC | 615.7651 | 400.1514 | 0 | 618.8465 | 3.555556 | 397.6743 | 0 |
| 103 LANCASTEF501-PREC | 504.4822 | 935.1854 | 0 | 508.2042 | 3.555556 | 935.3538 | 0 |
| 105 LEE COUNT 101 - ELYD, | 55.8144 | 317.0283 | 0 | 55.86 | 1.384615 | 318.4829 | 0 |
| 105 LEE COUNT 102 - EWIN | 55.8144 | 304.16 | 0 | 49.98 | 1.384615 | 307.9449 | 0 |
| 105 LEE COUNT 103 - ROSE | 77.8464 | 608.3201 | 0 | 73.5 | 2.769231 | 613.548 | 0 |
| 105 LEE COUNT 201 - BLAC | 22.032 | 124.0037 | 0 | 17.64 | 0 | 128.7982 | 0 |
| 105 LEE COUNT 202 - FLAT | 73.44 | 483.1465 | 0 | 69.09 | 0 | 487.0915 | 0 |
| 105 LEE COUNT 203 - JONE | 92.5344 | 703.0776 | 0 | 94.08 | 2.769231 | 706.0485 | 0 |
| 105 LEE COUNT 301 - BEN + | 111.6288 | 740.5127 | 0 | 99.96 | 2.769231 | 748.2007 | 0 |
| 105 LEE COUNT 302 - WOO | 52.8768 | 547.4881 | 0 | 48.51 | 1.384615 | 552.6615 | 2 |
| 105 LEE COUNT 401 - STICK | 54.3456 | 327.557 | 0 | 57.33 | 2.769231 | 325.5083 | 0 |
| 105 LEE COUNT 402 - JASPE | 30.8448 | 255.0265 | 0 | 38.22 | 0 | 250.5711 | 0 |
| 105 LEE COUNT 403 - SEMII | 35.2512 | 353.2936 | 0 | 35.28 | 0 | 354.7806 | 0 |
| 105 LEE COUNT 404 - DRYD | 80.784 | 565.0357 | 3.333333 | 76.44 | 1.384615 | 571.3958 | 0 |


| 105 LEE COUNT 501 - SAIN7 | 57.2832 | 201.2136 | 0 | 55.86 | 0 | 207.2481 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 105 LEE COUNT 502 - PENN | 79.3152 | 581.4136 | 0 | 76.44 | 0 | 588.9592 | 0 |
| 105 LEE COUNT 503 -ROBE | 14.688 | 84.22893 | 0 | 10.29 | 0 | 91.32966 | 0 |
| 105 LEE COUNT 504 -KEOK | 23.5008 | 120.4942 | 1.666667 | 23.52 | 1.384615 | 119.4311 | 0 |
| 107 LOUDOUN 107-LITTL | 1003.892 | 761.3958 | 1.289256 | 995.1621 | 4.808383 | 773.827 | 1.385417 |
| 107 LOUDOUN 108 - MERC | 993.4714 | 663.4811 | 0 | 986.4326 | 4.808383 | 667.644 | 1.385417 |
| 107 LOUDOUN 112 -FREEI | 772.8929 | 489.5731 | 1.289256 | 780.4166 | 8.013972 | 481.4601 | 0 |
| 107 LOUDOUN 114 - DU | 800.6824 | 575.7964 | 2.578512 | 817.0805 | 1.602794 | 571.6429 | 0 |
| LOUDOUN 117 - CART | 519.3146 | 248.4401 | 0 | 509.8023 | 4.808383 | 258.9121 | 0 |
| 107 LOUDOUN 118-MOO | 1207.102 | 685.4023 | 0 | 1195.94 | 11.21956 | 693.8261 | 0 |
| 107 LOUDOUN 119 - ARCC | 998.6819 | 533.4155 | 1.289256 | 1024.842 | 4.808383 | 510.5513 | 0 |
| 107 LOUDOUN 120 - LUNS | 1108.103 | 740.936 | 2.578512 | 1075.473 | 12.82236 | 766.5542 | 0 |
| 107 LOUDOUN 121 -TOW | 720.7878 | 486.6503 | 1.289256 | 696.6135 | 11.21956 | 501.8239 | 1.385417 |
| 107 LOUDOUN 122 - HUTC | 1007.366 | 752.6273 | 0 | 984.6867 | 11.21956 | 773.827 | 0 |
| 107 LOUDOUN 123 - CARD | 668.6827 | 479.3432 | 2.578512 | 668.6791 | 1.602794 | 481.4601 | 517 |
| 107 LOUDOUN 124 - LIBE | 795.4718 | 472.0361 | 0 | 789.1461 | 8.013972 | 478.5509 | 0 |
| 107 LOUDOUN 125 -ROCK | 951.7873 | 558.2595 | 2.578512 | 934.0557 | 12.82236 | 576.0066 | 0 |
| 107 LOUDOUN 126-GOSH | 1017.787 | 692.7094 | 2.578512 | 1005.638 | 8.013972 | 704.0081 | 2.770833 |
| 107 LOUDOUN 207 - RIVEF | 708.6299 | 562.6437 | 1.289256 | 700.1053 | 9.616766 | 564.3701 | 1.385417 |
| 107 LOUDOUN 208 - ALGO | 821.5244 | 588.9491 | 2.578512 | 841.523 | 4.808383 | 590.5522 | 385417 |
| 107 LOUDOUN 209 - POTC | 1088.997 | 688.3252 | 1.289256 | 1073.728 | 12.82236 | 693.8261 | 0 |
| 107 LOUDOUN 210 - CASC | 1245.313 | 770.1642 | 1.289256 | 1218.637 | 14.42515 | 791.2818 | 385417 |
| 107 LOUDOUN 213 - COUN | 444.6305 | 258.67 | 0 | 439.9664 | 1.602794 | 263.2757 | 385417 |
| 107 LOUDOUN 214 - SUGA | 1177.576 | 844.6963 | 3.867769 | 1197.686 | 8.013972 | 839.2823 | 0 |
| 107 LOUDOUN 215 - SUGA | 1149.787 | 768.7028 | 0 | 1150.547 | 9.616766 | 765.0997 | 0 |
| 107 LOUDOUN 216 - LOWI | 1045.577 | 815.468 | 2.578512 | 1024.842 | 4.808383 | 834.9186 | . 15625 |
| 107 LOUDOUN 217 - SOUT | 1085.524 | 818.3908 | 2.578512 | 1077.219 | 8.013972 | 824.7367 | 0 |
| 107 LOUDOUN 218 - UNIV | 911.8 | 498.3416 | 0 | 895.6459 | 9.616766 | 510.5513 | 0 |
| 107 LOUDOUN 219 - GALII | 936.1557 | 631.3301 | 1.289256 | 927.0721 | 12.82236 | 634.1891 | 0 |
| 107 LOUDOUN 301 - PURC | 929.2084 | 1104.828 | 0 | 921.8344 | 1.602794 | 1124.377 | 0 |
| 07 LOUDOUN 302 - ROUN | 875.3664 | 1341.576 | 1.289256 | 822.3182 | 9.616766 | 1378.925 |  |
| 107 LOUDOUN 303 - HILLS | 715.5773 | 1142.824 | 1.289256 | 689.6299 | 3.205589 | 1165.104 | 0 |
| 107 LOUDOUN 305 - PHILC | 474.1568 | 590.4105 | 1.289256 | 469.6467 | 0 | 593.4613 | 1.385417 |
| 107 LOUDOUN 307 - MIDC | 625.2 | 469.1133 | 0 | 612.8104 | 0 | 481.4601 | 1.385417 |
| 107 LOUDOUN 308-ST LO | 573.1566 | 492.4959 | 0 | 565.6711 | 4.808383 | 497.4602 | 0 |
| 107 LOUDOUN 309 - ALDIE | 387.3149 | 409.1954 | 0 | 389.3354 | 8.013972 | 401.4591 | 0 |
| 107 LOUDOUN 310-MOU | 1016.05 | 1359.113 | 1.289256 | 993.4162 | 9.616766 | 1373.107 | 4.15625 |
| 107 LOUDOUN 311 -ROUN | 958.7346 | 1430.723 | 2.578512 | 939.2934 | 19.23353 | 1426.925 | 2.770833 |
| 107 LOUDOUN 312 - BRIAF | 1332.155 | 688.3252 | 0 | 1283.235 | 17.63074 | 724.3719 | 0 |
| 107 LOUDOUN 313 - PINEE | 1217.523 | 1005.452 | 1.289256 | 1213.399 | 9.616766 | 1000.739 | 1.385417 |
| 107 LOUDOUN 314 - LEGA | 1229.681 | 733.6289 | 1.289256 | 1202.924 | 4.808383 | 753.4632 | 1.385417 |
| 107 LOUDOUN 315 - FIREF | 302.2098 | 453.0378 | 1.289256 | 288.0732 | 4.808383 | 466.9144 | 0 |
| 107 LOUDOUN 316 - CREIG | 1457.207 | 865.156 | 2.578512 | 1436.874 | 9.616766 | 884.3738 | 0 |
| 107 LOUDOUN 318 - MADI | 1026.471 | 1229.048 | 1.289256 | 986.4326 | 12.82236 | 1252.378 | 2.770833 |
| 107 LOUDOUN 319 - JOHN | 1705.575 | 1310.887 | 1.289256 | 1688.284 | 6.411178 | 1328.015 | 0 |
| 107 LOUDOUN 320-STON | 1926.153 | 897.3071 | 1.289256 | 1936.201 | 12.82236 | 898.9194 | 1.385417 |
| 07 LOUDOUN 321 - bRan | 795.4718 | 472.0361 | 1.289256 | 780.4166 | 1.602794 | 487.2783 | 4.15625 |

107 LOUDOUN 322-BUFFA 885.7874 107 LOUDOUN 401 - WEST 1130.682 107 LOUDOUN 402 - WATE 976.103 107 LOUDOUN 403 - LUCK 1040.366 107 LOUDOUN 407 - HARP 722.5246 107 LOUDOUN 408 -EVER' 1075.103 107 LOUDOUN 409 - CLAR 811.1034 107 LOUDOUN 411 -EAST 670.4195 107 LOUDOUN 413 -TUSC 65.99985 107 LOUDOUN 414 -RED F 771.1561 107 LOUDOUN 416 - HAMI 1115.05 107 LOUDOUN 420 - RIVEF 559.2619 107 LOUDOUN 421 - BETV 118.105 107 LOUDOUN 422 - SYCO 576.6302 107 LOUDOUN 501 - WEST 894.4716 107 LOUDOUN 502 -EAST 1085.524 107 LOUDOUN 503 - DRY 543.6303 107 LOUDOUN 504 - SMAF 1109.84 107 LOUDOUN 505-COOL 983.0503 107 LOUDOUN 506 - BRAN 616.5775 107 LOUDOUN 507-GREE 401.2096 107 LOUDOUN 508 -BALL؛ 1200.155 107 LOUDOUN 509-TOLB 1490.207 107 LOUDOUN 510 -HERI7 543.6303 107 LOUDOUN 615 -HILLS 1146.313 107 LOUDOUN 616-EAGL 1179.313 107 LOUDOUN 617-OAK ( 574.8934 107 LOUDOUN 619 - RIDG| 580.1039 107 LOUDOUN 620-RUSS 1281.786 107 LOUDOUN 621 -DOM 1380.786 107 LOUDOUN 622 -FARN 1469.365 107 LOUDOUN 623 -WELL 1540.575 107 LOUDOUN 625 -MILL 494.9989 107 LOUDOUN 626-ASHB 1115.05 107 LOUDOUN 627 - ASHB 437.6832 107 LOUDOUN 628 - MOO 1398.155 107 LOUDOUN 629 - DISCC 307.4203 107 LOUDOUN 701 - SULL) 859.7348 107 LOUDOUN 702 - PARK 791.9982 107 LOUDOUN 703-ROLLI 1182.787 107 LOUDOUN 705 - FORE 1153.26 107 LOUDOUN 707 - CLAU 861.4717 107 LOUDOUN 708 - SENE 866.6822 107 LOUDOUN 709 - MIRR 996.9451 107 LOUDOUN 710 - STERI 658.2616 107 LOUDOUN 808 - STON 1359.944 107 LOUDOUN 810 - CEDA 1071.629
555.3366
1724.466

### 1287.504

1300.657

### 505.6486

1036.141
1150.131
1100.443
42.38095
458.8834
1492.102
828.6207
203.1363
819.8523
700.0165
580.1807
450.115
743.8588 942.6109 371.1987
415.0411
872.4631
831.5436
512.9557
742.3974
773.0871
201.6749
232.3645
882.693
941.1495
853.4647
999.606
384.3514
666.404
216.289
825.6979
201.6749
590.4105
546.5682
489.5731
727.7833
442.8079
660.5583
581.6421
469.1133
989.3761
755.55011 .289256
2.578512

0
2.578512
3.867769
5.157025
1.289256
1.289256
2.578512
1.289256

0
2.578512
2.578512

0
3.867769
5.157025
1.289256
1.289256
1.289256
0
2.578512

0
1.289256
2.578512
3.867769
3.867769

0
0
3.867769
2.578512

0
1.289256
3.867769
3.867769
1.289256
1.289256
2.578512
3.867769
3.867769
2.578512
$0 \quad 890.4082$
3.8677691101 .662
$0 \quad 944.5311$
1466.555
511.5482
$2.578512 \quad 1127.85$
1168.006
562.1793
572.6547 1283.235 1365.293 1449.096 1532.899 485.3598 1129.596 436.4746 1401.956 312.5158 834.5395 775.1789 1183.719 1145.309 857.2361 855.4902 977.7031 654.7119 1354.817 1084.203
1.
8
8
8
3
1.6
8.01
8.
3.
3.
$557.0973 \quad 2.770833$ 1745.4754 .15625 1313.471 .385417 1307.6511 .385417 $522.1878 \quad 2.770833$ 1066.1941 .385417 $1189.832 \quad 2.770833$ $1124.377 \quad 2.770833$ $\begin{array}{lll}0 & 42.1823 & 0\end{array}$
8.013972 475.6418 1.385417 4.15625
$\begin{array}{rrr}3.205589 & 818.9185 & 1.385417 \\ 1.602794 & 202.1841 & 0\end{array}$
$\begin{array}{lll}1.602794 & 820.373 & 0\end{array}$
$\begin{array}{lll}6.411178 & 730.1902 & 4.15625\end{array}$
$12.82236 \quad 603.6433 \quad 4.15625$
3.205589469 .82360
$20.83633 \quad 775.2816 \quad 2.770833$
$\begin{array}{lll}9.616766 & 935.2834 & 0\end{array}$
$\begin{array}{llll}20.83633 & 392.7318 & 2.770833\end{array}$
$\begin{array}{llll}11.21956 & 411.6411 & 2.770833\end{array}$
$\begin{array}{llll}6.411178 & 887.2829 & 1.385417\end{array}$
$\begin{array}{lll}9.616766 & 855.2825 & 1.385417\end{array}$
$\begin{array}{lll}14.42515 & 530.9152 & 0\end{array}$
$8.013972786 .9181 \quad 2.770833$
$4.808383 \quad 218.1843 \quad 0$
$8.013972 \quad 238.54821 .385417$
$9.616766 \quad 884.3738 \quad 4.15625$
11.21956
12.82236
4.8083831024 .0121 .385417
1.602794391 .27720
$\begin{array}{lll}1.602794 & 663.2803 & 0\end{array}$
3.205589219 .63890
$4.808383839 .2823 \quad 0$
$\begin{array}{lll}0 & 200.7296 & 0\end{array}$
$\begin{array}{llll}14.42515 & 602.1887 & 5.541667\end{array}$
$\begin{array}{llll}12.82236 & 558.5518 & 2.770833\end{array}$
$4.808383 \quad 493.0966 \quad 5.541667$
$\begin{array}{lll}12.82236 & 746.1904 & 1.385417\end{array}$
$\begin{array}{lll}12.82236 & 440.7323 & 1.385417\end{array}$
$4.808383674 .9168 \quad 0$
$22.43912 \quad 600.7342 \quad 1.385417$
8.013972474 .18721 .385417
3.2055891005 .1024 .15625
$11.21956 \quad 752.0086 \quad 2.770833$

107 LOUDOUN 813 - SELDI 948.3136 107 LOUDOUN 814 - NEW 1061.208 107 LOUDOUN 815 -BELM 1108.103 107 LOUDOUN 817 -SAND 1274.839 107 LOUDOUN 818 - BROA 882.3137 107 LOUDOUN 819 - HERI7 807.6297 107 LOUDOUN 820 - BELM 979.5767 107 LOUDOUN 822 - RIVEF 802.4192 109 LOUISA CO 101 - ZION 913.198 109 LOUISA CO 102 - MECF 371.3198 109 LOUISA CO 201 - LOUIS 410.4061 109 LOUISA CO 202 - LOUIS 318.0203 109 LOUISA CO 301 - PATR 898.9848 109 LOUISA CO 302 - PATR 209.6447 109 LOUISA CO 401 - MINE 532.9949 109 LOUISA CO 402 - YANC 197.2081 109 LOUISA CO 501 - FRED 264.7208 109 LOUISA CO 502 - CUCK 280.7107 109 LOUISA CO 503 - ELK C 227.4112 109 LOUISA CO 601 - BUMI 255.8376 109 LOUISA CO 602 - LOCU 374.8731 109 LOUISA CO 701 - SHEL` 367.7665 109 LOUISA CO 702 - SOUT 326.9036 111 LUNENBUR 101 - PLYM 87.05455 111 LUNENBUR 201 - BROV 170.4818 111 LUNENBUR 301 -ROSE 90.68182 111 LUNENBUR 302 - FLAT 161.4136 111 LUNENBUR 401 - ARRC 54.40909 111 LUNENBUR 402 - PLEA؛ 126.9545 111 LUNENBUR 501 -REED 114.2591 111 LUNENBUR 502 - PEOP 179.55 111 LUNENBUR 601 - HOUr 360.9136 111 LUNENBUR 701 - MEHI 136.0227 111 LUNENBUR 702 - VICTC 114.2591 113 MADISON 1001 - OAK I 312.7393 113 MADISON 1002 - RADI/ 416.4191 113 MADISON 1003 -ROCF 176.7657 113 MADISON 1004 - GRAV 23.79538 113 MADISON 1005 - MADI 339.934 113 MADISON 1006 - WOLF 243.0528 113 MADISON 1007 - BRIGI 265.1485 113 MADISON 1008 - CRIGI 149.571 113 MADISON 1009 - ETLAI 132.5743 115 MATHEWS 001 -CHES، 326.4673 115 MATHEWS 002 - WEST 553.1058 115 MATHEWS 003 - PIANI 523.4269 117 MECKLENB 101 - WRIG 240.0952
529.0312 1050.755 717.5534 1047.833 667.8654 631.3301 682.4795 540.7225 1216.674 670.2791 683.3196 715.9207 949.3447 328.6193 1309.261 341.6598 314.2748 662.4548 642.8942 919.3517 1054.972 1138.431 658.5427
360.213 361.5373 336.3753
317.835
229.106
377.429 146.9987 146.9987
271.484
186.728
250.295
480.4784
751.2453
440.6598
53.09154
759.209
491.0967
964.9387
415.4413
254.8394
827.5607
1240.411
1378.028
290.5265

| 0 | 904.3754 |
| ---: | ---: |
| 1.289256 | 1021.351 |
| 2.578512 | 1078.965 |
| 2.578512 | 1272.76 |
| 1.289256 | 862.4738 |
| 0 | 796.1297 |
| 2.578512 | 961.99 |
| 0 | 782.1625 |
| 1.6 | 903.6084 |

12.82236 9.616766 56 60.0064 1079.285 1.385417 8.013972741 .82671 .385417 $16.027941042 .921 \quad 2.770833$ 8.013972 4.808383 9.616766 4.808383 7.016129 5.612903 2.806452 7.016129 15.43548 5.612903 4.209677 5.612903 4.209677 5.612903 2.806452 1.403226 8.419355 8.419355 2.806452

6
36
366
335.
324.5

O 234.4
381.51
147.0
$0 \quad 145.71$
272.8

188
$\begin{array}{lll}0 & 255.6678 & 0\end{array}$
2307.2563
$0 \quad 395.2905$
$0 \quad 165.7113$
$0 \quad 25.89239$
$0 \quad 331.4226$
4.578947
$0 \quad 226.1269$
$2 \quad 246.8408$
0148.4497
$0 \quad 126.0096$
$0 \quad 305.312$
$0 \quad 545.2$
$6 \quad 512.488$
$0 \quad 240.3322$ 685.0988

0
.385417
0
0
1.75
1.75

0
0
0
1.75

0
0
0
0
0
0
1.75

0
0
0
0
0
0
0
0
0
0
0
1.25

0
0
0
1.25

0
1.25

0
1.25

0
0
7
0

| 2 - PEAR | 42.28092 | 163.5056 | 0 | 41.06943 | 0 | 165.7999 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 MECKLENB 103 - SOUT | 317.1069 | 404.0345 | 0 | 310.3024 | 1.541667 | 412.4778 | 0 |
| 117 MECKLENB 201 - BOYD | 155.5334 | 214.8545 | 0 | 159.7144 | 0 | 217.0226 | 0 |
| 117 MECKLENB 202 - BLUE: | 96.6421 | 70.26687 | 0 | 98.87085 | 0 | 67.39833 | 0 |
| 117 MECKLENB 203 - CHAS | 214.4247 | 63.51044 | 0 | 220.558 | 0 | 62.00647 | 0 |
| 117 MECKLENB 301 - BRAC | 217.4447 | 775.6382 | 1.5 | 209.9104 | 3.083333 | 787.2125 | 0 |
| 117 MECKLENB 302 - LACR | 206.8745 | 398.6294 | 0 | 197.7417 | 3.083333 | 407.0859 | 0 |
| 117 MECKLENB 401 - AMEF | 637.2339 | 404.0345 | 0 | 632.7734 | 6.166667 | 413.8258 | 0 |
| 117 MECKLENB 402 - PARK | 119.2926 | 90.53616 | 0 | 117.1239 | 0 | 93.0097 | 0 |
| 117 MECKLENB 501 - SOUT | 440.9296 | 776.9895 | 0 | 435.0317 | 4.625 | 781.8207 | 0 |
| 117 MECKLENB 601 - BASK | 138.923 | 368.9011 | 3 | 130.8137 | 1.541667 | 377.4307 | 2 |
| 117 MECKLENB 602 - UNIO | 45.30099 | 294.5804 | 0 | 41.06943 | 0 | 301.9445 | 0 |
| 117 MECKLENB 603 - SMITI | 83.05181 | 194.5852 | 0 | 79.09668 | 3.083333 | 195.4552 | 0 |
| 117 MECKLENB 604 - LAKE | 92.112 | 258.0956 | 0 | 92.78649 | 0 | 258.8096 | 0 |
| 117 MECKLENB 701 - CHAS | 206.8745 | 385.1165 | 0 | 200.7839 | 3.083333 | 388.2144 | 1 |
| 117 MECKLENB 702 - SUNS | 166.1036 | 371.6037 | 1.5 | 167.3199 | 0 | 378.7786 | 0 |
| 117 MECKLENB 801 - FINCF | 64.93141 | 144.5876 | 0 | 62.36469 | 1.541667 | 145.5804 | 0 |
| 117 MECKLENB 802 - BLUE: | 110.2324 | 451.3295 | 0 | 106.4763 | 1.541667 | 454.2648 | 0 |
| 117 MECKLENB 803 - CHAS | 134.3929 | 333.7677 | 0 | 136.8981 | 0 | 331.5998 | 0 |
| 117 MECKLENB 901 - AVER | 16.61036 | 195.9365 | 0 | 13.68981 | 0 | 198.1511 | 0 |
| 117 MECKLENB 902 - BUFF. | 83.05181 | 302.6881 | 0 | 80.61777 | 3.083333 | 304.6405 | 0 |
| 117 MECKLENB 903 - CLAR | 309.5567 | 874.2821 | 0 | 299.6547 | 3.083333 | 889.658 | 0 |
| 119 MIDDLESE) 101 - SALU | 106.2239 | 211.9181 | 3 | 114.7927 | 2.764706 | 207.2271 | 0 |
| 119 MIDDLESE) 102 - URBA | 258.4782 | 457.7974 | 0 | 269.0453 | 2.764706 | 452.3782 | 0 |
| 119 MIDDLESE) 201 - NEW | 375.3245 | 1003.894 | 0 | 380.2507 | 2.764706 | 1007.693 | 0 |
| 119 MIDDLESE) 302 - CHUR | 428.4364 | 596.3592 | 0 | 401.7743 | 24.88235 | 601.365 | 0 |
| 119 MIDDLESE) 401- HARN | 357.6205 | 567.8317 | 0 | 344.378 | 11.05882 | 566.15 | 1 |
| 119 MIDDLESE) 501 - WILTI | 339.9165 | 876.1997 | 0 | 349.7589 | 2.764706 | 868.1869 | 2 |
| 121 MONTGON 101 - PREC | 1018.228 | 841.4673 | 1.423077 | 996.8847 | 24.52033 | 847.9449 | 1.235294 |
| 121 MONTGON 102 - PREC | 905.5025 | 269.2695 | 1.423077 | 907.6114 | 24.52033 | 265.151 | . 235294 |
| 121 MONTGON 103 - PREC | 1363.798 | 600.4711 | 5.692308 | 1342.819 | 22.9878 | 617.7884 | 0 |
| 121 MONTGON 201 - PREC | 118.2697 | 142.7129 | 0 | 117.1711 | 3.065041 | 142.6701 | 0 |
| 121 MONTGON 202 - PREC | 846.3676 | 990.9119 | 2.846154 | 803.4593 | 27.58537 | 1013.496 | 1.235294 |
| 121 MONTGON 203 - PREC | 654.1793 | 837.4283 | 0 | 669.5494 | 10.72764 | 825.0638 | 1.235294 |
| 121 MONTGON 204 - PREC | 1210.417 | 1223.83 | 2.846154 | 1195.89 | 26.05285 | 1240.961 | 1.235294 |
| 121 MONTGON 301 - PREC | 397.3123 | 1300.572 | 0 | 394.2902 | 9.195122 | 1302.874 | 1.235294 |
| 121 MONTGON 302 - PREC | 548.8454 | 978.7948 | 1.423077 | 522.6205 | 19.92276 | 1001.383 | 1.235294 |
| 121 MONTGON 303 - PREC | 214.3639 | 538.5391 | 0 | 202.7247 | 7.662602 | 543.7615 | 0 |
| 121 MONTGON 304 - PREC | 583.9567 | 1003.029 | 2.846154 | 539.3593 | 22.9878 | 1026.955 | 0 |
| 121 MONTGON 401 - PREC | 345.5693 | 651.6323 | 0 | 323.6156 | 15.3252 | 663.5505 | 0 |
| 121 MONTGON 402 - PREC | 395.4643 | 1305.957 | 0 | 386.8508 | 7.662602 | 1312.296 | 0 |
| 121 MONTGON 403 - PREC | 312.306 | 1067.654 | 0 | 295.7177 | 7.662602 | 1075.409 | 2.470588 |
| 121 MONTGON 404 - PREC | 201.4281 | 659.7104 | 0 | 193.4254 | 7.662602 | 660.8586 | 2.470588 |
| 121 MONTGON 405 - PREC | 630.1558 | 1011.107 | 0 | 623.0529 | 16.85772 | 1013.496 | 1.235294 |
| 121 MONTGON 501 - PREC | 744.7296 | 797.0378 | 5.692308 | 708.6065 | 18.39024 | 822.3719 | 2.470588 |
| 121 MONTGON 502 - PREC | 495.2544 | 828.0038 | 1.423077 | 487.2832 | 9.195122 | 830.4476 | 0 |
| 121 MONTGON 503 - PREC | 354.8091 | 76.74182 | 1.423077 | 351.5134 | 15.3252 | 75.37288 | 1.235294 |


| MONTGON 601 - PREC | 1066.275 | 446.9874 | 1.423077 | 1050.821 | 15.3252 | 467.0427 | 1.235294 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 121 MONTGON 602 - PREC | 1132.802 | 389.0945 | 5.692308 | 1121.495 | 15.3252 | 406.4752 | 1.235294 |
| 121 MONTGON 603 - PREC | 83.15839 | 68.66373 | 0 | 74.39438 | 9.195122 | 69.9891 | 0 |
| 121 MONTGON 701 - PREC | 1385.973 | 580.2759 | 2.846154 | 1353.978 | 24.52033 | 601.6371 | 0 |
| 121 MONTGON 702 - PREC | 694.8345 | 218.1083 | 0 | 691.8677 | 15.3252 | 214.0051 | 0 |
| 125 NELSON CC 101 - ROCK | 964.0768 | 833.7878 | 2 | 937.1729 | 21.33333 | 859.8572 | 3.3 |
| 125 NELSON CC 201 - LOVIT | 294.9787 | 478.2577 | 0 | 289.2057 | 4.923077 | 478.3979 | . 1 |
| 125 NELSON CC 202 - SCHU | 239.2206 | 330.2255 | 1 | 230.6324 | 8.205128 | 331.1017 | . 1 |
| 125 NELSON CC 301 - SHIPN | 336.3477 | 607.3113 | 1 | 314.8315 | 4.923077 | 621.9172 | . 1 |
| 125 NELSON CC 302 - GLAD | 66.55008 | 154.3583 | 0 | 60.40372 | 0 | 156.1088 | 2.2 |
| 125 NELSON CC 401 - ROSE | 365.1261 | 800.8918 | 0 | 338.6269 | 8.205128 | 810.7585 | 0 |
| 125 NELSON CC 402 - MON | 62.95278 | 102.4838 | 0 | 60.40372 | 1.641026 | 101.9743 | . 1 |
| 125 NELSON CC 501 - FABE | 269.7976 | 273.2901 | 0 | 261.7495 | 3.282051 | 282.003 | 0 |
| 125 NELSON CC 502 - NELL | 866.9497 | 593.3938 | 0 | 852.9737 | 11.48718 | 616.8815 | . 1 |
| 127 NEW KENT 102 - TUNS | 95.75229 | 505.7038 | 0 | 92.90265 | 3.714286 | 506.6472 | 0 |
| 127 NEW KENT 103 - SOUT | 365.4546 | 1406.41 | 0 | 360.3982 | 7.428571 | 1404.28 | 0 |
| 127 NEW KENT 201 - QUIN | 577.7055 | 1085.628 | 3.333333 | 583.0442 | 3.714286 | 1083.697 | 2 |
| 127 NEW KENT 202 - KENT | 266.5106 | 871.773 | 0 | 269.0973 | 3.714286 | 871.232 | 2 |
| 127 NEW KENT 301 - WATr | 499.5078 | 714.5268 | 0 | 504.5575 | 3.714286 | 710.3118 | 0 |
| 127 NEW KENT 302 - CUMI | 386.2009 | 890.6426 | 0 | 366.8053 | 12.38095 | 898.8901 | 0 |
| 127 NEW KENT 401 - PROV | 564.9385 | 1035.309 | 1.666667 | 549.4071 | 6.190476 | 1044.724 | 0 |
| 127 NEW KENT 403 - MOU | 193.1005 | 464.1908 | 0 | 192.2124 | 4.952381 | 460.1312 | 2 |
| 127 NEW KENT 501 - ELTH, | 260.1271 | 602.5675 | 0 | 254.6814 | 2.47619 | 605.9651 | 0 |
| 127 NEW KENT 502 - CHICl | 269.7023 | 986.2483 | 0 | 265.8938 | 3.714286 | 983.1218 | 0 |
| 131 NORTHAM 101 - PREC | 582.0972 | 814.9208 | 0 | 596.4648 | 1.6875 | 807.2543 | 0 |
| 131 NORTHAM 201 - PREC | 545.5893 | 335.8275 | 1.5 | 539.2696 | 8.4375 | 346.185 | 1 |
| 131 NORTHAM 301 - PREC | 586.1536 | 292.6937 | 0 | 584.2087 | 8.4375 | 295.6358 | 0 |
| 131 NORTHAM 401 - PREC | 403.6144 | 551.4965 | 1.5 | 392.196 | 6.75 | 560.6358 | 1 |
| 131 NORTHAM 501 - PREC | 470.5455 | 630.0616 | 0 | 471.8609 | 1.6875 | 640.289 | 1 |
| 133 NORTHUM 101-1A | 350.9382 | 683.6956 | 1 | 341.7928 | 5.103448 | 688.6596 | 0 |
| 133 NORTHUM 201-2A | 387.5392 | 836.6476 | 1 | 374.4482 | 10.2069 | 844.0651 | 0 |
| 133 NORTHUM 301-3A | 583.4618 | 289.0793 | 0 | 581.2655 | 7.655172 | 292.528 | 0 |
| 133 NORTHUM 401-4A | 551.1668 | 1177.731 | 0 | 563.8493 | 7.655172 | 1171.635 | 0 |
| 133 NORTHUM 501-5A | 462.894 | 1157.847 | 1 | 450.6441 | 6.37931 | 1170.112 | 0 |
| 135 NOTTOWA 101 - PREC | 197.343 | 460.0763 | 3 | 180.6163 | 3.428571 | 473.7495 | 0 |
| 135 NOTTOWA 102 - PREC | 153.2932 | 349.0738 | 0 | 146.6389 | 0 | 357.1342 | 0 |
| 135 NOTTOWA 201 - PREC | 262.5367 | 538.9466 | 1.5 | 253.9357 | 6.857143 | 543.7186 | 1.5 |
| 135 NOTTOWA 202 - PREC | 89.86154 | 290.6514 | 0 | 80.47259 | 0 | 298.8266 | 0 |
| 135 NOTTOWA 301 - PREC | 274.8706 | 239.5318 | 0 | 275.3951 | 3.428571 | 243.4343 | 0 |
| 135 NOTTOWA 302 - PREC | 107.4814 | 277.5064 | 0 | 107.2968 | 0 | 278.4189 | 0 |
| 135 NOTTOWA 401 - PREC | 320.6824 | 132.9109 | 0 | 327.2552 | 1.714286 | 131.1922 | 0 |
| 135 NOTTOWA 402 - PREC | 156.8172 | 543.3282 | 0 | 150.2155 | 1.714286 | 548.0917 | 0 |
| 135 NOTTOWA 501 - PREC | 384.114 | 611.9746 | 1.5 | 370.1739 | 6.857143 | 622.4339 | 1.5 |
| 137 ORANGE C101-ONE ' | 613.134 | 1055.023 | 1.5 | 574.448 | 2.857143 | 1098.73 | 1.285714 |
| 137 ORANGE C102-ONE I | 616.4216 | 923.1451 | 0 | 599.3518 | 4.285714 | 945.6793 | 0 |
| 137 ORANGE Cl201-TWO | 336.9771 | 1157.042 | 1.5 | 317.1086 | 7.142857 | 1179.61 | 1.285714 |
| 137 ORANGE CI202-TWO | 338.6209 | 1137.136 | 0 | 332.0509 | 7.142857 | 1138.548 | 0 |


| 137 ORANGE C1301-THRE | 627.9281 | 854.7179 | 0 | 610.9736 | 8.571429 | 873.509 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 137 ORANGE Cl302-THRE | 172.598 | 419.2721 | 1.5 | 159.3844 | 2.857143 | 429.2886 | 0 |
| 137 ORANGE Cl401-FOUR | 348.4837 | 1373.521 | 1.5 | 342.0124 | 2.857143 | 1384.922 | 1.285714 |
| 137 ORANGE Cl 402 - FOUR | 754.5 | 1098.568 | 0 | 727.1914 | 18.57143 | 1117.395 | 1.285714 |
| 137 ORANGE C1501-FIVE | 813.6765 | 1169.483 | 0 | 785.3003 | 12.85714 | 1192.054 | 1.285714 |
| 137 ORANGE CI502-FIVE I | 910.6601 | 1305.093 | 3 | 903.1784 | 12.85714 | 1310.264 | 2.571429 |
| 139 PAGE COUI 101 - WEST | 471.1036 | 1162.217 | 0 | 455.281 | 5.25 | 1191.922 | 1.25 |
| 139 PAGE COUI 201 - EAST | 544.5785 | 1325.226 | 1.6 | 528.492 | 8.75 | 1363.44 | 0 |
| 139 PAGE COUI 301 - MARt | 421.4 | 1790.611 | 3.2 | 388.9335 | 1.75 | 1830.763 | 1.25 |
| 139 PAGE COUI 401 - NEWI | 267.9672 | 1375 | 0 | 258.5264 | 7 | 1396.998 | 0 |
| 139 PAGE COUI 501 - SHEN | 401.9508 | 1771.946 | 3.2 | 363.7672 | 5.25 | 1810.877 | 2.5 |
| 141 PATRICK C( 101 - ARAR | 101.0277 | 397.1415 | 0 | 96.66449 | 2.56 | 404.2927 | 0 |
| 141 PATRICK C( 102 - CLAU | 76.97349 | 397.1415 | 0 | 77.00392 | 0 | 397.9953 | 0 |
| 141 PATRICK C( 103 - WILLI | 78.57711 | 457.6583 | 0 | 81.91906 | 0 | 460.9693 | 0 |
| 141 PATRICK C( 201 - DRY F | 38.48675 | 248.371 | 0 | 39.32115 | 0 | 253.1553 | 0 |
| 141 PATRICK C( 202 - PATR | 128.2892 | 559.7804 | 0 | 108.1332 | 3.84 | 580.6198 | 2 |
| 141 PATRICK C( 203 -RUSS | 113.8566 | 455.1367 | 0 | 113.0483 | 5.12 | 455.9314 | 0 |
| 141 PATRICK C( 301 - CRITZ | 186.0193 | 637.9479 | 0 | 172.03 | 3.84 | 652.4101 | 0 |
| 141 PATRICK C( 302 - LIBER | 70.55904 | 480.3521 | 1.5 | 63.89687 | 2.56 | 487.4183 | 2 |
| 141 PATRICK C( 401 - MEAI | 186.0193 | 516.9143 | 0 | 165.4765 | 3.84 | 531.5001 | 0 |
| 141 PATRICK C( 402 - STUA | 104.2349 | 457.6583 | 0 | 98.30287 | 2.56 | 459.7098 | 0 |
| 141 PATRICK C( 501 - STUA | 48.10843 | 237.0241 | 0 | 49.15144 | 2.56 | 238.0415 | 0 |
| 141 PATRICK C( 502 - ELAN | 104.2349 | 429.9214 | 1.5 | 101.5796 | 2.56 | 435.7797 | 2 |
| 141 PATRICK C( $503-$ WOO | 94.61325 | 579.9526 | 0 | 88.47258 | 2.56 | 588.1767 | 0 |
| 143 PITTSYLVAI 103-TWIN | 327.5577 | 1781.693 | 0 | 315.3109 | 6.666667 | 1793.557 | 1.2 |
| 143 PITTSYLVAI 105 - CHAT | 131.8739 | 400.7602 | 0 | 124.9881 | 2.666667 | 407.2969 | 0 |
| 143 PITTSYLVAI 106-TUNS | 161.6519 | 713.4015 | 1.222222 | 154.8148 | 4 | 717.9061 | 1.2 |
| 143 PITTSYLVAI 108 - WEST | 127.6199 | 405.5886 | 0 | 127.8287 | 2.666667 | 402.4625 | 0 |
| 143 PITTSYLVAI 201 - CALL | 148.8899 | 701.3304 | 0 | 143.4522 | 2.666667 | 703.403 | 0 |
| 143 PITTSYLVAI 202-BEARS | 70.89993 | 161.7526 | 0 | 69.59564 | 0 | 163.1605 | 0 |
| 143 PITTSYLVAI 204 - SAND | 120.5299 | 462.3228 | 0 | 113.6255 | 0 | 472.5611 | 0 |
| 143 PITTSYLVAI 206 -CLIM | 106.3499 | 470.7725 | 0 | 95.16138 | 0 | 478.6041 | 0 |
| 143 PITTSYLVAI 207 -GRET | 296.3617 | 1092.434 | 0 | 281.2232 | 5.333333 | 1109.491 | 1.2 |
| 143 PItTSYLVAI 301 - CENT | 297.7797 | 229.3507 | 0 | 294.0061 | 5.333333 | 233.2591 | 0 |
| 143 PITTSYLVAI 305 -RICEV | 316.2137 | 304.1915 | 0 | 308.2093 | 2.666667 | 305.7748 | 0 |
| 143 PITTSYLVAI307-EAST | 524.6595 | 216.0725 | 0 | 528.3587 | 0 | 219.9645 | 0 |
| 143 PITTSYLVAI 308 - MT A | 198.5198 | 183.4806 | 0 | 200.265 | 4 | 182.498 | 0 |
| 143 PITTSYLVAI309-EAST | 182.9218 | 243.836 | 1.222222 | 178.9602 | 2.666667 | 245.345 | 1.2 |
| 143 PITTSYLVAI 402 - KEELI | 114.8579 | 731.5081 | 0 | 107.9443 | 4 | 736.0351 | 0 |
| 143 PITTSYLVAI 404 - KENT | 287.8537 | 1271.086 | 1.222222 | 286.9045 | 4 | 1277.486 | 1.2 |
| 143 PITTSYLVAI 405 -RING | 368.6797 | 1297.642 | 0 | 357.9204 | 1.333333 | 1313.744 | 0 |
| 143 PITTSYLVAI 501 - HURT | 350.2457 | 939.1309 | 0 | 340.8766 | 5.333333 | 943.9136 | 1.2 |
| 143 PITTSYLVAI502-MOTI | 327.5577 | 1115.369 | 3.666667 | 329.514 | 4 | 1111.908 | 2.4 |
| 143 PITTSYLVAI 503 -RENA | 163.0698 | 614.4185 | 0 | 156.2351 | 5.333333 | 617.5926 | 0 |
| 143 PITTSYLVAI603-STON | 215.5358 | 829.2839 | 0 | 213.0479 | 2.666667 | 836.3485 | 0 |
| 143 PITTSYLVAI 604 -SWAr | 225.4618 | 609.5901 | 1.222222 | 217.3088 | 1.333333 | 618.8012 | 1.2 |
| 143 PITTSYLVAI 605 - WHIT | 168.7418 | 659.0815 | 1.222222 | 166.1773 | 1.333333 | 663.5193 | 1.2 |

143 PITTSYLVAI 606 - BROS 372.9337 143 PITTSYLVAI 607 - DRY F 76.57193 143 PITTSYLVAI 702-BACH 165.9058 143 PITTSYLVAI 703 -FERR' 69.48194 143 PITTSYLVAI 704 - MT H 399.8756 143 PITTSYLVAI 705 - MT C 157.3979 145 POWHATAI 101 -SUBL 406.8006 145 POWHATAI 102 - MAN، 384.6115 145 POWHATAI 103 - FLAT 240.3822 145 POWHATAI 201 - POW 257.024 145 POWHATAI 202 - GRAC 403.1024 145 POWHATAI 301 - BETH 330.9878 145 POWHATAI 302 -LEE'S 367.9696 145 POWHATAI401-POW 323.5914 145 POWHATAI 402 - MT ZI 177.513 145 POWHATAI501-SMITI 417.8951 145 POWHATAI 502 - PINE 329.1387 145 POWHATAI503-TOBA 134.9838 147 PRINCE ED 101 - FARN 423.4186 147 PRINCE ED 201 - LOCK 442.0988 147 PRINCE ED 301 -LEIGF 311.3372 147 PRINCE ED 302 - MT P 221.0494 147 PRINCE ED 401 - HAMI 345.5843 147 PRINCE ED 501 - DARL 203.9259 147 PRINCE ED' 502 - BUFF، 116.7515 147 PRINCE ED 601 - PROS 529.2733 147 PRINCE ED 701 - WEST 375.1613 147 PRINCE ED' 801 -CENT 244.3997 149 PRINCE GEI 101 - RICH/ 299.4595 149 PRINCE GEI 102 - TEMF 507.8553 149 PRINCE GEI 103 - UNIO 588.4116 149 PRINCE GEI 104 - RIVES 474.582 149 PRINCE GEI 105 - HARR 96.31738 149 PRINCE GEI 201 - BLAN 530.6212 149 PRINCE GEI 202 - BLAC 455.3185 149 PRINCE GEI 203 - BRAN 189.1323 149 PRINCE GEI 204 - COUF 812.5684 149 PRINCE GEI 205 - JEFFE 691.7339 153 PRINCE WI 101 - BREN 513.3697 153 PRINCE WI 102 - CEDA 1383.637 153 PRINCE WI 103-GLEN 988.0609 153 PRINCE WI 104 - NOKE 815.7656 153 PRINCE WI 105 - LIME! 1304.522 153 PRINCE WI 106-WEST 634.6797 153 PRINCE WI 107 - MAR؟ 1425.832 153 PRINCE WI 108 - VICTC 1691.307 153 PRINCE WI 109 - CHRIS 1221.89

| 505.7787 | 1.222222 | 374.9643 | 5.333333 | 499.1502 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 324.7123 | 0 | 73.8566 | 0 | 327.5296 | 0 |
| 1058.635 | 0 | 157.6554 | 1.333333 | 1061.147 | 0 |
| 193.1375 | 0 | 63.91436 | 0 | 199.4184 | 0 |
| 1152.789 | 0 | 394.8487 | 1.333333 | 1163.878 | 0 |
| 721.8512 | 0 | 142.0319 | 0 | 737.2437 | 0 |
| 1279.109 | 0 | 408.0372 | 3.782609 | 1274.809 | 1.428571 |
| 988.5349 | 2.857143 | 393.0634 | 1.26087 | 986.3379 | 2.857143 |
| 824.9959 | 0 | 228.3511 | 5.043478 | 830.447 | 0 |
| 1216.321 | 1.428571 | 248.9401 | 3.782609 | 1223.817 | 0 |
| 1587.205 | 0 | 400.5503 | 10.08696 | 1588.048 | 0 |
| 1011.898 | 1.428571 | 333.168 | 2.521739 | 1011.106 | 2.857143 |
| 1136.012 | 0 | 366.8592 | 3.782609 | 1136.401 | 0 |
| 1628.089 | 1.428571 | 305.0921 | 10.08696 | 1624.471 | 1.428571 |
| 743.2264 | 0 | 181.5578 | 1.26087 | 740.1176 | 0 |
| 868.801 | 2.857143 | 408.0372 | 7.565217 | 890.1809 | 1.428571 |
| 627.873 | 0 | 327.5528 | 5.043478 | 623.5637 | 0 |
| 643.9349 | 0 | 119.7907 | 3.782609 | 652.7022 | 0 |
| 397.477 | 3.6 | 419.1051 | 6.26087 | 407.3129 | 0 |
| 684.3974 | 3.6 | 436.3716 | 3.130435 | 686.6878 | 1 |
| 410.6384 | 0 | 306.088 | 1.565217 | 413.8404 | 0 |
| 217.1646 | 1.8 | 226.0342 | 0 | 212.7949 | 2 |
| 484.3428 | 0 | 346.8998 | 6.26087 | 484.3368 | 0 |
| 446.1745 | 0 | 210.3374 | 0 | 450.3941 | 0 |
| 201.3708 | 0 | 117.7262 | 0 | 201.0455 | 0 |
| 579.1055 | 0 | 528.9829 | 6.26087 | 587.4705 | 0 |
| 336.9341 | 0 | 379.8631 | 6.26087 | 332.9 | 0 |
| 97.39502 | 0 | 238.5917 | 6.26087 | 99.21724 | 0 |
| 647.9938 | 0 | 293.5326 | 1.615385 | 652.3163 | 3.25 |
| 2034.227 | 0 | 497.4236 | 11.30769 | 2039.595 | 0 |
| 971.9906 | 5 | 581.7922 | 8.076923 | 975.5228 | 3.25 |
| 470.4612 | 0 | 462.27 | 8.076923 | 473.741 | 0 |
| 523.721 | 0 | 89.64171 | 1.615385 | 528.3467 | 0 |
| 1142.126 | 0 | 529.0618 | 8.076923 | 1137.864 | 1.625 |
| 1043.004 | 0 | 462.27 | 16.15385 | 1033.08 | 1.625 |
| 513.3649 | 0 | 179.2834 | 4.846154 | 520.9675 | 0 |
| 784.102 | 0 | 782.1678 | 12.92308 | 802.8508 | 1.625 |
| 395.0099 | 0 | 699.5568 | 11.30769 | 383.7155 | 1.625 |
| 1473.334 | 1.282051 | 518.84 | 7.770492 | 1470.549 | 0 |
| 1287.534 | 5.128205 | 1371.22 | 17.09508 | 1302.651 | 1.37931 |
| 943.5142 | 2.564103 | 968.8543 | 10.87869 | 962.5146 | 1.37931 |
| 1418.174 | 1.282051 | 802.9666 | 7.770492 | 1422.785 | 0 |
| 1290.437 | 1.282051 | 1295.335 | 10.87869 | 1293.967 | 0 |
| 344.0198 | 0 | 619.4314 | 6.216393 | 357.5054 | 0 |
| 1184.473 | 1.282051 | 1392.397 | 17.09508 | 1215.808 | 0 |
| 1228.02 | 1.282051 | 1683.583 | 26.41967 | 1223.045 | 0 |
| 1013.189 | 3.846154 | 1222.98 | 12.43279 | 1005.936 | 5.517241 |

153 PRINCE WI 110 - BUCK 942.5139 153 PRINCE WI 111 - BRIST 576.6619 153 PRINCE WI 112 - BURK 1516.059 153 PRINCE WI 114 - PINEY 872.0253 153 PRINCE WI 201 - SAUN 959.8318 153 PRINCE WI 202 - MAR〔 930.0431 153 PRINCE WI 203 - BENN 919.4944 153 PRINCE WI 204 - ELLIS 722.5854 153 PRINCE WI 205 - BUCK 1368.537 153 PRINCE WI 206 -COLE 678.6326 153 PRINCE WI 207 - SPRIC 1311.554 153 PRINCE WI 208 - HYLTI 636.4378 153 PRINCE WI 209 - INDEI 478.2074 153 PRINCE WI 210 - PENN 825.6796 153 PRINCE WI 211 - SIGN/ 1228.058 153 PRINCE WI 212 - YORK 1527.142 153 PRINCE WI 213 - SARA 743.6828 153 PRINCE WI 214 - LUCA 481.7236 153 PRINCE WI 215 -ROSA 1026.086 153 PRINCE WI 301 - DUM 671.0328 153 PRINCE WI 302 - POTC 1058.363 153 PRINCE WI 303 - GRAF 599.6825 153 PRINCE WI 304-QUAr 91.422 153 PRINCE WI 305 -PATT 968.7216 153 PRINCE WI 306 - WASF 933.5593 153 PRINCE WI 307 - HENC 896.6389 153 PRINCE WI 308-MON 648.7446 153 PRINCE WI 309 - ASHL 863.2347 153 PRINCE WI 310 - FORE 921.2525 153 PRINCE WI 311 - SWAr 2300.199 153 PRINCE WI 312-TRIAR 1096.019 153 PRINCE WI 313 - CARD 965.2054 153 PRINCE WI 314 - CABII 821.0399 153 PRINCE WI 315 - WILLI 657.4423 153 PRINCE WI 401 - EVER 840.608 153 PRINCE WI 402 - BATT 804.3554 153 PRINCE WI 403 - BULL 938.037 153 PRINCE WI 404 - BEN L 852.686 153 PRINCE WI 405 - UNIT 1065.418 153 PRINCE WI 406 - ALVE' 258.3 153 PRINCE WI 407 - HERI 892.7212 153 PRINCE WI 408 - SUDL 666.3258 153 PRINCE WI 409 - TYLEF 1364.006 153 PRINCE WI 410 - MOU 897.2528 153 PRINCE WI 411 - MULI 1107.613 153 PRINCE WI 412 - CATH 536.9922 153 PRINCE WI 413 -REAG 1228.0581499 .283
832.3259 551.5929 1343.375 899.9673 537.0014 1084.315 989.9641 629.9771 1269.855 933.3532 892.7095 908.6767 939.1595 955.655 1118.682
992.4079 348.3745 776.5847 509.9376 287.7302 250.6956 247.8468
119.0279
757.7144
660.4599
730.1348
551.5929
669.1693
461.5962
803.3654
507.1578
451.4352
551.5929
128.1966
1424.586
1389.015
894.5899
442.7259
605.3006
391.2719
1230.728
541.432
1047.542
1111.568
464.4993
1006.636
1499.283

| 1.75 | 933.7124 | 6.623656 | 838.2854 | 2.181818 |
| ---: | ---: | ---: | ---: | ---: |
| 1.282051 | 573.5476 | 6.216393 | 548.5609 | 1.37931 |
| 5.25 | 1533.06 | 14.69959 | 1323.466 | 4.363636 |
| 0 | 877.0866 | 9.32459 | 891.5924 | 0 |
| 2.6 | 954.4139 | 15.09375 | 531.3606 | 4.304348 |
| 1.282051 | 917.6762 | 10.87869 | 1086.99 | 0 |
| 1.282051 | 898.2638 | 17.09508 | 997.2519 | 1.37931 |
| 1.282051 | 704.14 | 3.108197 | 651.3257 | 1.37931 |
| 0 | 1361.449 | 9.935484 | 1278.193 | 2.181818 |
| 0 | 654.7266 | 7.770492 | 948.0407 | 0 |
| 1.282051 | 1297.1 | 21.75738 | 893.0398 | 1.37931 |
| 2.564103 | 631.7847 | 4.662295 | 911.8559 | 2.758621 |
| 1.282051 | 464.1324 | 10.87869 | 949.4881 | 1.37931 |
| 3.846154 | 792.119 | 10.87869 | 972.7942 | 0 |
| 1.75 | 1206.116 | 19.87097 | 1125.732 | 2.181818 |
| 3.5 | 1514.498 | 19.87097 | 998.0899 | 4.363636 |
| 2.564103 | 723.5524 | 12.43279 | 358.9528 | 2.758621 |
| 1.282051 | 487.0743 | 10.87869 | 768.5643 | 1.37931 |
| 0 | 998.8052 | 15.09375 | 517.2286 | 1.434783 |
| 0 | 674.4069 | 12.075 | 291.1178 | 0 |
| 1.3 | 1055.148 | 19.62188 | 245.8956 | 1.434783 |
| 0 | 602.6978 | 6.0375 | 240.2428 | 0 |
| 0 | 86.47333 | 3.108197 | 123.0282 | 0 |
| 1.282051 | 975.9133 | 4.662295 | 752.643 | 1.37931 |
| 0 | 912.3819 | 23.31148 | 673.0365 | 0 |
| 2.564103 | 896.499 | 6.216393 | 729.4847 | 1.37931 |
| 1.282051 | 663.5505 | 18.64918 | 528.2975 | 2.758621 |
| 0 | 840.0266 | 12.43279 | 677.3787 | 2.758621 |
| 1.282051 | 919.4409 | 7.770492 | 460.2701 | 0 |
| 1.3 | 2279.325 | 33.20625 | 811.1728 | 0 |
| 0 | 1070.358 | 13.67382 | 521.9701 | 0 |
| 1.282051 | 938.8533 | 7.770492 | 468.9545 | 1.37931 |
| 0 | 832.9676 | 6.216393 | 545.6662 | 0 |
| 0 | 633.4303 | 10.56563 | 137.0797 | 0 |
| 1.75 | 804.0774 | 18.21505 | 1441.291 | 0 |
| 0 | 788.0872 | 6.623656 | 1400.517 | 0 |
| 0 | 957.1262 | 6.623656 | 875.7663 | 0 |
| 1.282051 | 1085.329 | 24.86557 | 474.744 | 0 |
| 1.75 | 532.2444 | 4.967742 | 1015.818 | 0 |
| 0 | 1210.685 | 11.5914 | 1512.204 | 2.181818 |
| 0 | 1318.047 | 8.27957 | 1081.412 | 2.181818 |
| 1.282051 | 825.9085 | 10.87869 | 457.3753 | 1.37931 |
| 1.282051 | 1035.915 | 15.54098 | 625.2726 | 0 |
| 0 | 251.2742 | 3.311828 | 395.3358 | 0 |
| 1.75 | 877.1753 | 8.27957 | 1248.056 | 2.181818 |
| 0 | 667.08 | 10.87869 | 536.9818 |  |
| 0 |  |  |  |  |

153 PRINCE WI 501 - LAKE 1030.256 153 PRINCE WI 502 - OCCC 686.3222 153 PRINCE WI 503-OLD E 873.1921 153 PRINCE WI 504 - ROCK 733.8891 153 PRINCE WI 505 - MOH 1137.501 153 PRINCE WI 506-BETH 1007.399 153 PRINCE WI 507-CHINI 927.5543 153 PRINCE WI 508 - SPRIN 854.4441 153 PRINCE WI 509 - MC C 893.1226 153 PRINCE WI 510 - YATE! 817.9501 153 PRINCE WI 511 - WEST 1211.342 153 PRINCE WI 512 - YORK 1114.424 153 PRINCE WI 513 - LYNN 869.7945 153 PRINCE WI 514 - ANTII 1241.835 153 PRINCE WI 601 - DALE 895.2767 153 PRINCE WI 602 - BEVIL 1525.538 153 PRINCE WI 603 - HAMI 847.7098 153 PRINCE WI 604 - GIDEI 830.7217 153 PRINCE WI 605 - MINN 691.4186 153 PRINCE WI 606 - BEL A 715.2021 153 PRINCE WI 607 - KERR' 1158.593 153 PRINCE WI 608 - ENTE 915.6625 153 PRINCE WI 609 - KING 1291.656 153 PRINCE WI 610 - FITZG 1216.353 153 PRINCE WI 611 - NEAB 800.143 153 PRINCE WI 701 - BELM 902.072 153 PRINCE WI 702 - LIBRA 1105.93 153 PRINCE WI 703 - LYNN 538.5251 153 PRINCE WI 704 - PORT 1007.399 153 PRINCE WI 705 - POTC 524.9345 153 PRINCE WI 706 - RIPPC 1004.001 153 PRINCE WI 707 - KILBY 750.8773 153 PRINCE WI 708 - RIVEF 1243.534 153 PRINCE WI 709 - FREEI 1204.461 153 PRINCE WI 710 - POW 1122.918 153 PRINCE WI 711 - GRAY 978.5188 153 PRINCE WI 712 - LEESY 1034.58 155 PULASKI CC 101 - BELSF 197.3377 155 PULASKI C( 102 -NEW 688.6682 155 PULASKI C( 103 - WEST 225.5288 155 PULASKI CC 201 - DRAP 229.5561 155 PULASKI C( 202 - SOUT 56.3822 155 PULASKI CC 203 - NEWI 451.0576 155 PULASKI CC 301 - DUBL 310.1021 155 PULASKI CC 302 -HIWA 84.57329 155 PULASKI C( 304 - SNOV 195.324 155 PULASKI CC 401 - MAS§ 348.3614
656.1052
407.3803
403.1071
454.3858
738.8442
670.8956
538.4258
381.7603
1023.35
1020.864
824.4862
323.3403
668.0468
712.2034
303.3986
542.699
226.4807
337.5844
462.9322
480.0251
501.3912
445.8393
646.8979
488.5715
358.9505
638.1342
363.2237
176.6264
273.4861
384.5898
538.4258
417.3512
334.7356
304.8231
240.7247
353.2529
581.158
505.9647
1106.882
674.1674
862.7172
126.152
1140.794
1068.901
291.6418
751.4864
1227.609

| 0 | 1028.856 | 12.43279 | 654.2204 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 3.9 | 688.0658 | 12.075 | 402.76 | 0 |
| 0 | 851.9723 | 19.62188 | 408.4128 | 1.434783 |
| 1.3 | 727.3351 | 7.546875 | 455.0481 | 2.869565 |
| 0 | 1129.448 | 20.20328 | 729.4847 | 2.758621 |
| 2.6 | 986.8537 | 16.60313 | 678.3326 | 0 |
| 1.3 | 927.0961 | 6.0375 | 541.2529 | 0 |
| 1.282051 | 838.2619 | 10.87869 | 390.7954 | 0 |
| 1.282051 | 900.0285 | 10.87869 | 1014.621 | 4.137931 |
| 3.5 | 815.4989 | 9.935484 | 1017.591 | 2.181818 |
| 0 | 1210.627 | 18.64918 | 813.4334 | 0 |
| 1.3 | 1102.954 | 10.56563 | 333.5135 | 2.869565 |
| 1.3 | 867.3385 | 13.58438 | 665.6139 | 1.434783 |
| 2.6 | 1215.64 | 19.62188 | 722.1416 | 0 |
| 5.2 | 908.3152 | 6.0375 | 305.2497 | 1.434783 |
| 3.9 | 1480.281 | 24.15 | 572.3432 | 2.869565 |
| 0 | 841.7281 | 4.528125 | 234.59 | 1.434783 |
| 1.3 | 829.7766 | 4.528125 | 340.5795 | 0 |
| 6.5 | 669.2848 | 10.56563 | 477.6592 | 1.434783 |
| 3.9 | 698.31 | 7.546875 | 496.0307 | 1.434783 |
| 0 | 1140.516 | 21.13125 | 501.6835 | 0 |
| 1.3 | 880.9974 | 24.15 | 464.9405 | 0 |
| 2.6 | 1289.473 | 18.1125 | 641.8974 | 0 |
| 2.6 | 1201.981 | 15.09375 | 497.4439 | 1.434783 |
| 2.6 | 797.3368 | 10.56563 | 358.951 | 0 |
| 0 | 879.29 | 10.56563 | 648.6556 | 0 |
| 1.3 | 1099.539 | 18.1125 | 367.4302 | 0 |
| 0 | 529.2814 | 7.546875 | 182.3019 | 0 |
| 1.3 | 1002.22 | 9.05625 | 279.8122 | 0 |
| 1.3 | 520.7446 | 3.01875 | 392.8677 | 0 |
| 0 | 997.0978 | 7.546875 | 548.3189 | 1.434783 |
| 1.3 | 739.2866 | 7.546875 | 428.1975 | 0 |
| 1.3 | 1248.08 | 1.509375 | 336.3399 | 1.434783 |
| 5.2 | 1195.152 | 16.60313 | 310.9025 | 1.434783 |
| 1.3 | 1120.028 | 9.05625 | 236.0032 | 2.869565 |
| 1.3 | 945.8771 | 12.075 | 378.7357 | 0 |
| 1.3 | 1027.83 | 6.0375 | 589.3015 | 0 |
| 0 | 200.5087 | 3.591837 | 505.8241 | 0 |
| 4 | 682.5396 | 7.183673 | 1120.136 | 2.25 |
| 0 | 206.5847 | 5.387755 | 686.185 | 0 |
| 0 | 234.9394 | 3.591837 | 861.1215 | 0 |
| 0 | 54.68418 | 5.387755 | 122.0487 | 2.25 |
| 0 | 437.4734 | 7.183673 | 1147.258 | 0 |
| 0 | 287.5983 | 7.183673 | 1090.302 | 0 |
| 0 | 78.98826 | 1.795918 | 295.6291 | 0 |
| 2 | 186.3313 | 8.979592 | 752.6338 | 2.25 |
| 2 | 334.1811 | 14.36735 | 1238.116 | 2.25 |


| ALk | 124.8463 | 565.6495 | 0 | 119.4951 | 3.591837 | 569.5607 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 155 PULASKI CC501-ROBII | 481.2623 | 1233.034 | 0 | 453.6761 | 19.7551 | 1242.185 | 0 |
| 57 RAPPAHAN 101 - WASt | 375.5603 | 452.1965 | 0 | 379.0233 | 0 | 453.4971 | 0 |
| 157 RAPPAHAN 201 - AMIS | 287.1932 | 599.6784 | 3.333333 | 274.4651 | 5.181818 | 611.5524 | 1.666667 |
| 157 RAPPAHAN 301 - SPERI | 410.539 | 405.8799 | 0 | 401.4286 | 3.454545 | 417.0228 | 0 |
| 157 RAPPAHAN401-SCRA | 318.4899 | 454.6342 | 1.666667 | 306.206 | 6.909091 | 468.0868 | 3.333333 |
| 57 RAPPAHAN501-CHES | 88.36713 | 305.9335 | 0 | 78.4186 | 1.727273 | 312.4631 | 0 |
| 157 RAPPAHAN502-FLINT | 244.8506 | 237.6774 | 0 | 246.4585 | 1.727273 | 244.3778 | 0 |
| 159 RICHMONL 101 - PREC | 276.1542 | 258.417 | 0 | 272.3695 | 5.714286 | 257.5848 | 2 |
| 159 RICHMONL 201 - PREC | 152.7216 | 452.9723 | 0 | 144.8314 | 4.285714 | 455.9548 | 0 |
| 159 RICHMONL 301 - PREC | 165.2741 | 349.0115 | 0 | 166.448 | 0 | 350.8483 | 0 |
| 159 RICHMON[ 401 - PREC | 213.3919 | 576.2402 | 0 | 198.873 | 4.285714 | 586.2275 | 0 |
| 159 RICHMONL501-PREC | 169.4582 | 564.359 | 0 | 153.4781 | 5.714286 | 574.3846 | 0 |
| 161 ROANOKE 101-CATA | 138.8547 | 483.2351 | 0 | 133.1834 | 5.066667 | 480.4874 | 1.545455 |
| 161 ROANOKE -102-MASC | 125.786 | 437.5751 | 0 | 128.2507 | 5.066667 | 437.383 | 0 |
| 161 ROANOKE (103-GLEN | 488.4417 | 1222.674 | 0 | 470.2527 | 3.8 | 1239.886 | 0 |
| 161 ROANOKE (104-NORT | 380.6251 | 540.3101 | 8.166667 | 371.5983 | 5.066667 | 546.4118 | 0 |
| 161 ROANOKE (105-PETEI | 697.5405 | 1170.672 | 1.166667 | 688.9366 | 2.533333 | 1177.765 | 6.181818 |
| 161 ROANOKE (106-GREE | 398.5945 | 1118.67 | 1.166667 | 396.2619 | 5.066667 | 1128.321 | 3.090909 |
| 161 ROANOKE (107-BENN | 178.0607 | 555.5301 | 1.166667 | 184.1549 | 3.8 | 551.4829 | 0 |
| 161 ROANOKE (108-WILD | 290.778 | 728.0235 | 0 | 291.0305 | 8.866667 | 727.7039 | 0 |
| 161 ROANOKE 201 - PLAN | 494.0708 | 903.7361 | 0 | 485.0437 | 5.873874 | 915.2303 | . 25 |
| 161 ROANOKE 202 - BURL | 457.2577 | 580.4362 | 2.714286 | 451.6601 | 11.74775 | 585.6875 | 0 |
| 161 ROANOKE 203 - MOU | 732.3873 | 1523.269 | 0 | 722.6562 | 13.21622 | 1530.876 | 3.75 |
| 161 ROANOKE 204 - BOTE | 570.1209 | 955.0552 | 1.166667 | 542.5992 | 11.4 | 969.8493 | 3.090909 |
| 161 ROANOKE 205 - ORCF | 567.697 | 1541.314 | 2.714286 | 579.3032 | 10.27928 | 1533.872 | 2.5 |
| 161 ROANOKE 206 - HOLL | 284.8173 | 473.672 | 0 | 265.1049 | 1.468468 | 488.3226 | 0 |
| 161 ROANOKE 301 - BENT | 204.198 | 346.2551 | 1.166667 | 190.7318 | 6.333333 | 353.7097 | 3.090909 |
| 161 ROANOKE 302 -POAG | 680.0739 | 1402.971 | 0 | 695.1639 | 2.936937 | 1399.059 | . 25 |
| 61 ROANOKE 303 - WINE | 486.3206 | 578.9324 | 0 | 494.8624 | 2.936937 | 575.202 | 0 |
| 161 ROANOKE 304 - OAK 1 | 796.3258 | 1213.503 | 1.357143 | 777.641 | 5.873874 | 1223.802 | 2.5 |
| 161 ROANOKE 305 - CAST | 895.14 | 1240.57 | 4.071429 | 885.6466 | 14.68468 | 1247.769 | 1.25 |
| 161 ROANOKE 306 - GARS | 381.6939 | 517.2799 | 1.357143 | 382.9293 | 2.936937 | 522.7748 | 1.25 |
| 161 ROANOKE 401 - SOUT | 265.4419 | 723.2896 | 0 | 249.395 | 4.405405 | 732.4838 | 0 |
| 161 ROANOKE (402-BONS | 158.8777 | 338.3371 | 0 | 143.353 | 1.468468 | 352.0117 | 1.25 |
| 161 ROANOKE (403-NORT | 387.5065 | 884.1877 | 0 | 371.1468 | 11.74775 | 891.2636 | 0 |
| 161 ROANOKE (404-SOUT | 453.3826 | 917.2696 | 1.357143 | 451.6601 | 11.74775 | 919.7241 | 0 |
| 161 ROANOKE (405-NORT | 275.1296 | 911.2547 | 0 | 263.1411 | 2.936937 | 921.222 | 1.25 |
| 161 ROANOKE (406-MOU | 486.3206 | 1415.001 | 0 | 469.3338 | 7.342342 | 1438.005 | 0 |
| 161 ROANOKE 1501-COTT | 470.8204 | 816.5203 | 0 | 479.1525 | 0 | 817.8654 | 1.25 |
| 161 ROANOKE 1502-PENN | 393.3191 | 643.5924 | 0 | 398.6392 | 10.27928 | 635.1189 | 0 |
| 161 ROANOKE 503 - CAVE | 552.1967 | 783.4384 | 0 | 553.7746 | 10.27928 | 786.409 | 0 |
| 161 ROANOKE 504 - OGDE | 550.2592 | 577.4287 | 2.714286 | 526.2823 | 13.21622 | 587.1854 | 1.25 |
| 161 ROANOKE 1505-CLEAI | 298.38 | 795.4682 | 0 | 296.5247 | 4.405405 | 795.3966 | 0 |
| 161 ROANOKE 1506-MOU | 414.6319 | 533.8208 | 0 | 408.4579 | 7.342342 | 534.7581 | 0 |
| 161 ROANOKE (507-HUN7 | 714.9495 | 1094.709 | 2.714286 | 697.1276 | 5.873874 | 1109.96 | 1.25 |
| 163 ROCKBRID 101 - AIRP( | 342.6068 | 474.6551 | 1 | 328.6884 | 1.428571 | 485.8305 | 0 |

163 ROCKBRID( 102 - BEN $\subseteq 175.1529$ 163 ROCKBRID 103 - PLAN 100.0874 163 ROCKBRID( 104 - EFFIN 100.0874 163 ROCKBRID( 201 - COLLI 188.6262 163 ROCKBRID( 202 - HIGH 423.4466 163 ROCKBRID( 203 - VO-TI 130.8835 163 ROCKBRID( 301 - MAU 198.25 163 ROCKBRID( 302 - NATL 159.7549 163 ROCKBRID( 303 - FALLI 67.3665 163 ROCKBRID( 401 - FAIRF 240.5947 163 ROCKBRID( 402 - MOU 217.4976 163 ROCKBRID( 403 - VESU 59.66748 163 ROCKBRID(501-GOSF 59.66748 163 ROCKBRID(502-MEA[ 263.6917 163 ROCKBRID(503-ROCK 184.7767 163 ROCKBRID(504-ROCK 259.8422 165 ROCKINGH 101 - BROA 535.13 165 ROCKINGH 102 - TIMB 227.1778 165 ROCKINGH 103 - FULK! 114.4303 165 ROCKINGH 104 - BERG 55.53236 165 ROCKINGH 105 -LACE' 124.5271 165 ROCKINGH 106 - TENT 161.5487 165 ROCKINGH 107 - PLAIA 156.5003 165 ROCKINGH 108 - LITTL 124.5271 165 ROCKINGH 201 - SINGI 227.1778 165 ROCKINGH 202 -EDON 506.5224 165 ROCKINGH 203 - DAYT 270.9306 165 ROCKINGH 204-MT C 334.8769 165 ROCKINGH 205 - SILVE 403.8717 165 ROCKINGH 301 - KEEZI 260.8338 165 ROCKINGH 302 - PORT 281.0274 165 ROCKINGH 303 - MELR 151.4519 165 ROCKINGH 304 - GROT 272.6134 165 ROCKINGH 305 -MAS§ 742.1142 165 ROCKINGH 306 -CROS 136.3067 165 ROCKINGH 307 - CROS 663.0227 165 ROCKINGH 401 - WEST 341.6081 165 ROCKINGH 402 - MON 220.4466 165 ROCKINGH 403 - MT C 80.77434 165 ROCKINGH 404 - NORT 328.1458 165 ROCKINGH 405 - OTTO 212.0326 165 ROCKINGH 406 - EAST 469.5008 165 ROCKINGH 501 - ELKT( 311.3178 165 ROCKINGH 502 - SWIF 264.1994 165 ROCKINGH 503 - MCG/ 408.9201 165 ROCKINGH 504-SOUT 114.4303 165 ROCKINGH 505-STON 469.5008
427.5614 296.1947 272.6479 333.374 744.8244

### 164.828

360.6388 483.3303 231.7507 514.313 729.9527 287.5196 313.545 349.485 307.3485 518.0309 1305.927 775.1961 909.4621 336.9316 639.6634 610.5302 678.9299 482.5976 947.4619
1228.66
602.9303 957.5951 918.3287 614.3302
986.7283
521.864
1012.062 882.8622 363.5315 971.5284 670.0633 984.195 158.3325 892.9955 1313.527 766.3294 1031.061 1735.325 1351.526 785.3293 851.1957

| 0 | 165.3167 | 2.857143 | 433.6441 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 85.57568 | 2.857143 | 303.1781 | 1.75 |
| 1 | 99.18999 | 0 | 277.0849 | 0 |
| 0 | 173.0963 | 0 | 347.9093 | 0 |
| 0 | 423.9886 | 4.285714 | 751.7326 | 1.75 |
| 0 | 126.4186 | 2.857143 | 166.4995 | 0 |
| 0 | 184.7657 | 7.142857 | 372.76 | 0 |
| 1 | 155.5921 | 1.428571 | 488.3156 | 0 |
| 0 | 64.18176 | 0 | 234.8388 | 0 |
| 0 | 241.1678 | 4.285714 | 514.4088 | 0 |
| 0 | 210.0494 | 2.857143 | 738.0648 | 0 |
| 0 | 62.23686 | 0 | 287.0252 | 0 |
| 0 | 52.51235 | 2.857143 | 314.3609 | 3.5 |
| 0 | 266.4516 | 2.857143 | 349.1519 | 0 |
| 0 | 175.0412 | 1.428571 | 316.846 | 0 |
| 1 | 256.727 | 2.857143 | 524.349 | 0 |
| 1.26087 | 507.5894 | 13.8069 | 1340.843 | 0 |
| 1.26087 | 205.7795 | 7.531034 | 790.5915 | 2.705882 |
| 0 | 111.4639 | 3.765517 | 914.5562 | 0 |
| 1.26087 | 46.30038 | 0 | 349.1252 | 1.352941 |
| 1.26087 | 118.3232 | 1.255172 | 652.7123 | 0 |
| 1.26087 | 142.3308 | 3.765517 | 629.9433 | 1.352941 |
| 0 | 132.0418 | 3.765517 | 698.2504 | 1.352941 |
| 0 | 126.8973 | 1.255172 | 492.0641 | 0 |
| 1.26087 | 205.7795 | 6.275862 | 972.7437 | 0 |
| 0 | 483.5817 | 3.765517 | 1254.827 | 1.352941 |
| 1.26087 | 265.7985 | 5.02069 | 613.499 | 2.705882 |
| 1.26087 | 320.673 | 3.765517 | 979.0685 | 1.352941 |
| 1.26087 | 409.8441 | 3.765517 | 931.0005 | 0 |
| 0 | 248.6502 | 6.275862 | 626.1484 | 0 |
| 0 | 284.6616 | 7.531034 | 992.9829 | 0 |
| 0 | 135.4715 | 6.275862 | 533.8074 | 0 |
| 1.26087 | 276.0875 | 7.531034 | 1019.547 | 0 |
| 2.521739 | 732.2319 | 7.531034 | 904.4366 | 1.352941 |
| 0 | 132.0418 | 2.510345 | 369.3643 | 0 |
| 1.26087 | 222.9278 | 6.275862 | 1762.07 | 0 |
| 1.26087 | 394.4106 | 11.29655 | 1364.877 | 0 |
| 0 | 109.749 | 1.255172 | 794.3863 | 0 |
| 0 | 461.289 | 10.04138 | 852.5738 | 2.705882 |
| .521739 | 651.635 | 8.786207 | 996.7777 | 0 |
| 5.043478 | 327.5323 | 7.531034 | 689.3958 | 2.705882 |
| 0 | 193.7757 | 3.765517 | 1010.692 | 0 |
| 0 | 82.31179 | 1.255172 | 158.1183 | 0 |
| 0 | 293.2357 | 15.06207 | 912.0263 | 0 |
| 1.26087 | 192.0608 | 7.531034 | 1330.724 | 1.352941 |
| 2.521739 | 456.1445 | 10.04138 | 776.6771 | 2.705882 |
| 0 | 298.3802 | 3.76517 | 1051.17 | 0 |


| RUSSELL C( 101 - MOCI | 90.46908 | 646.1164 | 0 | 76.97349 | 1.888889 | 662.3886 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 167 RUSSELL C( 102 - COPP | 99.16803 | 513.4207 | 1.4 | 96.21687 | 0 | 520.9798 | 3 |
| 167 RUSSELL C( 103 - SOUT | 71.33139 | 374.5243 | 0 | 76.97349 | 1.888889 | 375.8497 | 0 |
| 167 RUSSELL C( 201 - NORT | 187.8973 | 972.275 | 0 | 180.188 | 0 | 983.6595 | 0 |
| 167 RUSSELL C( 202 - DANT | 41.75496 | 200.9038 | 0 | 41.98554 | 0 | 199.7089 | 0 |
| 167 RUSSELL C( 301 - COOk | 36.53559 | 200.9038 | 0 | 34.98795 | 0 | 204.6706 | 0 |
| 167 RUSSELL C( 302 - DAUC | 60.89265 | 264.1512 | 0 | 61.22892 | 0 | 267.9325 | 0 |
| 167 RUSSELL C( 303 - NEW | 90.46908 | 566.747 | 0 | 92.71807 | 1.888889 | 566.8756 | 0 |
| 167 RUSSELL C( 304 - CLEVI | 92.20887 | 303.8359 | 0 | 92.71807 | 3.777778 | 305.1453 | 0 |
| 167 RUSSELL C( 401 - DRILL | 20.87748 | 73.16865 | 0 | 20.99277 | 0 | 75.66611 | 0 |
| 167 RUSSELL C( 402 - SWOI | 92.20887 | 947.472 | 2.8 | 80.47229 | 5.666667 | 967.5339 | 0 |
| 167 RUSSELL C(403-HON/ | 83.50992 | 343.5206 | 1.4 | 71.7253 | 1.888889 | 353.522 | 0 |
| 167 RUSSELL C( 501 - WEST | 262.7083 | 1082.648 | 1.4 | 265.9084 | 0 | 1101.5 | 0 |
| 167 RUSSELL C(601-EAST | 123.5251 | 628.7544 | 0 | 122.4578 | 0 | 632.6183 | 0 |
| 167 RUSSELL C( 602 -ELK G | 137.4434 | 999.5582 | 0 | 136.453 | 0 | 1010.949 | 0 |
| 169 SCOTT COL 101 - WEBE | 84.29674 | 490.3137 | 1 | 88.26829 | 5.894737 | 488.5372 | 2 |
| 169 SCOTT COL 102 - YUM, | 120.8783 | 662.3763 | 2 | 119.7927 | 0 | 669.9569 | 1 |
| 169 SCOTT COL 202 - WEBE | 54.07715 | 333.7756 | 1 | 53.59146 | 2.947368 | 334.3305 | 0 |
| 169 SCOTT COL 203 - HILTC | 93.83976 | 657.2015 | 0 | 91.42073 | 2.947368 | 655.7025 | 0 |
| 169 SCOTT COL 204 - CLAR | 14.31454 | 204.4052 | 0 | 11.03354 | 0 | 209.9285 | 0 |
| 169 SCOTT COL 301 - NICKI | 54.07715 | 514.8941 | 0 | 50.43902 | 0 | 520.9336 | 0 |
| 169 SCOTT COL 302 - SNOV | 60.43917 | 403.6356 | 0 | 58.32012 | 0 | 412.0818 | 0 |
| 169 SCOTT COL 303 - TWIN | 69.9822 | 293.6707 | 0 | 63.04878 | 0 | 303.23 | 0 |
| 169 SCOTT COL 304 - COPP | 14.31454 | 117.727 | 0 | 12.60976 | 1.473684 | 116.6269 | 0 |
| 169 SCOTT COL 401 - GATE | 192.451 | 970.2778 | 0 | 189.1463 | 5.894737 | 978.3703 |  |
| 169 SCOTT COL 501 - DUNC | 54.07715 | 249.6848 | 1 | 45.71037 | 1.473684 | 257.8751 | 0 |
| 169 SCOTT COL 502 - FORT | 50.89614 | 292.377 | 0 | 47.28659 | 1.473684 | 301.9342 | 0 |
| 169 SCOTT COL 503 - MAN | 11.13353 | 187.587 | 0 | 11.03354 | 2.947368 | 186.6031 | 0 |
| 169 SCOTT COL 504 - RYE C | 47.71513 | 457.9711 | 0 | 44.13415 | 1.473684 | 465.2118 | 0 |
| 169 SCOTT COL 601 - CLINC | 27.03858 | 265.2093 | 1 | 31.52439 | 0 | 269.5378 |  |
| 169 SCOTT COL 602 - DUFF | 85.88724 | 714.1244 | 1 | 83.53963 | 1.473684 | 719.1994 | 0 |
| 169 SCOTT COL 603 - FAIR\ | 36.5816 | 170.7689 | 0 | 33.10061 | 0 | 174.9404 | 0 |
| 171 SHENANDC 101 - ORK^ | 352.0588 | 639.219 | 0 | 339.1723 | 2.972222 | 659.1269 | 0 |
| 171 SHENANDC 103 - NEW | 607.2549 | 1683.057 | 0 | 588.7878 | 23.77778 | 1705.047 | 0 |
| 171 SHENANDC 201 - CONI | 331.5686 | 1350.927 | 0 | 304.8739 | 11.88889 | 1364.301 | 0 |
| 171 SHENANDC 202 - MT J/ | 335.2941 | 1004.299 | 0 | 299.1576 | 10.40278 | 1035.395 | 1.833333 |
| 171 SHENANDC 302 -EDINI | 331.5686 | 1024.068 | 0 | 333.4559 | 4.458333 | 1032.764 | 0 |
| 171 SHENANDC 303 - ST LU | 266.3725 | 1153.23 | 1.833333 | 253.4265 | 0 | 1174.851 | 0 |
| 171 SHENANDC 304 - FORT | 199.3137 | 640.537 | 1.833333 | 198.1681 | 7.430556 | 640.7082 | 1.833333 |
| 171 SHENANDC 401 - WOO | 644.5098 | 1437.913 | 3.666667 | 645.9517 | 10.40278 | 1455.079 | 1.833333 |
| 171 SHENANDC 501 - CEDA | 57.7451 | 110.7101 | 0 | 53.35294 | 0 | 114.4592 | 1.833333 |
| 171 SHENANDC 503 -TOM | 407.9412 | 1369.378 | 0 | 362.0378 | 7.430556 | 1397.191 | 1.833333 |
| 171 SHENANDC 504 - LEBAI | 363.2353 | 1174.318 | 0 | 339.1723 | 7.430556 | 1198.532 | 0 |
| 171 SHENANDC 601 - STRA: | 853.1373 | 1887.344 | 3.666667 | 817.4433 | 20.80556 | 1915.547 | 1.833333 |
| 173 SMYTH COI 101 - SALT | 229.3069 | 1082.396 | 0 | 216.1905 | 3.75 | 1096.651 | 1.5 |
| 173 SMYTH COI 201 - SEVEI | 103.9715 | 831.3076 | 1.333333 | 107.3794 | 0 | 835.4899 | 0 |
| 173 SMYTH COI 202 - RICH | 76.91039 | 348.3575 | 0 | 80.17661 | 3.75 | 342.5621 | 0 |


| 301 - CHIL | 212.2157 | 1020.19 | 0 | 201.8733 | 3.75 | 1033.339 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 173 SMYTH COI 302 - ST CL | 62.66772 | 357.4057 | 0 | 57.26901 | 0 | 361.7818 | 0 |
| 173 SMYTH COI 401 - EAST | 189.4274 | 609.6256 | 0 | 181.8291 | 2.5 | 619.5513 | . 5 |
| 173 SMYTH COI 402 - WEST | 108.2443 | 329.13 | 0 | 100.2208 | 1.25 | 335.7787 | 0 |
| 173 SMYTH COI 501 - ATKIN | 111.0928 | 861.8455 | 1.333333 | 117.4015 | 3.75 | 856.9707 | 0 |
| 173 SMYTH COI 502 - WAS | 185.1546 | 439.971 | 1.333333 | 191.8512 | 3.75 | 437.5299 | 1.5 |
| 173 SMYTH COI 601 - ROYA | 170.912 | 649.2117 | 0 | 161.785 | 1.25 | 657.9907 | 0 |
| 173 SMYTH COI 602 -ROYA | 103.9715 | 406.04 | 0 | 101.6525 | 6.25 | 404.7434 | 0 |
| 173 SMYTH COI 701 - ADW | 92.57732 | 907.0867 | 0 | 85.90352 | 1.25 | 918.0213 | . 5 |
| 173 SMYTH COI 702 - SUGA | 133.881 | 480.6881 | 0 | 127.4235 | 2.5 | 487.2749 | 0 |
| 173 SMYTH COI703-KONN | 15.66693 | 92.74452 | 0 | 20.04415 | 1.25 | 89.31488 | 0 |
| 175 SOUTHAMI 101 - BERLI | 117.3932 | 584.3609 | 1.5 | 104.6803 | 1.45 | 593.557 | 4 |
| 175 SOUTHAMI 102 -IVOR | 305.8403 | 542.2563 | 1.5 | 292.1673 | 4.35 | 556.698 | 0 |
| 175 SOUTHAMI 201 - BOYK | 386.162 | 387.8727 | 0 | 379.6613 | 7.25 | 394.01 | 0 |
| 175 SOUTHAMI 202 - BRAN | 109.67 | 186.281 | 0 | 110.9298 | 1.45 | 185.566 | 0 |
| 175 SOUTHAMI301-CAPR | 228.6079 | 320.2502 | 0 | 224.9845 | 0 | 325.376 | 0 |
| 175 SOUTHAMI 302 -SEBRI | 179.1791 | 399.3558 | 1.5 | 184.3623 | 0 | 396.552 | 0 |
| 175 SOUTHAMI401-DREV | 230.1525 | 276.8697 | 0 | 221.8597 | 2.9 | 285.975 | 0 |
| 175 SOUTHAMI501-HUN7 | 225.5186 | 649.4317 | 1.5 | 215.6101 | 2.9 | 657.107 | 0 |
| 175 SOUTHAMI502-FORK | 166.822 | 253.9035 | 0 | 159.364 | 4.35 | 259.284 | 0 |
| 175 SOUTHAMI601-COUF | 312.0189 | 445.2881 | 0 | 303.1041 | 1.45 | 455.018 | 0 |
| 175 SOUTHAMI 602 - SEDLI | 55.60732 | 357.2512 | 0 | 56.24612 | 0 | 358.422 | 0 |
| 175 SOUTHAMI701-BLAC | 242.5097 | 158.2112 | 0 | 243.7332 | 0 | 161.417 | 0 |
| 175 SOUTHAMI702-NEW: | 225.5186 | 451.6676 | 0 | 220.2973 | 2.9 | 455.018 | 0 |
| 177 SPOTSYLVA 101 - PART | 397.3315 | 1465.672 | 0 | 381.6856 | 7.484663 | 1480.543 | 0 |
| 177 SPOTSYLVf 102 - BLAYI | 441.6765 | 1394.142 | 2.6 | 428.0587 | 8.981595 | 1414.71 | 1.142857 |
| 177 SPOTSYLVf 103-TRAV | 922.7921 | 1554.216 | 1.3 | 917.0331 | 16.46626 | 1553.744 | 1.142857 |
| 177 SPOTSYLVA 104 - MASS | 856.697 | 1280.572 | 1.4 | 827.8021 | 18 | 1306.016 | 1.3 |
| 177 SPOTSYLVA 201 - WILD | 775.1512 | 1129.059 | 3.9 | 734.834 | 16.46626 | 1155.58 | 2.285714 |
| 177 SPOTSYLVf 202 - WILD | 631.4733 | 1396.947 | 0 | 627.8194 | 13.47239 | 1396.501 | 0 |
| 177 SPOTSYLVA 203 - NI RII | 633.2471 | 1213.212 | 1.3 | 617.1179 | 5.98773 | 1225.615 | 1.142857 |
| 177 SPOTSYLVf 204 - CHAN | 1000.424 | 1213.212 | 0 | 991.6692 | 13.47239 | 1222.814 | 0 |
| 177 SPOTSYLVf 301 - PLAN | 876.2579 | 1157.11 | 0 | 877.5202 | 5.98773 | 1156.981 | 1.142857 |
| 177 SPOTSYLVf 302 - HAZE | 941.8885 | 984.5951 | 1.3 | 893.5724 | 25.44785 | 1007.105 | 2.285714 |
| 177 SPOTSYLVf 303 - RIVEF | 1115.721 | 1753.196 | 1.3 | 1093.333 | 17.96319 | 1762.084 | 1.142857 |
| 177 SPOTSYLVf 401 - SUMI | 1315.642 | 1451.738 | 0 | 1300.283 | 19.5 | 1453.239 | 2.6 |
| 177 SPOTSYLVf 402 - PARK | 1382.342 | 1208.696 | 2.7 | 1376.994 | 11.99387 | 1215.358 | 2.6 |
| 177 SPOTSYLVf 403 -LEE H | 1281.221 | 1266.308 | 0 | 1256.108 | 21 | 1279.104 | 2.6 |
| 177 SPOTSYLVA 501 - BELM | 376.0459 | 1270.717 | 3.9 | 342.4469 | 8.981595 | 1291.448 | 1.142857 |
| 177 SPOTSYLVA 502 - BROK | 400.8791 | 1164.122 | 1.3 | 401.305 | 2.993865 | 1161.183 | 0 |
| 177 SPOTSYLVA 503 - POST | 338.7961 | 1269.314 | 0 | 326.3947 | 7.484663 | 1277.441 | 0 |
| 177 SPOTSYLVA 504 - COUF | 700.6515 | 1190.771 | 0 | 679.5431 | 7.484663 | 1208.807 | 1.142857 |
| 177 SPOTSYLVA 505 - BROC | 736.1276 | 1660.628 | 0 | 729.4833 | 2.993865 | 1673.84 | 0 |
| 177 SPOTSYLVA 601 - SALEI | 959.6265 | 1211.809 | 5.2 | 927.4604 | 28.44172 | 1220.012 | 1.142857 |
| 177 SPOTSYLVA 602 -SMITI | 1445.648 | 1357.675 | 2.6 | 1446.482 | 17.96319 | 1351.678 | 2.285714 |
| 177 SPOTSYLVA 603 - PIEDN | 571.164 | 737.7451 | 0 | 556.4762 | 13.47239 | 746.5746 | 0 |
| 177 SPOTSYLVA 701 - BATT | 875.8197 | 901.7891 | 2.8 | 856.6119 | 21 | 905.5042 | 1.3 |


| SPOTSYLVA 702 - BREN | 1116.161 | 1118.223 | 1.4 | 1128.833 | 14.98466 | 1120.192 | 1.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 177 SPOTSYLVA 703 -FAIR\ | 558.793 | 525.9007 | 0 | 546.5878 | 8.990798 | 531.3808 | . 3 |
| 177 SPOTSYLVA 704 - GAYL | 1155.423 | 1353.631 | 0 | 1160.545 | 8.984663 | 1360.548 | 0 |
| 179 STAFFORD 101 - HART | 1126.423 | 2607.808 | 0 | 1092.398 | 19.70199 | 2632.515 | 1.458333 |
| 179 STAFFORD 102 -ROCK | 1022.569 | 1074.115 | 1.484848 | 1010.347 | 16.88742 | 1080.48 | 1.458333 |
| 179 STAFFORD 103 - SIMP: | 864.3901 | 1195.963 | 0 | 831.7667 | 15.48013 | 1215.21 | 0 |
| 179 STAFFORD 104 - COLLI | 1247.853 | 1701.896 | 1.484848 | 1238.801 | 16.88742 | 1709.219 | 1.458333 |
| 179 STAFFORD 201 -ROCK | 749.3511 | 1047.626 | 1.484848 | 736.8455 | 12.66556 | 1048.779 | 1.458333 |
| 179 STAFFORD 202 -ROSE | 1091.273 | 1222.451 | 2.969697 | 1071.483 | 14.07285 | 1235.023 | 1.458333 |
| 179 STAFFORD 203 -RUBY | 471.3403 | 1348.272 | 1.484848 | 453.6909 | 12.66556 | 1360.507 | 2.916667 |
| 179 STAFFORD 204 -STEF/ | 953.8649 | 1511.178 | 4.454545 | 955.6468 | 12.66556 | 1509.767 | 2.916667 |
| 179 STAFFORD 301 - GRIFF | 928.3007 | 504.6088 | 1.484848 | 921.8613 | 8.443709 | 517.7852 | 0 |
| 179 STAFFORD 302 -WIDE | 1134.412 | 1072.79 | 2.969697 | 1129.401 | 15.48013 | 1072.555 | 0 |
| 179 STAFFORD 303 - HARB | 635.9099 | 806.5795 | 0 | 632.2714 | 18.2947 | 799.1328 | 1.458333 |
| 179 STAFFORD 304 - BARR | 490.5134 | 450.3071 | 1.484848 | 466.5616 | 9.850993 | 468.9126 | 0 |
| 179 STAFFORD 401 - AQUI | 538.4463 | 205.2871 | 1.484848 | 532.5237 | 9.850993 | 206.0574 | 0 |
| 179 STAFFORD 402 - COUF | 1445.976 | 919.1562 | 0 | 1418.991 | 26.73841 | 936.5043 | 0 |
| 179 STAFFORD 403 - BROC | 1019.373 | 1633.025 | 0 | 995.8676 | 22.51656 | 1649.78 | 1.458333 |
| 179 STAFFORD 404 - GOVE | 774.9154 | 923.1295 | 1.484848 | 748.1073 | 12.66556 | 944.4296 | 1.458333 |
| 179 STAFFORD 501 - GRAF | 1075.295 | 1770.766 | 1.484848 | 1063.439 | 22.51656 | 1767.338 | 2.916667 |
| 179 STAFFORD 502 - FALM | 1006.591 | 1131.065 | 0 | 1010.347 | 7.036424 | 1138.599 | 0 |
| 179 STAFFORD 503 - DREV | 997.0045 | 1121.794 | 5.939394 | 976.5616 | 23.92384 | 1139.92 | 2.916667 |
| 179 STAFFORD 504 - GAYL | 939.485 | 666.1896 | 1.484848 | 937.9496 | 8.443709 | 676.2909 | 0 |
| 179 STAFFORD 601 - FERR' | 765.3288 | 1193.314 | 5.939394 | 749.7162 | 11.25828 | 1207.285 | 2.916667 |
| 179 STAFFORD 602 - CHAT | 1027.362 | 1280.726 | 1.484848 | 987.8235 | 12.66556 | 1312.955 | 1.458333 |
| 179 STAFFORD 603 - WHIT | 889.9543 | 1998.569 | 2.969697 | 862.3345 | 11.25828 | 2024.91 | 0 |
| 179 STAFFORD 604 -ENGL | 810.0662 | 458.2537 | 1.484848 | 799.59 | 22.51656 | 453.062 | 1.458333 |
| 179 STAFFORD 701 - WOO | 1575.395 | 1434.361 | 2.969697 | 1534.827 | 30.96026 | 1463.536 | 1.458333 |
| 179 STAFFORD 702 - WHIT | 1003.396 | 736.3845 | 0 | 1021.609 | 7.036424 | 735.7305 | 1.458333 |
| 179 STAFFORD 703 - HAMI | 1278.211 | 1381.383 | 2.969697 | 1282.24 | 22.51656 | 1373.716 | 2.916667 |
| 181 SURRY COL 101 - SURR | 237.1874 | 397.7795 | 1.25 | 230.3843 | 1.125 | 407.6832 | 0 |
| 181 SURRY COL 201 - BACC | 392.8982 | 325.0819 | 0 | 388.2066 | 2.25 | 326.6957 | 0 |
| 181 SURRY COL 301 - DENL | 338.5804 | 360.7449 | 0 | 337.4132 | 4.5 | 362.3851 |  |
| 181 SURRY COL 401 - CARS | 405.5723 | 366.2315 | 1.25 | 399.0909 | 1.125 | 371.9938 | 0 |
| 181 SURRY COL 501 - CLAR | 237.1874 | 259.2425 | 2.5 | 234.0124 | 0 | 264.9255 | 2 |
| 181 SURRY COL 502 - SPRIN | 166.5743 | 32.91969 | 0 | 166.8926 | 0 | 34.31677 | 0 |
| 183 SUSSEX CO 101 - WAVI | 463.1132 | 135.1932 | 0 | 463.8027 | 4.5 | 133.3822 | 0 |
| 183 SUSSEX CO 201 - STON | 306.228 | 193.5119 | 0 | 303.139 | 3 | 196.7718 | 0 |
| 183 SUSSEX CO 202 - LITTL | 76.93412 | 64.94576 | 0 | 78.81614 | 0 | 64.71017 | 0 |
| 183 SUSSEX CO 301 - COUF | 101.0703 | 351.2373 | 0 | 98.52018 | 1.5 | 351.2838 | 0 |
| 183 SUSSEX CO 302 - WAKI | 31.67876 | 151.0983 | 0 | 25.76682 | 0 | 161.1151 | 0 |
| 183 SUSSEX CO 401 - MARS | 349.9748 | 261.1085 | 1 | 356.1883 | 4.5 | 260.1613 | 0 |
| 183 SUSSEX CO 402 - WEST | 55.81495 | 5.301695 | 0 | 56.08072 | 0 | 5.282463 | 0 |
| 183 SUSSEX CO 501 - HENR | 298.6854 | 229.2983 | 0 | 295.5605 | 3 | 232.4284 | 0 |
| 183 SUSSEX CO 502 - YALE | 107.1044 | 110.0102 | 0 | 107.6143 | 1.5 | 108.2905 | 0 |
| 183 SUSSEX CO 601 - BLAC | 165.9363 | 308.8237 | 0 | 168.2422 | 0 | 312.9859 | 0 |
| 183 SUSSEX CO 602 - NEW | 81.45966 | 144.4712 | 0 | 74.26906 | 6 | 146.5884 | 0 |


| 185 TAZEWELL 101 - INDIA | 53.07553 | 497.3788 | 0 | 46.12665 | 0 | 503.0394 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 185 TAZEWELL 102 - TIP T( | 41.28097 | 293.3976 | 0 | 46.12665 | 0 | 290.645 | 0 |
| 185 TAZEWELL 103 - MUN | 60.93857 | 561.6468 | 1.333333 | 60.1652 | 0 | 568.714 | 0 |
| 185 TAZEWELL 104 - FALLS | 58.97281 | 392.5939 | 0 | 66.18172 | 2 | 396.8422 | 0 |
| 185 TAZEWELL 106 - POCA | 33.41793 | 152.2873 | 0 | 36.09912 | 2 | 152.3092 | 0 |
| 185 TAZEWELL 107 - AMO | 7.863041 | 48.8996 | 0 | 8.022026 | 0 | 48.90661 | 0 |
| 185 TAZEWELL 109 - BISHC | 13.76032 | 136.9189 | 0 | 12.03304 | 0 | 138.3358 | 0 |
| 185 TAZEWELL 112 - BANL | 19.6576 | 177.4357 | 1.333333 | 20.05507 | 0 | 180.2558 | 0 |
| 185 TAZEWELL 203 - BURK | 17.69184 | 114.5648 | 0 | 12.03304 | 0 | 118.7732 | 0 |
| 185 TAZEWELL 204 - CLEAI | 43.24673 | 361.857 | 0 | 42.11564 | 2 | 361.9089 | 0 |
| 185 TAZEWELL 207 -FREE؛ | 31.45217 | 139.7131 | 0 | 30.0826 | 0 | 139.7332 | 0 |
| 185 TAZEWELL 209 - JEFFE | 306.6586 | 1197.342 | 1.333333 | 268.7379 | 10 | 1228.255 | 2.666667 |
| 185 TAZEWELL 214 - THON | 60.93857 | 409.3595 | 0 | 50.13767 | 2 | 417.8022 | 0 |
| 185 TAZEWELL 301 - CEDA | 157.2608 | 1286.758 | 0 | 132.3634 | 6 | 1309.3 | 1.333333 |
| 185 TAZEWELL 302 - BAPT | 45.21249 | 296.1919 | 0 | 40.11013 | 0 | 303.221 | 0 |
| 185 TAZEWELL 303 - PAIN ${ }^{-}$ | 145.4663 | 1061.82 | 0 | 136.3744 | 2 | 1071.753 | 0 |
| 185 TAZEWELL 401 - RICHI | 381.3575 | 2064.96 | 0 | 358.9857 | 4 | 2091.806 | 0 |
| 185 TAZEWELL 402 - JEWE | 27.52064 | 206.7755 | 0 | 20.05507 | 0 | 215.1891 | 0 |
| 185 TAZEWELL 501 - SPRIN | 104.1853 | 958.4322 | 0 | 102.2808 | 6 | 962.7616 | 0 |
| 185 TAZEWELL 502 - GRAF | 342.0423 | 1525.668 | 0 | 332.9141 | 4 | 1545.449 | 0 |
| 187 WARREN C 101 - FORK | 302.209 | 605.9995 | 0 | 293.6283 | 2.918033 | 615.6957 | 0 |
| 187 WARREN C 102 - OTTE | 476.8623 | 1567.286 | 1.230769 | 450.4981 | 10.21311 | 1590.101 | . 4 |
| 187 WARREN C 201 - HAPP | 502.3734 | 1084.632 | 0 | 498.7658 | 7.295082 | 1094.868 | 0 |
| 187 WARREN C 202 - LINDE | 606.3804 | 1142.282 | 2.461538 | 587.2565 | 11.67213 | 1159.114 | . 4 |
| 187 WARREN C 301 - NORT | 419.9528 | 768.2251 | 1.230769 | 404.2416 | 14.59016 | 778.9889 | 0 |
| 187 WARREN C 302 - RIVEF | 410.1408 | 1287.079 | 4.923077 | 392.1747 | 8.754098 | 1306.346 | 0 |
| 187 WARREN C 401 - EAST | 602.4556 | 1783.14 | 3.692308 | 571.1673 | 17.5082 | 1798.902 | . 8 |
| 187 WARREN C 402 - TOW | 266.8859 | 631.473 | 0 | 257.4275 | 7.295082 | 637.1112 | 0 |
| 187 WARREN C 501 - SOUT | 498.4486 | 1183.844 | 1.230769 | 486.6989 | 7.295082 | 1199.268 | 0 |
| 187 WARREN C 502 - BENT | 213.9012 | 620.7473 | 1.230769 | 207.1487 | 1.459016 | 627.7419 | 0 |
| 187 WARREN C $504-\mathrm{BROV}$ | 188.39 | 477.2917 | 0 | 178.9926 | 0 | 485.8642 | . 4 |
| 191 WASHINGT 101 - EAST | 570.3609 | 1184.046 | 0 | 560.3234 | 9.55102 | 1188.958 | 1.636364 |
| 191 WASHINGT 102 - WEST | 295.2932 | 582.7102 | 0 | 285.2555 | 1.591837 | 591.1504 | 0 |
| 191 WASHINGT 201 - CLINC | 131.4662 | 666.5247 | 0 | 128.365 | 4.77551 | 665.7099 | 0 |
| 191 WASHINGT 202 -GREE | 171.9173 | 932.6025 | 0 | 160.9656 | 4.77551 | 941.3138 | 1.636364 |
| 191 WASHINGT 203 - HAYT | 64.7218 | 409.7597 | 0 | 61.12619 | O | 412.7401 | 1.636364 |
| 191 WASHINGT 204 WOOD | 194.1654 | 658.5424 | 0 | 185.4161 | 1.591837 | 669.7042 | 0 |
| 191 WASHINGT 301 - WAT. | 362.0376 | 1349.014 | 0 | 362.682 | 6.367347 | 1347.397 | 1.636364 |
| 191 WASHINGT 302 -SOUT | 453.0526 | 956.5495 | 5 | 450.2962 | 11.14286 | 955.9594 | 4.909091 |
| 191 WASHINGT 401 - GLAD | 311.4737 | 1128.17 | 0 | 309.706 | 3.183673 | 1134.37 | 0 |
| 191 WASHINGT 402 - MEAL | 317.5414 | 1295.799 | 0 | 315.8186 | 6.367347 | 1295.471 | 0 |
| 191 WASHINGT 501 -RHEA | 297.3158 | 1717.532 | 0 | 287.2931 | 7.959184 | 1720.194 | 3.272727 |
| 191 WASHINGT 502 - DAM, | 319.5639 | 715.7491 | 0 | 303.5934 | 3.183673 | 736.2752 | 1.636364 |
| 191 WASHINGT 504 -GREE | 28.31579 | 159.6466 | 0 | 24.45047 | 0 | 162.4332 | 0 |
| 191 WASHINGT 601 - BURS | 180.0075 | 1422.186 | 2.5 | 171.1533 | 6.367347 | 1427.282 | 0 |
| 191 WASHINGT 602 - MENI | 44.49624 | 323.2845 | 0 | 40.75079 | 0 | 327.5293 | 0 |
| 191 WASHINGT 603 - VALLI | 236.6391 | 1077.615 | 0 | 244.5047 | 1.591837 | 1075.787 | 0 |

191 WASHINGT 701 - HIGH $214.391 \quad 1156.108$ 191 WASHINGT 702 - WALL 105.1729 191 WASHINGT 703 - JOHN 275.0677 193 WESTMOR 101 - PREC 553.2719 193 WESTMOR 102 -PREC 217.5403 193 WESTMOR 201 - PREC 464.2002 193 WESTMOR 202 - PREC 198.6983 193 WESTMOR 301 - PREC 248.3728 193 WESTMOR 302 - PREC 262.0761 193 WESTMOR 401 - PREC 419.6644 193 WESTMOR 501 - PREC 673.176 195 WISE COUP 101 - APPA 141.9419 195 WISE COUN 102 - DORC 81.88953 195 WISE COUP 103 - GUES 78.25 195 WISE COUP 104 - WEST 192.8953 195 WISE COUP 201 - NORT 78.25 195 WISE COUP 202 - WISE 360.314 195 WISE COUP 203 -EAST 40.03488 195 WISE COUP 301 - BIG S 262.0465 195 WISE COUN 302 -EAST 207.4535 195 WISE COUP 401 - CLINC 163.7791 195 WISE COUP 402 -SOUT 143.7616 195 WISE COUN 403 - ST PA 127.3837 197 WYTHE CO 101 - ROYA 75.09658 197 WYTHE CO 102 -RURA 269.2487 197 WYTHE CO 203 - WEST 351.6718 197 WYTHE CO 303 -EAST 474.3906 197 WYTHE CO 401 -FORT 194.1521 197 WYTHE CO 402 - MAX 164.8462 197 WYTHE CO 501 -JACK 148.3615 197 WYTHE CO 502 -SHEFI 141.035 197 WYTHE CO 601 -HUD[ 65.93846 197 WYTHE CO 602 -ZION 146.5299 197 WYTHE CO 603 EVERI 111.7291 199 YORK COUI 101-QUEE 947.1832 199 YORK COUI 102 - WALL 935.6883 199 YORK COUI 103-MAG 1751.829 199 YORK COUI 201 - COVE 1464.456 199 YORK COUI 202 -KILN । 708.0884 199 YORK COUI 301 - SEAFI 726.4803 199 YORK COUI 302 -YORK 646.0157 199 YORK COUI 303 -EDGE 1202.371 199 YORK COUI 401 -HARV 675.9026 199 YORK COUI 402 - DARE 643.7167 199 YORK COUI 403 -GRAF 429.9108 199 YORK COUI501-TABB 882.8115 199 YORK COUI502 - BETH 1257.547
525.5035 1057.659 285.0465

### 449.7093

408.1977
395.7442
473.2326
1300.698
1011.5
643.5521
446.4901
423.0631
1085.908
585.6737
1303.641
296.282
964.6391
1262.299
943.9682
1205.799
421.6851
354.5362
1443.112
1091.073
1163.478
896.3274
937.5235
684.1051
986.2098
511.8304
762.7522
533.0527
909.6605
1199.176
1199.176
1582.912
842.8493
2424.048
1096.389
1151.209
1610.322
1534.945
729.7841
1740.518
1439.011

| 2.5 | 224.1294 | 3.183673 | 1154.341 | 1.636364 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 112.0647 | 0 | 527.2423 | 0 |
| 0 | 277.1054 | 6.367347 | 1061.142 | 0 |
| 2.666667 | 563.5855 | 2.4 | 293.6307 | 0 |
| 0 | 212.2143 | 1.2 | 205.4036 | 0 |
| 1.333333 | 466.1756 | 2.4 | 463.1921 | 0 |
| 1.333333 | 193.0802 | 1.2 | 414.9429 | 0 |
| 2.666667 | 243.5246 | 2.4 | 401.1575 | 2.5 |
| 0 | 255.7008 | 3.6 | 479.7347 | 0 |
| 0 | 400.0761 | 6 | 1316.513 | 0 |
| 0 | 636.6429 | 10.8 | 1039.425 | 2.5 |
| 0 | 128.8115 | 3.3125 | 656.6203 | 0 |
| 0 | 82.80738 | 3.3125 | 450.1359 | 0 |
| 0 | 69.92623 | 0 | 433.6172 | 0 |
| 0 | 184.0164 | 4.96875 | 1104.003 | 2.2 |
| 0 | 73.60656 | 1.65625 | 593.2984 | 0 |
| 1.6 | 344.1107 | 14.90625 | 1310.488 | 4.4 |
| 1.6 | 36.80328 | 1.65625 | 298.7141 | 2.2 |
| 0 | 244.7418 | 9.9375 | 974.6063 | 0 |
| 0 | 200.5779 | 4.96875 | 1269.191 | 2.2 |
| 1.6 | 172.9754 | 1.65625 | 948.4516 | 0 |
| 3.2 | 132.4918 | 4.96875 | 1223.764 | 0 |
| 0 | 125.1311 | 1.65625 | 428.1109 | 0 |
| 0 | 74.97248 | 1.282609 | 354.7375 | 0 |
| 0 | 254.9064 | 8.978261 | 1455.173 | 0 |
| 2.8 | 350.4963 | 8.978261 | 1099.186 | 1.25 |
| 1.4 | 464.8294 | 7.695652 | 1175.38 | 1.25 |
| 0 | 179.9339 | 3.847826 | 906.8288 | 0 |
| 1.4 | 144.322 | 11.54348 | 944.3011 | 1.25 |
| 0 | 142.4477 | 3.847826 | 690.7388 | 0 |
| 0 | 134.9505 | 5.130435 | 995.5132 | 0 |
| 0 | 71.22385 | 0 | 510.8719 | 1.25 |
| 0 | 123.7046 | 3.847826 | 785.6685 | 0 |
| 1.4 | 101.2128 | 3.847826 | 539.6006 | 0 |
| 0 | 942.3343 | 10.34483 | 908.0457 | 1.6 |
| 0 | 921.4452 | 17.24138 | 1196.504 | 1.6 |
| 3.166667 | 928.4082 | 8.62069 | 1710.266 | 1.6 |
| 1.583333 | 1241.746 | 15.51724 | 1449.118 | 1.6 |
| 0 | 420.047 | 1.72438 | 739.0673 | 0 |
| 0.333333 | 1745.407 | 12.06897 | 1216.986 | 1.6 |
| 3.166667 | 1459.922 | 15.51724 | 1589.08 | 3.2 |
| 0 | 703.2692 | 0 | 851.7195 | 0 |
| 4.75 | 687.0221 | 10.34483 | 2440.799 | 1.6 |
| 0 | 663.8119 | 6.896552 | 1095.799 | 0 |
| 0 | 1167.473 | 31.03448 | 1148.712 | 1.6 |
| 0 | 654.5278 | 12.06897 | 1616.39 | 1.6 |
| 0 | 654.5278 | 8.62069 | 1522.513 | 0 |
| 0 |  |  |  |  |

510 ALEXANDR 101-LADR 807.6244399 .4327 510 ALEXANDR 102 - CITY। 764.4259 510 ALEXANDR 103 -LYLES 1506.314 510 ALEXANDR 104 - DURA 1335.398 510 ALEXANDR 105 -LEE C 1033.008 510 ALEXANDR 106 - CORA 2064.138 510 ALEXANDR 107-MT V 2832.32 510 ALEXANDR 108 -GEOR 2516.783 510 ALEXANDR 109 - FIRE I 1322.25 510 ALEXANDR 110 - CHAR 1782.408 510 ALEXANDR 111 - POTC 860.2139 510 ALEXANDR 112 -ALEX 946.611 510 ALEXANDR 201 - NAOP 1829.363 510 ALEXANDR 202 -GEOR 1626.518 510 ALEXANDR 203 -CHAR 1694.133 510 ALEXANDR 204 -BLES§ 1643.422 510 ALEXANDR 205 - DOU( 1534.486 510 ALEXANDR 206 -CHIN 1269.661 510 ALEXANDR 207-TEMF 1771.139 510 ALEXANDR 208 - NOVt 1756.114 510 ALEXANDR 209-JAME 1876.318 510 ALEXANDR 210 -Ther 655.4905 510 ALEXANDR 302 - PATR 1192.655 510 ALEXANDR 303 - CHAR 1100.623 510 ALEXANDR 304 - SAML 1250.879 510 ALEXANDR 305 - JOHN 1341.032 510 ALEXANDR 306 - WILLI 1543.877 510 ALEXANDR 307 -SOUT 1453.724 510 ALEXANDR 308 - CAMI 1701.646 510 ALEXANDR 309 - OLYN 1057.425 520 BRISTOL Cl 001 - FIRST 242.707 520 BRISTOL Cl 002 - SECO 400.3628 520 BRISTOL Cl 003 - THIRL 269.6744 520 BRISTOL Cl 004 - FOUR 425.2558 530 BUENA VIS 001 - FIRST 283.234 530 BUENA VIS 002 - SECO 236.766 540 CHARLOTTI 101 - Key R 1783.222 540 CHARLOTTI 102 - CLAR 2116.067 540 CHARLOTTI 201 - CARV 1662.501 540 CHARLOTTI 202 - WALk 2214.368 540 CHARLOTTI 301 -BENJ/ 1603.865 540 CHARLOTTI 302 - JOHN 2095.372 540 CHARLOTTI 303 - BUFC 850.2208 540 CHARLOTTI 401 - VENA 941.6239 540 CHARLOTTI 402 -ALUN 1203.761 550 CHESAPEAIOO1-GREA 544.8537 550 CHESAPEAIOO2 - BETH 301.27211571 .913

| 0 | 783.6578 | 5.043668 | 426.5964 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 778.0064 | 3.362445 | 509.7596 | 1.434783 |
| 1.475 | 1476.894 | 13.44978 | 686.8665 | 0 |
| 1.475 | 1333.725 | 13.44978 | 414.276 | 4.304348 |
| 0 | 1030.435 | 8.406114 | 364.9941 | 1.434783 |
| 2.95 | 2055.218 | 21.8559 | 522.0801 | 2.869565 |
| 5.9 | 2838.876 | 11.76856 | 572.9021 | 4.304348 |
| 0 | 2531.818 | 28.58079 | 529.7804 | 0 |
| 0 | 1309.236 | 8.406114 | 469.7181 | 1.434783 |
| 2.95 | 1782.068 | 18.49345 | 425.0564 | 2.869565 |
| 1.475 | 862.7771 | 6.724891 | 266.4303 | 2.869565 |
| 0 | 945.664 | 6.724891 | 318.7923 | 1.434783 |
| 2.95 | 1806.557 | 8.406114 | 523.6202 | 2.869565 |
| 2.95 | 1610.643 | 11.76856 | 679.1662 | 4.304348 |
| 5.9 | 1702.949 | 11.76856 | 474.3383 | 2.869565 |
| 0 | 1665.273 | 5.043668 | 628.3442 | 1.434783 |
| 1.475 | 1514.569 | 15.131 | 606.7834 | 2.869565 |
| 0 | 1264.025 | 3.362445 | 438.9169 | 1.434783 |
| 2.95 | 1736.857 | 16.81223 | 740.7685 | 1.434783 |
| 2.95 | 1738.741 | 13.44978 | 532.8605 | 0 |
| 1.475 | 1870.606 | 10.08734 | 458.9377 | 2.869565 |
| 2.95 | 663.0951 | 5.043668 | 283.3709 | 0 |
| 2.95 | 1196.208 | 10.08734 | 311.092 | 5.73913 |
| 1.475 | 1083.181 | 13.44978 | 308.0119 | 2.869565 |
| 1.475 | 1243.303 | 25.21834 | 331.1128 | 2.869565 |
| 2.95 | 1343.144 | 8.406114 | 392.7151 | 2.869565 |
| 4.425 | 1556.013 | 25.21834 | 409.6558 | 1.434783 |
| 2.95 | 1427.915 | 25.21834 | 441.997 | 4.304348 |
| 1.475 | 1670.924 | 16.81223 | 689.9466 | 1.434783 |
| 1.475 | 1043.621 | 13.44978 | 254.1098 | 1.434783 |
| 0 | 230.9488 | 6.315789 | 679.1673 | 0 |
| 0 | 424.4465 | 3.157895 | 921.0438 | 0 |
| 2 | 270.4806 | 6.315789 | 424.992 | 0 |
| 0 | 416.124 | 14.21053 | 1747.797 | 0 |
| 1 | 262.7902 | 12.375 | 848.0887 | 1 |
| 1 | 218.2098 | 9.625 | 610.9113 | 0 |
| 0 | 1800.273 | 24.71429 | 341.0656 | 4.125 |
| 1.666667 | 856.944 | 12.35714 | 131.0762 | 2.75 |
| 1.666667 | 941.6018 | 1.544643 | 120.3761 | 0 |
| 0 | 1171.387 | 9.267857 | 345.0781 | 1.375 |
| 0 | 515.0732 | 9.461538 | 995.2978 | 3 |
| 0 | 294.0209 | 4.730769 | 1580.015 | 0 |
| 0 | 2052.45 | 0 |  |  |
| 3.333333 | 2090.529 | 26.25893 | 347.7531 | 5.5 |
| 1.666667 | 1641.324 | 20.08036 | 203.3018 | 0 |
| 3.333333 | 2227.018 | 16.99107 | 584.4928 | 2.75 |
| 3.333333 | 1596.404 | 26.25893 | 204.6393 | 1.375 |


| 550 CHESAPEAIO03-CAMI | 1125.569 | 121.3843 |
| :---: | :---: | :---: |
| 550 CHESAPEAI004-CHUR | 456.0496 | 896.3763 |
| 550 CHESAPEAI 005 - CRES | 1333.217 | 208.532 |
| 50 CHESAPEAIO06- DEEP | 782.0254 | 819.6401 |
| 550 CHESAPEAI007-GREE | 557.6738 | 787.5603 |
| 50 CHESAPEAIOO8-SOUT | 980.0214 | 879.258 |
| 50 CHESAPEAIOO9-BELLS | 660.2345 | 1647.3 |
| 50 CHESAPEAI010-OSCA | 428.8807 | 421.7326 |
| 50 CHESAPEAIO11-GENE | 512.328 | 739.1992 |
| 550 CHESAPEAIO12-GEOR | 882.9896 | 175.8516 |
| 50 CHESAPEAIO13-GILM | 766.5514 | 810.7848 |
| 50 CHESAPEAIO14-GRAS | 566.2205 | 939.9396 |
| 50 CHESAPEAI015-GREE | 871.3458 | 613.1463 |
| 50 CHESAPEAI016-HICK( | 559.8105 | 1536.625 |
| 550 CHESAPEAIO17-INDIA | 354.6891 | 1271.966 |
| 50 CHESAPEAI018-INDIA | 712.2136 | 404.6143 |
| 550 CHESAPEAIO19-JOLLI | 401.6961 | 792.3723 |
| 550 CHESAPEAIO20-E W C | 831.169 | 1063.447 |
| 50 CHESAPEAI021-FELLC | 739.3825 | 963.2933 |
| 50 CHESAPEAIO22-NORF | 409.4743 | 591.3594 |
| 50 CHESAPEAIO23-OAK | 982.8734 | 749.0645 |
| 50 CHESAPEAIO24-OAKL | 667.5789 | 563.3476 |
| 550 CHESAPEAIO25-ST JU | 822.8299 | 479.3123 |
| 550 CHESAPEAIO26-JOHN | 535.6157 | 287.8986 |
| 550 CHESAPEAIO27-SILVE | 646.2319 | 865.2521 |
| 550 CHESAPEAIO28-SUNR | 141.021 | 251.8268 |
| 550 CHESAPEAI029-TANE | 390.0679 | 826.3469 |
| 50 CHESAPEAIO30-SOUT | 673.4009 | 40.46143 |
| 50 CHESAPEAI031-CARV | 1098.4 | 248.9934 |
| 50 CHESAPEAI032-PROV | 1368.149 | 99.59737 |
| 550 CHESAPEAI 033 - WEST | 382.3054 | 619.3711 |
| 550 CHESAPEAI 034 - HICKI | 510.6668 | 1547.853 |
| 550 CHESAPEAI 035 - TAYLI | 611.3005 | 284.7862 |
| 550 CHESAPEAI 036 - GREA | 519.2136 | 1122.795 |
| 550 CHESAPEAI 037 - BRID | 579.0406 | 1121.191 |
| 550 CHESAPEAI038-BAILE | 444.4058 | 989.7489 |
| 550 CHESAPEAI 039 - LAKE | 576.904 | 720.1926 |
| 550 CHESAPEAIO41-JOHN | 1416.62 | 1323.294 |
| 550 CHESAPEAI 042 - PARK | 745.2044 | 427.9574 |
| 550 CHESAPEAI 043 - PLEA؛ | 416.6529 | 1178.934 |
| 550 CHESAPEAIO44-NANS | 787.8984 | 552.4542 |
| 550 CHESAPEAIO45-SUNR | 378.1926 | 234.1829 |
| 550 CHESAPEAIO46-BELLS | 726.4716 | 957.5835 |
| 550 CHESAPEAIO48-JOLLI | 1452.943 | 186.0631 |
| 550 CHESAPEAI 049 - WATE | 645.2778 | 729.8166 |
| 550 CHESAPEAI 050 - RIVEF | 1089.707 | 753.8764 |
| CHESAPEAI051-COOF | 799.118 | 1867.047 |


| 3.9 | 1092.865 | 24.2511 | 129.783 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 439.0976 | 6.46696 | 900.7556 | 0 |
| 0 | 1321.196 | 14.55066 | 214.7599 | 0 |
| 1.56 | 768.3175 | 4.730769 | 835.5389 | 0 |
| 0 | 536.5346 | 7.884615 | 800.3919 | 0 |
| 0 | 973.821 | 17.78414 | 876.035 | 0 |
| 0 | 650.2799 | 4.730769 | 1656.699 | 0 |
| 0 | 413.7275 | 6.46696 | 440.3351 | 0 |
| 5.85 | 491.7893 | 16.1674 | 746.2521 | 0 |
| 0 | 856.7283 | 11.31718 | 188.4943 | 0 |
| 0 | 737.684 | 12.93392 | 828.1389 | 0 |
| 1.56 | 547.2652 | 9.461538 | 944.1749 | 1.5 |
| 1.95 | 864.5344 | 17.78414 | 610.289 | 0 |
| 0 | 553.7037 | 17.34615 | 1522.502 | 0 |
| 0 | 351.9667 | 17.34615 | 1257.302 | 0 |
| 0 | 692.7985 | 24.2511 | 403.2542 | 0 |
| 1.56 | 403.474 | 7.884615 | 782.8185 | 0 |
| 0 | 819.8248 | 11.03846 | 1065.592 | 3 |
| 0 | 733.7809 | 9.700441 | 959.4669 | 0 |
| 3.9 | 398.1152 | 6.46696 | 594.8386 | 1.26087 |
| 0 | 970.0545 | 11.03846 | 750.8667 | 0 |
| 0 | 647.9129 | 22.63436 | 560.8478 | 0 |
| 0 | 788.4242 | 21.01762 | 489.7762 | 0 |
| 3.9 | 513.2563 | 14.55066 | 293.5567 | 1.26087 |
| 1.95 | 626.4459 | 16.1674 | 871.3999 | 0 |
| 0 | 139.499 | 0 | 252.419 | 0 |
| 1.95 | 388.3575 | 8.0837 | 826.5939 | 1.26087 |
| 3.9 | 679.1377 | 9.700441 | 35.53581 | 2.521739 |
| 0 | 1085.059 | 11.31718 | 256.4759 | 6.304348 |
| 7.8 | 1358.275 | 14.55066 | 101.9723 | 3.782609 |
| 0 | 370.7936 | 3.23348 | 627.2843 | 1.26087 |
| 1.56 | 497.9041 | 3.153846 | 1556.051 | 0 |
| 0 | 604.979 | 6.46696 | 290.4666 | 1.26087 |
| 1.56 | 502.1963 | 4.730769 | 1135.886 | 1.5 |
| 0 | 590.188 | 1.576923 | 1119.91 | 1.5 |
| 0 | 425.4368 | 4.85022 | 1004.273 | 0 |
| 0 | 570.8728 | 3.153846 | 728.5004 | 0 |
| 7.8 | 1382.113 | 37.84615 | 1321.206 | 6 |
| 0 | 724.0232 | 6.46696 | 440.3351 | 0 |
| 3.12 | 390.5972 | 11.03846 | 1191.801 | 0 |
| 0 | 782.5695 | 9.700441 | 553.1226 | 1.26087 |
| 0 | 375.5742 | 4.730769 | 239.6383 | 0 |
| 1.56 | 721.1024 | 11.03846 | 956.9556 | 0 |
| 4.68 | 1435.766 | 18.92308 | 193.3082 | 1.5 |
| 0 | 654.5722 | 3.153846 | 730.098 | 0 |
| 3.12 | 1092.384 | 14.19231 | 746.0739 | 3 |
| 1.56 | 772.6098 | 9.461538 | 1878.764 | 3 |
|  |  |  |  |  |


| EAI052-SHIPY | 777.752 | 601.4972 | 1.56 | 759.7329 | 14.19231 | 613.4741 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550 CHESAPEAI053-FAIRV | 1014.953 | 880.8142 | 0 | 999.191 | 6.46696 | 893.0304 | 1.26087 |
| 550 CHESAPEAI054-PUGF | 836.4143 | 353.2594 | 1.95 | 843.0674 | 11.31718 | 346.0879 | 2.521739 |
| 550 CHESAPEAI 055 - GEOR | 599.6567 | 216.313 | 0 | 579.6089 | 14.55066 | 219.395 | 1.26087 |
| 550 CHESAPEAI 056 - GREE | 698.6291 | 530.6672 | 1.95 | 702.5562 | 4.85022 | 531.4922 | 2.521739 |
| 550 CHESAPEAI057-CYPR | 655.9351 | 522.8862 | 0 | 653.7676 | 12.93392 | 512.9517 | 1.26087 |
| 550 CHESAPEAI058-EXPR | 467.9332 | 192.4791 | 0 | 463.5659 | 4.730769 | 196.5034 | 0 |
| 550 CHESAPEAI 059 - CLEAI | 935.8664 | 834.0761 | 0 | 914.2549 | 1.576923 | 854.71 | 5 |
| 550 CHESAPEAI 060 - PARK | 491.4367 | 1079.487 | 1.56 | 480.735 | 3.153846 | 1089.555 | . 5 |
| 550 CHESAPEAI061-CENT | 700.8315 | 1647.3 | 3.12 | 742.5638 | 11.03846 | 1615.162 | 1.5 |
| 550 CHESAPEAI 062 - FENT | 666.6446 | 1422.741 | 0 | 652.426 | 0 | 1439.427 | 0 |
| 550 CHESAPEAI063-POPL | 207.2581 | 837.2841 | 1.56 | 212.4677 | 6.307692 | 829.1485 | 5 |
| 550 CHESAPEAI064-DEEP | 717.9249 | 704.1527 | 1.56 | 729.687 | 14.19231 | 694.9511 | 0 |
| 550 CHESAPEAI065-WATE | 641.0044 | 747.4605 | 0 | 626.6724 | 3.153846 | 757.257 | 0 |
| 570 COLONIAL 001 - FIRST | 274.8472 | 789.2066 | 1.4 | 275.1096 | 6.625 | 787.9509 | 2.5 |
| 570 COLONIAL 002 - SECO | 325.4769 | 863.0821 | 1.4 | 318.8356 | 11.59375 | 861.7089 | 1.25 |
| 570 COLONIAL 003 - THIRI | 367.0656 | 963.9853 | 1.4 | 360.7397 | 13.25 | 969.6474 | 3.75 |
| 570 COLONIAL 004 - FOUR | 417.6954 | 1001.824 | 0 | 408.1096 | 18.21875 | 989.4361 | 1.25 |
| 570 COLONIAL 005 - FIFTH | 377.9149 | 1273.902 | 2.8 | 366.2055 | 3.3125 | 1304.257 | 1.25 |
| 580 COVINGTO 101 - PREC | 106.0728 | 182.7339 | 0 | 97.23664 | 1.6 | 190.6973 | 0 |
| 580 COVINGTO 201 - PREC | 129.3216 | 216.7036 | 0 | 122.2824 | 0 | 225.7949 | 0 |
| 580 COVINGTO 301 - PREC | 136.5869 | 101.9093 | 0 | 129.6489 | 4.8 | 106.4629 | 0 |
| 580 COVINGTO 401 - PREC | 122.0563 | 315.0988 | 0 | 110.4962 | 6.4 | 324.0684 | 0 |
| 580 COVINGTO 501 - PREC | 124.9624 | 345.5544 | 0 | 119.3359 | 3.2 | 350.9766 |  |
| 590 DANVILLE (001-WARI | 250.493 | 84.60096 | 0 | 239.2845 | 8.888889 | 87.44634 | 0 |
| 590 DANVILLE (002-WARI | 236.4028 | 154.6155 | 0 | 231.4647 | 2.962963 | 160.3183 | 1.25 |
| 590 DANVILLE (003-WARI | 454.0185 | 252.3442 | 0 | 461.3655 | 7.407407 | 250.6795 | 0 |
| 590 DANVILLE (004-WARI | 706.0771 | 719.1081 | 2.285714 | 710.0337 | 8.888889 | 736.0067 | 0 |
| 590 DANVILLE (006-WARI | 297.4604 | 80.22504 | 0 | 304.9704 | 1.481481 | 80.15914 | 0 |
| 590 DANVILLE (007-WARI | 452.453 | 122.5255 | 0 | 453.5457 | 2.962963 | 123.8823 | 0 |
| 590 DANVILLE (008-WARI | 402.3544 | 207.1265 | 2.285714 | 397.2435 | 0 | 220.0733 | 0 |
| 590 DANVILLE (009-WARI | 306.8539 | 319.4415 | 0 | 300.2786 | 8.888889 | 323.5514 | 0 |
| 590 DANVILLE (010-WARI | 475.9367 | 399.6666 | 2.285714 | 467.6213 | 2.962963 | 412.4552 | 2.5 |
| 590 DANVILLE (011-WARI | 655.9785 | 361.742 | 1.142857 | 650.6036 | 1.481481 | 374.5618 | 0 |
| 590 DANVILLE (012-WARI | 695.118 | 479.8916 | 0 | 669.371 | 7.407407 | 507.1887 | 0 |
| 590 DANVILLE (013-WARI | 605.8799 | 449.2602 | 0 | 603.685 | 5.925926 | 456.1784 | 0 |
| 590 DANVILLE (014-WARI | 114.2874 | 17.50365 | 0 | 126.68 | 1.481481 | 13.11695 | 0 |
| 590 DANVILLE (015-WARI | 485.3302 | 570.3271 | 0 | 486.3887 | 7.407407 | 561.114 | 0 |
| 590 DANVILLE (016-WARI | 507.2483 | 809.5436 | 0 | 494.2085 | 7.407407 | 817.6232 | 1.25 |
| 590 DANVILLE (017-WARI | 277.1079 | 773.0777 | 0 | 275.2553 | 4.444444 | 782.6447 | 0 |
| 595 EMPORIA ( 101 - PREC | 186.1935 | 90.69981 | 0 | 220.1714 | 5 | 97.73889 | 0 |
| 595 EMPORIA ( 201 - PREC | 122.0323 | 13.53728 | 0 | 153.966 | 2.5 | 10.71111 | 0 |
| 595 EMPORIA ( 301 - PREC | 108.1935 | 152.9713 | 0 | 129.3314 | 7.5 | 152.6333 | 0 |
| 595 EMPORIA ( 401 - PREC | 144.6774 | 166.5086 | 0 | 175.5212 | 0 | 171.3778 | 0 |
| 595 EMPORIA ( 501 - PREC | 113.2258 | 8.122371 | 1 | 137.0297 | 0 | 9.372222 | 2 |
| 595 EMPORIA ( 601 - DISTF | 83.03226 | 211.1816 | 0 | 103.1572 | 2.5 | 210.2056 | 0 |
| 595 EMPORIA ( 701 - DISTF | 139.6452 | 64.97897 | 0 | 167.8229 | 2.5 | 70.96111 | 0 |


| NE | 1079.411 | 536.0978 | 1.333333 | 1107.468 | 7.866667 | 525.3569 | 1.714286 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600 FAIRFAX Cl 002 - TWO | 1022.17 | 638.6556 | 1.333333 | 997.1302 | 9.833333 | 655.919 | 1.714286 |
| 600 FAIRFAX Cl 003 - THRE | 1336.998 | 776.9533 | 1.333333 | 1313.842 | 17.7 | 797.3612 | 1.714286 |
| 600 FAIRFAX Cl 004 - FOUR | 905.6425 | 537.6517 | 1.333333 | 897.0085 | 11.8 | 537.7914 | 6.857143 |
| 600 FAIRFAX Cl 005 - FIVE | 1067.145 | 484.8189 | 2.666667 | 1054.343 | 5.9 | 502.0422 | 0 |
| 600 FAIRFAX Cl 006 - SIX | 1089.633 | 585.8228 | 0 | 1095.209 | 5.9 | 587.5293 | 0 |
| 610 FALLS CHU 001 - FIRST | 2020.836 | 537.288 | 1.2 | 2031.459 | 15.55556 | 549.3028 | 0 |
| 610 FALLS CHU 002 - SECO | 1525.582 | 439.1456 | 1.2 | 1495.414 | 9.333333 | 473.1946 | 3 |
| 610 FALLS CHU 003 - THIRI | 1856.581 | 565.5663 | 3.6 | 1861.127 | 17.11111 | 567.5026 | 3 |
| 620 FRANKLIN (101-PREC | 196.7824 | 483.5129 | 0 | 187.2189 | 1.555556 | 494.6163 | 0 |
| 620 FRANKLIN (201-PREC | 275.1618 | 383.3255 | 0 | 268.4024 | 4.666667 | 384.055 | 0 |
| 620 FRANKLIN 301 - PREC | 373.5529 | 42.10773 | 1 | 386.0355 | 1.555556 | 48.00687 | 0 |
| 620 FRANKLIN (401-PREC | 261.8206 | 47.91569 | 0 | 263.432 | 1.555556 | 45.09737 | 0 |
| 620 FRANKLIN 1501 - PREC | 341.8676 | 14.51991 | 0 | 329.7041 | 3.111111 | 21.82131 | 0 |
| 620 FRANKLIN (601-PREC | 251.8147 | 268.6183 | 0 | 245.2071 | 1.555556 | 276.4032 | 1 |
| 630 FREDERICK 101 - PREC | 1505.248 | 1116.753 | 2.25 | 1487.976 | 25.74684 | 1124.775 | 4.857143 |
| 630 FREDERICK 201 - PREC | 1417.547 | 808.0573 | 3.375 | 1347.804 | 40.05063 | 847.7442 | 7.285714 |
| 630 FREDERICK 301 - PREC | 1095.377 | 851.9405 | 2.25 | 1058.476 | 15.73418 | 881.0484 | 1.214286 |
| 630 FREDERICK 401 - PREC | 902.0751 | 298.1035 | 0 | 911.1158 | 17.16456 | 290.6551 | 0 |
| 630 FREDERICK 402 - PREC | 606.7529 | 360.1454 | 1.125 | 596.6281 | 14.3038 | 358.7774 | 3.642857 |
| 640 GALAX CIT 001 - EAST | 263.6384 | 595.0143 | 2 | 241.0996 | 7.5 | 615.5538 | 0 |
| 640 GALAX CIT 005 - WEST | 250.3616 | 790.9857 | 0 | 250.9004 | 1.5 | 808.4462 |  |
| 650 HAMPTON 101 - ABER | 1177.799 | 198.973 | 0 | 1163.795 | 13.38583 | 209.2982 | 0 |
| 650 HAMPTON 102 - BASSI | 1328.529 | 113.1148 | 1.6 | 1338.364 | 14.72441 | 103.29 |  |
| 650 HAMPTON 103 - CITY I | 608.1787 | 137.6457 | 0 | 601.2941 | 12.04724 | 138.6261 | 0 |
| 650 HAMPTON 104 - COOF | 1556.377 | 284.8313 | 0 | 1537.62 | 24.09449 | 281.3294 | 3.521739 |
| 650 HAMPTON 105 - EAST | 531.061 | 207.15 | 3.2 | 530.7611 | 9.370079 | 205.221 | 0 |
| 650 HAMPTON 106 - ARM | 1021.81 | 512.4237 | 3.2 | 1010.386 | 30.7874 | 504.2185 | 2.347826 |
| 650 HAMPTON 107 - LINDS | 1190.067 | 245.3092 | 1.6 | 1170.848 | 13.38583 | 255.5069 | 0 |
| 650 HAMPTON 108-THON | 1272.443 | 212.6013 | 1.6 | 1290.754 | 9.370079 | 205.221 | 1.173913 |
| 650 HAMPTON 109 - PHEN | 1535.345 | 170.3536 | 0 | 1528.803 | 12.04724 | 175.3212 | 0 |
| 650 HAMPTON 110 - PHOE | 306.2588 | 169.251 | 1.714286 | 298.3254 | 6.123596 | 174.9202 | 0 |
| 650 HAMPTON 111 - HAM | 373.3201 | 267.1145 | 0 | 379.115 | 6.692913 | 256.866 | 0 |
| 650 HAMPTON 112 - SMI | 1288.217 | 581.928 | 0 | 1271.358 | 25.43307 | 585.7632 | 1.173913 |
| 650 HAMPTON 115 - WYTF | 581.8886 | 478.353 | 0 | 592.4775 | 12.04724 | 467.5233 | 0 |
| 650 HAMPTON 116 - JONE | 595.91 | 173.0793 | 3.2 | 590.7141 | 13.38583 | 171.244 | 1.173913 |
| 650 HAMPTON 117 - KECO | 963.9721 | 343.4329 | 1.6 | 952.1959 | 12.04724 | 346.5653 | 1.173913 |
| 650 HAMPTON 118 - MALL | 1584.42 | 179.8934 | 6.4 | 1555.253 | 16.06299 | 198.4256 | 5.869565 |
| 650 HAMPTON 201 - BOOk | 878.8296 | 960.3713 | 0 | 869.6943 | 17.14607 | 958.8689 | 0 |
| 650 HAMPTON 202 - BRYA | 1013.65 | 748.8075 | 0 | 1001.16 | 22.04494 | 754.5826 | 0 |
| 650 HAMPTON 203 - BURB | 734.0224 | 500.0598 | 0 | 723.0598 | 9.797753 | 505.6086 | 1 |
| 650 HAMPTON 204 - FORR | 942.94 | 482.4415 | 1.6 | 952.1959 | 13.38583 | 478.396 | 1.173913 |
| 650 HAMPTON 205 - ASBU | 1018.643 | 1697.639 | 1.714286 | 1026.442 | 14.69663 | 1685.362 | 2 |
| 650 HAMPTON 208 - KRAF | 1426.679 | 1039.839 | 3.2 | 1426.531 | 12.04724 | 1042.414 | 2.347826 |
| 650 HAMPTON 209 -LANG | 803.9293 | 692.3905 | 5.142857 | 780.3652 | 20.82022 | 702.2342 | 0 |
| 650 HAMPTON 210 - MACl | 1708.86 | 573.751 | 3.2 | 1662.816 | 29.44882 | 591.1996 | 3.521739 |
| 650 HAMPTON 212 - BETH | 1768.451 | 671.8747 | 1.6 | 1742.166 | 22.75591 | 683.617 | 1.173913 |


| ILL | 1220.042 | 1223.223 | 3.428571 | 1191.616 | 18.37079 | 1235.932 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 650 HAMPTON 214 - TUCK | 1244.4 | 759.0958 | 0 | 1239.618 | 18.74016 | 757.0073 | 0 |
| HAMPTON 215 - TYLEF | 343.601 | 85.21324 | 0 | 345.9735 | 4.015748 | 86.24047 | 0 |
| 50 HAMPTON 216 - SAND | 797.4678 | 436.1053 | 0 | 784.68 | 10.70866 | 434.9054 | 2.347826 |
| HAMPTON 217 - SYMS | 418.8897 | 449.7336 | 0 | 412.6182 | 4.015748 | 455.2916 | 0 |
| HARRISONI 101 - NORT | 1131.507 | 601.8551 | 3.111111 | 1106.366 | 20.96 | 622.6052 | 2.666667 |
| HARRISONI 102 - EAST | 580.4964 | 269.7971 | 1.555556 | 573.7405 | 7.86 | 281.9942 | 0 |
| HARRISONI 103 - SOUT | 1081.75 | 628.9944 | 0 | 1068.989 | 19.65 | 630.5264 | 2.666667 |
| HARRISONI 104 - EAST | 820.0664 | 646.5552 | 0 | 812.9547 | 18.34 | 646.3688 | 0 |
| HARRISONI 105 - Soutr | 381.4691 | 105.3645 | 0 | 379.3789 | 11.79 | 101.3912 | 0 |
| HARRISONI 201 - NORT | 950.9084 | 691.2553 | 4.666667 | 923.2176 | 15.72 | 720.8279 | 1.333333 |
| HARRISONI202-SOUT | 1057.793 | 680.0803 | 3.111111 | 1035.349 | 22.27 | 684.3905 | 2.666667 |
| HARRISONI203-WES | 938.0085 | 672.0981 | 1.555556 | 912.0044 | 14.41 | 693.8959 | 2.666667 |
| HOPEWELL 101 - WARI | 314.6694 | 403.3878 | 2.307692 | 299.9799 | 16.11111 | 397.8852 | . 5 |
| HOPEWELL 201 - WARI | 478.1569 | 114.5988 | 0 | 465.0575 | 12.88889 | 116.9357 | 0 |
| HOPEWELL 301 - WARI | 374.4391 | 797.6077 | 0 | 356.7808 | 6.444444 | 810.9568 | 2.25 |
| 70 HOPEWELL 401 - WARI | 652.192 | 693.7048 | 10.38462 | 660.3107 | 16.11111 | 675.7974 | 1.125 |
| 70 HOPEWELL 501 - WARI | 381.4708 | 579.106 | 0 | 362.1059 | 6.444444 | 592.2718 | 0 |
| HOPEWELL 601 - WARI | 551.99 | 152.7984 | 0 | 544.9338 | 14.5 | 151.8646 | 1.125 |
| HOPEWELL 701 - WARI | 406.0818 | 343.7964 | 2.307692 | 395.8314 | 14.5 | 349.2885 | 0 |
| 8 LEXINGTON 001 - LEXIN | 1317 | 749 | 2 | 1289 | 10 | 775 | 4 |
| LYNCHBUR 101 - FIRST | 1009.471 | 1188.759 | 1.066667 | 952.1213 | 27.62791 | 1214.652 | 3.62069 |
| 80 LYNCHBUR 102 - FIRST | 937.1004 | 1489.759 | 1.066667 | 950.2471 | 6.139535 | 1491.055 | . 62069 |
| LYNCHBUR 103 - FIRST | 710.7118 | 919.5105 | 1.066667 | 706.594 | 6.139535 | 936.9807 | 0 |
| LYNCHBUR 104 - FIRST | 404.5305 | 259.0886 | 1.066667 | 393.5935 | 4.604651 | 273.8672 | 0 |
| LYNCHBUR 105 - FIRST | 601.2288 | 535.9578 | 0 | 594.1387 | 4.604651 | 538.859 | 1.206897 |
| LYNCHBUR 201 - SECO | 1208.024 | 457.2152 | 1.066667 | 1203.271 | 13.81395 | 474.1959 | 2.413793 |
| LYNCHBUR 202 - SECO | 963.0794 | 377.2025 | 1.066667 | 968.9896 | 12.27907 | 387.9785 | 1.206897 |
| 80 LYNCHBUR 203 - SECO | 367.4176 | 153.6751 | 1.066667 | 380.4737 | 3.069767 | 153.4163 | 2.413793 |
| LYNCHBUR 204 - SECO | 276.491 | 264.1688 | 0 | 277.3897 | 1.534884 | 263.7239 | 0 |
| LYNCHBUR 301 - THIRI | 480.6119 | 368.3122 | 1.066667 | 462.9409 | 10.74419 | 376.5673 | 2.413793 |
| LYNCHBUR 302 - THIRI | 27.83467 | 648.9916 | 0 | 22.49105 | 6.139535 | 654.2382 | 1.206897 |
| LYNCHBUR 303 - THIRL | 361.8506 | 556.2785 | 0 | 367.3539 | 4.604651 | 554.0738 | 2.413793 |
| LYNCHBUR 304 - THIRI | 387.8297 | 572.789 | 0 | 378.5994 | 6.139535 | 581.9677 | 0 |
| LYNCHBUR 305 - THIRI | 593.8062 | 1348.785 | 3.2 | 590.3902 | 16.88372 | 1341.442 | 7.241379 |
| 80 LYNCHBUR 401 - FOUR | 692.1553 | 1764.089 | 0 | 685.9772 | 16.88372 | 1767.458 | 0 |
| LYNCHBUR 402 - FOUR | 432.3651 | 577.8692 | 1.066667 | 432.9528 | 3.069767 | 578.164 | 3.62069 |
| CHBUR 403 - FOUR | 788.6489 | 1038.895 | 2.133333 | 760.9474 | 35.30233 | 1039.681 | 1.206897 |
| LYNCHBUR 404 - FOUR | 901.8432 | 1023.654 | 1.066667 | 871.5284 | 18.4186 | 1039.681 | 2.413793 |
| MANASSAS001-DEAN | 1101.179 | 573.8329 | 0 | 1073.663 | 13.92 | 593.652 | 0 |
| MANASSAS002-WEER | 1136.893 | 875.0951 | 0 | 1109.786 | 27.84 | 892.8527 | 0 |
| 683 MANASSAS 003 - METZ | 1134.909 | 1010.583 | 0 | 1139.889 | 13.92 | 1005.251 | 3.111111 |
| 83 MANASSAS004-HAYD | 1069.434 | 903.7867 | 9.272727 | 1057.608 | 13.92 | 921.348 | 3.111111 |
| 683 MANASSAS005-BALD | 930.5461 | 760.3285 | 6.181818 | 925.1565 | 13.92 | 763.0408 | 4.666667 |
| 683 MANASSAS006-ROUN | 869.0388 | 854.3734 | 1.545455 | 848.8963 | 3.48 | 873.8558 | 3.111111 |
| 685 MANASSAS 001 - PREC | 940.2857 | 495.9036 | 0 | 928.6259 | 20 | 488.1151 | 1.272727 |
| MANASSAS002-PREC | 519.4462 | 441.805 | 5.333333 | 504.7645 | 12 | 456.6721 | 2.545455 |


| 685 MANASSAS 003 - PREC | 734.2681 | 434.2913 | 6.666667 | 724.6096 | 14 | 434.2128 | 10.18182 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 690 MARTINSV 001 - PREC | 363.3464 | 14.893 | 1 | 363.8724 | 2.758621 | 17.57097 | 0 |
| 0 MARTINSV 002 - PREC | 419.1299 | 392.6337 | 2 | 404.6382 | 11.03448 | 401.429 | 1.666667 |
| 690 MARTINSV 003 - PREC | 257.8101 | 166.5309 | 1 | 256.6735 | 5.517241 | 167.6 | 0 |
| 690 MARTINSV 004 - PREC | 541.2505 | 287.0288 | 1 | 537.5044 | 8.275862 | 293.3 | 0 |
| 690 MARTINSV 005 - PREC | 474.9134 | 774.4362 | 1 | 452.9532 | 11.03448 | 787.9903 | 3.333333 |
| 690 MARTINSV 006 - PREC | 206.5496 | 9.477366 | 0 | 208.3585 | 1.37931 | 8.109677 | 0 |
| 700 NEWPORT 101 - DENB | 1276.642 | 546.7565 | 2.652174 | 1264.945 | 27.41784 | 552.9397 | 2.685714 |
| NEWPORT 102 - Ston | 1452.514 | 418.9269 | 3.978261 | 1449.713 | 24.67606 | 414.3899 | 0 |
| 700 NEWPORT 103 -JENKI | 1014.404 | 735.3369 | 3.978261 | 1005.955 | 17.8216 | 743.1308 | 4.028571 |
| 700 NEWPORT 104 - MCIN | 937.4604 | 379.692 | 2.652174 | 928.5741 | 21.93427 | 381.6418 | 0 |
| 700 NEWPORT 105 - OYST | 252.8159 | 172.127 | 0 | 241.6188 | 5.483568 | 177.5957 | 0 |
| 700 NEWPORT 106 -RESEI | 1278.212 | 691.0395 | 0 | 1272.841 | 19.19249 | 696.5277 | 714 |
| 700 NEWPORT 107 - RICHI | 1187.136 | 807.4783 | 1.326087 | 1167.034 | 13.70892 | 814.9248 | 1.342857 |
| ORT 108 - KATH | 1108.621 | 378.4264 | 1.326087 | 1097.549 | 17.8216 | 391.7181 | 0 |
| NEWPORT 109 - WINE | 656.3793 | 453.0991 | 1.326087 | 644.3167 | 17.8216 | 448.3976 | 0 |
| 700 NEWPORT 110 -GREE | 1235.815 | 468.2868 | 1.326087 | 1204.935 | 23.30516 | 479.8862 | 0 |
| 700 NEWPORT 201 - BLAN | 205.7074 | 96.18864 | 0 | 198.9802 | 4.112676 | 96.98487 | 0 |
| 700 NEWPORT 202 -BOUL | 703.4879 | 832.7911 | 3.978261 | 694.8514 | 13.70892 | 838.8562 | 4.028571 |
| 700 NEWPORT 203 - CHAR | 1201.268 | 1251.718 | 2.652174 | 1168.614 | 27.41784 | 1255.765 | 2.685714 |
| 700 NEWPORT 204 - MARI | 416.1256 | 374.6295 | 0 | 412.1732 | 8.225352 | 379.1227 | 0 |
| 700 NEWPORT 205 - DEEP | 803.9861 | 1258.046 | 2.652174 | 794.3415 | 6.85446 | 1264.582 | 342857 |
| NEWPORT 208 - HIDEI | 497.7805 | 677.1174 | 1.326087 | 499.0296 | 2.741784 | 681.4132 | 1.342857 |
| 700 NEWPORT 209 - HILTC | 825.9701 | 759.384 | 1.326087 | 840.1385 | 9.596244 | 746.9095 | 0 |
| 700 NEWPORT 210 - KNOL | 1304.907 | 1239.062 | 3.978261 | 1293.371 | 28.78873 | 1235.612 | 4.028571 |
| 700 NEWPORT 211 - PALN | 941.3927 | 611.6971 | 0 | 928.1614 | 20.4507 | 608.3175 | 2.342857 |
| 700 NEWPORT 212 -RIVEF | 502.4913 | 618.898 | 0 | 491.1336 | 4.112676 | 628.5124 | 0 |
| 700 NEWPORT 213 -SANF | 383.1496 | 516.3811 | 1.326087 | 366.3762 | 0 | 532.787 | 0 |
| 700 NEWPORT 215 -WAR' | 469.5153 | 396.1453 | 0 | 459.5494 | 8.225352 | 401.7945 | 1.342857 |
| 700 NEWPORT 216 - YATE: | 474.2262 | 583.4601 | 0 | 478.4999 | 9.596244 | 576.8711 | 2.685714 |
| 00 NEWPORT 217 - RIVEF | 635.9656 | 845.4475 | 3.978261 | 636.4207 | 8.225352 | 838.8562 | 2.685714 |
| 700 NEWPORT 218 -KILN | 1272.962 | 1032.446 | 3.978261 | 1276.388 | 27.41784 | 1022.845 | 0 |
| 700 NEWPORT 219 - DEER | 990.8501 | 449.3022 | 2.652174 | 985.4256 | 19.19249 | 454.6953 |  |
| NEWPORT 302 - BRIAF | 714.4798 | 232.8778 | 2.652174 | 709.0642 | 10.96714 | 238.0538 | 0 |
| 700 NEWPORT $303-$ CARV | 511.913 | 180.9865 | 0 | 510.0841 | 6.85446 | 182.6339 | 1.342857 |
| 700 NEWPORT 304-CHES | 504.0616 | 30.37536 | 0 | 499.0296 | 8.225352 | 30.22905 | 0 |
| 700 NEWPORT 305 - DOW | 279.5108 | 72.14148 | 0 | 284.2574 | 5.483568 | 68.01537 | 0 |
| 700 NEWPORT 306 - DUNE | 103.6388 | 3.79692 | 0 | 102.6485 | 4.112676 | 5.038175 |  |
| 700 NEWPORT 307 - HUN7 | 367.4468 | 24.04716 | 0 | 377.4306 | 4.112676 | 16.37407 | 0 |
| 700 NEWPORT 308 -JEFFE | 331.3302 | 12.6564 | 0 | 336.3712 | 1.370892 | 11.33589 | 0 |
| 700 NEWPORT 309 -MAG | 497.7805 | 20.25024 | 2.652174 | 494.292 | 9.596244 | 22.67179 | 2.685714 |
| 700 NEWPORT 310 -MARS | 557.4513 | 29.10972 | 1.326087 | 552.7227 | 9.596244 | 32.74814 | 4.028571 |
| 700 NEWPORT 311 - NEWI | 1074.075 | 391.0828 | 1.326087 | 1050.173 | 21.93427 | 394.2372 | 1.342857 |
| 700 NEWPORT 312 - NEW: | 190.0045 | 6.3282 | 1.326087 | 184.7673 | 4.112676 | 10.07635 | 1.342857 |
| 700 NEWPORT 313 -REED | 805.5564 | 43.03176 | 1.326087 | 800.6583 | 5.483568 | 55.41993 | 0 |
| 700 NEWPORT 314 -RIVEF | 445.961 | 321.4726 | 0 | 439.0197 | 6.85446 | 323.7028 | 1.342857 |
| 700 NEWPORT 315 -SEDG | 646.9576 | 559.4129 | 0 | 623.787 | 26.04695 | 563.0161 | 0 |


| T | 788.2833 | 451.8335 | 0 | 776.9702 | 21.93427 | 460.993 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 700 NEWPORT 317 - WASt | 262.2377 | 16.45332 | 0 | 266.8861 | 4.112676 | 12.59544 | 0 |
| 700 NEWPORT 318 - WILSI | 532.3267 | 68.34456 | 1.326087 | 535.3514 | 9.596244 | 66.75582 | 0 |
| 700 NEWPORT 319 - SAUN | 951.5929 | 825.1973 | 0 | 945.9454 | 9.596244 | 830.0394 | 0 |
| 700 NEWPORT 320 - WATF | 1130.605 | 1251.718 | 2.652174 | 1108.604 | 30.15962 | 1251.987 | 2.685714 |
| 710 NORFOLK ( 101 - GRan | 1157.766 | 559.7288 | 4.5 | 1157.067 | 14.49591 | 559.9038 | 1.323529 |
| 10 NORFOLK ( 102 - OCEA | 374.5474 | 375.9108 | 1.411765 | 368.7392 | 6.658031 | 380.0769 | 0 |
| OLK ( 103 - NORT | 633.8494 | 645.3349 | 1.411765 | 626.3735 | 13.31606 | 639.8601 | 1.363636 |
| NORFOLK ( 104 - TITUS | 544.8447 | 83.4429 | 0 | 556.1552 | 6.658031 | 79.38346 | 0 |
| 10 NORFOLK ( 106 - SECO | 953.9754 | 559.3758 | 0 | 922.653 | 17.31088 | 579.7133 | 1.363636 |
| 710 NORFOLK ( 201 - LARC | 919.6904 | 510.4194 | 1.5 | 914.5088 | 14.49591 | 500.4801 | 1.323529 |
| 710 NORFOLK ( 203 - GHEN | 582.1445 | 221.2262 | 1.5 | 568.6999 | 4.348774 | 232.4129 | 0 |
| 710 NORFOLK ( 207 - LAME | 991.4393 | 165.2533 | 7.5 | 989.8984 | 20.29428 | 158.4633 | 5.294118 |
| 10 NORFOLK ( 208 - LARC | 662.0466 | 497.0925 | 3 | 660.4786 | 7.247956 | 493.8774 | 0 |
| 10 NORFOLK ( 210 - MAU | 1099.063 | 363.8237 | 3 | 1094.788 | 13.04632 | 360.5041 | 2.647059 |
| 710 NORFOLK ( 211 - CHRY | 1203.425 | 601.0422 | 0 | 1194.762 | 14.49591 | 606.1223 | 2.647059 |
| NORFOLK (212-PARK | 844.6802 | 81.29395 | 7.5 | 819.4523 | 27.54223 | 87.15484 | 2.647059 |
| 710 NORFOLK ( 213 - TAYL( | 1467.591 | 393.1429 | 1.5 | 1452.07 | 21.74387 | 404.0815 | 2.647059 |
| 710 NORFOLK ( 214 - STUA | 1322.463 | 422.462 | 3 | 1302.929 | 26.09264 | 422.5689 | 2.647059 |
| 10 NORFOLK ( 215 - SUBU | 773.1042 | 536.2823 | 0 | 761.6315 | 14.64767 | 536.2028 | 1.363636 |
| 710 NORFOLK ( 217 - WESL | 659.4595 | 382.3257 | 0 | 644.0859 | 17.31088 | 383.9161 | 0 |
| 710 NORFOLK ( 218 - WILL) | 1172.442 | 856.9182 | 1.5 | 1152.15 | 14.49591 | 860.9842 | 5.294118 |
| NORFOLK (301-BALLI | 931.105 | 177.2475 | 0 | 925.9811 | 17.3951 | 172.9891 | 1.323529 |
| 710 NORFOLK (302-TANN | 603.343 | 155.9245 | 4.5 | 590.0057 | 8.697548 | 162.4249 | 1.323529 |
| 710 NORFOLK ( 303 - BROA | 1180.596 | 78.62858 | 1.5 | 1170.178 | 23.19346 | 75.27009 | 1.323529 |
| 710 NORFOLK ( 304 - COLE | 575.6218 | 138.5995 | 3 | 568.6999 | 11.59673 | 141.2965 | 1.323529 |
| 710 NORFOLK ( 305 - LAFA' | 792.4992 | 205.2339 | 1.5 | 796.5077 | 13.04632 | 202.0408 | 0 |
| 710 NORFOLK ( 306 - LINDE | 737.0569 | 98.61889 | 1.5 | 726.0348 | 11.59673 | 101.6806 | 1.323529 |
| 710 NORFOLK ( 309 - NORI | 1371.382 | 442.4523 | 0 | 1342.263 | 30.44142 | 450.3 | 0 |
| 710 NORFOLK (310-ROSE | 1635.549 | 113.2785 | 0 | 1604.488 | 27.54223 | 125.4501 | 1.323529 |
| 710 NORFOLK ( 311 -SHER' | 1348.553 | 694.3303 | 4.5 | 1311.124 | 23.19346 | 715.7261 | 3.970588 |
| 710 NORFOLK ( 313 - UNIO | 551.162 | 27.98644 | 0 | 545.7553 | 15.9455 | 19.80792 | 0 |
| 710 NORFOLK ( 402 - BERK | 931.105 | 21.323 | 1.5 | 912.8699 | 20.29428 | 29.05161 |  |
| 710 NORFOLK ( 404 - CAM | 896.8612 | 47.97676 | 1.5 | 881.7307 | 28.99183 | 46.21848 |  |
| 710 NORFOLK ( 405 - CHES | 926.213 | 66.63439 | 3 | 922.7033 | 14.49591 | 64.70587 | 0 |
| 710 NORFOLK ( 406 - BARR | 553.8179 | 428.5127 | 0 | 550.6934 | 9.321244 | 429.986 | 0 |
| 710 NORFOLK ( 408 - EASTI | 694.6598 | 638.3574 | 1.5 | 688.34 | 7.247956 | 636.4944 | 2.647059 |
| 710 NORFOLK ( 409 - FAIRL | 575.6218 | 433.1235 | 0 | 557.2276 | 10.14714 | 441.0563 | 0 |
| 710 NORFOLK ( 411 - RUFF | 445.1693 | 26.65375 | 0 | 449.0599 | 8.697548 | 23.7695 | 0 |
| 710 NORFOLK ( 412 - INGLE | 973.5021 | 187.909 | 1.5 | 968.5927 | 23.19346 | 179.5918 | 1.323529 |
| 710 NORFOLK ( 413 - POPL | 1201.794 | 271.8683 | 1.5 | 1180.011 | 18.84469 | 282.593 | 2.647059 |
| 710 NORFOLK ( 414 - YOUN | 779.4539 | 41.31332 | 0 | 762.0907 | 17.3951 | 48.85953 | 0 |
| 710 NORFOLK ( 415 - LAKE | 614.7576 | 403.8044 | 1.5 | 601.478 | 21.74387 | 398.7994 | 0 |
| 710 NORFOLK ( 501 - BAYV | 761.8998 | 765.9343 | 0 | 731.0375 | 18.64249 | 776.7902 | 0 |
| 710 NORFOLK (503-EAST | 833.9281 | 803.1405 | 2.823529 | 821.2095 | 15.97927 | 806.2238 | 1.363636 |
| 710 NORFOLK ( 504 - LARR' | 793.9124 | 533.7164 | 2.823529 | 787.395 | 13.31606 | 537.4825 | 0 |
| 710 NORFOLK ( 505 - LITTL | 513.8022 | 552.961 | 4.235294 | 503.9972 | 11.98446 | 555.3986 | 2.727273 |


| 710 NORFOLK ( 506 - OCEA | 925.164 | 564.5077 | 0 | 898.4998 | 21.3057 | 569.4755 | 2.727273 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 710 NORFOLK (507-PRETI | 704.2771 | 543.9802 | 5.647059 | 687.5617 | 26.63212 | 549 | 2.727273 |
| 10 NORFOLK (509-TARR | 646.6544 | 917.325 | 1.411765 | 618.3224 | 18.64249 | 934.1958 | 0 |
| 710 NORFOLK (510-THIRI | 749.0947 | 993.0204 | 2.823529 | 753.5805 | 14.64767 | 985.3846 | 636 |
| 710 NORFOLK (511-CROS | 801.9155 | 692.8049 | 1.411765 | 787.395 | 19.97409 | 694.8881 | 0 |
| 710 NORFOLK ( 512 - AZALI | 500.9971 | 447.7572 | 0 | 492.7257 | 10.65285 | 445.3427 | 0 |
| 720 NORTON C 001 - EAST | 344 | 842 | 2 | 320 | 13 | 866 |  |
| 730 PETERSBUF 101 - FIRST | 799.6397 | 148.1086 | 0 | 784.7517 | 16.58824 | 147.3948 | 0 |
| 730 PETERSBUF 201 -SECO | 1587.91 | 173.6446 | 1.428571 | 1594.205 | 29.85882 | 149.0326 | 25 |
| 730 PETERSBUF 301 -THIRI | 1423.055 | 396.6587 | 2.857143 | 1402.292 | 29.85882 | 389.7775 | 1.25 |
| 730 PETERSBUF 401 - FOUR | 903.8581 | 229.8237 | 0 | 874.0576 | 19.90588 | 245.6581 | 0 |
| 730 PETERSBUF 501 - FIFTH | 905.753 | 98.73907 | 2.857143 | 906.3597 | 21.56471 | 91.71235 | 25 |
| 730 PETERSBUF601-SIXTH | 797.7448 | 51.07193 | 1.428571 | 807.5532 | 11.61176 | 54.04478 | 0 |
| 730 PETERSBUF 701 -SEVEI | 1207.039 | 108.9535 | 1.428571 | 1221.78 | 11.61176 | 129.3799 | . 25 |
| 735 POQUOSOIO01-CENT | 408.6392 | 1477.055 | 1 | 402.6401 | 10.66667 | 1481.445 | 1.666667 |
| 735 POQUOSOI002-EASTI | 483.7405 | 1721.702 | 2 | 470.5008 | 12.19048 | 1728.353 | 1.666667 |
| 735 POQUOSOI003-WEST | 503.6203 | 1671.243 | 3 | 490.859 | 9.142857 | 1687.202 | 1.666667 |
| 740 PORTSMOL 001 - EMAP | 801.1045 | 271.8812 | 1.275862 | 798.0149 | 12.52941 | 269.9578 | 0 |
| 740 PORTSMOL 005 - HAMI | 559.5501 | 22.45975 | 0 | 554.0065 | 6.960784 | 31.82909 |  |
| 740 PORTSMOL 007-PARK | 571.7807 | 164.3108 | 0 | 573.9569 | 8.352941 | 167.3974 | 0 |
| 740 PORTSMOL 009 -THIRI | 765.9415 | 153.672 | 1.275862 | 778.0646 | 11.13725 | 140.2838 | 647 |
| 740 PORTSMOL010-PORT | 365.3893 | 221.0512 | 1.275862 | 365.2453 | 6.960784 | 219.267 | 0 |
| 740 PORTSMOL011-JOSEF | 594.7131 | 17.73138 | 1.275862 | 595.4419 | 5.568627 | 18.86168 |  |
| 740 PORTSMOL 013 - ST. M | 301.1786 | 21.27766 | 0 | 299.2556 | 2.784314 | 22.39825 | 0 |
| 740 PORTSMOI 014 -BRIGI | 706.3173 | 31.91649 | 0 | 695.1938 | 9.745098 | 36.54451 | 1.117647 |
| 740 PORTSMOI 016 - CRAD | 539.6753 | 223.4154 | 1.275862 | 540.1947 | 11.13725 | 219.267 | 0 |
| 740 PORTSMOI 017 - VICTC | 623.7607 | 308.526 | 0 | 607.7191 | 16.70588 | 313.5754 |  |
| 740 PORTSMOI 019 - VICT | 307.2939 | 248.2393 | 1.275862 | 293.117 | 9.745098 | 253.4538 | 0 |
| 740 PORTSMOL 020 - NOBL | 720.0767 | 198.5915 | 0 | 705.9363 | 18.09804 | 208.6573 | 647 |
| 740 PORTSMOL 021 -JOHN | 518.2718 | 14.1851 | 0 | 515.6404 | 4.176471 | 15.32512 | 0 |
| 740 PORTSMOL022-ST. M | 461.7053 | 392.4546 | 1.275862 | 452.72 | 11.13725 | 392.5587 | 1.117647 |
| 740 PORTSMOL 023 - WEST | 368.4469 | 563.8579 | 0 | 339.1564 | 5.568627 | 579.9967 | 1.117647 |
| 740 PORTSMOI 024 -THE S | 458.6476 | 263.6065 | 2.551724 | 440.4429 | 8.352941 | 278.2098 | 0 |
| 740 PORTSMOL 025 - WATE | 626.818 | 500.0249 | 1.275862 | 619.9962 | 13.92157 | 509.2654 | 1.117647 |
| 740 PORTSMOL 026 - WILLI | 911.1799 | 28.37021 | 0 | 919.2518 | 9.745098 | 29.47138 | 0 |
| 740 PORTSMOL 027 - CAVA | 807.2198 | 41.37322 | 2.551724 | 822.5692 | 11.13725 | 38.90222 | 0 |
| 740 PORTSMOI 028 -LAKE | 1239.877 | 46.10159 | 1.275862 | 1232.319 | 19.4902 | 48.33306 | 2.235294 |
| 740 PORTSMOL 029 - MAN | 246.1409 | 482.2936 | 1.275862 | 222.5234 | 5.568627 | 499.8345 | 0 |
| 740 PORTSMOL030-THE F | 292.0056 | 625.3267 | 0 | 285.4438 | 4.176471 | 630.6874 |  |
| 740 PORTSMOL031-WEST | 764.4127 | 543.7624 | 1.275862 | 739.6985 | 19.4902 | 551.7042 | 0 |
| 740 PORTSMOL032-HODC | 366.9181 | 521.3026 | 1.275862 | 375.9878 | 5.568627 | 517.5174 | 0 |
| 740 PORTSMOI 033- PINEC | 272.1309 | 588.6819 | 2.551724 | 260.8895 | 2.784314 | 597.6795 | 1.117647 |
| 740 PORTSMOI 034-CHUR | 483.1088 | 585.1356 | 3.827586 | 454.2547 | 9.745098 | 603.5738 | 2.235294 |
| 740 PORTSMOL 035 -CHUR | 582.4825 | 671.4283 | 1.275862 | 575.4915 | 20.88235 | 667.232 | 1.117647 |
| 740 PORTSMOI 036 -CHUR | 1067.12 | 891.2974 | 3.827586 | 1057.37 | 13.92157 | 899.4664 | 4.470588 |
| 740 PORTSMOI 037 -CHUR | 1012.082 | 521.3026 | 2.551724 | 1002.123 | 19.4902 | 522.2328 | 0 |
| 40 PORTSMOL038-GRO\} | 1181.782 | 200.9557 | 0 | 1147.914 | 20.88235 | 215.7305 | 0 |


| 740 PORTSMOI 039 - CHUR | 1265.867 | 44 | 2.551724 | 1243.062 | 29.23529 | 446.7861 | 47 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 RADFORD (001-EAST | 436.0323 | 379.2337 | 2.5 | 414.769 | 10.05714 | 393.8351 | 0 |
| RADFORD (002-CENT | 604.0274 | 681.4582 | 0 | 594.1807 | 16.34286 | 692.1073 | 0 |
| RADFORD (003-WEST | 577.6012 | 868.8956 | 2.5 | 559.4559 | 10.05714 | 881.7853 | 5 |
| 50 RADFORD (004-NEW | 313.3392 | 296.4125 | 0 | 310.5945 | 7.542857 | 298.2722 | 0 |
| 760 RICHMONL 101 - ONE I | 370.8341 | 221.5282 | 0 | 353.9342 | 10.16992 | 233.3006 | 0 |
| MONL 102 - ONE | 494.4454 | 451.3122 | 0 | 478.7592 | 16.52612 | 452.9579 | 0 |
| 04-O | 777.6562 | 789.7963 | 1.462963 | 771.0709 | 1.27124 | 795.405 | 1.384615 |
| 05 | 937.2557 | 539.3731 | 1.462963 | 927.4971 | 8.898681 | 548.4611 | 2.769231 |
| RICHMONL 106 - ON | 531.9982 | 927.3914 | 1.462963 | 508.7804 | 2.54248 | 950.9387 | 0 |
| 60 RICHMONL 111-ONE | 813.6444 | 510.4781 | 2.925926 | 793.1918 | 16.52612 | 527.9961 | 15 |
| 60 RICHMONL112-ONE I | 746.3622 | 345.3639 | 1.462963 | 736.3095 | 8.898681 | 356.0904 | 1.384615 |
| RICHMONL 113 - ONE I | 1450.478 | 321.9727 | 10.24074 | 1379.395 | 75.00317 | 326.0751 | 5.538462 |
| RICHMONL 114 - ONE | 1581.912 | 399.026 | 1.462963 | 1526.341 | 73.73193 | 398.3846 | 6.923077 |
| RICHMON[ 115 - ON | 663.4331 | 511.85 | 0 | 658.8864 | 3.81372 | 519.8101 | 0 |
| RICHMONL 203 - TWO | 600.8451 | 239.415 | 2.925926 | 595.6839 | 13.98364 | 231.9363 | 4.153846 |
| RICHMON[ 204 - TWO | 1344.078 | 316.4689 | 7.314815 | 1268.791 | 77.54565 | 316.5248 | 5.538462 |
| 760 RICHMONL 206 -TWO | 563.2922 | 70.17354 | 2.925926 | 535.6415 | 39.40844 | 62.75923 | 384615 |
| 60 RICHMON[ 207 - TWO | 1461.43 | 342.612 | 1.462963 | 1398.356 | 59.74828 | 354.7261 | 0 |
| RICHMON[ 208 - TWO | 1264.278 | 321.9727 | 4.388889 | 1229.289 | 50.8496 | 319.2535 | 1.384615 |
| RICHMON[ 213 - TWO | 1503.677 | 108.7002 | 5.851852 | 1362.015 | 156.3625 | 91.41018 | 2.769231 |
| RICHMONL 214 - TWO | 632.1391 | 77.05329 | 2.925926 | 589.3636 | 44.4934 | 79.1312 | 0 |
| RICHMON[ 215 - TWO | 907.5264 | 316.4689 | 1.462963 | 878.5152 | 29.23852 | 324.7108 |  |
| 60 RICHMONL 301 - THRE | 500.7042 | 42.6545 | 0 | 505.6202 | 17.79736 | 30.01528 | 0 |
| 60 RICHMONL 302 -THRE | 558.5981 | 147.2268 | 0 | 546.7019 | 16.52612 | 144.6191 | 1.384615 |
| HMONL 303 -THRE | 674.386 | 57.78997 | 1.462963 | 641.5057 | 26.69604 | 60.03056 | 2.769231 |
| RICHMONL 304 - THRE | 982.632 | 60.54187 | 4.388889 | 959.0984 | 38.1372 | 54.57324 | 1.384615 |
| RICHMONL 305 - THRE | 937.2557 | 116.955 | 0 | 902.2161 | 50.8496 | 109.1465 | 1.384615 |
| RICHMONL 306 - THRE | 600.8451 | 55.03807 | 2.925926 | 573.563 | 27.96728 | 58.66623 | 2.769231 |
| 60 RICHMON[307-THRE | 677.5154 | 243.5434 | 1.462963 | 671.5269 | 16.52612 | 240.1223 | 4.153846 |
| 60 RICHMON[ 308 -THRE | 821.4679 | 257.303 | 0 | 802.6721 | 13.98364 | 259.2229 | 384615 |
| MONL309-THRE | 488.1866 | 213.2725 | 0 | 477.1791 | 10.16992 | 215.5643 |  |
| RICHMON[310-THRE | 201.8464 | 11.00761 | 0 | 203.8282 | 5.08496 | 6.821655 | 0 |
| RICHMONL 402 - FOUR | 1804.1 | 553.1326 | 5.851852 | 1809.172 | 27.96728 | 547.0967 | 5.538462 |
| 760 RICHMONL 404 -FOUR | 1297.137 | 356.3715 | 1.462963 | 1281.431 | 44.4934 | 343.8114 | 0 |
| 60 RICHMON[ 409 - FOUR | 851.1972 | 621.9302 | 0 | 861.1345 | 13.98364 | 608.4916 | 1.384615 |
| 760 RICHMONL 410 -FOUR | 960.7262 | 392.1462 | 1.462963 | 960.6785 | 17.79736 | 387.47 | 1.384615 |
| 760 RICHMONL 412 -FOUR | 1053.044 | 240.7915 | 1.462963 | 1036.522 | 25.4248 | 246.9439 | 1.384615 |
| HMONL 413 - FOUR | 940.3851 | 410.0336 | 4.388889 | 922.757 | 16.52612 | 409.2993 | 2.769231 |
| 60 RICHMON[ 414 - FOUR | 990.4555 | 616.4264 | 4.388889 | 1009.66 | 13.98364 | 596.2126 | 1.384615 |
| 60 RICHMON[ 415 - FOUR | 751.0563 | 476.0793 | 0 | 756.8503 | 5.08496 | 474.7872 | 0 |
| 0 RICHMON[ 501 - FIVE I | 1558.442 | 260.0549 | 5.851852 | 1471.039 | 85.17309 | 275.5949 | 1.384615 |
| 760 RICHMONL503-FIVE I | 1498.983 | 178.8737 | 5.851852 | 1450.498 | 66.10449 | 177.363 | 0 |
| 760 RICHMONL504-FIVE I | 1739.947 | 231.1599 | 1.462963 | 1640.106 | 106.7842 | 230.5719 | 1.384615 |
| 760 RICHMON[505-FIVE I | 793.3032 | 112.828 | 4.388889 | 742.6297 | 58.47704 | 109.1465 | 1.384615 |
| 760 RICHMON[508-FIVE I | 852.7619 | 145.8509 | 1.462963 | 835.8535 | 22.88232 | 150.0764 | 0 |
| 60 RICHMONL509-FIVE | 812.0797 | 71.54949 | 1.462963 | 799.512 | 30.50976 | 69.58088 | 0 |

760 RICHMON[ 510 - FIVE I 1165.702 760 RICHMON[ 602 - SIX H 475.669 760 RICHMON[ 603 - SIX H 987.3261 760 RICHMON[604-SIX H 722.8917 760 RICHMON[ 606 - SIX H 1037.397 760 RICHMON[ 607 - SIX H 1017.055 760 RICHMON[ 609 - SIX H 1657.018 760 RICHMON[ 610 - SIX H 560.1628 760 RICHMON[ 701 - SEVEI 586.7628 760 RICHMON[ 702 - SEVEI 837.1149
760 RICHMON[ 703 - SEVEI 1140.667 760 RICHMON[ 705 - SEVEI 1067.126 760 RICHMON[ 706 - SEVEI 1503.677 760 RICHMON[ 707 - SEVEI 1929.276 760 RICHMON[ 708 - SEVEI 1509.936 760 RICHMON[ 802 - EIGH $\quad 675.9507$ 760 RICHMON[ 806 - EIGH ${ }^{-} 625.8803$ 760 RICHMON[ 810 - EIGH 561.7275 760 RICHMON[ 811 - EIGH- 716.6329 760 RICHMON[ 812 - EIGH 1146.926
760 RICHMON[ 814 - EIGH ${ }^{-} 508.5277$ 760 RICHMON[ 902 - NINE 278.5167 760 RICHMON[ 903 - NINE 726.0211 760 RICHMON[ 908 - NINE 779.2209 760 RICHMON[ 909 - NINE 927.8675 760 RICHMON[ 910 - NINE 749.4916 760 RICHMON[ 911 - NINE 837.1149 770 ROANOKE 1001 -Peters 842.5296 770 ROANOKE 1002 - Granc 810.8415 770 ROANOKE 1003 -Prestc 639.3532 770 ROANOKE 1004 - Willia 708.3213 770 ROANOKE 1005 - East ( 544.289 770 ROANOKE 1006 - Hollir 452.9528 770 ROANOKE 1007 - Soutr 423.1288 770 ROANOKE 1008 - Linco 641.2172 770 ROANOKE 1009 - Highli 883.5377 770 ROANOKE 010 - Old S 1267.522 770 ROANOKE 1011 - RALEI 1530.347 770 ROANOKE 1012 - SOUT 853.7136 770 ROANOKE 1013 -GAR[ 568.5211 770 ROANOKE 1014 - Crysti 950.6418 770 ROANOKE 1015 - Granı 1094.17 770 ROANOKE 1016 - Deyeı 894.7217 770 ROANOKE 1017 - LEE-H 1284.298 770 ROANOKE 1018 - Sumn 864.8976 770 ROANOKE 1019 - Fores 766.1054 770 ROANOKE 1020 - EURE 1056.89
125.2116 27.51903 77.05329
60.54187 67.42163 196.7611 266.9346 34.39879 41.27855 77.05329
 137.5952 137.5952 310.9651 264.1827 41.27855
85.309
100.4445 103.1964 180.2497 44.03045
31.64689 126.5876 92.18876 127.9635 123.8357
48.15831
4.388889
4.388889472 .4389
$0 \quad 948.038$
4.388889684 .1674
1.4629631009 .66
$4.388889 \quad 976.4791$
2.9259261611 .665
1.462963
1.462963
1.462963
2.925926
4.388889
4.388889
4.388889
1.462963

0
1.462963

0
4.388889
1.462963
1.462963
1.462963712 .6085
1.462963755 .2702 $0 \quad 892.7358$
2.925926
269.2846
502.6646
752.616
528.9026
847.90131
581.3786
542.7121
63.52355
318.9987
595.1881
792.6635
860.3299
910.044
791.2825
756.7589
987.377
829.949
$604.8547 \quad 2$
157.4279
120.1424
1.192308
1.192308
3.576923
1.192308
2.384615
1.192308414 .563
1.192308635 .9133
3.576923877 .898

- 1247.441
$2.384615 \quad 1510.06$
0797.2365
1.192308553 .3759
3.576923945 .4287
$4.769231 \quad 1069.235$
1.192308881 .6497
01269.951
$2.384615 \quad 855.3878$
0787.8572
$0 \quad 1056.104$
39.40844 31.781 49.57836
48.30712 41.95092 $43.22216 \quad 208.7426$ 68.64697 26 3


## 31

31.37961
1.384615
45.76464143 .25481 .384615
66.10449145 .98340
$\begin{array}{llll}82.63061 & 313.7961 & 1.384615\end{array}$
$68.64697 \quad 263.3159 \quad 2.769231$
20.3398446 .38725
$\begin{array}{lll}27.96728 & 99.59616 & 1.384615\end{array}$
16.5261290 .04585
$\begin{array}{lrr}21.61108 & 106.4178 & 0 \\ 24.15356 & 184.1847 & 1.384615\end{array}$
$\begin{array}{llll}24.15356 & 184.1847 & 1.384615\end{array}$
$\begin{array}{lll}11.44116 & 40.92993 & 0\end{array}$
$\begin{array}{lll}10.16992 & 20.46496 & 0\end{array}$
$\begin{array}{lll}21.61108 & 129.6114 & 0\end{array}$
$\begin{array}{lll}19.0686 & 102.3248 & 1.384615\end{array}$
$\begin{array}{lll}33.05224 & 137.7974 & 0\end{array}$
$\begin{array}{llll}8.898681 & 120.0611 & 0\end{array}$
$\begin{array}{llll}17.79736 & 47.75158 & 0\end{array}$
$\begin{array}{lll}12.57803 & 262.5568 & 0\end{array}$
$3.144509 \quad 525.11351 .416667$
15.72254756 .05351 .416667
15.72254551 .2317
4.25
1.416667
$\begin{array}{ll}12.57803 & 860.5264 \\ 11.00578 & 595.2203\end{array}$
$\begin{array}{ll}11.00578 & 595.2203 \\ 14.15029 & 544.3585\end{array}$
$11.00578 \quad 65.98285 \quad 2.8$
20.43931321 .6664
23.58382606 .2174
20.43931812 .4139
4.25

0
$14.15029 \quad 919.6361 .416667$
$\begin{array}{llll}11.00578 & 806.9153 & 4.25\end{array}$
15.72254773 .92392 .833333
$\begin{array}{lll}6.289017 & 1003.489 & 1.416667\end{array}$
$25.15607 \quad 828.9096 \quad 4.25$
$\begin{array}{lll}11.00578 & 608.9667 & 2.833333\end{array}$
$\begin{array}{llll}3.144509 & 155.3346 & 0\end{array}$
15.72254122 .34321 .416667

| 775 SALEM CIT' 001 - NORT | 382.7585 | 614.3652 | 0 | 387.8765 | 1.538462 | 612.4608 | 2.285714 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 775 SALEM CIT 002 - CONE | 231.014 | 418.7384 | 0 | 220.3322 | 1.538462 | 431.4698 | 0 |
| 775 SALEM CIT'003-BEVE | 176.6578 | 451.0734 | 0 | 162.954 | 4.615385 | 457.3256 | 0 |
| 775 SALEM CIT' 004 - WEST | 319.3429 | 611.1317 | 1.571429 | 332.7934 | 4.615385 | 609.2288 | 0 |
| 775 SALEM CIT' 005 - NORT | 600.1835 | 813.2255 | 4.714286 | 585.2574 | 12.30769 | 819.3077 | 3.428571 |
| 775 SALEM CIT'006-SOUT | 298.9593 | 459.1572 | 1.571429 | 296.0714 | 7.692308 | 460.5576 | 0 |
| 775 SALEM CIT' 007 - SOUT | 314.8132 | 651.5505 | 0 | 307.547 | 3.076923 | 660.9406 | 0 |
| SALEM CIT'008-EAST | 181.1875 | 271.6141 | 0 | 176.7248 | 6.153846 | 274.7186 | 0 |
| SALEM CIT' 009 - SOUT | 398.6124 | 853.6443 | 1.571429 | 387.8765 | 4.615385 | 861.3235 | 714 |
| 775 SALEM CIT' 010 - HIDD | 491.471 | 955.4996 | 1.571429 | 486.5669 | 13.84615 | 956.667 | 0 |
| 790 STAUNTON 101 - WARI | 1030.025 | 975.3076 | 7 | 979.5156 | 34.70833 | 996.4295 | 2.666667 |
| 790 STAUNTON 201 - WARI | 942.0436 | 1219.134 | 0 | 916.5313 | 19.83333 | 1241.035 | 0 |
| 790 STAUNTON 301 - WARI | 1090.11 | 970.82 | 4.666667 | 1042.5 | 33.05556 | 1002.432 | 5.333333 |
| STAUNTON 401 - WARI | 987.1072 | 747.9352 | 0 | 964.3125 | 14.875 | 775.8344 | 0 |
| STAUNTON 501 - WARI | 1113.714 | 614.8028 | 2.333333 | 1101.141 | 16.52778 | 624.2691 | 0 |
| 800 SUFFOLK C 101 - BELLE | 836.6566 | 369.7333 | 6.764706 | 826.326 | 9.882353 | 376.036 | 5.869565 |
| 800 SUFFOLK C 102 - DRIVI | 956.6486 | 1944.378 | 4.058824 | 919.06 | 15.52941 | 1975.495 | 2.347826 |
| 800 SUFFOLK C 104 - BENN | 1007.604 | 975.4667 | 1.352941 | 1006.826 | 11.29412 | 979.2604 | 0 |
| 800 SUFFOLK C 201 - EBEN | 496.4053 | 1117.067 | 0 | 496.7892 | 4.235294 | 1117.663 | 0 |
| SUFFOLK C 202 - CHUC | 499.6928 | 907.2889 | 0 | 488.5093 | 4.235294 | 921.8105 | 0 |
| SUFFOLK C 203 - KING! | 1040.479 | 607.0444 | 2.705882 | 1025.042 | 11.29412 | 617.5869 | 1.173913 |
| SUFFOLK C 204 - HILLP | 884.3247 | 529.6889 | 1.352941 | 849.5095 | 12.70588 | 548.3858 | 3.521739 |
| 800 SUFFOLK C 301 - WHIT | 298.5485 | 140.2802 | 0 | 289.7005 | 1.272727 | 146.8597 | 0 |
| 800 SUFFOLK C 302 - JOHN | 1191.587 | 209.6337 | 0 | 1183.352 | 17.65775 | 213.116 | 2.347826 |
| 800 SUFFOLK C 304 - NANS | 964.8673 | 635.8889 | 1.352941 | 945.5554 | 12.70588 | 650.2289 | 4.695652 |
| 800 SUFFOLK C 305 - SHOL | 432.3 | 325.1556 | 1.352941 | 437.1745 | 7.058824 | 317.2804 | 1.173913 |
| 800 SUFFOLK C 401 - AIRPC | 334.5182 | 544.4537 | 0 | 335.2509 | 3.818182 | 547.2603 | . 4 |
| 800 SUFFOLK C 402 - WHA | 291.3545 | 995.8502 | 1.75 | 284.2344 | 2.545455 | 1003.08 | . 4 |
| 800 SUFFOLK C 403 - SOUT | 571.9182 | 52.77867 | 1.75 | 573.9349 | 8.909091 | 54.03329 | 0 |
| 800 SUFFOLK C 404 - BOOk | 954.5054 | 56.323 | 1.75 | 942.4255 | 14 | 63.01348 | 0 |
| 00 SUFFOLK C 405 - PITTM | 194.2364 | 294.4494 | 0 | 202.2437 | 1.272727 | 292.334 |  |
| 800 SUFFOLK C 501 - KILBY | 667.2379 | 1156.964 | 0 | 659.5696 | 17.81818 | 1154.096 |  |
| 800 SUFFOLK C 502 - HOLL | 602.4924 | 1408.357 | 0 | 583.045 | 10.18182 | 1415.949 | 0 |
| SUFFOLK C 504 - LAKE | 701.735 | 1363.307 | 1.352941 | 679.7551 | 9.048128 | 1378.68 | . 4 |
| 800 SUFFOLK C 601 -LAKE | 685.2227 | 593.0656 | 1.75 | 690.5439 | 7.636364 | 595.7517 | 2.8 |
| 800 SUFFOLK C 602 - OLDE | 208.908 | 149.5445 | 0 | 205.5056 | 4.235294 | 152.8444 | 0 |
| 800 SUFFOLK C 603 - ELEPF | 271.5712 | 237.504 | 0 | 271.4803 | 2.545455 | 241.0716 | 0 |
| 800 SUFFOLK C 604 - WILR | 664.0654 | 551.9778 | 0 | 637.5461 | 9.882353 | 566.6654 | 0 |
| 800 SUFFOLK C 605 - HOLL | 530.9236 | 35.4 | 0 | 526.5965 | 4.235294 | 40.4761 | 0 |
| 800 SUFFOLK C 702 - HARB | 1209.782 | 1014.8 | 1.352941 | 1218.789 | 8.470588 | 1014.514 | 2.347826 |
| 800 SUFFOLK C 704 - BURB | 1293.613 | 658.1778 | 0 | 1293.308 | 19.76471 | 648.9232 | 2.347826 |
| 800 SUFFOLK C 706 - HUN7 | 1518.803 | 309.4222 | 1.352941 | 1506.927 | 19.76471 | 318.5861 | 1.173913 |
| 810 VIRGINIA B 001 - NORT | 825.4181 | 1575.039 | 0 | 814.3186 | 13.89222 | 1583.845 | 0 |
| 810 VIRGINIA B 002 - SOUT | 855.9264 | 1009.386 | 0 | 831.3545 | 23.61677 | 1011.626 | 2.64 |
| 810 VIRGINIA B 003 - OCEA | 535.5896 | 808.0758 | 0 | 528.1146 | 13.89222 | 801.1061 | 0 |
| 810 VIRGINIA B 004 - LINKł | 599.9959 | 1078.852 | 1.379747 | 613.2943 | 4.167665 | 1072.38 | 0 |
| 810 VIRGINIA B 005 - SEAT, | 735.5882 | 758.4571 | 1.379747 | 752.9892 | 15.2 | 740.3521 | 0 |


| GINIA B 006 - ALAN | 705.0799 | 1190.849 | 0 | 717.2136 | 13.89222 | 1168.456 | 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 007 - KING! | 562.708 | 886.0481 | 0 | 545.1505 | 4.167665 | 901.421 | 0 |
| 810 VIRGINIA B 008 -LONL | 899.9939 | 1091.611 | 1.379747 | 890.9804 | 13.89222 | 1090.748 | 1.32 |
| 810 VIRGINIA B 009 - TRAN | 598.301 | 1059.005 | 1.379747 | 630.3303 | 2.778443 | 1039.884 | 0 |
| 810 VIRGINIA B 010 - GREA | 462.7087 | 1202.19 | 1.379747 | 477.0067 | 2.778443 | 1186.824 | 0 |
| 810 VIRGINIA B 011 - CAPE | 1067.789 | 1217.784 | 0 | 1120.966 | 6.946108 | 1172.695 | 1.32 |
| 810 VIRGINIA B 012 - PLAZ | 894.9091 | 808.0758 | 1.379747 | 882.4624 | 15.28144 | 812.4092 | 0 |
| 810 VIRGINIA B 013 - MT TI | 910.1633 | 1182.343 | 0 | 918.2379 | 16.67066 | 1159.979 | 0 |
| VIRGINIA B 014 - MALI | 861.0111 | 1117.129 | 1.379747 | 851.7977 | 18.05988 | 1114.767 | 2.64 |
| 810 VIRGINIA B 015 - OLD [ | 594.9112 | 738.6097 | 1.379747 | 579.2224 | 12.50299 | 737.5263 | 2.64 |
| 810 VIRGINIA B 016 - ARAE | 955.9257 | 1237.632 | 2.759494 | 938.681 | 33.34132 | 1236.275 | 1.32 |
| 810 VIRGINIA B 017 - OCEA | 474.573 | 696.0794 | 1.379747 | 473.5995 | 9.724551 | 692.314 | 0 |
| 810 VIRGINIA B 018 -THOR | 767.7914 | 1114.294 | 0 | 759.8035 | 6.946108 | 1124.657 | 1.32 |
| 810 VIRGINIA B 019 - LAKE | 444.0648 | 681.9026 | 0 | 437.824 | 6.946108 | 690.9011 | 0 |
| 810 VIRGINIA B 020 - BAYS | 755.927 | 849.1885 | 1.379747 | 732.546 | 13.89222 | 861.8602 | 1.32 |
| 810 VIRGINIA B 021 - DAVI! | 1096.603 | 428.1384 | 0 | 1081.783 | 22.22754 | 422.4528 | 0 |
| 810 VIRGINIA B 022 - POIN | 672.8768 | 938.5021 | 0 | 676.3274 | 8.335329 | 938.1561 | 0 |
| 810 VIRGINIA B 023 - ARRC | 842.3671 | 1110.041 | 0 | 822.8366 | 19.4491 | 1119.005 | 0 |
| 810 VIRGINIA B 024 - LARK! | 691.5207 | 718.7622 | 0 | 674.6238 | 11.11377 | 721.9846 | 2.64 |
| 810 VIRGINIA B 025 - AVAL | 1184.738 | 1475.802 | 1.379747 | 1166.963 | 18.05988 | 1476.465 | 2.64 |
| 810 VIRGINIA B 026 - FAIRF | 840.6722 | 1070.346 | 1.379747 | 838.1689 | 16.67066 | 1065.316 | 3.96 |
| 810 VIRGINIA B 027 - EDWI | 813.5538 | 1139.812 | 4.139241 | 805.8006 | 11.11377 | 1140.199 | 2.64 |
| 810 VIRGINIA B 028 -THAL | 550.8437 | 856.2769 | 2.759494 | 570.7044 | 8.335329 | 843.4927 | 0 |
| 810 VIRGINIA B 029 - HOLL | 837.2824 | 656.3844 | 0 | 812.615 | 13.89222 | 669.7078 | 0 |
| 810 VIRGINIA B $030-$ RED | 520.3354 | 839.2647 | 2.759494 | 529.8182 | 5.556886 | 832.1896 | 0 |
| 810 VIRGINIA B 031 - SIGM | 679.6564 | 1529.673 | 0 | 664.4022 | 5.556886 | 1544.284 | 0 |
| 810 VIRGINIA B 032 - CREEI | 254.2356 | 1006.551 | 1.379747 | 243.6141 | 2.778443 | 1022.929 | 0 |
| 810 VIRGINIA B 033 - CAPP | 271.1846 | 1050.499 | 0 | 250.4285 | 1.389222 | 1078.032 | 0 |
| 810 VIRGINIA B 034 - BLAC | 166.1006 | 650.7137 | 1.379747 | 168.6559 | 0 | 658.4047 | 0 |
| 810 VIRGINIA B 035 - COUF | 449.1495 | 914.4016 | 1.379747 | 458.2672 | 5.556886 | 904.2468 | 1.32 |
| 810 VIRGINIA B 036 - WIN[ | 1101.687 | 849.1885 | 2.759494 | 1078.376 | 30.56287 | 847.7314 | 0 |
| 810 VIRGINIA B 037 - CHES | 640.6736 | 755.6218 | 0 | 642.2555 | 5.556886 | 768.6098 | 2.64 |
| 810 VIRGINIA B 038 - WITC | 752.5372 | 1311.351 | 0 | 749.582 | 2.778443 | 1321.048 | 0 |
| 810 VIRGINIA B 039 - PEME | 972.8747 | 1010.804 | 5.518987 | 967.6422 | 22.22754 | 1014.452 | 2.64 |
| 810 VIRGINIA B $040-$ BON | 598.301 | 646.4607 | 0 | 591.1476 | 15.28144 | 644.2758 | 0 |
| 810 VIRGINIA B 041 - COLLI | 1574.566 | 554.3117 | 2.759494 | 1557.086 | 22.22754 | 562.3285 | 3.96 |
| 810 VIRGINIA B 042 - BRAN | 977.9594 | 888.8834 | 0 | 943.7918 | 18.05988 | 905.6597 | 0 |
| 810 VIRGINIA B 043 - BELL | 961.0104 | 588.3359 | 1.379747 | 933.5703 | 25.00599 | 597.6506 | 0 |
| 810 VIRGINIA B 044 - CENT | 857.6213 | 1165.33 | 1.379747 | 843.2797 | 8.335329 | 1175.521 | 1.32 |
| 810 VIRGINIA B 045 - TIMB | 1023.722 | 576.9945 | 1.379747 | 1003.418 | 22.22754 | 583.5218 | 0 |
| 810 VIRGINIA B 046 - GREE | 911.8582 | 548.641 | 0 | 899.4984 | 9.724551 | 551.0254 | 1.32 |
| 810 VIRGINIA B 047 - KING! | 815.2487 | 1558.027 | 0 | 843.2797 | 5.556886 | 1531.568 | 0 |
| 810 VIRGINIA B 048 - WOLI | 783.0455 | 1161.077 | 1.379747 | 812.615 | 6.946108 | 1128.896 | 2.64 |
| 810 VIRGINIA B 049 - LYNN | 554.2335 | 982.4501 | 0 | 567.2973 | 2.778443 | 976.304 | 2.64 |
| 810 VIRGINIA B $050-$ OCEA | 647.4532 | 389.8611 | 0 | 632.0339 | 11.11377 | 406.9111 | 0 |
| 810 VIRGINIA B 051 - STRA | 650.843 | 914.4016 | 0 | 645.6626 | 5.556886 | 925.4401 | 0 |
| 810 VIRGINIA B 052 - HOM | 1030.501 | 1226.291 | 1.379747 | 1028.972 | 20.83832 | 1220.733 | 0 |

| 3 - SHAN | 633.894 | 840.6824 | 0 | 611.5907 | 16.67066 | 853.3829 | 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 810 VIRGINIA B 054 - CRON | 537.2845 | 608.1834 | 1.379747 | 517.893 | 11.11377 | 611.7795 | 64 |
| 810 VIRGINIA B 055 - MAG | 1018.637 | 596.842 | 1.379747 | 1037.49 | 15.28144 | 583.5218 | . 32 |
| 810 VIRGINIA B 056 - EDINI | 455.9291 | 589.7536 | 0 | 456.5636 | 5.556886 | 590.5862 | 0 |
| 810 VIRGINIA B 057 -SHER | 447.4546 | 747.1157 | 2.759494 | 448.0456 | 6.946108 | 748.8294 | 0 |
| 810 VIRGINIA B 058 - GLEN | 908.4684 | 964.0203 | 0 | 901.2019 | 15.28144 | 967.8266 | 0 |
| 810 VIRGINIA B 059 - SHEL` | 562.708 | 688.991 | 0 | 555.3721 | 9.724551 | 700.7913 | 0 |
| 810 VIRGINIA B 060 - FOXF | 676.2666 | 1458.79 | 0 | 681.4381 | 6.946108 | 1462.337 | 0 |
| 810 VIRGINIA B 061 - BAKE | 1244.059 | 235.3344 | 4.139241 | 1228.292 | 25.00599 | 235.9519 | 64 |
| 810 VIRGINIA B 062 - LAND | 842.3671 | 1139.812 | 1.379747 | 839.8725 | 9.724551 | 1144.437 | 0 |
| 810 VIRGINIA B 063 - CULV | 984.739 | 1290.086 | 2.759494 | 982.9745 | 16.67066 | 1284.313 | 1.32 |
| 810 VIRGINIA B 064 - ROSE | 693.2156 | 829.341 | 0 | 689.9561 | 9.724551 | 826.5381 | . 32 |
| 810 VIRGINIA B 065 - COLO | 883.0448 | 954.0966 | 2.759494 | 889.2768 | 15.28144 | 948.0462 | 1.32 |
| 810 VIRGINIA B 066 - HUN1 | 611.8602 | 1040.575 | 0 | 613.2943 | 5.556886 | 1046.948 | . 32 |
| 810 VIRGINIA B 067 - EASTI | 483.0475 | 408.2909 | 0 | 483.8211 | 11.11377 | 398.4337 | 0 |
| 810 VIRGINIA B 068 - MAN | 764.4016 | 1022.145 | 0 | 783.6539 | 4.167665 | 1015.865 | 1.32 |
| 810 VIRGINIA B 069 - SHELI | 828.8079 | 442.3152 | 0 | 826.2438 | 16.67066 | 435.1688 | 2.64 |
| 810 VIRGINIA B 070 - CORP | 779.6557 | 965.438 | 0 | 766.6179 | 9.724551 | 983.3684 | 0 |
| 810 VIRGINIA B 071 - ROUN | 499.9966 | 500.4399 | 8.278481 | 509.375 | 4.167665 | 502.9873 | 2.64 |
| 810 VIRGINIA B 072 - RUDE | 679.6564 | 1134.142 | 0 | 662.6986 | 9.724551 | 1155.74 | 1.32 |
| 810 VIRGINIA B 073 - DAHL | 889.8244 | 472.0864 | 1.379747 | 908.0163 | 11.11377 | 456.3621 | 1.32 |
| 810 VIRGINIA B 074 - BUCK | 786.4353 | 518.8697 | 4.139241 | 783.6539 | 12.50299 | 515.7033 | 5.28 |
| 810 VIRGINIA B 075 - COLO | 667.792 | 1314.186 | 1.379747 | 686.5489 | 8.335329 | 1306.919 | 3.96 |
| 810 VIRGINIA B 076 - VILLA | 799.9945 | 453.6566 | 1.379747 | 781.9503 | 12.50299 | 467.6651 | 1.32 |
| 810 VIRGINIA B 077 - BROC | 771.1812 | 793.8991 | 1.379747 | 742.7676 | 16.67066 | 803.9319 | 0 |
| 810 VIRGINIA B 078 - INDIA | 842.3671 | 698.9147 | 0 | 846.6869 | 12.50299 | 695.1397 | 0 |
| 810 VIRGINIA B 079 - PLEA! | 798.2996 | 462.1627 | 0 | 805.8006 | 4.167665 | 462.0136 | 0 |
| 810 VIRGINIA B $080-$ CHIM | 862.706 | 479.1748 | 0 | 841.5761 | 11.11377 | 491.6842 | 1.32 |
| 810 VIRGINIA B 081 - ROCK | 972.8747 | 805.2405 | 0 | 950.6062 | 16.67066 | 810.9963 | 0 |
| 810 VIRGINIA B 082 - SHELI | 549.1488 | 939.9198 | 0 | 557.0757 | 5.556886 | 936.7432 | 0 |
| 810 VIRGINIA B 083 - STRA' | 798.2996 | 1304.263 | 1.379747 | 798.9862 | 18.05988 | 1297.029 | 1.32 |
| 810 VIRGINIA B 084 - TALLI | 949.1461 | 714.5092 | 1.379747 | 955.717 | 4.167665 | 714.9201 | 1.32 |
| 810 VIRGINIA B 085 - UPTC | 744.0627 | 1321.275 | 1.379747 | 727.4352 | 9.724551 | 1333.764 | 0 |
| 810 VIRGINIA B 086 - HAYG | 869.4856 | 982.4501 | 1.379747 | 865.4264 | 6.946108 | 990.4328 | 1.32 |
| 810 VIRGINIA B 087 - HILLC | 744.0627 | 959.7673 | 0 | 744.4712 | 8.335329 | 960.7622 | 0 |
| 810 VIRGINIA B 088 - NORT | 649.1481 | 894.5541 | 4.139241 | 649.0698 | 6.946108 | 892.9437 | 1.32 |
| 810 VIRGINIA B 089 - LAKE | 786.4353 | 1026.398 | 4.139241 | 773.4323 | 11.11377 | 1035.645 | 3.96 |
| 810 VIRGINIA B 090 - LAKE | 464.4036 | 751.3688 | 1.379747 | 465.0815 | 11.11377 | 747.4165 | 0 |
| 810 VIRGINIA B 091 - LEXIN | 930.5021 | 643.6253 | 0 | 931.8667 | 12.50299 | 640.0372 | 0 |
| 810 VIRGINIA B 092 - LITTL | 594.9112 | 978.1971 | 2.759494 | 608.1835 | 6.946108 | 966.4138 | 2.64 |
| 810 VIRGINIA B 093 - NEW | 1142.365 | 223.993 | 0 | 1112.448 | 15.28144 | 237.3648 | 0 |
| 810 VIRGINIA B 094 - PINEI | 427.1157 | 571.3238 | 0 | 422.4917 | 11.11377 | 563.7414 | 0 |
| 810 VIRGINIA B 095 - DAM | 503.3864 | 735.7743 | 0 | 505.9678 | 15.28144 | 723.3974 | 0 |
| 810 VIRGINIA B 096 - HILLT | 638.9787 | 473.5041 | 1.379747 | 621.8123 | 16.67066 | 473.3167 | 2.64 |
| 810 VIRGINIA B 097 - INDIA | 898.2989 | 592.5889 | 2.759494 | 867.13 | 16.67066 | 610.3666 | 1.32 |
| 810 VIRGINIA B 098 - INDEI | 598.301 | 313.3066 | 1.379747 | 574.1116 | 8.335329 | 329.2023 | 2.64 |
| 810 VIRGINIA B 099 - SALEI | 684.7411 | 474.9218 | 0 | 667.8094 | 8.335329 | 487.4455 | 0 |

| 810 VIRGINIA B 100 - SAND | 296.6081 | 715.9268 |
| :--- | :--- | ---: |
| 820 WAYNESBC 001 - WARI | 591.3662 | 702.1693 |
| 820 WAYNESBC 002 - WARI | 963.4178 | 1088.74 |
| 820 WAYNESBC 003 - WARI | 830.2625 | 1058.539 |
| 820 WAYNESBC 004 - WARI | 1031.954 | 1511.552 |
| 830 WILLIAMSE 001 - STRYI | 1778.423 | 1020.173 |
| 830 WILLIAMSE 002 - MATC | 1430.577 | 680.8269 |
| 840 WINCHEST 101 - MERF | 939.0278 | 858.2529 |
| 840 WINCHEST 102 - OLD 1 | 664.8889 | 635.1691 |
| 840 WINCHEST 201 - VIRGI | 836.7372 | 548.4143 |
| 840 WINCHEST 301 - WAR | 765.1337 | 740.5142 |
| 840 WINCHEST 401 - FRED | 425.5289 | 419.8313 |
| 840 WINCHEST 402 - ROLLI | 789.6835 | 828.8182 |


| 0 | 282.7968 | 2.778443 | 726.2232 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 554.7814 | 27.26087 | 717.0688 | 2.571429 |
| 0 | 936.5665 | 15.78261 | 1115.608 | 2.571429 |
| 8.25 | 781.4663 | 43.04348 | 1083.906 | 3.857143 |
| 2.75 | 1002.186 | 12.91304 | 1556.417 | 0 |
| 1 | 1759.286 | 19.04762 | 1028.107 | 3 |
| 1 | 1425.714 | 20.95238 | 674.8926 | 0 |
| 0 | 930.5048 | 10.58824 | 864.1253 | 0 |
| 0 | 632.0801 | 0 | 665.0679 | 0 |
| 2 | 804.0888 | 28.23529 | 564.7676 | 5 |
| 0 | 758.4961 | 8.823529 | 759.1958 | 0 |
| 1 | 416.5512 | 3.529412 | 427.4334 | 0 |
| 0 | 752.279 | 8.823529 | 856.4099 | 0 |


| GE21LTGD | GE21LTGR | GE21LTG | E21SLLD | GE21SLLI | GE21SLLL | GE21SLLR | GE21SLLW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 700.9566 | 1294.616 | 0 | 601.5879 | 0 | 0 | 1406.685 | 0 |
| 156.9627 | 535.8863 | 0 | 102.8168 | 0 | 0 | 587.8077 | 0 |
| 335.4271 | 907.2926 | 1.25 | 317.2009 | 0 | 0 | 939.141 | 1.125 |
| 473.0382 | 562.4153 | 0 | 463.7696 | 0 | 0 | 586.4564 | 0 |
| 139.7613 | 366.1005 | 1.25 | 122.5052 | 0 | 0 | 393.2231 | 1.125 |
| 223.6181 | 478.8489 | 0 | 168.4446 | 0 | 0 | 525.6487 | 0 |
| 49.45399 | 168.4593 | 0 | 41.56425 | 0 | 0 | 178.3692 | 0 |
| 240.8194 | 210.9057 | 1.25 | 229.6972 | 0 | 0 | 229.7179 | 0 |
| 245.1198 | 118.0542 | 0 | 229.6972 | 0 | 0 | 136.4795 | 1.125 |
| 313.9253 | 530.5805 | 0 | 293.1374 | 0 | 0 | 562.1333 | 0 |
| 17.20139 | 210.9057 | 0 | 13.12555 | 0 | 0 | 221.6103 | 0 |
| 477.3385 | 697.7133 | 1.25 | 413.4549 | 0 | 0 | 770.2308 | 0 |
| 212.8672 | 360.7947 | 0 | 175.0074 | 0 | 0 | 397.2769 | 0 |
| 344.0278 | 399.2618 | 0 | 339.0768 | 0 | 0 | 416.1949 | 2.25 |
| 150.5122 | 363.4476 | 0 | 118.13 | 0 | 0 | 390.5205 | 0 |
| 872.9705 | 632.7172 | 0 | 813.7843 | 0 | 0 | 690.5051 | 3.375 |
| 1402.218 | 705.2735 | 2.777778 | 1446.105 | 0 | 0 | 721.6773 | 3.130435 |
| 460.623 | 171.5159 | 0 | 459.0217 | 0 | 0 | 182.6285 | 1.565217 |
| 1084.036 | 377.335 | 6.944444 | 1113.967 | 0 | 0 | 385.8764 | 7.826087 |
| 1696.351 | 565.3165 | 0 | 1712.935 | 0 | 0 | 593.5427 | 1.565217 |
| 1489.163 | 1063.399 | 1.388889 | 1241.11 | 0 | 0 | 1147.874 | 2.533333 |
| 1239.427 | 783.4848 | 1.388889 | 1245.544 | 0 | 0 | 812.1802 | 0 |
| 908.2968 | 207.1912 | 0 | 903.1159 | 0 | 0 | 228.2857 | 3.130435 |
| 1259.776 | 396.5448 | 0 | 1268.841 | 0 | 0 | 427.1151 | 3.130435 |
| 1959.035 | 1031.84 | 2.777778 | 1988.369 | 0 | 0 | 1040.161 | 5.333333 |
| 1252.377 | 906.9762 | 0 | 1410.562 | 25.5 | 0 | 823.684 | 0 |
| 458.7731 | 246.9829 | 0 | 468.955 | 0 | 0 | 247.9287 | 0 |
| 1022.99 | 529.6412 | 0 | 1167.777 | 24 | 0 | 454.3069 | 1 |
| 734.407 | 536.5018 | 2.777778 | 822.6608 | 16.5 | 0 | 488.0092 | 0 |
| 345.9297 | 262.0763 | 0 | 360.1574 | 0 | 0 | 259.3277 | 0 |
| 484.6716 | 761.5307 | 1.388889 | 428.4573 | 0 | 0 | 753.4961 | 2.533333 |
| 438.4243 | 614.7131 | 2.777778 | 385.9656 | 0 | 0 | 615.0722 | 1.266667 |
| 1476.213 | 488.4774 | 2.777778 | 1517.011 | 0 | 0 | 499.2828 | 1.565217 |
| 886.0981 | 1070.259 | 1.388889 | 777.2427 | 0 | 0 | 1078.662 | 1.266667 |
| 701.1089 | 236.0059 | 2.777778 | 714.6558 | 0 | 0 | 245.9594 | 3.130435 |
| 619.7137 | 489.8495 | 0 | 548.8502 | 0 | 0 | 496.2366 | 2.533333 |
| 647.462 | 616.0852 | 1.388889 | 547.0797 | 0 | 0 | 645.1076 | 1.266667 |
| 1363.37 | 734.0882 | 1.388889 | 1110.094 | 0 | 0 | 846.214 | 1.266667 |
| 897.1974 | 418.4989 | 0 | 932.971 | 0 | 0 | 427.1151 | 3.130435 |
| 1444.765 | 1005.769 | 4.166667 | 1152.585 | 0 | 0 | 1132.203 | 3.8 |
| 923.0959 | 546.1067 | 2.777778 | 939.3596 | 0 | 0 | 552.2348 | 7.826087 |
| 1435.516 | 1059.282 | 0 | 1481.898 | 0 | 0 | 1078.632 | 10.66667 |
| 641.9124 | 617.4574 | 2.777778 | 563.0141 | 0 | 0 | 629.437 | 1.266667 |
| 1346.721 | 1254.124 | 4.166667 | 1090.619 | 0 | 0 | 1348.98 | 1.266667 |
| 1296.774 | 817.788 | 1.388889 | 1358.094 | 0 | 0 | 823.5792 | 7.111111 |
| 1644.554 | 950.8843 | 2.777778 | 1676.983 | 0 | 0 | 973.1913 | 8.888889 |


| 128.6082 | 501.729 | 1.2 | 96.09007 | 0 | 5.902778 | 527.0869 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37.7437 | 198.4366 | 0 | 31.55196 | 0 | 2.361111 | 206.0534 | 0 |
| 75.4874 | 280.7427 | 0 | 50.1963 | 0 | 7.083333 | 294.8499 | 0 |
| 92.26238 | 360.7939 | 2.4 | 61.66975 | 0 | 3.541667 | 383.6464 | 2 |
| 60.11034 | 316.8221 | 0 | 38.72286 | 0 | 3.541667 | 331.2793 | 0 |
| 162.1581 | 485.9443 | 0 | 117.6028 | 0 | 9.444444 | 515.7028 | 0 |
| 99.25195 | 326.9695 | 0 | 67.40647 | 0 | 4.722222 | 350.6323 | 0 |
| 125.8123 | 386.726 | 1.2 | 93.22171 | 0 | 5.902778 | 410.9684 | 1 |
| 90.86447 | 158.9748 | 1.2 | 70.27483 | 0 | 3.541667 | 176.4546 | 0 |
| 163.556 | 589.6725 | 0 | 127.642 | 0 | 9.444444 | 613.6066 | 1 |
| 329.9079 | 513.0038 | 0 | 262.455 | 0 | 9.444444 | 563.5163 | 0 |
| 243.2372 | 311.1847 | 0 | 225.1663 | 0 | 20.06944 | 314.203 | 0 |
| 258.1801 | 866.7242 | 3.5 | 232.7719 | 0 | 16.82353 | 878.7199 | 1.2 |
| 361.8291 | 958.341 | 1.166667 | 307.8596 | 0 | 19.41176 | 972.6065 | 1.2 |
| 280.7945 | 936.5275 | 1.166667 | 257.1754 | 0 | 20.70588 | 938.866 | 1.2 |
| 243.1039 | 836.1852 | 0 | 223.386 | 0 | 14.23529 | 842.0455 | 0 |
| 488.0924 | 1089.222 | 1.166667 | 476.807 | 0 | 16.82353 | 1076.762 | 2.4 |
| 483.7163 | 499.5704 | 2.222222 | 451.0341 | 0 | 0 | 499.7699 | 8.666667 |
| 304.6896 | 864.3362 | 0 | 307.6056 | 0 | 0 | 932.0262 | 3 |
| 127.3844 | 515.4298 | 2.222222 | 129.4194 | 0 | 0 | 555.5772 | 0 |
| 587.0009 | 1141.875 | 0 | 624.5894 | 0 | 0 | 1214.713 | 0 |
| 184.1909 | 671.3804 | 0 | 187.5644 | 0 | 0 | 722.1104 | 0 |
| 223.7833 | 631.7319 | 0 | 228.8286 | 0 | 0 | 675.9289 | 3 |
| 488.8805 | 1608.405 | 2.222222 | 478.3952 | 0 | 0 | 1711.23 | 3 |
| 111.8917 | 395.1629 | 0 | 121.9169 | 0 | 0 | 422.6305 | 0 |
| 599.0507 | 1432.631 | 1.111111 | 593.8362 | 0 | 0 | 1524.138 | 0 |
| 142.877 | 426.8816 | 0 | 150.0515 | 0 | 0 | 454.8176 | 0 |
| 750.5348 | 1436.595 | 2.222222 | 696.7588 | 0 | 0 | 1432.058 | 4.333333 |
| 84.36321 | 469.46 | 1.333333 | 86.85489 | 15.30275 | 0 | 448.7507 | 0 |
| 225.5425 | 736.1677 | 0 | 238.4252 | 7.651376 | 0 | 714.7275 | 0 |
| 103.3019 | 272.1507 | 0 | 100.4792 | 5.100917 | 0 | 265.9768 | 1.4 |
| 134.2925 | 1058.666 | 0 | 144.7582 | 19.12844 | 0 | 1028.444 | 1.4 |
| 106.7453 | 685.8199 | 1.333333 | 124.3217 | 16.57798 | 0 | 654.7122 | 1.4 |
| 191.1085 | 762.0221 | 1.333333 | 207.7705 | 22.95413 | 0 | 725.6394 | 1.4 |
| 237.5943 | 873.6039 | 2.666667 | 245.2373 | 25.50459 | 0 | 832.0301 | 1.4 |
| 272.0283 | 768.8258 | 1.333333 | 265.6738 | 20.40367 | 0 | 748.8271 | 0 |
| 105.0236 | 295.2835 | 0 | 100.4792 | 6.376147 | 0 | 291.8925 | 0 |
| 1347.177 | 319.4983 | 3.079646 | 1127.757 | 57.82772 | 0 | 289.3511 | 0 |
| 1554.435 | 426.9793 | 9.238938 | 1575.691 | 0 | 0 | 410.3289 | 8.145455 |
| 958.0793 | 376.9197 | 3.079646 | 832.075 | 0 | 0 | 392.0281 | 0 |
| 1712.811 | 449.0645 | 6.159292 | 1701.905 | 0 | 0 | 459.4528 | 2.036364 |
| 1597.451 | 410.7835 | 4.619469 | 1609.217 | 0 | 0 | 400.2151 | 6.109091 |
| 1139.919 | 354.8345 | 0 | 1295.043 | 0 | 0 | 384.7743 | 2.576923 |
| 1552.48 | 472.6219 | 0 | 1735.625 | 0 | 0 | 524.8386 | 0 |
| 1867.277 | 506.4858 | 7.699115 | 1594.773 | 88.18727 | 0 | 436.8089 | 4 |
| 1724.543 | 456.4262 | 1.539823 | 1496.181 | 66.50187 | 0 | 375.6 | 4 |
| 1437.119 | 431.3963 | 3.079646 | 1624.367 | 0 | 0 | 470.1008 | 5.153846 |


| 1284.608 | 366.6133 | 0 | 1287.768 | 0 | 0 | 349.6464 | 4.072727 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1843.814 | 518.2646 | 6.159292 | 1639.417 | 0 | 0 | 495.9225 | 6.375 |
| 1087.127 | 350.4175 | 0 | 1096.476 | 0 | 0 | 330.8638 | 6.109091 |
| 1061.708 | 301.8302 | 1.539823 | 1084.644 | 0 | 0 | 274.5158 | 8.145455 |
| 891.6003 | 263.5493 | 0 | 893.352 | 0 | 0 | 254.2883 | 0 |
| 1419.522 | 444.6474 | 9.238938 | 1615.466 | 0 | 0 | 479.7604 | 10.30769 |
| 1800.798 | 558.0178 | 6.159292 | 1847.838 | 0 | 0 | 512.9111 | 8.145455 |
| 1699.124 | 559.4901 | 4.619469 | 1713.737 | 0 | 0 | 546.142 | 6.109091 |
| 1360.864 | 419.6176 | 3.079646 | 1542.036 | 0 | 0 | 455.6114 | 7.730769 |
| 1114.5 | 469.6772 | 3.079646 | 1232.738 | 0 | 0 | 518.3988 | 7.730769 |
| 883.7793 | 260.6046 | 0 | 752.4145 | 44.81648 | 0 | 212.84 | 4 |
| 1691.303 | 450.5368 | 4.619469 | 1519.288 | 0 | 0 | 415.5775 | 8.5 |
| 1726.498 | 446.1198 | 3.079646 | 1763.039 | 0 | 0 | 417.553 | 10.18182 |
| 2039.34 | 513.8475 | 6.159292 | 2291.914 | 0 | 0 | 569.9167 | 5.153846 |
| 1460.582 | 401.9495 | 3.079646 | 1475.115 | 0 | 0 | 385.7669 | 4.072727 |
| 1761.693 | 440.2304 | 6.159292 | 1535.963 | 85.29588 | 0 | 353.3422 | 6 |
| 1642.422 | 426.9793 | 4.619469 | 1500.492 | 50.59925 | 0 | 355.6033 | 4 |
| 1755.827 | 391.6431 | 4.619469 | 1515.207 | 80.9588 | 0 | 314.3911 | 8 |
| 1591.585 | 452.0091 | 7.699115 | 1619.077 | 0 | 0 | 427.6667 | 6.109091 |
| 1446.895 | 326.86 | 0 | 1276.51 | 63.61049 | 0 | 253.1822 | 4 |
| 1781.245 | 466.7326 | 0 | 1814.313 | 0 | 0 | 445.0046 | 0 |
| 580.7134 | 259.1323 | 1.539823 | 496.4184 | 0 | 0 | 267.3549 | 0 |
| 1298.295 | 634.5796 | 1.539823 | 1481.956 | 0 | 0 | 679.3923 | 2.576923 |
| 1399.969 | 503.5411 | 4.619469 | 1582.088 | 0 | 0 | 542.5478 | 7.730769 |
| 1065.619 | 640.469 | 6.159292 | 1199.361 | 0 | 0 | 693.8817 | 2.576923 |
| 1468.403 | 513.8475 | 1.539823 | 1664.419 | 0 | 0 | 553.8174 | 2.576923 |
| 1454.716 | 518.2646 | 6.159292 | 1475.115 | 0 | 0 | 489.794 | 2.036364 |
| 1263.1 | 267.9663 | 6.159292 | 1091.433 | 46.26217 | 0 | 226.7511 | 6 |
| 973.7214 | 259.1323 | 0 | 984.0676 | 0 | 0 | 254.2883 | 2.036364 |
| 1691.303 | 532.988 | 4.619469 | 1658.519 | 0 | 0 | 544.6971 | 0 |
| 1048.021 | 287.1068 | 6.159292 | 1059.007 | 0 | 0 | 271.6262 | 10.18182 |
| 1200.532 | 263.5493 | 0 | 1068.801 | 0 | 0 | 252.117 | 2.125 |
| 1136.008 | 238.5195 | 1.539823 | 1004.949 | 34.69663 | 0 | 187.8 | 8 |
| 1030.424 | 267.9663 | 1.539823 | 1179.335 | 0 | 0 | 280.1286 | 2.576923 |
| 1042.156 | 306.2472 | 1.539823 | 1070.839 | 0 | 0 | 275.9606 | 6.109091 |
| 1669.795 | 544.7667 | 3.079646 | 1684.156 | 0 | 0 | 507.1318 | 10.18182 |
| 1173.158 | 248.8259 | 1.539823 | 1013.597 | 43.37079 | 0 | 212.84 | 0 |
| 860.3161 | 323.9153 | 1.539823 | 867.715 | 0 | 0 | 299.0777 | 2.036364 |
| 1071.485 | 312.1366 | 1.539823 | 1094.504 | 0 | 0 | 291.8536 | 2.036364 |
| 1255.279 | 425.507 | 1.539823 | 1419.652 | 0 | 0 | 458.8313 | 10.30769 |
| 549.4291 | 114.8427 | 0 | 538.3777 | 0 | 0 | 119.9201 | 0 |
| 1149.695 | 270.911 | 0 | 994.5709 | 50.59925 | 0 | 223.9689 | 0 |
| 1697.169 | 457.8985 | 3.079646 | 1449.479 | 59.27341 | 0 | 411.7689 | 0 |
| 674.566 | 200.2386 | 6.159292 | 692.1999 | 0 | 0 | 182.0473 | 8.145455 |
| 229.1245 | 612.6964 | 0 | 200.7582 | 0 | 0 | 591.3976 | 1.090909 |
| 314.8134 | 766.2102 | 1.375 | 277.57 | 0 | 0 | 730.55 | 2.181818 |
| 322.2646 | 1086.823 | 1.375 | 331.2717 | 0 | 0 | 1175.825 | 1.333333 |


| 309.225 | 1482.155 | 0 | 325.3561 | 0 | 0 | 1595.553 | 1.333333 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 208.6337 | 997.16 | 2.75 | 224.7915 | 0 | 0 | 1070.527 | 0 |
| 435.8954 | 1366.68 | 0 | 445.6393 | 0 | 0 | 1482.943 | 2.666667 |
| 517.8587 | 1612.573 | 2.75 | 518.5979 | 0 | 0 | 1772.512 | 0 |
| 122.9449 | 623.5646 | 0 | 99.50622 | 0 | 0 | 599.1283 | 1.090909 |
| 137.8473 | 971.348 | 1.375 | 115.2177 | 0 | 0 | 930.2594 | 1.090909 |
| 173.2405 | 725.4543 | 0 | 144.895 | 0 | 0 | 699.6272 | 2.181818 |
| 195.5941 | 859.9486 | 0 | 165.8437 | 0 | 0 | 827.1836 | 1.090909 |
| 169.5149 | 847.7219 | 1.375 | 136.1664 | 0 | 0 | 820.7413 | 0 |
| 113.6309 | 724.0958 | 0 | 94.84615 | 0 | 0 | 707.3974 | 0 |
| 80.10044 | 343.7077 | 0 | 73.32037 | 0 | 0 | 329.8427 | 0 |
| 324.1274 | 869.4583 | 0 | 291.5358 | 0 | 0 | 836.2027 | 1.090909 |
| 288.7341 | 1363.963 | 1.375 | 273.8012 | 0 | 0 | 1317.495 | 3.6 |
| 176.9661 | 770.2857 | 0 | 166.4282 | 0 | 0 | 746.8434 | 0 |
| 173.2405 | 838.2122 | 0 | 157.4804 | 0 | 0 | 813.9015 | 1.8 |
| 257.0665 | 1294.678 | 1.375 | 237.1701 | 0 | 0 | 1240.451 | 1.8 |
| 249.6153 | 1065.086 | 0 | 240.9098 | 0 | 0 | 1001.124 | 1.090909 |
| 460.1118 | 1994.32 | 0 | 408.0174 | 0 | 0 | 1949.945 | 1.8 |
| 452.6606 | 1281.093 | 0 | 394.5334 | 0 | 0 | 1236.91 | 1.090909 |
| 285.0085 | 1056.935 | 1.375 | 291.8346 | 0 | 0 | 0 | 0 |
| 610.9987 | 1562.308 | 2.75 | 660.5715 | 0 | 0 | 0 | 1134.876 | 2.666667


| 264.1154 | 1297.228 | 0 | 246.8341 | 0 | 12.6875 | 1333.373 | 1.333333 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 97.30568 | 406.9228 | 0 | 97.62041 | 0 | 0 | 405.9681 | 1.9 |
| 121.6321 | 541.6998 | 1.444444 | 111.5662 | 0 | 0 | 548.7118 | 1.9 |
| 152.9089 | 727.0181 | 0 | 148.1738 | 0 | 0 | 732.0522 | 1.9 |
| 597.7349 | 1212.993 | 1.444444 | 587.4657 | 0 | 0 | 1221.833 | 3.8 |
| 582.0965 | 1989.256 | 0 | 563.0606 | 0 | 0 | 2021.983 | 0 |
| 234.5762 | 975.8371 | 1.444444 | 211.4021 | 0 | 15.84615 | 1015.768 | 0 |
| 262.3835 | 1125.721 | 1.176471 | 248.1677 | 0 | 6.094675 | 1123.114 | 0 |
| 68.36754 | 268.3483 | 1.176471 | 55.78309 | 0 | 0 | 265.8437 | 1.9 |
| 364.0109 | 1081.443 | 0 | 347.4347 | 0 | 10.97041 | 1066.693 | 12.46154 |
| 301.1867 | 1598.014 | 1.176471 | 259.1973 | 0 | 14.62722 | 1599.465 | 0 |
| 136.7351 | 629.2766 | 0 | 116.7959 | 0 | 0 | 616.8097 | 0 |
| 129.344 | 575.607 | 0 | 109.823 | 0 | 0 | 570.9745 | 1.9 |
| 465.6384 | 971.4207 | 0 | 430.1573 | 0 | 17.06509 | 955.3531 | 6.230769 |
| 44.63934 | 266.0432 | 0 | 0 | 0 | 0 | 279.878 | 4.25 |
| 58.9877 | 318.0144 | 0 | 0 | 0 | 0 | 329.6341 | 17 |
| 33.47951 | 84.14388 | 0 | 0 | 0 | 0 | 97.02439 | 2.125 |
| 97.25 | 508.5755 | 0 | 0 | 0 | 0 | 544.8293 | 4.25 |
| 31.88525 | 325.4388 | 1 | 0 | 0 | 0 | 325.9024 | 8.5 |
| 20.72541 | 163.3381 | 0 | 0 | 0 | 0 | 170.4146 | 6.375 |
| 102.0328 | 570.446 | 0 | 0 | 0 | 0 | 598.3171 | 8.5 |
| 577.0689 | 1320.692 | 1.384615 | 512.4793 | 0 | 38.97541 | 1338.575 | 4.65 |
| 400.2565 | 1493.077 | 1.384615 | 305.0947 | 0 | 61.06148 | 1496.631 | 4.65 |
| 441.0594 | 1455.541 | 2.769231 | 376.8817 | 0 | 28.58197 | 1484.042 | 1.55 |
| 464.3753 | 1419.396 | 0 | 386.8521 | 0 | 35.07787 | 1449.074 | 3.1 |
| 326.4228 | 1274.815 | 2.769231 | 201.4024 | 0 | 33.77869 | 1345.569 | 3.1 |
| 359.4537 | 1152.477 | 1.384615 | 251.2544 | 0 | 32.47951 | 1198.703 | 6.2 |
| 221.5012 | 885.5587 | 0 | 145.568 | 0 | 20.78689 | 923.1555 | 1.55 |
| 390.5416 | 1498.638 | 2.769231 | 287.1479 | 0 | 48.06967 | 1530.2 | 6.2 |
| 295.3349 | 918.9235 | 1.384615 | 121.6391 | 0 | 15.59016 | 980.2128 | 18.17647 |
| 613.9857 | 1520.881 | 4.153846 | 107.6805 | 0 | 2.598361 | 1765.836 | 84.82353 |
| 184.733 | 182.1204 | 1 | 187.1684 | 0 | 0 | 182.3156 | 0 |
| 179.6486 | 353.2862 | 0 | 173.6787 | 0 | 0 | 357.7253 | 0 |
| 262.6937 | 446.4004 | 0 | 257.9888 | 0 | 0 | 450.2643 | 0 |
| 98.2983 | 116.3927 | 0 | 97.79968 | 0 | 0 | 120.1625 | 0 |
| 342.3493 | 130.086 | 0 | 340.6127 | 0 | 0 | 128.4496 | 0 |
| 276.2521 | 180.7511 | 0 | 276.537 | 0 | 0 | 179.5532 | 0 |
| 89.82431 | 89.00621 | 0 | 89.36867 | 0 | 0 | 91.15779 | 0 |
| 269.4729 | 394.366 | 0 | 263.0474 | 0 | 0 | 400.5418 | 1 |
| 138.9735 | 161.5805 | 1 | 134.8961 | 0 | 0 | 165.7414 | 1 |
| 155.9214 | 160.2112 | 0 | 156.8167 | 0 | 0 | 157.4544 | 1 |
| 447.4268 | 386.15 | 0 | 448.5296 | 0 | 0 | 393.6359 | 0 |
| 235.577 | 106.8075 | 0 | 242.813 | 0 | 0 | 103.5884 | 0 |
| 511.8291 | 158.8419 | 1 | 495.7432 | 0 | 0 | 175.4097 | 2 |
| 16.19344 | 270.4348 | 0 | 0 | 0 | 0 | 265.692 | 2.741573 |
| 61.82951 | 490.31 | 0 | 0 | 0 | 0 | 490.875 | 5.483146 |
| 25.02623 | 62.31758 | 1.230769 | 0 | 0 | 0 | 69.10376 | 0 |


| 42.6918 | 346.862 | 2.461538 | 0 | 0 | 0 | 349.0931 | 5.483146 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 42.6918 | 333.9282 | 1.230769 | 0 | 0 | 0 | 337.1787 | 4.11236 |
| 69.19016 | 368.0265 | 1.230769 | 0 | 0 | 0 | 375.3049 | 15.07865 |
| 48.58033 | 311.5879 | 1.230769 | 0 | 0 | 0 | 314.5412 | 13.70787 |
| 76.55082 | 499.7164 | 0 | 0 | 0 | 0 | 498.0236 | 9.595506 |
| 14.72131 | 54.08696 | 0 | 0 | 0 | 0 | 58.38076 | 0 |
| 85.38361 | 324.5217 | 1.230769 | 0 | 0 | 0 | 331.2215 | 5.483146 |
| 27.97049 | 77.60302 | 0 | 0 | 0 | 0 | 73.86953 | 2.741573 |
| 64.77377 | 348.0378 | 1.230769 | 0 | 0 | 0 | 361.0076 | 6.853933 |
| 45.63607 | 233.9849 | 1.230769 | 0 | 0 | 0 | 234.7145 | 2.741573 |
| 63.30164 | 348.0378 | 1.230769 | 0 | 0 | 0 | 358.6247 | 15.07865 |
| 73.60656 | 189.3043 | 0 | 0 | 0 | 0 | 194.2054 | 1.370787 |
| 86.85574 | 391.5425 | 1.230769 | 0 | 0 | 0 | 400.3252 | 24.67416 |
| 52.99672 | 325.6975 | 2.461538 | 0 | 0 | 0 | 328.8386 | 6.853933 |
| 373.4123 | 547.15 | 0 | 361.9303 | 7.567568 | 0 | 552.5994 | 1.333333 |
| 93.35309 | 187.3615 | 0 | 96.75365 | 3.027027 | 0 | 182.8353 | 0 |
| 228.8066 | 290.5462 | 0 | 225.7585 | 9.081081 | 0 | 286.533 | 0 |
| 245.2807 | 424.9577 | 0 | 252.6345 | 7.567568 | 0 | 409.3329 | 0 |
| 100.6749 | 396.4462 | 2 | 94.96191 | 3.027027 | 0 | 401.1462 | 0 |
| 283.7202 | 628.6115 | 0 | 284.8857 | 10.59459 | 0 | 613.9993 | 1.333333 |
| 84.20082 | 287.8308 | 0 | 82.41977 | 1.513514 | 0 | 285.1686 | 0 |
| 237.9588 | 353 | 0 | 227.5502 | 7.567568 | 0 | 360.2129 | 1.333333 |
| 373.4123 | 423.6 | 0 | 379.8476 | 1.513514 | 0 | 414.7906 | 0 |
| 203.1802 | 343.4962 | 2 | 204.2577 | 4.540541 | 0 | 338.3818 | 0 |
| 427.7928 | 1503.547 | 2.615385 | 342.465 | 0 | 39.21569 | 1488.93 | 0 |
| 354.5056 | 1593.58 | 1.307692 | 302.2407 | 10.6 | 29.41176 | 1542.886 | 1.5 |
| 371.5491 | 1073.962 | 2.615385 | 320.6413 | 0 | 24.5098 | 1058.683 | 3 |
| 386.8883 | 1746.636 | 0 | 404.3343 | 89.34286 | 0 | 1655.671 | 1.45 |
| 190.8876 | 666.2425 | 0 | 190.3741 | 68.14286 | 0 | 599.6004 | 1.45 |
| 139.757 | 550.486 | 1.307692 | 129.7239 | 59.05714 | 0 | 506.7591 | 1.45 |
| 572.6628 | 1269.462 | 3.923077 | 586.2847 | 175.6571 | 0 | 1107.649 | 2.9 |
| 177.2528 | 1106.117 | 1.307692 | 210.5908 | 69.65714 | 0 | 1018.676 | 1.45 |
| 369.8448 | 1592.294 | 0 | 374.0092 | 127.2 | 0 | 1472.567 | 7.25 |
| 371.5491 | 1463.675 | 0 | 347.8837 | 18.17143 | 18.38235 | 1408.013 | 5.85 |
| 308.488 | 897.7553 | 1.307692 | 318.4133 | 77.22857 | 0 | 817.5197 | 1.45 |
| 308.488 | 920.9066 | 1.307692 | 277.424 | 18.17143 | 13.48039 | 895.8484 | 1.45 |
| 369.8448 | 1407.083 | 0 | 384.1176 | 60.57143 | 0 | 1334.594 | 2.9 |
| 236.9052 | 745.9858 | 0 | 0 | 0 | 0 | 854.5718 | 24.89362 |
| 317.0098 | 960.7782 | 1.307692 | 47.17233 | 12.11429 | 0 | 1045.682 | 39.41064 |
| 146.5744 | 559.4893 | 0 | 30.32507 | 9.085714 | 0 | 593.348 | 16.59574 |
| 317.5519 | 749.8978 | 0 | 285.717 | 0 | 0 | 794.6427 | 0 |
| 285.6371 | 637.2894 | 1.571429 | 269.1086 | 0 | 0 | 659.1197 | 0 |
| 478.7214 | 486.3199 | 1.571429 | 484.291 | 0 | 0 | 488.429 | 0 |
| 510.6362 | 744.948 | 1.571429 | 516.5771 | 0 | 0 | 752.5793 | 2.25 |
| 244.1479 | 337.8253 | 0 | 243.6113 | 0 | 0 | 341.0435 | 0 |
| 505.849 | 897.155 | 0 | 384.4444 | 0 | 0 | 915.6689 | 2.25 |
| 765.9542 | 669.4633 | 1.571429 | 771.637 | 0 | 0 | 671.5898 | 0 |


| 319.1476 | 247.491 | 1.571429 | 313.1749 | 0 | 0 | 254.1824 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 517.0191 | 433.1093 | 0 | 524.6486 | 0 | 0 | 429.8673 | 0 |
| 272.8712 | 493.7446 | 0 | 276.2233 | 0 | 0 | 493.2969 | 2.25 |
| 528.1893 | 695.4498 | 3.142857 | 537.563 | 0 | 0 | 696.5097 | 2.25 |
| 346.2751 | 512.3065 | 0 | 339.0037 | 0 | 0 | 522.0708 | 0 |
| 83.35977 | 405.8582 | 0 | 0 | 0 | 0 | 427.3495 | 7.625 |
| 98.07032 | 610.6045 | 0 | 0 | 0 | 0 | 623.832 | 18.3 |
| 63.74571 | 354.9744 | 1.428571 | 0 | 0 | 0 | 367.1767 | 6.1 |
| 114.4154 | 497.9334 | 0 | 0 | 0 | 0 | 531.7308 | 7.625 |
| 258.2518 | 897.734 | 0 | 0 | 0 | 0 | 973.8165 | 22.875 |
| 111.1464 | 439.7806 | 0 | 0 | 0 | 0 | 455.5938 | 9.15 |
| 130.7604 | 569.4129 | 0 | 0 | 0 | 0 | 611.5518 | 13.725 |
| 227.1962 | 1125.499 | 1.428571 | 0 | 0 | 0 | 1191.175 | 50.325 |
| 86.62878 | 506.4141 | 1.428571 | 0 | 0 | 0 | 529.2748 | 9.15 |
| 63.74571 | 255.6301 | 0 | 0 | 0 | 0 | 273.8475 | 4.575 |
| 192.8716 | 961.9444 | 1.428571 | 0 | 0 | 0 | 1035.217 | 19.825 |
| 135.6639 | 844.4273 | 1.428571 | 0 | 0 | 0 | 878.0313 | 16.775 |
| 49.03516 | 144.1705 | 0 | 0 | 0 | 0 | 168.2382 | 1.525 |
| 62.1112 | 352.5514 | 0 | 0 | 0 | 0 | 370.8608 | 6.1 |
| 148.74 | 872.2922 | 0 | 0 | 0 | 0 | 924.6959 | 18.3 |
| 80.09076 | 403.4351 | 2.857143 | 0 | 0 | 0 | 433.4896 | 15.25 |
| 93.1668 | 477.3377 | 0 | 0 | 0 | 0 | 496.1184 | 16.775 |
| 616.1782 | 724.5251 | 0 | 664.7005 | 636.5743 | 0 | 0 | 5.818182 |
| 599.2966 | 390.8045 | 0 | 608.0856 | 348.2866 | 0 | 0 | 4.363636 |
| 584.5252 | 456.6704 | 0 | 589.214 | 414.1391 | 0 | 0 | 5.818182 |
| 215.4161 | 457.5869 | 0 | 0 | 0 | 0 | 551.0426 | 13.05983 |
| 260.5839 | 550.6338 | 2 | 0 | 0 | 0 | 646.4154 | 48.97436 |
| 158.0876 | 407.8769 | 2 | 0 | 0 | 0 | 456.9945 | 26.11966 |
| 225.8394 | 560.8308 | 0 | 0 | 0 | 0 | 676.8817 | 9.794872 |
| 198.0438 | 392.5815 | 0 | 0 | 0 | 0 | 450.3714 | 42.44444 |
| 177.1971 | 628.3854 | 0 | 0 | 0 | 0 | 698.0757 | 16.32479 |
| 192.8321 | 316.1046 | 2 | 0 | 0 | 0 | 372.2187 | 34.28205 |
| 762.2327 | 749.2915 | 1.571429 | 698.9341 | 686.4294 | 0 | 0 | 19.92453 |
| 1030.77 | 1175.971 | 6.285714 | 899.4151 | 0 | 0 | 1195.077 | 6.105263 |
| 1340.621 | 1947.811 | 0 | 1154.733 | 0 | 0 | 1939.088 | 12.21053 |
| 944.0118 | 1507.255 | 4.714286 | 793.0327 | 0 | 0 | 1527.968 | 6.105263 |
| 797.1241 | 523.7479 | 4.662162 | 769.9488 | 513.1229 | 0 | 0 | 11.62264 |
| 1582.304 | 1418.797 | 7.857143 | 1454.538 | 0 | 0 | 1376.503 | 9.157895 |
| 1123.725 | 1077.107 | 3.142857 | 1009.666 | 0 | 0 | 1053.599 | 9.157895 |
| 999.7849 | 1543.679 | 1.571429 | 907.152 | 0 | 0 | 1499.672 | 1.526316 |
| 1543.056 | 1874.963 | 6.285714 | 1311.405 | 0 | 0 | 1920.779 | 7.631579 |
| 824.2029 | 1004.259 | 0 | 754.3482 | 0 | 0 | 978.6984 | 0 |
| 559.7969 | 825.6083 | 0 | 554.4369 | 0 | 0 | 915.5545 | 0 |
| 894.4357 | 839.484 | 1.571429 | 812.375 | 0 | 0 | 820.5754 | 3.052632 |
| 846.9252 | 735.4158 | 1.571429 | 856.857 | 0 | 0 | 801.821 | 1.692308 |
| 632.0954 | 832.5461 | 0 | 638.4425 | 0 | 0 | 911.7634 | 1.692308 |
| 1523.179 | 707.7227 | 6.216216 | 1463.276 | 677.9339 | 0 | 0 | 28.22642 |
|  |  |  |  |  |  |  |  |


| 497.8268 | 553.2963 | 3.142857 | 504.0335 | 0 | 0 | 595.2052 | 6.769231 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 751.0254 | 649.7126 | 0 | 752.3845 | 0 | 0 | 673.3019 | 2.025641 |
| 1233.141 | 498.8865 | 0 | 1209.119 | 463.8495 | 0 | 0 | 13.28302 |
| 847.0644 | 198.8916 | 1.554054 | 921.9613 | 0 | 0 | 221.7803 | 5.076923 |
| 436.0173 | 187.2896 | 1.554054 | 470.4313 | 0 | 0 | 217.9892 | 6.769231 |
| 1148.627 | 416.015 | 1.554054 | 1119.416 | 392.4881 | 0 | 0 | 13.28302 |
| 809.7432 | 990.383 | 1.571429 | 725.3348 | 0 | 0 | 972.0406 | 3.052632 |
| 1690.287 | 959.6521 | 3.108108 | 1852.323 | 0 | 0 | 1084.259 | 5.076923 |
| 931.6178 | 1758.754 | 1.571429 | 924.0615 | 0 | 0 | 1941.051 | 3.384615 |
| 562.7888 | 669.6018 | 4.662162 | 554.5927 | 0 | 0 | 696.9859 | 4.051282 |
| 747.1838 | 276.7908 | 3.108108 | 812.7541 | 0 | 0 | 312.7671 | 5.076923 |
| 218.969 | 44.75062 | 0 | 209.3065 | 44.17615 | 0 | 0 | 1.660377 |
| 547.4226 | 275.1334 | 0 | 602.7401 | 0 | 0 | 307.0804 | 0 |
| 1260.032 | 314.9117 | 0 | 1386.092 | 0 | 0 | 348.7827 | 5.076923 |
| 1251.797 | 442.2901 | 6.285714 | 1278.985 | 0 | 0 | 466.3073 | 10.15385 |
| 305.4042 | 485.6271 | 0 | 300.566 | 0 | 0 | 499.0554 | 0 |
| 1020.442 | 1387.577 | 1.571429 | 1001.767 | 0 | 0 | 1552.462 | 3.384615 |
| 402.8059 | 1365.029 | 3.142857 | 408.5784 | 0 | 0 | 1339.858 | 3.636364 |
| 190.0418 | 719.8055 | 0 | 197.4131 | 0 | 0 | 784.761 | 0 |
| 653.0655 | 2123.168 | 0 | 673.3206 | 0 | 0 | 2207.528 | 3.636364 |
| 1817.059 | 2272.337 | 4.662162 | 1917.817 | 0 | 0 | 2366.061 | 5.454545 |
| 405.2848 | 316.5692 | 0 | 413.0358 | 0 | 0 | 319.7338 | 2.025641 |
| 843.2228 | 1435.335 | 0 | 792.2422 | 0 | 0 | 1433.631 | 1.863636 |
| 1125.578 | 1390.584 | 6.216216 | 1057.587 | 0 | 0 | 1401.085 | 5.590909 |
| 1386.804 | 1889.47 | 0 | 1358.942 | 0 | 0 | 1853.468 | 3.727273 |
| 212.7641 | 929.6765 | 3.142857 | 220.5147 | 0 | 0 | 1012.228 | 0 |
| 633.8577 | 1607.707 | 3.108108 | 630.2189 | 0 | 0 | 1661.262 | 0 |
| 956.5489 | 1382.297 | 3.108108 | 971.5067 | 0 | 0 | 1397.355 | 8.102564 |
| 1175.518 | 1674.005 | 0 | 1267.427 | 0 | 0 | 1721.701 | 5.454545 |
| 288.1171 | 522.0905 | 0 | 316.8568 | 0 | 0 | 531.8522 | 1.818182 |
| 1406.012 | 2215.984 | 1.554054 | 1364.628 | 0 | 0 | 2183.805 | 7.454545 |
| 647.3032 | 797.2239 | 0 | 626.3407 | 0 | 0 | 825.5561 | 2.025641 |
| 482.116 | 425.9596 | 1.554054 | 484.7838 | 0 | 0 | 439.8455 | 2.025641 |
| 1175.518 | 1317.657 | 0 | 1152.352 | 0 | 0 | 1298.567 | 0 |
| 1039.142 | 828.7151 | 3.108108 | 1031.62 | 0 | 0 | 854.3152 | 4.051282 |
| 825.9358 | 916.5589 | 4.662162 | 826.0716 | 0 | 0 | 947.3594 | 2.025641 |
| 841.3021 | 1002.745 | 3.108108 | 756.9543 | 0 | 0 | 1020.844 | 2.933333 |
| 489.7991 | 639.7681 | 1.554054 | 482.8447 | 0 | 0 | 663.1516 | 4.051282 |
| 1440.586 | 982.8561 | 1.554054 | 1421.386 | 0 | 0 | 1028.562 | 4.051282 |
| 772.1539 | 629.8235 | 1.554054 | 765.9584 | 0 | 0 | 647.9262 | 6.076923 |
| 685.7188 | 687.8335 | 0 | 682.5756 | 0 | 0 | 707.1362 | 2.025641 |
| 1044.905 | 1219.869 | 4.662162 | 964.716 | 0 | 0 | 1249.748 | 7.454545 |
| 1033.38 | 1113.793 | 1.554054 | 1021.924 | 0 | 0 | 1148.673 | 10.12821 |
| 1048.746 | 953.0224 | 3.108108 | 976.1211 | 0 | 0 | 947.0093 | 2.933333 |
| 1411.774 | 1736.987 | 4.662162 | 1423.325 | 0 | 0 | 1767.84 | 6.076923 |
| 956.5489 | 1070.7 | 3.108108 | 940.4806 | 0 | 0 | 1113.147 | 0 |
| 762.55 | 757.4456 | 1.554054 | 735.3827 | 0 | 0 | 755.0564 | 0 |


| 687.6396 | 793.9091 | 0 | 659.5701 | 0 | 0 | 792.4837 | 1.863636 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1112.132 | 835.3448 | 4.662162 | 1078.159 | 0 | 0 | 877.9992 | 8.102564 |
| 691.4811 | 570.156 | 3.108108 | 696.1495 | 0 | 0 | 587.0245 | 2.025641 |
| 1102.528 | 1417.103 | 0 | 1042.424 | 0 | 0 | 1420.612 | 5.590909 |
| 1461.714 | 1907.702 | 3.108108 | 1318.684 | 0 | 0 | 1914.885 | 5.866667 |
| 1530.862 | 1087.274 | 3.108108 | 1390.512 | 0 | 0 | 1118.755 | 1.466667 |
| 1475.16 | 1019.32 | 4.662162 | 1329.735 | 0 | 0 | 1064.182 | 5.866667 |
| 1461.714 | 2073.445 | 3.108108 | 1318.684 | 0 | 0 | 2083.421 | 1.466667 |
| 973.8359 | 982.8561 | 1.554054 | 874.8255 | 0 | 0 | 1004.793 | 1.466667 |
| 993.0437 | 644.7404 | 0 | 928.2359 | 0 | 0 | 638.83 | 0 |
| 1010.331 | 1319.314 | 1.554054 | 931.9194 | 0 | 0 | 1311.367 | 0 |
| 802.8864 | 1110.478 | 1.554054 | 729.3282 | 0 | 0 | 1105.914 | 0 |
| 697.2435 | 318.2266 | 0 | 709.7235 | 0 | 0 | 309.5835 | 4.051282 |
| 1150.548 | 1466.826 | 1.554054 | 1109.185 | 0 | 0 | 1542.843 | 4.051282 |
| 1213.934 | 374.5792 | 3.108108 | 1304.187 | 0 | 0 | 432.1872 | 11.84615 |
| 783.6786 | 333.1435 | 3.108108 | 791.1672 | 0 | 0 | 338.3427 | 2.025641 |
| 804.8072 | 1251.36 | 0 | 773.2891 | 0 | 0 | 1238.358 | 1.863636 |
| 1002.648 | 1557.984 | 0 | 943.8675 | 0 | 0 | 1562.186 | 5.590909 |
| 485.2997 | 1005.621 | 1.8 | 463.9773 | 0 | 0 | 1031.245 | 6 |
| 543.2161 | 674.223 | 0 | 532.2093 | 0 | 0 | 689.9173 | 0 |
| 343.5043 | 644.2258 | 1.8 | 371.1851 | 0 | 0 | 610.8308 | 2 |
| 227.6715 | 351.3959 | 1.8 | 222.2412 | 0 | 0 | 355.8521 | 0 |
| 591.147 | 995.6217 | 0 | 629.3902 | 0 | 0 | 952.7002 | 0 |
| 389.438 | 627.0846 | 0 | 378.2 | 0 | 0 | 636.1764 | 0 |
| 191.7233 | 312.8281 | 3.6 | 200.7969 | 0 | 0 | 312.2784 | 0 |
| 63.98693 | 353.2472 | 0 | 54.44978 | 0 | 0 | 362.4449 | 0 |
| 72.71242 | 470.1582 | 3.2 | 51.50655 | 0 | 0 | 486.2066 | 3.333333 |
| 82.89216 | 279.0779 | 0 | 69.16594 | 0 | 0 | 282.8838 | 1.111111 |
| 55.26144 | 201.1372 | 0 | 38.26201 | 0 | 0 | 213.4257 | 0 |
| 47.9902 | 178.5093 | 1.6 | 39.73362 | 0 | 0 | 185.6425 | 1.111111 |
| 13.08824 | 31.42769 | 0 | 7.358079 | 0 | 0 | 34.0976 | 0 |
| 46.53595 | 182.2806 | 0 | 32.37555 | 0 | 0 | 189.4311 | 3.333333 |
| 62.53268 | 338.1619 | 3.2 | 44.14847 | 0 | 0 | 354.8677 | 1.111111 |
| 1061.523 | 1152.621 | 5.714286 | 1079.105 | 0 | 0 | 1165.657 | 4.384615 |
| 1007.799 | 850.1877 | 0 | 1024.558 | 0 | 0 | 845.3295 | 2.586538 |
| 320.4948 | 1003.351 | 0 | 296.7619 | 0 | 0 | 988.585 | 2.25 |
| 272.328 | 781.3939 | 0 | 279.4938 | 0 | 0 | 783.2582 | 1.461538 |
| 196.3725 | 238.8314 | 0 | 203.6048 | 0 | 0 | 238.6696 | 0 |
| 400.1554 | 1004.649 | 0 | 412.7624 | 0 | 0 | 1007.423 | 0 |
| 628.0216 | 1479.716 | 2.285714 | 642.2805 | 0 | 0 | 1484.762 | 8.769231 |
| 628.0216 | 1421.306 | 1.142857 | 620.6667 | 0 | 0 | 1382.494 | 0 |
| 427.9439 | 1286.315 | 1.142857 | 401.7143 | 0 | 0 | 1259.239 | 1.125 |
| 101.8914 | 214.1694 | 0 | 101.8024 | 0 | 0 | 216.2531 | 0 |
| 561.329 | 1082.529 | 1.142857 | 583.0501 | 0 | 0 | 1077.31 | 2.923077 |
| 259.36 | 295.9432 | 0 | 253.5805 | 0 | 0 | 303.2818 | 0 |
| 520.5725 | 1381.068 | 3.428571 | 496.4724 | 0 | 0 | 1349.576 | 4.5 |
| 264.9177 | 680.1502 | 0 | 262.8353 | 0 | 0 | 693.5923 | 0 |


| 122.2697 | 473.7687 | 1.142857 | 120.3119 | 0 | 0 | 486.5695 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 345.0871 | 691.4526 | 0 | 318.1512 | 0 | 13.88095 | 690.9928 | 0 |
| 224.0613 | 577.2678 | 1 | 221.3939 | 0 | 17.66667 | 565.5904 | 0 |
| 336.9097 | 357.7791 | 0 | 321.4312 | 0 | 5.047619 | 363.411 | 0 |
| 268.2194 | 586.1488 | 0 | 245.9932 | 0 | 7.571429 | 595.0216 | 0 |
| 346.7226 | 464.3517 | 1 | 346.0305 | 0 | 8.833333 | 452.9842 | 1 |
| 160.3503 | 651.4322 | 0 | 0 | 0 | 0 | 676.7833 | 33.34737 |
| 59.389 | 292.2062 | 1 | 0 | 0 | 0 | 297.7846 | 12.96842 |
| 27.71487 | 121.976 | 0 | 0 | 0 | 0 | 128.5888 | 1.852632 |
| 114.8187 | 355.2048 | 0 | 0 | 0 | 0 | 380.3522 | 7.410526 |
| 11.8778 | 203.7401 | 0 | 0 | 0 | 0 | 197.6207 | 3.705263 |
| 43.55193 | 355.2048 | 0 | 0 | 0 | 0 | 357.3416 | 16.67368 |
| 55.42974 | 249.3136 | 0 | 0 | 0 | 0 | 262.5919 | 12.96842 |
| 33.65377 | 213.1229 | 0 | 0 | 0 | 0 | 215.2171 | 14.82105 |
| 261.3116 | 646.0706 | 1 | 0 | 0 | 0 | 691.6725 | 24.08421 |
| 57.40937 | 171.5706 | 0 | 0 | 0 | 0 | 175.9636 | 16.67368 |
| 146.4929 | 536.1582 | 0 | 0 | 0 | 0 | 563.0837 | 31.49474 |
| 113.5283 | 494.2197 | 0 | 104.0672 | 0 | 0 | 504.7507 | 0 |
| 157.1931 | 623.6913 | 0 | 145.6941 | 0 | 0 | 639.3509 | 0 |
| 169.4192 | 1070.577 | 1.571429 | 159.5697 | 0 | 0 | 1076.802 | 0 |
| 387.7429 | 288.1788 | 0 | 385.0487 | 0 | 0 | 291.6337 | 1.75 |
| 557.1621 | 1007.93 | 4.714286 | 542.884 | 0 | 0 | 1027.729 | 3.5 |
| 146.7135 | 452.4546 | 1.571429 | 140.4908 | 0 | 0 | 462.6882 | 0 |
| 282.9475 | 572.1811 | 0 | 280.9815 | 0 | 0 | 574.855 | 0 |
| 464.5928 | 591.6714 | 0 | 450.958 | 0 | 0 | 608.505 | 0 |
| 361.544 | 750.3786 | 0 | 343.4218 | 0 | 0 | 766.9407 | 0 |
| 263.735 | 484.4745 | 0 | 258.4336 | 0 | 0 | 486.5236 | 0 |
| 204.351 | 300.7083 | 1.571429 | 202.9311 | 0 | 0 | 304.2525 | 1.75 |
| 144.9669 | 64.03973 | 0 | 145.6941 | 0 | 0 | 63.09384 | 0 |
| 971.1038 | 587.4949 | 1.571429 | 967.8252 | 0 | 0 | 588.8758 | 0 |
| 485.0538 | 505.9813 | 3 | 464.5557 | 0 | 0 | 518.9618 | 1.8 |
| 643.5176 | 452.2208 | 0 | 615.5363 | 0 | 0 | 468.0208 | 5.4 |
| 432.8767 | 1002.475 | 0 | 404.5506 | 0 | 0 | 1017.229 | 9 |
| 413.5519 | 746.3224 | 0 | 410.3575 | 0 | 0 | 749.7884 | 1.8 |
| 1196.743 | 643.0616 | 7.024291 | 1045.494 | 0 | 0 | 560.7342 | 4.222222 |
| 1804.154 | 954.5446 | 1.404858 | 1743.889 | 0 | 0 | 903.5027 | 4.953488 |
| 1382.943 | 657.4157 | 1.404858 | 1353.783 | 0 | 0 | 606.9074 | 6.27451 |
| 1142.51 | 674.6406 | 4.214575 | 1017.448 | 0 | 0 | 572.3892 | 9.851852 |
| 672.4901 | 321.5308 | 2.809717 | 658.7253 | 0 | 0 | 308.65 | 3.302326 |
| 1746.305 | 1066.506 | 9.834008 | 1522.277 | 0 | 0 | 950.5286 | 5.62963 |
| 1894.542 | 940.1906 | 11.23887 | 1693.669 | 0 | 0 | 795.1289 | 8.444444 |
| 997.8886 | 535.4062 | 2.809717 | 953.4183 | 0 | 0 | 520.4961 | 6.604651 |
| 925.5778 | 559.8081 | 0 | 832.0325 | 0 | 0 | 479.1493 | 1.407407 |
| 1213.013 | 572.7268 | 4.214575 | 1107.819 | 0 | 0 | 464.9043 | 2.814815 |
| 1160.588 | 677.5114 | 2.809717 | 1099.031 | 0 | 0 | 666.4034 | 3.302326 |
| 1842.117 | 821.0519 | 4.214575 | 1745.622 | 0 | 0 | 805.2959 | 8.255814 |
| 1784.268 | 1049.281 | 2.809717 | 1709.219 | 0 | 0 | 1014.336 | 4.953488 |


| 1247.361 | 920.0949 | 1.404858 | 1406.853 | 0 | 0 | 821.6092 | 1.590909 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 840.6127 | 552.6311 | 4.214575 | 892.3261 | 0 | 0 | 529.6821 | 3.181818 |
| 1749.921 | 958.8508 | 1.404858 | 1646.813 | 0 | 0 | 948.3973 | 4.953488 |
| 1297.978 | 767.9419 | 0 | 1267.18 | 0 | 0 | 726.7305 | 3.302326 |
| 1173.242 | 544.0187 | 4.214575 | 1119.833 | 0 | 0 | 521.8991 | 11.55814 |
| 2051.818 | 901.4346 | 2.809717 | 1990.044 | 0 | 0 | 843.1757 | 4.953488 |
| 1082.854 | 500.9565 | 2.809717 | 1001.828 | 0 | 0 | 490.049 | 2.391304 |
| 840.6127 | 463.636 | 2.809717 | 775.877 | 0 | 0 | 446.2694 | 2.391304 |
| 1218.436 | 620.0952 | 1.404858 | 1180.505 | 0 | 0 | 593.4498 | 0 |
| 1334.134 | 786.6022 | 2.809717 | 1343.886 | 0 | 0 | 794.5231 | 3.181818 |
| 1348.596 | 587.0808 | 2.809717 | 1369.073 | 0 | 0 | 585.3589 | 3.181818 |
| 423.018 | 175.1195 | 0 | 370.831 | 0 | 0 | 151.5148 | 0 |
| 571.2551 | 87.55973 | 2.809717 | 572.0961 | 0 | 0 | 88.78194 | 0 |
| 1608.915 | 648.8033 | 1.404858 | 1753.411 | 0 | 0 | 681.1478 | 4.404255 |
| 1335.941 | 815.3103 | 4.214575 | 1464.128 | 0 | 0 | 843.4703 | 2.93617 |
| 1668.571 | 977.5111 | 8.42915 | 1710.865 | 0 | 0 | 940.9143 | 10.4 |
| 390.4781 | 182.2965 | 0 | 433.062 | 0 | 0 | 183.385 | 0 |
| 1706.534 | 641.6262 | 2.809717 | 1867.55 | 0 | 0 | 656.8752 | 4.404255 |
| 1666.763 | 518.1814 | 7.024291 | 1820.32 | 0 | 0 | 523.3763 | 10.2766 |
| 1867.426 | 973.2049 | 1.404858 | 2081.049 | 0 | 0 | 947.9821 | 4.323529 |
| 1542.027 | 789.473 | 2.809717 | 1751.844 | 0 | 0 | 749.808 | 1.441176 |
| 708.6455 | 403.3489 | 0 | 787.7418 | 0 | 0 | 400.7849 | 0 |
| 1005.12 | 549.7603 | 4.214575 | 1122.826 | 0 | 0 | 536.8448 | 0 |
| 1482.371 | 777.9898 | 0 | 1719.179 | 0 | 0 | 942.0277 | 1.304348 |
| 1699.303 | 688.9946 | 5.619433 | 1794.738 | 0 | 0 | 746.3802 | 7.340426 |
| 1357.635 | 584.21 | 4.214575 | 1466.096 | 0 | 0 | 620.4665 | 4.404255 |
| 1140.702 | 259.8084 | 0 | 1227.978 | 0 | 0 | 282.1681 | 1.468085 |
| 1865.618 | 591.387 | 2.809717 | 2050.566 | 0 | 0 | 596.1939 | 7.340426 |
| 2406.141 | 786.6022 | 5.619433 | 2609.454 | 0 | 0 | 825.2659 | 8.808511 |
| 1746.305 | 533.9708 | 4.214575 | 1885.262 | 0 | 0 | 567.3703 | 2.93617 |
| 1740.882 | 990.4298 | 4.214575 | 1950.566 | 0 | 0 | 1258.816 | 1.304348 |
| 887.6147 | 453.5881 | 0 | 956.4062 | 0 | 0 | 482.4165 | 0 |
| 2048.888 | 1199.761 | 3.033708 | 1968.22 | 0 | 0 | 1096.073 | 6.933333 |
| 1330.518 | 849.76 | 2.809717 | 1460.192 | 0 | 0 | 885.9472 | 2.93617 |
| 1189.512 | 559.8081 | 1.404858 | 1283.08 | 0 | 0 | 597.711 | 1.468085 |
| 1390.174 | 564.1143 | 7.024291 | 1519.23 | 0 | 0 | 579.5066 | 2.93617 |
| 685.1445 | 333.0141 | 2.809717 | 676.0092 | 0 | 0 | 324.5514 | 10.4 |
| 1429.945 | 492.3441 | 2.809717 | 1540.877 | 0 | 0 | 509.723 | 4.404255 |
| 1032.236 | 575.5976 | 0 | 1141.39 | 0 | 0 | 588.6088 | 1.468085 |
| 973.1268 | 730.4875 | 4.550562 | 1094.22 | 0 | 0 | 816.9797 | 3.913043 |
| 1079.563 | 859.5758 | 4.550562 | 1247.757 | 0 | 0 | 928.6892 | 2.608696 |
| 948.2031 | 546.1348 | 6.086957 | 1168.927 | 0 | 0 | 592.5332 | 1.647059 |
| 697.5343 | 393.3394 | 1.516854 | 795.7963 | 0 | 0 | 438.5014 | 1.304348 |
| 669.0247 | 569.5069 | 3.033708 | 763.3589 | 0 | 0 | 618.5704 | 0 |
| 1026.922 | 527.5003 | 3.043478 | 1235.538 | 0 | 0 | 597.4573 | 6.588235 |
| 619.6081 | 657.5907 | 1.516854 | 668.2094 | 0 | 0 | 755.2894 | 1.304348 |
| 1189.727 | 603.4718 | 3.043478 | 1446.117 | 0 | 0 | 681.167 | 1.647059 |


| 1159.389 | 888.4308 | 10.61798 | 1286.681 | 0 | 0 | 1008.72 | 6.521739 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 867.6953 | 470.1633 | 4.565217 | 1063.637 | 0 | 0 | 510.4649 | 13.17647 |
| 767.8579 | 586.2125 | 1.516854 | 864.996 | 0 | 0 | 650.2492 | 2.608696 |
| 982.1953 | 523.2 | 0 | 1168.927 | 0 | 0 | 592.5332 | 1.647059 |
| 868.5917 | 490.5353 | 0 | 984.1332 | 0 | 0 | 521.9545 | 1.647059 |
| 1220.141 | 702.3781 | 9.130435 | 1256.133 | 0 | 0 | 715.7896 | 8.545455 |
| 323.8203 | 229.3479 | 0 | 393.5732 | 0 | 0 | 261.767 | 1.304348 |
| 910.6328 | 412.8263 | 0 | 935.0588 | 0 | 0 | 423.3634 | 0 |
| 642.2734 | 335.4214 | 1.521739 | 782.1495 | 0 | 0 | 377.5142 | 0 |
| 1505.872 | 822.4873 | 5.619433 | 1471.634 | 0 | 0 | 834.154 | 10.4 |
| 1379.328 | 701.9133 | 4.214575 | 1353.831 | 0 | 0 | 707.4651 | 10.4 |
| 1919.645 | 1091.935 | 6.067416 | 1812.357 | 0 | 0 | 1034.863 | 3.466667 |
| 916.1077 | 964.3651 | 0 | 992.5829 | 0 | 0 | 1097.087 | 1.304348 |
| 1056.755 | 625.6983 | 1.516854 | 1174.232 | 0 | 0 | 706.9376 | 1.304348 |
| 1287.132 | 612.9181 | 4.214575 | 1274.087 | 0 | 0 | 597.8578 | 6.933333 |
| 967.1565 | 281.3395 | 0 | 991.3594 | 0 | 0 | 261.9187 | 0 |
| 1592.735 | 961.3277 | 1.516854 | 1495.195 | 0 | 0 | 906.751 | 6.933333 |
| 910.4057 | 797.3097 | 3.033708 | 988.2579 | 0 | 0 | 922.02 | 2.608696 |
| 1144.184 | 1002.332 | 3.033708 | 1258.569 | 0 | 0 | 1140.437 | 2.608696 |
| 769.7585 | 560.3948 | 1.516854 | 852.021 | 0 | 0 | 631.9088 | 0 |
| 1643.262 | 625.8368 | 1.404858 | 1634.746 | 0 | 0 | 623.4803 | 1.733333 |
| 694.1563 | 395.6252 | 4.565217 | 831.571 | 0 | 0 | 451.3757 | 1.647059 |
| 1601.211 | 824.2192 | 7.608696 | 1540.885 | 0 | 0 | 810.1172 | 4 |
| 642.2734 | 226.4811 | 3.043478 | 611.1892 | 0 | 0 | 226.439 | 1.333333 |
| 610.0703 | 258.0164 | 1.521739 | 514.1774 | 0 | 0 | 230.5097 | 1.407407 |
| 1595.844 | 682.3101 | 0 | 1530.556 | 0 | 0 | 662.4396 | 2.666667 |
| 830.125 | 263.7501 | 3.043478 | 880.9022 | 0 | 0 | 280.4808 | 3.217391 |
| 1184.359 | 712.412 | 3.043478 | 1243.964 | 0 | 0 | 759.7639 | 6.434783 |
| 1318.539 | 335.4214 | 1.521739 | 1268.863 | 0 | 0 | 322.0779 | 1.333333 |
| 1472.398 | 705.2449 | 0 | 1263.63 | 0 | 0 | 635.8441 | 1.407407 |
| 1914.297 | 1010.564 | 4.565217 | 1830.124 | 0 | 0 | 980.2981 | 6.666667 |
| 1132.477 | 484.4975 | 6.086957 | 1098.419 | 0 | 0 | 452.878 | 1.333333 |
| 1001.875 | 215.0137 | 1.521739 | 1062.433 | 0 | 0 | 225.0011 | 6.434783 |
| 1182.57 | 675.143 | 6.086957 | 1037.703 | 0 | 0 | 593.1091 | 4.222222 |
| 1440.195 | 725.3129 | 3.043478 | 1266.746 | 0 | 0 | 631.9591 | 0 |
| 803.2891 | 427.1605 | 3.043478 | 716.7321 | 0 | 0 | 367.7795 | 1.407407 |
| 567.1328 | 187.7786 | 1.521739 | 528.5495 | 0 | 0 | 189.8712 | 0 |
| 1973.336 | 835.6866 | 0 | 1885.217 | 0 | 0 | 821.3689 | 2.666667 |
| 1506.391 | 602.0383 | 4.565217 | 1389.379 | 0 | 0 | 618.8396 | 2.666667 |
| 1619.102 | 603.4718 | 3.043478 | 1539.164 | 0 | 0 | 597.7427 | 1.333333 |
| 1280.969 | 646.4745 | 0 | 1227.543 | 0 | 0 | 627.2783 | 0 |
| 1316.75 | 587.7041 | 1.521739 | 1267.142 | 0 | 0 | 568.2072 | 2.666667 |
| 1194.935 | 411.9614 | 2.809717 | 1023.68 | 0 | 0 | 367.7795 | 1.407407 |
| 1397.258 | 553.3019 | 4.565217 | 1353.225 | 0 | 0 | 531.6394 | 4 |
| 1238.031 | 279.5178 | 1.521739 | 1289.824 | 0 | 0 | 309.7617 | 0 |
| 1302.438 | 301.0192 | 3.043478 | 1350.971 | 0 | 0 | 332.8783 | 1.608696 |
| 1057.336 | 389.8915 | 1.521739 | 905.2638 | 0 | 0 | 345.7645 | 7.037037 |


| 873.0625 | 325.3874 | 0 | 866.9897 | 0 | 0 | 296.3966 | 4.705882 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 658.028 | 281.3395 | 0 | 671.5617 | 0 | 0 | 251.2314 | 1.568627 |
| 703.2222 | 295.6935 | 1.404858 | 694.6577 | 0 | 0 | 276.6369 | 6.27451 |
| 1028.621 | 473.6838 | 2.809717 | 964.7037 | 0 | 0 | 462.9433 | 4.705882 |
| 1216.563 | 477.3304 | 1.521739 | 1004.112 | 109.9653 | 0 | 401.429 | 1 |
| 212.8984 | 91.73918 | 1.521739 | 207.8643 | 0 | 0 | 83.27334 | 0 |
| 1359.688 | 487.3644 | 1.521739 | 1350.23 | 0 | 0 | 464.3547 | 3.137255 |
| 1254.592 | 615.7889 | 2.809717 | 1241.856 | 0 | 0 | 584.3248 | 3.137255 |
| 704.8906 | 143.3425 | 1.521739 | 609.525 | 21.45665 | 0 | 129.7548 | 0 |
| 889.1641 | 441.4948 | 0 | 891.8623 | 0 | 0 | 412.1325 | 0 |
| 1171.434 | 489.4733 | 5.619433 | 1133.482 | 0 | 0 | 468.589 | 14.11765 |
| 714.0688 | 348.8035 | 0 | 701.7642 | 0 | 0 | 338.739 | 1.568627 |
| 1076.439 | 499.4815 | 5.619433 | 1076.631 | 0 | 0 | 464.3547 | 9.411765 |
| 581.4453 | 111.8071 | 0 | 505.2641 | 17.43353 | 0 | 86.50323 | 1 |
| 706.6797 | 335.4214 | 0 | 689.3279 | 0 | 0 | 326.0363 | 3.137255 |
| 577.8672 | 349.7556 | 4.565217 | 487.6895 | 0 | 0 | 304.3246 | 12.66667 |
| 631.5391 | 321.0871 | 1.521739 | 548.5725 | 42.91329 | 0 | 268.971 | 1 |
| 1014.158 | 566.9852 | 2.809717 | 984.2465 | 0 | 0 | 543.3938 | 9.411765 |
| 793.6107 | 457.8943 | 0 | 776.3821 | 0 | 0 | 438.9493 | 1.568627 |
| 949.9922 | 256.583 | 1.521739 | 822.8587 | 24.13873 | 0 | 217.6097 | 1 |
| 824.7578 | 530.3671 | 3.043478 | 806.5847 | 0 | 0 | 510.9313 | 3.137255 |
| 200.6624 | 106.22 | 0 | 206.5391 | 0 | 0 | 106.2046 | 0 |
| 1000.086 | 564.7693 | 3.043478 | 986.0231 | 0 | 0 | 544.8052 | 3.137255 |
| 1293.492 | 686.6104 | 1.521739 | 1293.686 | 0 | 0 | 709.9702 | 0 |
| 1663.828 | 566.2027 | 4.565217 | 1438.139 | 0 | 0 | 502.4593 | 4.222222 |
| 951.7813 | 528.9337 | 4.565217 | 814.8933 | 0 | 0 | 476.5593 | 1.407407 |
| 667.0668 | 377.5116 | 4.214575 | 593.6412 | 0 | 0 | 325.0445 | 0 |
| 797.2262 | 221.0524 | 1.404858 | 779.9354 | 0 | 0 | 211.7119 | 0 |
| 493.7813 | 176.3112 | 0 | 426.6675 | 16.09249 | 0 | 152.7323 | 0 |
| 710.2578 | 266.617 | 4.565217 | 675.1149 | 0 | 0 | 258.2885 | 4.705882 |
| 611.026 | 337.3203 | 2.809717 | 523.5261 | 0 | 0 | 297.8496 | 4.222222 |
| 790.7656 | 549.0016 | 1.521739 | 827.3983 | 0 | 0 | 587.1603 | 3.217391 |
| 935.6797 | 517.4663 | 9.130435 | 940.3333 | 0 | 0 | 516.0988 | 1.333333 |
| 1377.578 | 457.2625 | 0 | 1442.692 | 0 | 0 | 490.0708 | 1.608696 |
| 937.4688 | 649.3414 | 4.565217 | 984.0881 | 0 | 0 | 707.3664 | 0 |
| 1059.125 | 657.9419 | 4.565217 | 1135.045 | 0 | 0 | 701.202 | 3.217391 |
| 1427.672 | 470.1633 | 3.043478 | 1348.06 | 0 | 0 | 465.5361 | 4 |
| 862.3281 | 311.0531 | 1.521739 | 938.2277 | 0 | 0 | 319.0084 | 0 |
| 763.9297 | 553.3019 | 0 | 825.4875 | 0 | 0 | 574.8315 | 0 |
| 769.2969 | 301.0192 | 3.043478 | 806.379 | 0 | 0 | 320.5495 | 1.608696 |
| 1153.945 | 699.5112 | 6.086957 | 1226.766 | 0 | 0 | 756.6817 | 1.608696 |
| 617.2266 | 364.0899 | 0 | 651.6001 | 0 | 0 | 397.6046 | 0 |
| 1164.68 | 1143.873 | 3.043478 | 1054.993 | 0 | 0 | 1141.094 | 2.391304 |
| 837.2813 | 551.8685 | 3.043478 | 873.2588 | 0 | 0 | 610.2769 | 1.608696 |
| 1119.953 | 624.9731 | 4.565217 | 1148.421 | 0 | 0 | 690.4142 | 1.608696 |
| 1003.664 | 944.6268 | 0 | 935.3721 | 0 | 0 | 916.5469 | 1.195652 |
| 985.7734 | 352.6225 | 0 | 929.2745 | 0 | 0 | 361.4933 | 1.333333 |


| 2424.218 | 1234.449 | 7.024291 | 2211.333 | 0 | 0 | 1215.943 | 8.369565 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1268.445 | 653.6416 | 1.521739 | 1220.657 | 0 | 0 | 627.2783 | 2.666667 |
| 1017.977 | 315.3534 | 1.521739 | 1012.667 | 0 | 0 | 313.9012 | 6.666667 |
| 1626.258 | 483.0641 | 1.521739 | 1549.494 | 0 | 0 | 462.7232 | 1.333333 |
| 1447.352 | 614.9392 | 1.521739 | 1262.072 | 0 | 0 | 551.6692 | 1.407407 |
| 1474.188 | 865.7885 | 6.086957 | 1274.537 | 0 | 0 | 776.9989 | 2.814815 |
| 1506.391 | 553.3019 | 3.043478 | 1574.541 | 0 | 0 | 597.948 | 4.826087 |
| 2100.628 | 739.2338 | 8.42915 | 1950.492 | 0 | 0 | 696.2367 | 5.978261 |
| 1489.602 | 864.1141 | 2.809717 | 1347.401 | 0 | 0 | 851.5837 | 3.586957 |
| 356.0234 | 189.2121 | 0 | 340.8886 | 0 | 0 | 184.2454 | 0 |
| 1777.037 | 753.5879 | 4.214575 | 1947.799 | 0 | 0 | 754.2447 | 1.441176 |
| 912.4219 | 342.5885 | 1.521739 | 951.9574 | 0 | 0 | 340.4365 | 1.424242 |
| 1091.893 | 502.3919 | 7.024291 | 1201.208 | 0 | 0 | 502.8298 | 2.882353 |
| 1645.938 | 642.1742 | 1.521739 | 1712.397 | 0 | 0 | 644.5016 | 2.848485 |
| 1126.24 | 521.0522 | 1.404858 | 1093.831 | 0 | 0 | 498.0489 | 1.651163 |
| 1696.031 | 689.4773 | 7.608696 | 1749.949 | 0 | 0 | 709.9702 | 2.848485 |
| 1288.939 | 541.1479 | 4.214575 | 1320.499 | 0 | 0 | 534.1964 | 6.363636 |
| 1051.969 | 385.5912 | 1.521739 | 1083.391 | 0 | 0 | 394.2662 | 4.272727 |
| 918.3467 | 486.6024 | 4.214575 | 885.8122 | 0 | 0 | 467.1839 | 0 |
| 744.25 | 335.4214 | 0 | 762.317 | 0 | 0 | 347.7108 | 2.848485 |
| 1599.422 | 495.9649 | 3.043478 | 1603.494 | 0 | 0 | 532.4776 | 5.69697 |
| 1377.52 | 650.2387 | 1.404858 | 1432.63 | 0 | 0 | 645.9565 | 5.69697 |
| 943.6555 | 335.8849 | 1.404858 | 963.2232 | 0 | 0 | 341.8914 | 2.848485 |
| 900.269 | 496.6503 | 2.809717 | 936.9364 | 0 | 0 | 494.6514 | 2.848485 |
| 1381.136 | 691.8654 | 4.214575 | 1502.98 | 0 | 0 | 708.3985 | 1.441176 |
| 1724.612 | 541.1479 | 5.619433 | 1759.337 | 0 | 0 | 567.3942 | 5.69697 |
| 755.6475 | 244.0189 | 0 | 767.9499 | 0 | 0 | 244.416 | 1.424242 |
| 1481.344 | 612.0723 | 3.043478 | 1640.149 | 0 | 0 | 615.2271 | 2.882353 |
| 1028.621 | 681.8176 | 1.404858 | 1146.341 | 0 | 0 | 674.3835 | 4.323529 |
| 1097.316 | 503.8273 | 8.42915 | 1234.521 | 0 | 0 | 488.0407 | 2.882353 |
| 1688.456 | 831.0998 | 2.809717 | 1814.55 | 0 | 0 | 853.3318 | 5.764706 |
| 1209.398 | 564.1143 | 4.214575 | 1320.741 | 0 | 0 | 559.0284 | 5.764706 |
| 1303.402 | 1020.573 | 1.404858 | 1459.87 | 0 | 0 | 1013.054 | 1.441176 |
| 1744.497 | 717.7027 | 2.809717 | 1889.013 | 0 | 0 | 742.4134 | 2.882353 |
| 695.9911 | 294.2581 | 1.404858 | 762.2676 | 0 | 0 | 286.9088 | 2.882353 |
| 607.4104 | 272.727 | 2.809717 | 632.9368 | 0 | 0 | 285.4299 | 0 |
| 1885.503 | 980.3819 | 1.404858 | 1814.962 | 0 | 0 | 938.5766 | 3.302326 |
| 493.521 | 246.8897 | 1.404858 | 538.8781 | 0 | 0 | 248.4571 | 2.882353 |
| 1305.739 | 1594.619 | 3.033708 | 1276.649 | 0 | 0 | 1549.913 | 1.6875 |
| 718.4413 | 675.8149 | 1.516854 | 693.9091 | 0 | 0 | 655.8485 | 1.6875 |
| 756.454 | 602.918 | 0 | 710.0465 | 0 | 0 | 598.556 | 1.6875 |
| 1565.528 | 861.2433 | 2.809717 | 1450.408 | 0 | 0 | 838.8735 | 2.391304 |
| 1010.543 | 608.6119 | 0 | 933.7107 | 0 | 0 | 587.4939 | 2.391304 |
| 949.0788 | 424.88 | 1.404858 | 903.1471 | 0 | 0 | 415.2745 | 1.651163 |
| 1249.168 | 723.4443 | 2.809717 | 1161.323 | 0 | 0 | 697.649 | 4.782609 |
| 1018.742 | 958.2903 | 1.516854 | 995.1409 | 0 | 0 | 928.7417 | 0 |
| 1704.726 | 1057.894 | 8.42915 | 1603.258 | 0 | 0 | 1005.518 | 3.586957 |


|  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | :--- | :--- | ---: | ---: |
| 1250.976 | 809.5687 | 0 | 1223.842 | 0 | 0 | 767.4161 | 0 |
| 1162.396 | 587.0808 | 0 | 1061.639 | 0 | 0 | 590.3184 | 1.195652 |
| 1379.328 | 750.717 | 7.024291 | 1348.653 | 0 | 0 | 698.6714 | 6.604651 |
| 969.3255 | 741.1183 | 12.13483 | 865.593 | 0 | 0 | 675.0531 | 3.586957 |
| 1670.661 | 1149.645 | 7.58427 | 1450.408 | 0 | 0 | 1081.78 | 4.782609 |
| 1422.714 | 739.2338 | 0 | 1320.818 | 0 | 0 | 710.3592 | 1.195652 |
| 655.7202 | 608.9927 | 3.033708 | 641.9107 | 0 | 0 | 589.5098 | 0 |
| 826.1505 | 753.5879 | 0 | 816.4727 | 0 | 0 | 708.492 | 1.651163 |
| 1420.907 | 766.5065 | 2.809717 | 1423.439 | 0 | 0 | 750.6572 | 1.266667 |
| 871.3447 | 427.7508 | 4.214575 | 958.2232 | 0 | 0 | 424.4475 | 5.764706 |
| 1488.2 | 1471.606 | 7.58427 | 1309.189 | 0 | 0 | 1372.702 | 2.391304 |
| 1420.907 | 697.607 | 4.214575 | 1430.583 | 0 | 0 | 678.7552 | 3.8 |
| 1083.364 | 651.5159 | 1.516854 | 1026.948 | 0 | 0 | 608.2912 | 1.266667 |
| 1162.396 | 635.8846 | 4.214575 | 1165.781 | 0 | 0 | 648.5596 | 4.772727 |
| 1906.34 | 1614.362 | 3.033708 | 1812.77 | 0 | 0 | 1577.052 | 8.4375 |
| 1051.053 | 935.51 | 3.033708 | 928.7265 | 0 | 0 | 860.0571 | 2.391304 |
| 1055.737 | 762.2003 | 2.809717 | 1070.449 | 0 | 0 | 0 | 788.5259 | 3.375


| 398.4293 | 1516.254 | 4 | 461.0397 | 0 | 0 | 1760.447 | 2.444444 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 321.5158 | 716.2031 | 0 | 348.4854 | 0 | 0 | 754.2497 | 0 |
| 217.4912 | 668.6929 | 0 | 214.0864 | 0 | 3 | 660.0637 | 0 |
| 251.6211 | 772.2274 | 0 | 233.3339 | 0 | 0 | 757.0993 | 0 |
| 445.3294 | 844.9077 | 1.2 | 423.5305 | 0 | 0 | 827.2552 | 1.625 |
| 1060.403 | 1218.908 | 1.2 | 1023.532 | 0 | 0 | 1188.266 | 3.25 |
| 639.0377 | 1106.859 | 3.6 | 600.0015 | 0 | 0 | 1081.57 | 4.875 |
| 998.4964 | 1109.888 | 0 | 939.2181 | 0 | 0 | 1096.186 | 1.625 |
| 310.7018 | 1067.707 | 0 | 265.8239 | 0 | 21 | 1067.308 | 0 |
| 704.9385 | 1450.576 | 0 | 594.0897 | 0 | 36 | 1299.628 | 1 |
| 844.3777 | 1465.346 | 0 | 862.7473 | 0 | 0 | 1582.893 | 0 |
| 778.8272 | 1271.904 | 2.4 | 729.4136 | 0 | 0 | 1258.422 | 1.625 |
| 836.74 | 1188.625 | 2.4 | 774.5118 | 0 | 0 | 1179.496 | 3.25 |
| 537.1911 | 1355.183 | 1.2 | 501.9621 | 0 | 0 | 1328.578 | 1.625 |
| 345.4798 | 626.867 | 0 | 315.6871 | 0 | 0 | 619.7106 | 1.625 |
| 886.6648 | 1053.863 | 1.2 | 803.9236 | 0 | 0 | 1066.955 | 4.875 |
| 633.0467 | 1308.244 | 2.4 | 727.2739 | 0 | 0 | 1347.444 | 2.444444 |
| 475.2843 | 1043.264 | 1.2 | 443.1384 | 0 | 0 | 1024.569 | 1.625 |
| 814.7731 | 1664.074 | 0 | 887.4473 | 0 | 0 | 1739.718 | 1.222222 |
| 509.5679 | 1065.802 | 1.375 | 526.2545 | 0 | 0 | 1052.05 | 2.4 |
| 545.679 | 1074.99 | 4.125 | 602.8364 | 0 | 0 | 1036.289 | 2.4 |
| 473.4568 | 715.3472 | 4.125 | 488.9455 | 0 | 0 | 701.367 | 1.2 |
| 409.2593 | 1064.489 | 0 | 430.0364 | 0 | 0 | 1046.797 | 1.2 |
| 337.037 | 1240.373 | 1.375 | 327.9273 | 0 | 0 | 1242.497 | 4.8 |
| 1347.169 | 1455.167 | 3.5 | 1370.873 | 0 | 0 | 1701.064 | 4.666667 |
| 959.423 | 1356.539 | 1.75 | 716.7789 | 0 | 0 | 1180.272 | 1 |
| 1046.417 | 1309.65 | 1.75 | 822.934 | 0 | 0 | 1213.594 | 3 |
| 733.2378 | 1812.491 | 0 | 733.7867 | 0 | 0 | 2037.055 | 2.333333 |
| 1160.753 | 1185.153 | 0 | 1174.628 | 0 | 0 | 1402.015 | 0 |
| 423.4249 | 1287.916 | 3.857143 | 364.002 | 0 | 27.70213 | 1283.763 | 1.2 |
| 749.0066 | 2014.687 | 2.571429 | 704.8703 | 0 | 0 | 2049.798 | 2.972973 |
| 271.5992 | 1192.744 | 0 | 245.9253 | 0 | 0 | 1208.824 | 8.918919 |
| 344.1382 | 742.8385 | 0 | 299.6132 | 0 | 0 | 775.3315 | 1.486486 |
| 55.66941 | 187.8726 | 0 | 48.49231 | 0 | 0 | 194.4522 | 0 |
| 226.0515 | 666.2063 | 0 | 225.7586 | 0 | 2.638298 | 666.3954 | 2.4 |
| 133.2692 | 551.2579 | 0 | 105.644 | 0 | 0 | 559.8241 | 1.486486 |
| 143.3909 | 500.5817 | 0 | 128.1582 | 0 | 0 | 509.0436 | 1.486486 |
| 376.1902 | 699.5784 | 2.571429 | 339.4462 | 0 | 0 | 730.7438 | 2.972973 |
| 161.9474 | 337.4292 | 0 | 157.6 | 0 | 0 | 341.8395 | 1.486486 |
| 190.6255 | 961.6113 | 1.285714 | 166.2593 | 0 | 0 | 980.9306 | 1.486486 |
| 199.0603 | 462.2656 | 1.285714 | 180.1143 | 0 | 0 | 481.7955 | 1.486486 |
| 133.2692 | 548.7859 | 1.285714 | 124.6945 | 0 | 0 | 553.6313 | 2.972973 |
| 207.4951 | 572.27 | 0 | 188.7736 | 0 | 0 | 584.595 | 4.459459 |
| 234.4863 | 889.923 | 1.285714 | 225.1429 | 0 | 0 | 891.7551 | 2.972973 |
| 180.5038 | 478.3336 | 0 | 185.3099 | 0 | 0 | 474.3642 | 1.486486 |
| 253.0428 | 731.7145 | 1.285714 | 213.0198 | 0 | 0 | 757.9919 | 2.972973 |
| 345.8251 | 1066.672 | 0 | 330.7868 | 0 | 0 | 1078.776 | 1.486486 |


| 291.8427 | 1056.784 | 0 | 254.3027 | 0 | 17.14894 | 1050.128 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 210.869 | 804.6388 | 0 | 179.5078 | 0 | 10.55319 | 806.6559 | 2.4 |
| 413.3032 | 779.9187 | 0 | 360.8443 | 0 | 3.957447 | 804.9439 | 5.945946 |
| 332.3295 | 522.8298 | 1.285714 | 289.222 | 0 | 0 | 547.4386 | 2.972973 |
| 276.6601 | 451.1415 | 1.285714 | 261.5121 | 0 | 0 | 461.9787 | 5.945946 |
| 334.3292 | 1231.417 | 0 | 333.1571 | 0 | 0 | 1252.789 | 0 |
| 456.3594 | 1610.315 | 1.315789 | 474.176 | 0 | 0 | 1627.853 | 1.583333 |
| 533.2551 | 1289.02 | 0 | 541.16 | 0 | 0 | 1314.656 | 1.583333 |
| 324.2994 | 879.401 | 3.947368 | 336.6826 | 0 | 0 | 886.748 | 1.583333 |
| 180.5378 | 917.8028 | 0 | 181.5618 | 0 | 0 | 933.1476 | 0 |
| 379.4637 | 1140.533 | 0 | 357.8354 | 0 | 0 | 1179.323 | 1.583333 |
| 543.285 | 1594.954 | 1.315789 | 562.3128 | 0 | 0 | 1605.942 | 3.166667 |
| 337.6725 | 1015.087 | 1.315789 | 347.259 | 0 | 0 | 1029.813 | 1.583333 |
| 217.314 | 849.9596 | 1.315789 | 206.2484 | 0 | 0 | 836.5969 | 2 |
| 1021.376 | 1424.706 | 2.631579 | 973.6843 | 0 | 0 | 1389.326 | 4 |
| 648.5987 | 1533.511 | 0 | 645.1614 | 0 | 0 | 1565.987 | 1.583333 |
| 563.3448 | 947.2441 | 0 | 530.639 | 0 | 0 | 939.135 | 2.8 |
| 337.6725 | 761.6355 | 1.315789 | 320.5944 | 0 | 0 | 760.4952 | 1.4 |
| 571.703 | 1176.375 | 1.315789 | 536.9562 | 0 | 0 | 0 | 1171.367 |


| 554.1734 | 1178.215 | 0 | 534.2108 | 0 | 0 | 1159.729 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 210.2037 | 289.533 | 0 | 211.2313 | 0 | 0 | 276.8533 | 0 |
| 687.9394 | 1056.042 | 2.888889 | 662.9797 | 0 | 0 | 1042.597 | 2 |
| 365.2024 | 761.4886 | 2.888889 | 361.163 | 0 | 0 | 780.9669 | 0 |
| 140.1358 | 363.1715 | 0 | 131.4807 | 0 | 0 | 359.4236 | 0 |
| 643.3508 | 1298.715 | 0 | 621.5363 | 0 | 0 | 1339.29 | 4 |
| 619.9948 | 1303.735 | 0 | 602.6382 | 0 | 0 | 1339.29 | 2 |
| 758.0074 | 1578.206 | 2.888889 | 713.9268 | 0 | 0 | 1647.566 | 4 |
| 624.2413 | 985.7512 | 1.444444 | 579.5406 | 0 | 0 | 1036.151 | 0 |
| 70.38653 | 222.1996 | 0 | 0 | 0 | 0 | 239.9469 | 0 |
| 29.46413 | 121.8514 | 0 | 0 | 0 | 0 | 132.092 | 0 |
| 75.29722 | 228.1727 | 0 | 0 | 0 | 0 | 244.7943 | 0 |
| 34.37482 | 132.603 | 0 | 0 | 0 | 0 | 136.9394 | 0 |
| 37.64861 | 169.6362 | 0 | 0 | 0 | 0 | 180.5661 | 0 |
| 45.83309 | 187.5556 | 0 | 0 | 0 | 0 | 191.4728 | 0 |
| 18.00586 | 111.0998 | 0 | 0 | 0 | 0 | 115.126 | 1.5 |
| 49.10688 | 151.7169 | 1.25 | 0 | 0 | 0 | 166.0238 | 1.5 |
| 80.20791 | 361.9703 | 1.25 | 0 | 0 | 0 | 381.7337 | 3 |
| 206.2489 | 839.8188 | 0 | 0 | 0 | 0 | 889.5 | 0 |
| 73.66032 | 581.7806 | 0 | 0 | 0 | 0 | 604.7146 | 3 |
| 129.3148 | 707.2159 | 0 | 0 | 0 | 0 | 741.654 | 4.5 |
| 108.0351 | 281.9306 | 0 | 0 | 0 | 0 | 311.4462 | 4.5 |
| 103.1245 | 696.4643 | 1.25 | 0 | 0 | 0 | 716.205 | 4.5 |
| 57.29136 | 269.9844 | 1.25 | 0 | 0 | 0 | 284.7854 | 1.5 |
| 263.45 | 772.9352 | 2 | 233.4526 | 0 | 0 | 804.9124 | 1 |
| 354.0767 | 899.2515 | 0 | 328.563 | 0 | 0 | 930.7273 | 1 |
| 859.9007 | 1515.795 | 0 | 773.8523 | 0 | 0 | 1606.793 | 0 |
| 486.8555 | 1302.261 | 0 | 397.7341 | 0 | 0 | 1385.48 | 0 |
| 836.7171 | 1500.758 | 2 | 754.3979 | 0 | 0 | 1587.087 | 1 |
| 251.0149 | 181.6071 | 1 | 245.728 | 0 | 0 | 182.3612 | 3.857143 |
| 49.30649 | 127.7976 | 1 | 51.25615 | 0 | 0 | 127.3847 | 0 |
| 206.1908 | 53.80952 | 0 | 212.5623 | 0 | 0 | 48.27209 | 0 |
| 295.8389 | 126.4524 | 0 | 310.5519 | 0 | 0 | 117.9984 | 0 |
| 173.3198 | 372.631 | 0 | 167.3362 | 0 | 0 | 382.154 | 0 |
| 497.5473 | 304.0238 | 0 | 497.4861 | 0 | 0 | 307.0641 | 2.571429 |
| 80.68335 | 205.8214 | 0 | 76.88422 | 0 | 0 | 207.8382 | 0 |
| 277.9093 | 186.9881 | 0 | 266.8335 | 0 | 0 | 201.1337 | 1.285714 |
| 79.18921 | 135.869 | 0 | 72.36162 | 0 | 0 | 140.7936 | 1.285714 |
| 263.3345 | 496.744 | 0 | 0 | 0 | 0 | 587.5123 | 11.08889 |
| 107.7278 | 257.6693 | 0 | 0 | 0 | 0 | 290.9717 | 12.67302 |
| 275.3043 | 456.8982 | 3.5 | 0 | 0 | 0 | 515.1174 | 31.68254 |
| 138.5071 | 375.8785 | 1.75 | 0 | 0 | 0 | 453.8602 | 9.504762 |
| 135.0872 | 366.5811 | 0 | 0 | 0 | 0 | 419.055 | 11.08889 |
| 314.6335 | 394.4732 | 0 | 0 | 0 | 0 | 530.4317 | 25.34603 |
| 189.806 | 116.8809 | 0 | 0 | 0 | 0 | 189.3404 | 6.336508 |
| 169.2865 | 399.7859 | 0 | 0 | 0 | 0 | 462.2134 | 14.25714 |
| 391.5819 | 286.8896 | 0 | 0 | 0 | 0 | 438.5459 | 22.17778 |
|  |  |  |  |  |  |  |  |


| 314.6335 | 395.8014 | 0 | 0 | 0 | 0 | 509.5486 | 34.85079 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 259.9146 | 474.1647 | 0 | 0 | 0 | 0 | 581.9434 | 41.1873 |
| 314.6335 | 572.451 | 0 | 0 | 0 | 0 | 694.7124 | 53.86032 |
| 136.7972 | 541.9025 | 0 | 0 | 0 | 0 | 615.3565 | 19.00952 |
| 194.9359 | 462.211 | 0 | 0 | 0 | 0 | 538.785 | 17.4254 |
| 403.5516 | 618.9377 | 0 | 0 | 0 | 0 | 771.2839 | 41.1873 |
| 90.62811 | 249.7002 | 0 | 0 | 0 | 0 | 284.0107 | 7.920635 |
| 247.9448 | 780.9772 | 0 | 0 | 0 | 0 | 879.8762 | 49.10794 |
| 119.6975 | 625.5787 | 0 | 0 | 0 | 0 | 668.2604 | 14.25714 |
| 63.26868 | 423.6934 | 0 | 0 | 0 | 0 | 464.9979 | 7.920635 |
| 673.726 | 314.7816 | 1.75 | 0 | 0 | 0 | 540.1772 | 68.11746 |
| 696.6351 | 644.9705 | 4.682927 | 732.4871 | 0 | 0 | 643.2954 | 0 |
| 663.7232 | 871.9881 | 1.560976 | 681.9062 | 0 | 0 | 868.2978 | 3.25 |
| 636.2966 | 572.806 | 4.682927 | 648.1855 | 0 | 0 | 578.3618 | 0 |
| 305.3492 | 598.3642 | 3.121951 | 324.0928 | 0 | 0 | 593.4627 | 1.625 |
| 528.4187 | 709.6179 | 3.121951 | 552.6437 | 0 | 0 | 711.2492 | 1.625 |
| 438.8252 | 1843.202 | 1.560976 | 423.3813 | 0 | 0 | 1877.033 | 1.625 |
| 404.0849 | 787.7961 | 0 | 400.9009 | 0 | 0 | 800.3441 | 0 |
| 455.2812 | 1205.749 | 0 | 479.5824 | 0 | 0 | 1200.516 | 1.625 |
| 493.6784 | 745.7002 | 0 | 505.8095 | 0 | 0 | 747.4911 | 1.625 |
| 330.9474 | 927.6149 | 1.560976 | 354.0667 | 0 | 0 | 921.1507 | 4.875 |
| 149.932 | 381.8706 | 0 | 153.6162 | 0 | 0 | 383.5611 | 0 |
| 149.932 | 369.8432 | 1.560976 | 127.3891 | 0 | 0 | 389.6014 | 1.625 |
| 477.2224 | 1089.985 | 0 | 439.8023 | 0 | 0 | 1102.488 | 1.673077 |
| 612.5269 | 1226.797 | 3.121951 | 572.4411 | 0 | 0 | 1241.242 | 8.365385 |
| 1753.473 | 2405.484 | 9.365854 | 1835.901 | 0 | 0 | 2382.911 | 8.125 |
| 652.7525 | 1223.79 | 3.121951 | 683.7795 | 0 | 0 | 1217.127 | 4.875 |
| 418.7124 | 1518.462 | 1.560976 | 383.9544 | 0 | 0 | 1532.323 | 6.692308 |
| 775.2579 | 1775.548 | 0 | 715.5513 | 0 | 0 | 1785.699 | 8.365385 |
| 409.5702 | 1989.035 | 3.121951 | 363.0114 | 0 | 0 | 2016.453 | 3.346154 |
| 484.5362 | 888.5258 | 0 | 448.5285 | 0 | 0 | 888.325 | 6.692308 |
| 179.187 | 344.285 | 1.560976 | 165.7985 | 0 | 0 | 351.4087 | 1.673077 |
| 625.326 | 1282.424 | 3.121951 | 568.9506 | 0 | 0 | 1310.619 | 5.019231 |
| 559.5022 | 962.1938 | 1.560976 | 507.8669 | 0 | 0 | 984.8493 | 3.346154 |
| 270.6089 | 1178.687 | 1.560976 | 260.0418 | 0 | 0 | 1176.39 | 8.365385 |
| 193.8145 | 861.4641 | 1.560976 | 186.7414 | 0 | 0 | 855.1448 | 3.346154 |
| 416.884 | 933.6286 | 1.560976 | 378.7186 | 0 | 0 | 948.6527 | 5.019231 |
| 522.9334 | 1187.708 | 0 | 478.1977 | 0 | 0 | 1205.045 | 1.673077 |
| 937.989 | 1847.713 | 4.682927 | 872.6236 | 0 | 0 | 1873.174 | 8.365385 |
| 660.0663 | 1509.441 | 1.560976 | 589.8935 | 0 | 0 | 1539.864 | 8.365385 |
| 544.8747 | 893.0361 | 1.560976 | 507.8669 | 0 | 0 | 907.9315 | 0 |
| 402.2565 | 893.0361 | 1.560976 | 363.0114 | 0 | 0 | 900.3906 | 6.692308 |
| 442.4821 | 1297.458 | 0 | 455.2286 | 0 | 0 | 1304.712 | 0 |
| 610.6985 | 1214.77 | 0 | 601.3513 | 0 | 0 | 1232.228 | 1.625 |
| 586.9288 | 1489.897 | 1.560976 | 580.7443 | 0 | 0 | 1514.613 | 1.625 |
| 760.6304 | 1366.616 | 0 | 784.9414 | 0 | 0 | 1360.585 | 4.875 |
| 312.663 | 873.4915 | 0 | 295.9922 | 0 | 0 | 892.4591 | 0 |


| 1202.28 | 1340.208 | 1.320988 | 1261.829 | 0 | 0 | 1311.546 | 4.395349 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1086.457 | 461.95 | 1.320988 | 1109.337 | 0 | 0 | 458.3509 | 5.860465 |
| 1102.77 | 1555.969 | 3.962963 | 1127.77 | 0 | 0 | 1553.147 | 7.325581 |
| 1174.548 | 778.6761 | 3.962963 | 1186.021 | 0 | 0 | 800.2344 | 4.305233 |
| 1055.462 | 858.895 | 3.962963 | 1075.822 | 0 | 0 | 861.4789 | 1.465116 |
| 1109.295 | 1080.188 | 3.962963 | 1088.242 | 0 | 0 | 1130.322 | 6.875 |
| 306.6875 | 489.6116 | 0 | 315.0383 | 0 | 0 | 488.7236 | 0 |
| 1433.927 | 735.8005 | 2.641975 | 1447.166 | 0 | 0 | 746.8707 | 2.75 |
| 1460.028 | 1078.805 | 6.604938 | 1518.216 | 0 | 0 | 1060.282 | 2.930233 |
| 859.7038 | 861.6611 | 0 | 845.6824 | 0 | 0 | 902.8265 | 1.375 |
| 440.4554 | 410.7759 | 0 | 445.7456 | 0 | 0 | 415.5531 | 0 |
| 507.3394 | 423.2236 | 0 | 424.3856 | 0 | 0 | 398.6865 | 1.5 |
| 1048.936 | 1145.193 | 0 | 1007.935 | 0 | 0 | 1221.892 | 0 |
| 825.4461 | 549.0842 | 0 | 788.3202 | 0 | 0 | 596.6381 | 4.125 |
| 1110.503 | 94.06282 | 2.736842 | 1179.422 | 82.55969 | 0 | 0 | 10.10127 |
| 1515.493 | 171.5024 | 6.604938 | 1518.507 | 0 | 0 | 143.0907 | 4.581081 |
| 1278.952 | 549.0842 | 0 | 1229.959 | 0 | 0 | 528.1346 | 6.108108 |
| 311.5814 | 228.2088 | 1.320988 | 294.9966 | 0 | 0 | 225.0426 | 1.527027 |
| 380.0967 | 283.5322 | 1.320988 | 348.1927 | 0 | 0 | 267.9698 | 0 |
| 1358.23 | 69.87524 | 0 | 1281.543 | 0 | 0 | 62.43956 | 1.527027 |
| 1295.265 | 441.2037 | 2.641975 | 1291.215 | 0 | 0 | 401.9547 | 7.635135 |
| 1040.456 | 80.62527 | 6.842105 | 1010.726 | 0 | 0 | 54.63462 | 6.108108 |
| 958.4493 | 169.3131 | 0 | 896.2739 | 0 | 0 | 166.5055 | 6.108108 |
| 729.1985 | 218.5272 | 0 | 725.5934 | 0 | 0 | 227.7949 | 2.930233 |
| 550.126 | 30.90635 | 1.368421 | 511.0051 | 0 | 0 | 31.21978 | 1.527027 |
| 440.4554 | 174.2685 | 0 | 440.0769 | 0 | 0 | 157.3997 | 0 |
| 742.249 | 257.2536 | 2.641975 | 741.5216 | 0 | 0 | 235.4492 | 0 |
| 831.9714 | 405.2435 | 1.320988 | 814.0617 | 0 | 0 | 381.1415 | 1.527027 |
| 1715.3 | 100.7816 | 2.736842 | 1623.287 | 0 | 0 | 88.45604 | 7.635135 |
| 415.9857 | 323.6416 | 0 | 417.5089 | 0 | 0 | 297.8887 | 0 |
| 339.3138 | 232.3581 | 1.320988 | 340.1743 | 0 | 0 | 231.9366 | 1.465116 |
| 44.04554 | 44.25868 | 0 | 46.92059 | 0 | 0 | 42.79783 | 0 |
| 213.7025 | 48.40793 | 0 | 221.1971 | 0 | 0 | 46.93955 | 1.465116 |
| 1850.269 | 126.3129 | 4.105263 | 1753.86 | 0 | 0 | 110.5701 | 9.162162 |
| 168.0256 | 102.3482 | 0 | 169.2493 | 0 | 0 | 102.1626 | 0 |
| 1076.669 | 243.4227 | 1.320988 | 1068.758 | 0 | 0 | 217.2376 | 6.108108 |
| 1210.437 | 800.8055 | 1.320988 | 1189.658 | 0 | 0 | 745.3723 | 7.635135 |
| 350.2355 | 9.406282 | 2.736842 | 325.6247 | 0 | 0 | 11.70742 | 3.054054 |
| 918.4312 | 796.6562 | 0 | 898.4976 | 0 | 0 | 758.9749 | 3 |
| 756.9308 | 1005.502 | 2.641975 | 732.5969 | 0 | 0 | 1064.505 | 1.375 |
| 1115.82 | 933.5815 | 0 | 1161.285 | 0 | 0 | 908.4184 | 5.860465 |
| 590.5366 | 605.7907 | 1.320988 | 570.3439 | 0 | 0 | 645.2849 | 0 |
| 1223.487 | 1358.188 | 6.604938 | 1147.555 | 0 | 0 | 1348.692 | 6 |
| 1089.719 | 789.7408 | 1.320988 | 1105.985 | 0 | 0 | 806.2559 | 1.465116 |
| 621.5316 | 532.4872 | 0 | 603.1223 | 0 | 0 | 569.4532 | 0 |
| 1207.174 | 1212.964 | 2.641975 | 1116.029 | 0 | 0 | 1225.106 | 6 |
| 1241.432 | 1064.974 | 3.962963 | 1177.505 | 0 | 0 | 1047.788 | 9 |


| 1218.593 | 1435.641 | 1.320988 | 1161.742 | 0 | 0 | 1410.484 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 703.0974 | 687.3926 | 0 | 651.0167 | 0 | 0 | 686.4357 | 1.5 |
| 732.4611 | 560.1489 | 1.320988 | 732.5969 | 0 | 0 | 583.761 | 0 |
| 1314.841 | 1352.656 | 3.962963 | 1350.643 | 0 | 0 | 1351.583 | 4.395349 |
| 1019.573 | 933.5815 | 0 | 998.1019 | 0 | 0 | 990.1045 | 4.125 |
| 1246.326 | 539.4026 | 1.320988 | 1261.968 | 0 | 0 | 547.9914 | 1.375 |
| 887.4362 | 630.6862 | 0 | 854.3609 | 0 | 0 | 615.2398 | 1.5 |
| 1169.654 | 838.1487 | 3.962963 | 1132.493 | 0 | 0 | 904.2573 | 5.5 |
| 1112.558 | 686.0095 | 0 | 1099.715 | 0 | 0 | 715.3934 | 2.75 |
| 810.7643 | 890.7059 | 2.641975 | 826.8241 | 0 | 0 | 912.2887 | 1.375 |
| 732.4611 | 672.1787 | 0 | 675.073 | 0 | 0 | 682.011 | 1.375 |
| 977.1586 | 1164.556 | 2.641975 | 1023.874 | 0 | 0 | 1143.116 | 4.395349 |
| 936.3756 | 792.507 | 2.641975 | 953.4935 | 0 | 0 | 795.2113 | 2.930233 |
| 595.4305 | 739.9498 | 1.320988 | 599.9133 | 0 | 0 | 746.8912 | 4.395349 |
| 900.4867 | 774.5269 | 2.641975 | 903.2214 | 0 | 0 | 793.8307 | 2.930233 |
| 897.2241 | 932.1984 | 1.320988 | 936.7361 | 0 | 0 | 926.3659 | 1.465116 |
| 512.2334 | 824.3179 | 1.320988 | 547.9655 | 0 | 0 | 807.6365 | 0 |
| 831.9714 | 658.3478 | 1.320988 | 827.6543 | 0 | 0 | 693.9316 | 4.125 |
| 1088.088 | 901.7706 | 0 | 1086.604 | 0 | 0 | 940.027 | 0 |
| 1159.866 | 1224.029 | 0 | 1201.502 | 0 | 0 | 1206.623 | 2.930233 |
| 924.9564 | 786.9746 | 2.641975 | 755.7166 | 0 | 0 | 765.6305 | 4.5 |
| 590.5366 | 428.7559 | 0 | 590.011 | 0 | 0 | 447.8363 | 1.375 |
| 549.7536 | 459.1838 | 2.641975 | 550.6769 | 0 | 0 | 480.7444 | 2.75 |
| 871.123 | 1403.83 | 2.641975 | 875.1829 | 0 | 0 | 1462.264 | 1.375 |
| 791.1885 | 625.1538 | 1.320988 | 811.0559 | 0 | 0 | 625.4005 | 1.465116 |
| 969.002 | 1001.353 | 3.962963 | 925.2949 | 0 | 0 | 979.2791 | 6 |
| 447.6181 | 1158.316 | 1.368421 | 415.8969 | 0 | 0 | 1116.107 | 3.054054 |
| 688.5117 | 124.9692 | 4.105263 | 668.9814 | 0 | 0 | 105.3668 | 3.054054 |
| 724.3895 | 786.0964 | 1.368421 | 699.6095 | 0 | 0 | 744.0714 | 4.581081 |
| 717.5557 | 368.1887 | 4.105263 | 697.9975 | 0 | 0 | 338.2143 | 3.054054 |
| 1161.757 | 782.0651 | 0 | 1238.843 | 761.8666 | 0 | 0 | 25.97468 |
| 1224.97 | 425.9702 | 4.105263 | 1336.078 | 386.727 | 0 | 0 | 12.98734 |
| 107.6333 | 477.0329 | 0 | 104.7802 | 0 | 0 | 456.5893 | 1.527027 |
| 893.5276 | 202.9069 | 4.105263 | 847.9138 | 0 | 0 | 192.522 | 3.054054 |
| 732.9319 | 223.0633 | 1.368421 | 752.8063 | 75.31761 | 0 | 128.7816 | 7.551146 |
| 1001.161 | 407.1576 | 0 | 1082.187 | 395.4175 | 0 | 0 | 5.772152 |
| 1717.008 | 237.8446 | 1.368421 | 1797.043 | 246.2307 | 0 | 0 | 2.886076 |
| 529.6244 | 263.3759 | 0 | 501.3331 | 0 | 0 | 251.0591 | 1.527027 |
| 1549.579 | 192.1569 | 1.368421 | 1459.052 | 0 | 0 | 165.2047 | 12.21622 |
| 1869.062 | 190.8131 | 1.368421 | 1973.506 | 192.6393 | 0 | 0 | 5.772152 |
| 536.4583 | 924.5031 | 1.368421 | 488.437 | 0 | 0 | 898.8695 | 4.581081 |
| 1412.901 | 424.6264 | 2.736842 | 1543.152 | 385.2786 | 0 | 0 | 12.98734 |
| 302.3985 | 419.2514 | 1.368421 | 334.9199 | 420.0405 | 0 | 0 | 7.21519 |
| 695.3456 | 994.3783 | 1.368421 | 738.2643 | 984.9226 | 0 | 0 | 28.86076 |
| 190.2394 | 222.3094 | 0 | 176.0192 | 0 | 0 | 208.4982 | 0 |
| 141.8452 | 724.1305 | 1.1 | 119.9423 | 0 | 0 | 690.9535 | 0 |
| 253.6526 | 1184.35 | 2.2 | 216.5192 | 0 | 0 | 1126.133 | 1.333333 |


| 138.5077 | 304.2128 | 0 | 112.6386 | 0 | 0 | 293.7416 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 322.072 | 720.2303 | 0 | 297.5192 | 0 | 0 | 671.5583 | 0 |
| 407.1791 | 182.0077 | 2.2 | 429.0274 | 0 | 0 | 238.3903 | 1.8 |
| 260.3276 | 816.4344 | 0 | 233.6538 | 0 | 0 | 769.7464 | 1.333333 |
| 281.9426 | 371.0341 | 0 | 232.7864 | 0 | 0 | 339.8664 | 0 |
| 365.2842 | 625.0395 | 2 | 338.2515 | 0 | 0 | 661.7305 | 0 |
| 514.235 | 522.6394 | 0 | 485.0062 | 0 | 0 | 554.8252 | 1.5 |
| 228.7459 | 386.9925 | 0 | 174.2143 | 0 | 0 | 367.784 | 0 |
| 150.189 | 387.4163 | 1.1 | 117.1441 | 0 | 0 | 371.4254 | 3.6 |
| 190.2394 | 374.4158 | 0 | 160.6977 | 0 | 0 | 354.4321 | 0 |
| 300.378 | 673.4284 | 1.1 | 235.7901 | 0 | 0 | 650.6013 | 0 |
| 257.1175 | 368.3743 | 2 | 207.255 | 0 | 0 | 344.7216 | 1.8 |
| 188.5707 | 327.6138 | 1.1 | 171.3462 | 0 | 0 | 309.1108 | 1.333333 |
| 141.8452 | 553.8233 | 0 | 117.1441 | 0 | 0 | 521.9376 | 0 |
| 175.2205 | 904.8381 | 1.1 | 130.6608 | 0 | 0 | 861.804 | 1.8 |
| 105.1323 | 318.5134 | 0 | 88.60902 | 0 | 0 | 302.2383 | 0 |
| 125.9932 | 330.1065 | 0 | 97.6201 | 0 | 0 | 321.6592 | 0 |
| 278.6841 | 618.8261 | 1.1 | 270.2433 | 0 | 0 | 660.3773 | 0 |
| 141.8452 | 250.9106 | 0 | 141.3856 | 0 | 0 | 270.6464 | 0 |
| 285.4891 | 873.7254 | 0 | 245.1876 | 0 | 0 | 920.1978 | 0 |
| 210.2646 | 652.6275 | 0 | 184.3381 | 0 | 0 | 699.621 | 1.5 |
| 106.6338 | 281.4309 | 0 | 92.36923 | 0 | 0 | 292.4293 | 0 |
| 25.46479 | 83.34221 | 0 | 24.30769 | 0 | 0 | 84.93797 | 0 |
| 70.02817 | 152.1901 | 0 | 69.68205 | 0 | 0 | 155.3151 | 0 |
| 47.74648 | 105.0837 | 0 | 45.37436 | 0 | 0 | 110.4194 | 0 |
| 71.61972 | 248.8188 | 0 | 68.06154 | 0 | 0 | 249.9603 | 1 |
| 17.50704 | 82.13435 | 0 | 16.20513 | 0 | 0 | 84.93797 | 0 |
| 724.4582 | 1497.196 | 1.176471 | 689.515 | 0 | 0 | 1530.019 | 0 |
| 637.9304 | 1163.435 | 5.882353 | 616.3072 | 0 | 0 | 1189.864 | 3.45 |
| 877.1543 | 1662.05 | 4.705882 | 844.443 | 0 | 0 | 1687.222 | 5.75 |
| 883.9408 | 1310.722 | 3.529412 | 835.9305 | 0 | 0 | 1351.133 | 4.6 |
| 690.5257 | 812.1073 | 1.176471 | 675.8949 | 0 | 0 | 822.6055 | 0 |
| 763.4805 | 585.0956 | 0 | 772.9378 | 0 | 0 | 567.8282 | 0 |
| 134.0332 | 525.6402 | 1.176471 | 129.3905 | 0 | 0 | 528.5274 | 1.15 |
| 337.6281 | 922.9107 | 0 | 321.7736 | 0 | 0 | 933.7318 | 2.3 |
| 624.3574 | 898.588 | 1.176471 | 599.2821 | 0 | 0 | 916.1142 | 3.45 |
| 169.6623 | 743.1931 | 0 | 177.0606 | 0 | 0 | 729.0968 | 0 |
| 183.2353 | 210.7966 | 0 | 171.9531 | 0 | 0 | 210.0558 | 1.15 |
| 206.9881 | 452.6721 | 0 | 188.9782 | 0 | 0 | 458.0571 | 0 |
| 203.5948 | 778.3258 | 1.176471 | 194.0857 | 0 | 0 | 781.9496 | 1.15 |
| 95.01091 | 447.2671 | 0 | 100.4479 | 0 | 0 | 441.7947 | 0 |
| 1280.335 | 1471.362 | 4.153846 | 1095.898 | 0 | 0 | 1276.526 | 4.666667 |
| 1002.125 | 1086.846 | 2.076923 | 1064.536 | 0 | 0 | 1055.705 | 2.545455 |
| 1260.463 | 1720.513 | 2.076923 | 1315.501 | 0 | 0 | 1705.987 | 0 |
| 501.4295 | 441.037 | 0 | 534.8171 | 0 | 0 | 441.544 | 0 |
| 391.5272 | 364.7037 | 0 | 396.3377 | 0 | 0 | 371.1031 | 3.111111 |
| 1328.596 | 845.5428 | 0 | 1241.039 | 0 | 0 | 903.1694 | 0 |


| 916.9583 | 978.9463 | 0 | 907.3373 | 0 | 0 | 989.4723 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 783.5309 | 1047.61 | 0 | 794.2649 | 0 | 0 | 1049.684 | 0 |
| 848.8252 | 1222.212 | 2.076923 | 843.9065 | 0 | 0 | 1230.317 | 2.545455 |
| 579.1316 | 464.9505 | 2.076923 | 609.488 | 0 | 0 | 447.5706 | 0 |
| 434.3487 | 1043.686 | 0 | 444.0161 | 0 | 0 | 1047.677 | 0 |
| 1359.824 | 998.5645 | 4.153846 | 1378.932 | 0 | 0 | 959.3666 | 5.090909 |
| 1745.911 | 2207.043 | 4.153846 | 1784.338 | 0 | 0 | 2205.74 | 2.545455 |
| 1726.039 | 1997.129 | 2.076923 | 1704.36 | 0 | 0 | 2027.114 | 7.636364 |
| 1234.913 | 2024.594 | 4.153846 | 1238.281 | 0 | 0 | 2051.198 | 7.636364 |
| 915.853 | 402.0222 | 1.333333 | 952.643 | 0 | 0 | 407.1826 | 0 |
| 810.5299 | 1555.504 | 0 | 826.1015 | 0 | 0 | 1589.215 | 3.111111 |
| 357.1827 | 162.8444 | 1.333333 | 379.6247 | 0 | 0 | 159.7805 | 0 |
| 1197.478 | 1195.889 | 1.333333 | 1272.578 | 0 | 0 | 1202.649 | 3.111111 |
| 344.5262 | 344.3959 | 0 | 340.6271 | 0 | 0 | 345.8973 | 0 |
| 194.9872 | 487.6847 | 0 | 178.4237 | 0 | 0 | 504.9596 | 0 |
| 250.6978 | 412.2696 | 3.75 | 202.0169 | 0 | 0 | 462.0381 | 1.666667 |
| 236.0371 | 384.6173 | 1.25 | 219.7119 | 0 | 0 | 397.6557 | 3.333333 |
| 118.7516 | 460.0325 | 0 | 103.2203 | 0 | 0 | 478.4493 | 0 |
| 634.3813 | 1490.907 | 3.333333 | 605.5043 | 0 | 0 | 1520.626 | 0 |
| 433.236 | 873.4773 | 0 | 424.7243 | 0 | 0 | 886.896 | 2.25 |
| 607.8567 | 1774.504 | 3.333333 | 585.9017 | 0 | 0 | 1803.192 | 2.25 |
| 923.9421 | 1435.809 | 3.333333 | 938.7495 | 0 | 0 | 1432.427 | 2.25 |
| 762.5838 | 1711.302 | 0 | 723.1203 | 0 | 0 | 1737.859 | 2.25 |
| 586.9896 | 1082.103 | 0 | 411.7352 | 0 | 0 | 1064.327 | 1 |
| 148.7251 | 514.0302 | 0 | 103.2648 | 0 | 0 | 491.6729 | 0 |
| 287.9572 | 649.7644 | 1.5 | 294.5328 | 0 | 0 | 681.6922 | 2.363636 |
| 341.7514 | 1334.719 | 0 | 353.4393 | 0 | 0 | 1385.375 | 3.545455 |
| 444.5932 | 1398.816 | 1.5 | 450.4619 | 0 | 0 | 1459.106 | 4.727273 |
| 480.9834 | 1260.568 | 0 | 514.5661 | 0 | 0 | 1294.827 | 2.363636 |
| 322.6177 | 710.8519 | 3.5 | 306.817 | 0 | 0 | 724.6855 | 2 |
| 465.1697 | 414.291 | 3.5 | 466.6558 | 0 | 0 | 412.1649 | 1 |
| 343.2502 | 646.7709 | 0 | 349.0732 | 0 | 0 | 643.1584 | 1 |
| 146.3034 | 333.8172 | 0 | 143.3037 | 0 | 0 | 338.1866 | 0 |
| 611.473 | 405.3495 | 0 | 595.2617 | 0 | 0 | 418.2039 | 0 |
| 510.1861 | 929.9194 | 0 | 497.8886 | 0 | 0 | 943.6009 | 0 |
| 57.95122 | 314.0197 | 0 | 0 | 0 | 0 | 318.0199 | 8.032258 |
| 49.25854 | 306.9894 | 0 | 0 | 0 | 0 | 321.5666 | 6.693548 |
| 73.8878 | 608.1202 | 1.6 | 0 | 0 | 0 | 623.0354 | 17.40323 |
| 17.38537 | 126.5453 | 0 | 0 | 0 | 0 | 124.1342 | 2.677419 |
| 63.74634 | 487.4336 | 0 | 0 | 0 | 0 | 491.8078 | 13.3871 |
| 92.72195 | 700.6857 | 0 | 0 | 0 | 0 | 719.9782 | 14.72581 |
| 105.761 | 742.8675 | 0 | 0 | 0 | 0 | 771.9964 | 20.08065 |
| 53.60488 | 542.5042 | 1.6 | 0 | 0 | 0 | 561.5594 | 17.40323 |
| 55.05366 | 323.3934 | 0 | 0 | 0 | 0 | 341.6646 | 6.693548 |
| 31.87317 | 253.0905 | 0 | 0 | 0 | 0 | 257.7262 | 10.70968 |
| 37.66829 | 351.5146 | 1.6 | 0 | 0 | 0 | 361.7625 | 5.354839 |
| 82.58049 | 563.5951 | 1.6 | 0 | 0 | 0 | 585.204 | 10.70968 |
|  |  |  |  |  |  |  | 0 |


| 59.4 | 196.8482 | 0 | 0 | 0 | 0 | 217.5304 | 9.370968 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73.8878 | 581.1708 | 1.6 | 0 | 0 | 0 | 612.3953 | 18.74194 |
| 10.14146 | 87.87865 | 0 | 0 | 0 | 0 | 86.30281 | 0 |
| 26.07805 | 118.3432 | 0 | 0 | 0 | 0 | 125.3164 | 4.016129 |
| 1000.926 | 767.1827 | 1.477273 | 1042.238 | 0 | 0 | 780.8455 | 1.25 |
| 966.1115 | 689.7337 | 1.477273 | 906.4673 | 0 | 0 | 684.0579 | 0 |
| 760.704 | 501.226 | 1.477273 | 720.8255 | 0 | 0 | 489.0225 | 4.588235 |
| 800.7411 | 581.5975 | 1.477273 | 848.1508 | 0 | 0 | 580.9942 | 2.5 |
| 520.4817 | 251.3437 | 0 | 486.6826 | 0 | 0 | 249.5305 | 0 |
| 1197.63 | 689.7337 | 0 | 1142.214 | 42.53974 | 0 | 666.1047 | 18.30769 |
| 1020.074 | 521.6842 | 0 | 973.3653 | 0 | 0 | 510.5338 | 0 |
| 1100.149 | 746.7245 | 2.954545 | 1038.591 | 0 | 0 | 735.6849 | 4.588235 |
| 705.0003 | 502.6873 | 0 | 682.3592 | 0 | 0 | 490.4566 | 0 |
| 992.2226 | 773.0279 | 1.477273 | 938.2438 | 0 | 0 | 757.1961 | 0 |
| 659.741 | 483.6904 | 4.431818 | 703.2839 | 0 | 0 | 488.0285 | 1.25 |
| 793.7781 | 473.4613 | 0 | 744.2398 | 0 | 0 | 483.2862 | 0 |
| 926.0745 | 584.5201 | 1.477273 | 948.2785 | 0 | 0 | 514.836 | 3.058824 |
| 990.4819 | 717.4985 | 5.909091 | 970.0204 | 0 | 0 | 684.0579 | 3.058824 |
| 698.0373 | 569.9071 | 1.477273 | 699.4163 | 0 | 0 | 560.3961 | 1.333333 |
| 832.0744 | 585.9814 | 2.954545 | 792.3466 | 30.80464 | 0 | 567.5859 | 3.923077 |
| 1093.186 | 682.4272 | 1.477273 | 1076.159 | 0 | 0 | 690.3849 | 2.666667 |
| 1225.482 | 792.0248 | 0 | 1152.317 | 0 | 0 | 784.4437 | 3.058824 |
| 436.9261 | 265.9567 | 1.477273 | 399.7153 | 0 | 0 | 268.1736 | 6.117647 |
| 1190.667 | 841.709 | 2.954545 | 1158.136 | 0 | 0 | 852.1487 | 2.666667 |
| 1150.63 | 764.2601 | 0 | 1158.136 | 0 | 0 | 745.269 | 0 |
| 1028.778 | 828.5573 | 4.431818 | 1023.834 | 0 | 0 | 824.7066 | 2.666667 |
| 1081 | 813.9443 | 1.477273 | 1079.648 | 0 | 0 | 813.152 | 1.333333 |
| 898.2226 | 509.9938 | 0 | 874.6683 | 35.2053 | 0 | 483.7714 | 1.307692 |
| 934.7782 | 638.5882 | 1.477273 | 878.0984 | 46.9404 | 0 | 619.051 | 6.538462 |
| 908.667 | 1125.201 | 0 | 956.8005 | 0 | 0 | 1079.57 | 1.565217 |
| 839.0374 | 1376.545 | 1.477273 | 848.8907 | 0 | 0 | 1344.828 | 1.565217 |
| 694.5558 | 1157.35 | 0 | 735.5854 | 0 | 0 | 1116.649 | 3.130435 |
| 464.778 | 602.0557 | 0 | 487.6111 | 0 | 0 | 626.7982 | 1.580645 |
| 605.778 | 480.7678 | 1.477273 | 634.9861 | 0 | 0 | 506.6748 | 1.580645 |
| 558.778 | 501.226 | 1.477273 | 591.3194 | 0 | 0 | 526.6953 | 1.580645 |
| 391.6668 | 404.7802 | 0 | 413.0139 | 0 | 0 | 421.9723 | 3.16129 |
| 1002.667 | 1370.7 | 0 | 1055.718 | 0 | 0 | 1320.584 | 1.565217 |
| 948.7041 | 1437.92 | 4.431818 | 976.584 | 0 | 0 | 1401.873 | 3.130435 |
| 1298.593 | 716.0372 | 2.954545 | 1360.944 | 0 | 0 | 756.162 | 1.580645 |
| 1213.297 | 1011.22 | 2.954545 | 1160.68 | 0 | 0 | 990.9518 | 1.529412 |
| 1202.852 | 756.9536 | 1.477273 | 1185.766 | 0 | 0 | 705.5691 | 1.529412 |
| 292.4446 | 466.1548 | 0 | 309.3415 | 0 | 0 | 449.2268 | 0 |
| 1427.408 | 889.9319 | 1.477273 | 1531.972 | 0 | 0 | 904.0063 | 3.16129 |
| 1020.074 | 1231.876 | 1.477273 | 1038.903 | 0 | 0 | 1322.899 | 3.16129 |
| 1695.482 | 1321.015 | 1.477273 | 1630.638 | 0 | 0 | 1289.241 | 1.529412 |
| 1923.519 | 903.0836 | 1.477273 | 1849.728 | 0 | 0 | 876.2251 | 0 |
| 800.7411 | 473.4613 | 0 | 836.9444 | 0 | 0 | 498.9745 | 3.16129 |


| 891.2596 | 555.2941 | 0 | 857.9663 | 0 | 0 | 540.6495 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1103.63 | 1747.715 | 2.954545 | 1143.844 | 0 | 0 | 1707.062 | 3.130435 |
| 950.4448 | 1306.402 | 0 | 1008.957 | 0 | 0 | 1246.426 | 3.130435 |
| 1040.963 | 1299.096 | 1.477273 | 1102.479 | 0 | 0 | 1249.278 | 0 |
| 710.2225 | 514.3777 | 1.477273 | 731.4167 | 0 | 0 | 555.9562 | 3.16129 |
| 1040.963 | 1066.749 | 0 | 1100.764 | 0 | 0 | 1119.613 | 0 |
| 776.3707 | 1174.885 | 5.909091 | 818.3163 | 0 | 0 | 1138.041 | 1.565217 |
| 645.8151 | 1120.817 | 4.431818 | 678.0335 | 0 | 0 | 1080.997 | 9.391304 |
| 60.92595 | 48.22291 | 0 | 64.7459 | 0 | 0 | 42.78351 | 0 |
| 743.2966 | 477.8452 | 4.431818 | 798.7361 | 0 | 0 | 488.1942 | 0 |
| 1091.445 | 1505.139 | 4.431818 | 1149.24 | 0 | 0 | 1454.639 | 3.130435 |
| 558.778 | 830.0186 | 2.954545 | 571.3056 | 0 | 0 | 880.9056 | 3.16129 |
| 123.5926 | 200.1981 | 0 | 124.0963 | 0 | 0 | 198.2302 | 0 |
| 555.2965 | 838.7864 | 0 | 585.8611 | 0 | 0 | 877.8256 | 1.580645 |
| 868.63 | 716.0372 | 1.477273 | 887.8889 | 0 | 0 | 776.1826 | 3.16129 |
| 1082.741 | 585.9814 | 5.909091 | 1118.958 | 0 | 0 | 629.8783 | 3.16129 |
| 518.741 | 469.0774 | 1.477273 | 533.0972 | 0 | 0 | 503.5947 | 1.580645 |
| 1068.815 | 775.9505 | 5.909091 | 1129.875 | 0 | 0 | 814.6837 | 3.16129 |
| 993.9634 | 936.6935 | 0 | 1017.069 | 0 | 0 | 1005.649 | 1.580645 |
| 579.6669 | 407.7028 | 5.909091 | 634.9861 | 0 | 0 | 406.5718 | 4.741935 |
| 388.1853 | 423.7771 | 4.431818 | 410.0574 | 0 | 0 | 405.0172 | 1.565217 |
| 1181.963 | 885.548 | 2.954545 | 1215.784 | 0 | 0 | 865.6529 | 1.565217 |
| 1467.445 | 853.3994 | 1.477273 | 1521.056 | 0 | 0 | 904.0063 | 1.580645 |
| 525.7039 | 523.1455 | 1.477273 | 566.5266 | 0 | 0 | 499.1409 | 1.565217 |
| 1112.334 | 771.5666 | 1.477273 | 1095.908 | 39.60596 | 0 | 742.5671 | 2.615385 |
| 1168.038 | 787.6409 | 2.954545 | 1150.789 | 51.34106 | 0 | 730.8036 | 2.615385 |
| 558.778 | 216.2724 | 0 | 528.4939 | 0 | 0 | 217.9807 | 3.058824 |
| 581.4076 | 236.7307 | 1.477273 | 536.8561 | 0 | 0 | 236.6238 | 1.529412 |
| 1281.186 | 885.548 | 1.477273 | 1236.541 | 61.60927 | 0 | 845.4972 | 2.615385 |
| 1378.667 | 935.2322 | 4.431818 | 1324.008 | 54.27483 | 0 | 917.5482 | 1.307692 |
| 1476.149 | 847.5542 | 4.431818 | 1404.614 | 55.74172 | 0 | 823.4407 | 2.615385 |
| 1537.075 | 1002.452 | 1.477273 | 1483.506 | 38.13907 | 0 | 986.6584 | 5.230769 |
| 485.6669 | 391.6285 | 1.477273 | 483.6401 | 16.13576 | 0 | 369.0779 | 1.307692 |
| 1133.223 | 642.9721 | 0 | 1077.043 | 20.53642 | 0 | 641.1074 | 0 |
| 443.8891 | 211.8885 | 1.477273 | 439.0492 | 16.13576 | 0 | 198.508 | 0 |
| 1396.075 | 840.2477 | 0 | 1301.712 | 26.40397 | 0 | 879.3171 | 1.307692 |
| 309.852 | 201.6594 | 0 | 299.3684 | 0 | 0 | 196.4695 | 0 |
| 849.4818 | 590.3653 | 7.386364 | 779.2217 | 0 | 0 | 548.4477 | 7.2 |
| 778.1114 | 553.8328 | 4.431818 | 720.8255 | 0 | 0 | 559.2926 | 4.588235 |
| 1171.519 | 496.8421 | 2.954545 | 1095.454 | 0 | 0 | 504.7974 | 1.529412 |
| 1152.371 | 726.2663 | 1.477273 | 1063.778 | 0 | 0 | 676.5523 | 4.8 |
| 858.1855 | 447.1579 | 2.954545 | 816.1551 | 0 | 0 | 438.8296 | 4.588235 |
| 866.8892 | 663.4303 | 1.477273 | 847.6716 | 0 | 0 | 662.9428 | 5.333333 |
| 976.556 | 599.1331 | 2.954545 | 924.8642 | 0 | 0 | 587.9743 | 4.588235 |
| 654.5188 | 474.9226 | 2.954545 | 605.4265 | 0 | 0 | 473.2476 | 3.058824 |
| 1350.815 | 998.0681 | 4.431818 | 1322.293 | 51.34106 | 0 | 963.1316 | 3.923077 |
| 1087.963 | 745.2632 | 2.954545 | 1053.032 | 39.60596 | 0 | 727.8628 | 2.615385 |


| 913.8893 | 559.678 | 2.954545 | 874.6683 | 45.47351 | 0 | 536.7069 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1040.963 | 1065.288 | 2.954545 | 1042.742 | 32.27152 | 0 | 1019.008 | 1.307692 |
| 1086.223 | 733.5728 | 2.954545 | 1070.182 | 32.27152 | 0 | 705.8063 | 1.307692 |
| 1265.519 | 1052.136 | 2.954545 | 1203.955 | 63.07616 | 0 | 1026.36 | 1.307692 |
| 870.3707 | 673.6594 | 2.954545 | 833.5075 | 32.27152 | 0 | 669.0456 | 2.615385 |
| 807.704 | 631.2817 | 0 | 797.4917 | 38.13907 | 0 | 591.1128 | 1.307692 |
| 981.7782 | 678.0433 | 2.954545 | 956.9901 | 16.13576 | 0 | 674.9273 | 3.923077 |
| 799.0003 | 545.065 | 1.477273 | 813.2917 | 0 | 0 | 586.7571 | 3.16129 |
| 908.8921 | 1220.705 | 3.333333 | 871.9778 | 0 | 0 | 1245.917 | 1.083333 |
| 369.2934 | 670.0894 | 1.666667 | 359.1548 | 0 | 0 | 681.0141 | 2.166667 |
| 397.9764 | 693.4646 | 0 | 382.3837 | 0 | 0 | 700.5834 | 4.333333 |
| 306.5494 | 719.437 | 3.333333 | 319.8443 | 0 | 0 | 708.4112 | 1.083333 |
| 903.5141 | 949.2932 | 0 | 886.2725 | 0 | 0 | 965.4223 | 0 |
| 206.159 | 329.8502 | 1.666667 | 200.126 | 0 | 0 | 333.9839 | 1.083333 |
| 534.2206 | 1299.921 | 0 | 521.7572 | 0 | 0 | 1320.28 | 0 |
| 195.4028 | 341.5378 | 0 | 189.405 | 0 | 0 | 347.7851 | 0 |
| 263.5249 | 318.1626 | 1.666667 | 250.1576 | 0 | 0 | 328.7654 | 0 |
| 281.4518 | 659.7004 | 1.666667 | 260.8786 | 0 | 0 | 677.1002 | 0 |
| 231.2566 | 638.9224 | 1.666667 | 221.5681 | 0 | 0 | 645.7892 | 0 |
| 265.3176 | 909.0359 | 3.333333 | 259.0918 | 0 | 0 | 917.1511 | 2.166667 |
| 363.9154 | 1062.273 | 0 | 380.5968 | 0 | 0 | 1052.832 | 0 |
| 374.6715 | 1129.802 | 1.666667 | 375.2363 | 0 | 0 | 1132.414 | 1.083333 |
| 329.8543 | 655.8045 | 0 | 317.5496 | 0 | 0 | 668.551 | 0 |
| 83.55963 | 358.1329 | 1.75 | 71.77778 | 0 | 15.4902 | 359.99 | 1 |
| 165.3028 | 363.419 | 1.75 | 143.1406 | 0 | 12.39216 | 370.7166 | 0 |
| 92.6422 | 334.3454 | 0 | 89.251 | 0 | 1.54902 | 325.0478 | 0 |
| 152.5872 | 322.4517 | 1.75 | 135.7169 | 0 | 13.94118 | 327.4071 | 1 |
| 56.31193 | 227.302 | 0 | 51 | 0 | 7.745098 | 227.503 | 0 |
| 128.9725 | 376.6342 | 0 | 124.6667 | 0 | 10.84314 | 380.0638 | 0 |
| 114.4404 | 144.0461 | 0 | 113.3333 | 0 | 3.098039 | 148.546 | 0 |
| 183.4679 | 144.0461 | 0 | 187.0853 | 0 | 6.196078 | 137.0765 | 0 |
| 357.8532 | 274.8769 | 0 | 337.6807 | 0 | 0 | 262.3159 | 2 |
| 132.6055 | 187.6563 | 1.75 | 128.4444 | 0 | 3.098039 | 196.7231 | 0 |
| 116.2569 | 251.0895 | 0 | 107.9033 | 0 | 4.647059 | 254.6103 | 0 |
| 303.9085 | 492.4271 | 1.5 | 306.0137 | 0 | 0 | 490.426 | 2 |
| 406.9284 | 766.439 | 0 | 395.411 | 0 | 0 | 775.4033 | 0 |
| 166.5487 | 450.0678 | 0 | 178.7945 | 0 | 0 | 440.0579 | 0 |
| 25.75496 | 54.27288 | 0 | 24.06849 | 0 | 0 | 54.3445 | 0 |
| 333.0975 | 766.439 | 0 | 342.1164 | 0 | 0 | 763.474 | 2 |
| 224.9267 | 504.3407 | 0 | 218.3356 | 0 | 0 | 505.0062 | 2 |
| 259.2666 | 971.6169 | 0 | 271.6301 | 0 | 0 | 959.6444 | 2 |
| 144.2278 | 418.2983 | 1.5 | 146.1301 | 0 | 0 | 416.1994 | 0 |
| 125.3408 | 262.0983 | 0 | 125.5 | 0 | 0 | 262.4442 | 0 |
| 315.5483 | 844.4492 | 0 | 281.1321 | 0 | 0 | 864.0783 | 0 |
| 517.6099 | 1275.025 | 0 | 461.0566 | 0 | 0 | 1319.547 | 0 |
| 514.8419 | 1384.525 | 6 | 449.8113 | 0 | 0 | 1456.375 | 5 |
| 230.8401 | 296.8648 | 0 | 225.5577 | 0 | 11.78313 | 291.0552 | 1 |


| 41.00448 | 165.9744 | 0 | 39.625 | 0 | 5.236948 | 162.4494 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 309.8117 | 412.9119 | 0 | 291.0913 | 0 | 22.25703 | 404.7698 | 0 |
| 157.9432 | 214.5523 | 0 | 153.9279 | 0 | 10.4739 | 208.4767 | 0 |
| 97.19581 | 70.16803 | 0 | 91.44231 | 0 | 3.927711 | 70.39474 | 0 |
| 208.0598 | 64.77049 | 0 | 208.7933 | 0 | 11.78313 | 59.56478 | 0 |
| 212.6158 | 785.3422 | 0 | 196.601 | 0 | 22.25703 | 778.4034 | 0 |
| 198.9477 | 407.5143 | 2.5 | 175.2644 | 0 | 11.78313 | 416.9535 | 0 |
| 627.2167 | 412.9119 | 0 | 594.375 | 0 | 22.25703 | 422.3684 | 2 |
| 113.9013 | 94.45697 | 0 | 109.7308 | 0 | 2.618474 | 94.76215 | 0 |
| 441.9372 | 777.2459 | 0 | 400.8221 | 0 | 18.32932 | 800.0633 | 0 |
| 133.6442 | 369.7316 | 5 | 123.4471 | 0 | 20.94779 | 365.5112 | 1 |
| 41.00448 | 298.2141 | 0 | 36.57692 | 0 | 3.927711 | 301.8851 | 0 |
| 80.49028 | 194.3115 | 0 | 73.15385 | 0 | 11.78313 | 189.5243 | 0 |
| 91.12108 | 260.4314 | 0 | 89.91827 | 0 | 1.309237 | 262.6265 | 0 |
| 209.5785 | 383.2254 | 2.5 | 190.5048 | 0 | 27.49398 | 372.2799 | 0 |
| 164.0179 | 375.1291 | 0 | 156.976 | 0 | 18.32932 | 365.5112 | 0 |
| 63.78475 | 147.083 | 0 | 59.4375 | 0 | 11.78313 | 136.7282 | 1 |
| 109.3453 | 449.3453 | 0 | 97.53846 | 0 | 18.32932 | 445.3821 | 0 |
| 132.1256 | 337.3463 | 0 | 131.0673 | 0 | 17.02008 | 315.4226 | 0 |
| 19.7429 | 192.9621 | 0 | 15.24038 | 0 | 10.4739 | 186.8168 | 0 |
| 83.52765 | 303.6117 | 0 | 73.15385 | 0 | 11.78313 | 293.7627 | 2 |
| 296.1435 | 887.8955 | 0 | 269.7548 | 0 | 30.11245 | 881.288 | 0 |
| 111.8547 | 208.6051 | 1 | 97.12752 | 0 | 0 | 220.9135 | 1.2 |
| 255.6679 | 460.5568 | 0 | 199.651 | 0 | 0 | 510.4336 | 0 |
| 381.7264 | 996.97 | 1 | 329.1544 | 0 | 0 | 1055.171 | 3.6 |
| 424.3377 | 602.7875 | 0 | 365.1275 | 0 | 0 | 653.1355 | 0 |
| 353.3189 | 567.5685 | 0 | 332.7517 | 0 | 0 | 596.878 | 1.2 |
| 355.0943 | 861.5121 | 0 | 284.1879 | 0 | 0 | 912.4687 | 0 |
| 1003.363 | 847.7372 | 4.607143 | 960.1008 | 0 | 0 | 857.2604 | 10.75097 |
| 894.5428 | 274.0297 | 3.071429 | 931.5776 | 0 | 0 | 288.3432 | 6.648649 |
| 1344.581 | 618.2542 | 3.071429 | 1343.883 | 0 | 0 | 687.4783 | 11.08108 |
| 116.1983 | 141.7395 | 0 | 114.7455 | 0 | 0 | 154.651 | 2.216216 |
| 820.7661 | 1009.725 | 4.607143 | 763.6883 | 0 | 0 | 1012.229 | 5.785714 |
| 667.6794 | 822.0891 | 0 | 714.1232 | 0 | 0 | 729.365 | 5.928571 |
| 1198.872 | 1239.208 | 1.535714 | 1296.382 | 0 | 0 | 1061.552 | 13.33929 |
| 407.6164 | 1291.854 | 0 | 353.1011 | 0 | 0 | 1295.848 | 5.785714 |
| 551.481 | 977.3276 | 1.535714 | 601.0965 | 0 | 0 | 881.5146 | 14.82143 |
| 215.7969 | 534.5604 | 0 | 181.3073 | 0 | 0 | 548.1855 | 0 |
| 580.9917 | 1007.025 | 3.071429 | 498.5749 | 0 | 0 | 1028.937 | 10.21815 |
| 355.9727 | 646.6021 | 0 | 371.6181 | 0 | 0 | 602.7907 | 5.928571 |
| 370.7281 | 1321.552 | 0 | 429.8439 | 0 | 0 | 1222.918 | 14.82143 |
| 313.5511 | 1061.021 | 1.535714 | 318.5298 | 0 | 0 | 1027.051 | 4.446429 |
| 188.1307 | 668.2005 | 1.535714 | 217.4908 | 0 | 0 | 612.1259 | 10.375 |
| 645.5464 | 997.5761 | 1.535714 | 674.7351 | 0 | 0 | 921.5229 | 4.446429 |
| 737.7673 | 797.7909 | 4.607143 | 733.4256 | 0 | 0 | 748.4143 | 5.928571 |
| 499.8373 | 818.0394 | 1.535714 | 494.6467 | 0 | 0 | 844.3627 | 4.072394 |
| 354.1283 | 79.6441 | 0 | 336.6439 | 0 | 0 | 73.86923 | 0 |


| 1080.829 | 448.1668 | 0 | 1087.165 | 0 | 0 | 495.723 | 1.108108 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1112.184 | 395.5207 | 7.678571 | 1143.1 | 0 | 0 | 431.6309 | 7.756757 |
| 81.1544 | 71.5447 | 0 | 89.46257 | 0 | 0 | 72.44089 | 0 |
| 1375.936 | 584.5067 | 0 | 1376.168 | 0 | 0 | 661.8391 | 3.324324 |
| 695.3457 | 213.2842 | 3.071429 | 719.5902 | 0 | 0 | 232.9472 | 2.216216 |
| 953.3447 | 847.4889 | 3.818182 | 876.7199 | 0 | 0 | 848.238 | 0 |
| 289.8314 | 478.5227 | 0 | 329.1982 | 13.36364 | 0 | 468.3763 | 0 |
| 238.7919 | 329.9288 | 1.272727 | 273.9911 | 7.424242 | 0 | 317.3281 | 0 |
| 326.2882 | 613.2647 | 2.545455 | 390.5395 | 13.36364 | 0 | 590.2303 | 0 |
| 61.97652 | 156.1495 | 1.272727 | 67.47541 | 8.909091 | 0 | 149.7789 | 0 |
| 353.6307 | 803.4145 | 1.272727 | 332.3186 | 0 | 0 | 800.3435 | 0 |
| 63.79936 | 100.7416 | 1.272727 | 56.77805 | 0 | 0 | 102.0911 | 0 |
| 269.7801 | 272.0024 | 1.272727 | 310.7958 | 5.939394 | 0 | 265.2863 | 0 |
| 858.5571 | 609.4868 | 1.272727 | 773.1835 | 0 | 0 | 616.3275 | 1 |
| 102.3765 | 500.1488 | 0 | 99.4279 | 0 | 0 | 495.498 | 5.69697 |
| 374.314 | 1394.887 | 1.333333 | 356.016 | 0 | 0 | 1403.492 | 5.69697 |
| 580.6667 | 1081.98 | 2.666667 | 567.7012 | 0 | 0 | 1077.771 | 9.969697 |
| 268.7383 | 869.6055 | 0 | 251.7771 | 0 | 0 | 876.5536 | 2.848485 |
| 503.8843 | 710.0103 | 0 | 489.1211 | 0 | 0 | 715.5796 | 1.424242 |
| 375.9137 | 901.0219 | 0 | 386.4859 | 0 | 0 | 894.1601 | 0 |
| 558.2718 | 1035.484 | 4 | 548.4571 | 0 | 0 | 1031.24 | 12.81818 |
| 195.1552 | 461.1925 | 0 | 186.0264 | 0 | 0 | 465.3154 | 7.121212 |
| 263.9394 | 598.168 | 0 | 250.1734 | 0 | 0 | 609.9404 | 1.424242 |
| 260.7401 | 991.5011 | 0 | 267.8139 | 0 | 0 | 983.4504 | 0 |
| 603.4586 | 800.6853 | 0 | 540.6042 | 0 | 0 | 864.276 | 0 |
| 524.2166 | 361.1536 | 0 | 493.5061 | 0 | 0 | 388.4562 | 0 |
| 577.0446 | 302.7543 | 0 | 544.6997 | 0 | 0 | 336.974 | 0 |
| 390.1146 | 562.4776 | 0 | 348.1163 | 0 | 0 | 619.3458 | 0 |
| 457.1656 | 643.9292 | 0 | 432.0738 | 0 | 0 | 673.9481 | 0 |
| 347.867 | 680.4534 | 1.5 | 329.6292 | 0 | 0 | 700.5778 | 0 |
| 382.4377 | 840.2915 | 1.5 | 359.5955 | 0 | 0 | 863.0751 | 2 |
| 583.3795 | 289.2308 | 1.5 | 586.4831 | 0 | 0 | 289.7357 | 2 |
| 568.2548 | 1166.057 | 0 | 567.2191 | 0 | 0 | 1168.141 | 4 |
| 458.0609 | 1159.968 | 1.5 | 443.073 | 0 | 0 | 1183.471 | 2 |
| 187.4776 | 470.2008 | 2 | 166.8293 | 0 | 23.93814 | 461.4329 | 0 |
| 150.3358 | 351.9205 | 0 | 135.2195 | 0 | 10.63918 | 350.1549 | 1 |
| 254.6866 | 546.1339 | 2 | 224.7805 | 0 | 29.25773 | 537.102 | 2 |
| 90.20149 | 290.59 | 0 | 79.02439 | 0 | 7.979381 | 293.774 | 1 |
| 268.8358 | 245.3222 | 2 | 245.8537 | 0 | 6.649485 | 259.6488 | 0 |
| 102.5821 | 278.9079 | 0 | 89.56098 | 0 | 7.979381 | 286.3555 | 0 |
| 316.5896 | 137.2636 | 0 | 314.3415 | 0 | 5.319588 | 133.5336 | 0 |
| 153.8731 | 546.1339 | 0 | 135.2195 | 0 | 14.62887 | 551.9391 | 0 |
| 371.4179 | 623.5272 | 0 | 337.1707 | 0 | 22.60825 | 632.0592 | 0 |
| 579.0642 | 1087.796 | 2.769231 | 581.7963 | 0 | 0 | 1082.878 | 1.352941 |
| 587.313 | 950.7315 | 0 | 599.9259 | 0 | 0 | 937.0818 | 1.352941 |
| 315.1033 | 1178.757 | 2.769231 | 337.8704 | 0 | 0 | 1166.368 | 1.352941 |
| 329.9511 | 1140.13 | 1.384615 | 337.8704 | 0 | 0 | 1132.723 | 4.058824 |


| 600.511 | 880.953 | 1.384615 | 593.3333 | 0 | 0 | 884.7448 | 1.352941 |
| ---: | ---: | ---: | ---: | :--- | :--- | ---: | ---: |
| 158.3765 | 434.8693 | 0 | 161.5185 | 0 | 0 | 429.9112 | 1.352941 |
| 348.0984 | 1378.124 | 0 | 349.4074 | 0 | 0 | 1381.946 | 0 |
| 732.4914 | 1120.193 | 1.384615 | 754.8519 | 0 | 0 | 1099.077 | 2.705882 |
| 819.9285 | 1167.543 | 1.384615 | 815.8333 | 0 | 0 | 1172.598 | 2.705882 |
| 927.1626 | 1290.901 | 6.923077 | 896.5926 | 0 | 0 | 1309.672 | 6.764706 |
| 456.4139 | 1177.062 | 2.75 | 420.6564 | 0 | 0 | 1205.616 | 1.25 |
| 540.6067 | 1342.373 | 0 | 495.2889 | 0 | 0 | 1378.026 | 1.25 |
| 396.5926 | 1803.503 | 4.125 | 391.2556 | 0 | 0 | 1817.795 | 1.25 |
| 268.0878 | 1383.39 | 0 | 253.2985 | 0 | 0 | 1395.517 | 0 |
| 383.299 | 1773.672 | 4.125 | 341.5006 | 0 | 0 | 1814.047 | 1.25 |
| 97.21805 | 403.2698 | 0 | 105.1849 | 0 | 0 | 388.8046 | 1.2 |
| 72.91353 | 398.229 | 0 | 79.68553 | 0 | 0 | 386.2717 | 0 |
| 77.77444 | 456.199 | 0 | 66.93585 | 0 | 0 | 452.1278 | 1.2 |
| 38.88722 | 249.5232 | 0 | 44.6239 | 0 | 0 | 245.6941 | 1.2 |
| 119.9023 | 572.1391 | 1.333333 | 117.9346 | 0 | 0 | 569.909 | 2.4 |
| 111.8008 | 458.7195 | 0 | 117.9346 | 0 | 0 | 447.062 | 2.4 |
| 173.3722 | 650.2726 | 0 | 168.9333 | 0 | 0 | 649.6963 | 4.8 |
| 71.29323 | 480.1432 | 0 | 78.09182 | 0 | 0 | 477.4571 | 0 |
| 181.4737 | 519.2099 | 1.333333 | 172.1208 | 0 | 0 | 525.5828 | 2.4 |
| 105.3195 | 453.6786 | 0 | 94.02893 | 0 | 0 | 455.9272 | 2.4 |
| 50.22932 | 236.921 | 0 | 47.81132 | 0 | 0 | 236.8289 | 1.2 |
| 103.6992 | 429.7344 | 1.333333 | 87.65409 | 0 | 0 | 430.5979 | 8.4 |
| 89.11654 | 580.9606 | 0 | 86.06038 | 0 | 0 | 580.0407 | 2.4 |
| 304.611 | 1803.128 | 0 | 289.3929 | 0 | 0 | 1843.989 | 1.416667 |
| 127.5116 | 403.3788 | 0 | 117.2041 | 0 | 0 | 420.8172 | 0 |
| 157.2643 | 718.594 | 1.363636 | 149.0373 | 0 | 0 | 736.1233 | 2.833333 |
| 128.9284 | 403.3788 | 0 | 120.098 | 0 | 0 | 415.9097 | 1.416667 |
| 151.5971 | 698.0628 | 0 | 136.0147 | 0 | 0 | 717.7203 | 0 |
| 69.42297 | 161.8346 | 0 | 69.45429 | 0 | 0 | 165.6278 | 0 |
| 121.8444 | 461.3494 | 0 | 114.3102 | 0 | 0 | 474.7996 | 0 |
| 100.5925 | 471.0112 | 0 | 92.60572 | 0 | 0 | 488.2952 | 1.416667 |
| 293.2766 | 1084.533 | 2.727273 | 245.9839 | 0 | 0 | 1143.445 | 0 |
| 296.1102 | 230.6747 | 0 | 285.052 | 0 | 0 | 244.1476 | 0 |
| 306.0278 | 307.9689 | 0 | 300.9686 | 0 | 0 | 325.1211 | 0 |
| 521.3806 | 219.8052 | 0 | 512.7164 | 0 | 0 | 232.4415 | 0 |
| 196.9345 | 187.1968 | 0 | 189.5523 | 0 | 0 | 187.7115 | 0 |
| 181.3498 | 246.3751 | 1.363636 | 160.613 | 0 | 0 | 263.7775 | 1.416667 |
| 111.9268 | 733.0867 | 0 | 89.94669 | 0 | 0 | 729.7798 | 0 |
| 284.7758 | 1272.938 | 1.363636 | 241.6478 | 0 | 0 | 1273.325 | 2.4 |
| 376.8675 | 1297.092 | 0 | 296.6898 | 0 | 0 | 1325.588 | 0 |
| 359.866 | 929.9452 | 0 | 331.3548 | 0 | 0 | 968.0022 | 1.416667 |
| 338.6141 | 1099.026 | 4.090909 | 324.12 | 0 | 0 | 1137.311 | 1.416667 |
| 170.0154 | 601.4451 | 0 | 154.8252 | 0 | 0 | 631.8392 | 0 |
| 212.5193 | 830.9121 | 0 | 183.9208 | 0 | 0 | 835.0254 | 2.4 |
| 230.9376 | 607.4837 | 1.363636 | 214.1507 | 0 | 0 | 629.3855 | 1.416667 |
| 165.765 | 659.4157 | 1.363636 | 149.0373 | 0 | 0 | 682.141 | 4.25 |
|  |  |  |  |  |  |  |  |


| 372.6171 | 506.0351 | 0 | 316.8271 | 0 | 0 | 528.5723 | 2.4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 77.92374 | 324.877 | 0 | 70.90126 | 0 | 0 | 331.2555 | 0 |
| 167.1818 | 1054.34 | 0 | 127.5363 | 0 | 0 | 1061.896 | 2.4 |
| 65.17258 | 198.0663 | 0 | 56.38449 | 0 | 0 | 197.1753 | 0 |
| 388.2019 | 1155.789 | 1.363636 | 322.5105 | 0 | 0 | 1184.067 | 2.4 |
| 148.7635 | 728.2558 | 0 | 146.1434 | 0 | 0 | 744.7115 | 0 |
| 414.5426 | 1265.585 | 1.5 | 355.0982 | 0 | 0 | 1323.639 | 3.2 |
| 392.335 | 979.8078 | 1.5 | 332.6709 | 0 | 0 | 1034.23 | 0 |
| 233.1802 | 825.2547 | 1.5 | 190.6316 | 0 | 0 | 872.632 | 0 |
| 244.284 | 1226.218 | 1.5 | 214.9278 | 0 | 0 | 1258.999 | 3.2 |
| 429.3477 | 1565.943 | 0 | 373.7875 | 0 | 0 | 1618.923 | 0 |
| 323.8614 | 1014.801 | 0 | 272.8649 | 0 | 0 | 1062.143 | 4.8 |
| 377.5299 | 1127.071 | 1.5 | 310.2436 | 0 | 0 | 1185.545 | 1.6 |
| 322.0108 | 1615.516 | 3 | 267.2581 | 0 | 0 | 1668.872 | 6.4 |
| 173.9598 | 745.0621 | 0 | 156.9908 | 0 | 0 | 756.5749 | 3.2 |
| 401.5881 | 899.6152 | 1.5 | 358.836 | 0 | 0 | 938.7405 | 1.6 |
| 334.9652 | 616.754 | 3 | 297.1611 | 0 | 0 | 655.2085 | 0 |
| 131.3952 | 647.373 | 0 | 106.5294 | 0 | 0 | 665.4921 | 0 |
| 424.9289 | 398.1085 | 2.571429 | 0 | 0 | 0 | 517.6711 | 70.72146 |
| 437.5194 | 686.574 | 2.571429 | 0 | 0 | 0 | 803.9285 | 78.75799 |
| 316.3359 | 407.2454 | 0 | 0 | 0 | 0 | 477.5415 | 16.07306 |
| 221.9073 | 214.0649 | 2.571429 | 0 | 0 | 0 | 280.9068 | 14.46575 |
| 354.1074 | 479.0355 | 0 | 0 | 0 | 0 | 567.1642 | 43.39726 |
| 214.0383 | 438.572 | 0 | 0 | 0 | 0 | 525.697 | 8.03653 |
| 110.1667 | 206.2333 | 0 | 0 | 0 | 0 | 240.7772 | 11.25114 |
| 519.3575 | 589.9838 | 1.285714 | 0 | 0 | 0 | 765.1366 | 30.53881 |
| 371.4193 | 339.3712 | 0 | 0 | 0 | 0 | 424.0355 | 48.21918 |
| 239.2192 | 101.8114 | 0 | 0 | 0 | 0 | 147.1417 | 30.53881 |
| 304.1345 | 639.0658 | 0 | 292.2965 | 0 | 0 | 653.0324 | 0 |
| 513.3369 | 2020.511 | 0 | 477.6525 | 0 | 0 | 2047.664 | 0 |
| 578.383 | 981.4752 | 2 | 569.3053 | 0 | 0 | 980.9258 | 2.333333 |
| 467.6288 | 475.2406 | 0 | 451.2141 | 0 | 0 | 491.2026 | 0 |
| 86.14215 | 529.849 | 2 | 86.36521 | 0 | 0 | 529.6703 | 0 |
| 529.1589 | 1137.921 | 2 | 525.2415 | 0 | 0 | 1142.194 | 0 |
| 462.3548 | 1040.511 | 2 | 437.1137 | 0 | 0 | 1054.902 | 0 |
| 186.3483 | 519.5177 | 0 | 181.5432 | 0 | 0 | 511.916 | 0 |
| 789.3434 | 802.891 | 0 | 779.0494 | 0 | 0 | 801.9031 | 4.666667 |
| 696.1692 | 397.0178 | 0 | 661.2186 | 0 | 0 | 396.5895 | 0 |
| 529.1709 | 1457.522 | 2.8 | 535.2196 | 0 | 0 | 1497.052 | 2.965517 |
| 1388.854 | 1292.026 | 2.8 | 1357.855 | 0 | 0 | 1258.489 | 6.521739 |
| 965.1656 | 962.487 | 5.6 | 979.6693 | 0 | 0 | 1038.202 | 5.333333 |
| 831.5543 | 1405.26 | 0 | 855.2478 | 0 | 0 | 1435.348 | 0 |
| 1316.774 | 1284.768 | 0 | 1342.51 | 0 | 0 | 1381.152 | 6.666667 |
| 634.6535 | 342.6047 | 1.4 | 622.4207 | 0 | 0 | 332.7041 | 1.304348 |
| 1427.531 | 1190.406 | 0 | 1383.157 | 0 | 0 | 1171.697 | 1.304348 |
| 1684.205 | 1238.313 | 2.8 | 1624.366 | 0 | 0 | 1210.754 | 9.130435 |
| 1214.808 | 1017.652 | 5.6 | 1168.936 | 0 | 0 | 1009.685 | 6.521739 |
|  |  |  |  |  |  |  |  |


| 925.6959 | 847.89 | 3.846154 | 785.5497 | 0 | 0 | 805.9319 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 574.8801 | 551.6517 | 0 | 548.2025 | 0 | 0 | 554.0247 | 1.304348 |
| 1528.723 | 1341.268 | 0 | 1230.029 | 0 | 0 | 1194.089 | 4 |
| 859.683 | 907.3219 | 1.4 | 836.6413 | 0 | 0 | 891.0684 | 2.608696 |
| 977.9083 | 525.3395 | 0 | 988.7373 | 0 | 0 | 531.2345 | 1.433333 |
| 926.4887 | 1080.076 | 2.8 | 952.7277 | 0 | 0 | 1110.668 | 1.482759 |
| 919.4565 | 982.811 | 1.4 | 954.5669 | 0 | 0 | 1003.421 | 2.965517 |
| 704.9752 | 644.5615 | 2.8 | 699.3515 | 0 | 0 | 636.2224 | 1.304348 |
| 1363.603 | 1276.321 | 0 | 1131.134 | 0 | 0 | 1031.335 | 2.965517 |
| 664.5403 | 945.0665 | 0 | 684.1982 | 0 | 0 | 963.7545 | 1.482759 |
| 1295.678 | 901.515 | 5.6 | 1262.621 | 0 | 0 | 899.6714 | 1.433333 |
| 629.3794 | 917.4839 | 2.8 | 623.5591 | 0 | 0 | 892.5311 | 4.3 |
| 490.494 | 932.001 | 2.8 | 466.808 | 0 | 0 | 928.2324 | 0 |
| 806.5393 | 973.0356 | 4.2 | 820.0734 | 0 | 0 | 994.5142 | 5.931034 |
| 1252.612 | 1105.433 | 0 | 1037.724 | 0 | 0 | 930.6409 | 2.666667 |
| 1540.282 | 979.0469 | 3.846154 | 1242.729 | 0 | 0 | 843.3446 | 9.333333 |
| 731.3459 | 360.0253 | 4.2 | 713.1311 | 0 | 0 | 354.1563 | 2.866667 |
| 486.9779 | 776.6675 | 1.4 | 513.1487 | 0 | 0 | 780.1123 | 1.482759 |
| 1016.957 | 515.3737 | 0 | 1030.078 | 0 | 0 | 515.526 | 1.433333 |
| 670.6142 | 300.3974 | 0 | 665.6184 | 0 | 0 | 307.4762 | 2.545455 |
| 1062.796 | 244.8737 | 1.555556 | 1055.04 | 0 | 0 | 264.3721 | 2.545455 |
| 606.0994 | 242.0263 | 0 | 602.1445 | 0 | 0 | 248.5672 | 1.272727 |
| 94.93432 | 117.5889 | 0 | 82.31415 | 0 | 0 | 122.4827 | 0 |
| 961.6495 | 760.6987 | 0 | 957.7316 | 0 | 0 | 735.4456 | 5.733333 |
| 938.795 | 656.1752 | 0 | 900.8879 | 0 | 0 | 664.0431 | 0 |
| 893.0858 | 728.7609 | 1.4 | 850.9342 | 0 | 0 | 739.7298 | 1.433333 |
| 664.5403 | 542.9414 | 1.4 | 644.2296 | 0 | 0 | 536.9467 | 1.433333 |
| 849.1348 | 679.4026 | 0 | 806.1482 | 0 | 0 | 689.748 | 1.433333 |
| 919.4565 | 461.6454 | 1.4 | 912.9456 | 0 | 0 | 442.6954 | 1.433333 |
| 2303.857 | 798.6868 | 3.111111 | 2282.958 | 0 | 0 | 789.8022 | 4.434783 |
| 1081.845 | 518.3671 | 0 | 1056.664 | 0 | 0 | 534.3355 | 2.545455 |
| 951.1013 | 464.5488 | 1.4 | 933.2382 | 0 | 0 | 452.5935 | 0 |
| 821.0061 | 553.1034 | 1.4 | 802.7031 | 0 | 0 | 541.2309 | 1.433333 |
| 648.5434 | 132.4026 | 1.555556 | 651.8943 | 0 | 0 | 133.6228 | 2.545455 |
| 824.5041 | 1443.649 | 1.923077 | 1053.846 | 0 | 0 | 1591.173 | 4 |
| 779.2017 | 1402.707 | 1.923077 | 970.4337 | 0 | 0 | 1529.514 | 1.111111 |
| 953.6161 | 881.1422 | 0 | 901.3859 | 0 | 0 | 865.375 | 1.111111 |
| 836.8285 | 455.8385 | 1.4 | 865.3746 | 0 | 0 | 484.8062 | 4 |
| 1063.616 | 606.8169 | 2.8 | 1086.707 | 0 | 0 | 651.6045 | 1.333333 |
| 260.4889 | 389.8387 | 0 | 329.5123 | 0 | 0 | 430.9428 | 0 |
| 874.3368 | 1240.719 | 5.769231 | 698.4679 | 0 | 0 | 1091.204 | 1.333333 |
| 659.2661 | 545.8448 | 1.4 | 677.7774 | 0 | 0 | 577.3134 | 4 |
| 1347.747 | 1060.931 | 0 | 1084.893 | 0 | 0 | 919.7288 | 0 |
| 876.6019 | 1128.574 | 0 | 1051.528 | 0 | 0 | 1244.585 | 3.333333 |
| 1086.471 | 483.4211 | 0 | 1142.948 | 0 | 0 | 492.6005 | 4 |
| 532.3035 | 1012.869 | 1.923077 | 656.8674 | 0 | 0 | 1102.121 | 4.444444 |
| 1227.696 | 1502.392 | 1.923077 | 1516.792 | 0 | 0 | 1663.505 | 0 |


| 1054.826 | 637.3029 | 0 | 1072.278 | 0 | 0 | 664.0504 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 697.7783 | 401.4789 | 3.111111 | 686.2046 | 0 | 0 | 415.2365 | 2.545455 |
| 876.0429 | 398.6316 | 0 | 941.6922 | 0 | 0 | 415.7661 | 1.482759 |
| 731.7335 | 452.7316 | 3.111111 | 781.6781 | 0 | 0 | 473.0624 | 1.482759 |
| 1149.76 | 731.6644 | 2.8 | 1186.311 | 0 | 0 | 747.7912 | 1.482759 |
| 989.7926 | 676.25 | 0 | 1079.866 | 0 | 0 | 700.7142 | 2.965517 |
| 935.4644 | 533.8816 | 3.111111 | 987.6733 | 0 | 0 | 568.5564 | 2.965517 |
| 854.4089 | 381.801 | 1.4 | 903.0681 | 0 | 0 | 381.9759 | 1.482759 |
| 903.6341 | 1020.556 | 0 | 906.7466 | 0 | 0 | 1059.248 | 2.965517 |
| 808.6483 | 1028.889 | 3.846154 | 680.3259 | 0 | 0 | 874.5218 | 1.333333 |
| 1234.146 | 805.7018 | 2.8 | 1285.631 | 0 | 0 | 819.779 | 1.482759 |
| 1117.124 | 326.0237 | 1.555556 | 1103.074 | 0 | 0 | 344.8331 | 5.090909 |
| 898.1137 | 647.7763 | 1.555556 | 939.853 | 0 | 0 | 693.4331 | 2.965517 |
| 1249.55 | 710.4184 | 1.555556 | 1327.933 | 0 | 0 | 753.6678 | 1.482759 |
| 909.998 | 298.9737 | 3.111111 | 864.6177 | 0 | 0 | 340.5227 | 5.090909 |
| 1522.889 | 552.3895 | 3.111111 | 1555.453 | 0 | 0 | 546.9431 | 4.3 |
| 845.4832 | 234.9079 | 0 | 838.8851 | 0 | 0 | 241.3832 | 0 |
| 835.2967 | 333.1421 | 0 | 814.8679 | 0 | 0 | 359.2012 | 0 |
| 687.5918 | 462.6974 | 7.777778 | 681.4727 | 0 | 0 | 483.9755 | 0 |
| 719.8492 | 478.3579 | 4.666667 | 684.489 | 0 | 0 | 515.8129 | 2.545455 |
| 1154.475 | 495.4421 | 1.555556 | 1243.328 | 0 | 0 | 517.1366 | 2.965517 |
| 916.7891 | 449.8842 | 3.111111 | 912.9456 | 0 | 0 | 461.2601 | 5.733333 |
| 1297.62 | 642.3339 | 4.666667 | 1323.9 | 0 | 0 | 641.5231 | 4.3 |
| 1215.594 | 486.9 | 3.111111 | 1216.298 | 0 | 0 | 504.3184 | 3.818182 |
| 804.7371 | 355.9211 | 4.666667 | 816.4834 | 0 | 0 | 358.4405 | 4.3 |
| 894.7182 | 642.0816 | 0 | 856.7391 | 0 | 0 | 654.6489 | 4.434783 |
| 1123.915 | 351.65 | 3.111111 | 1111.651 | 0 | 0 | 369.2588 | 1.272727 |
| 541.5847 | 176.5368 | 0 | 524.9465 | 0 | 0 | 189.6582 | 3.818182 |
| 1006.77 | 277.6184 | 0 | 997.8491 | 0 | 0 | 271.7145 | 0 |
| 528.0026 | 382.9711 | 0 | 500.6044 | 0 | 0 | 394.1972 | 1.478261 |
| 1003.375 | 539.5763 | 1.555556 | 962.5716 | 0 | 0 | 557.5074 | 1.478261 |
| 765.6886 | 408.5974 | 0 | 742.8164 | 0 | 0 | 428.1678 | 2.545455 |
| 1237.665 | 340.2605 | 1.555556 | 1216.234 | 0 | 0 | 339.2911 | 7.391304 |
| 1215.594 | 297.55 | 4.666667 | 1191.121 | 0 | 0 | 306.719 | 8.664032 |
| 1130.707 | 233.4842 | 1.555556 | 1102.002 | 0 | 0 | 242.1497 | 2.956522 |
| 972.8151 | 360.1921 | 0 | 960.6864 | 0 | 0 | 375.006 | 2.545455 |
| 1023.748 | 585.1342 | 1.555556 | 1016.328 | 0 | 0 | 574.4016 | 4.434783 |
| 202.4016 | 494.4455 | 0 | 163.8086 | 0 | 0 | 484.9378 | 1.142857 |
| 676.6564 | 1116.577 | 4 | 587.4086 | 0 | 0 | 1067.9 | 6.857143 |
| 222.2449 | 675.1082 | 0 | 244.3439 | 0 | 0 | 662.754 | 2.076923 |
| 236.1352 | 853.0543 | 0 | 244.3439 | 0 | 0 | 865.8339 | 0 |
| 55.56123 | 123.6114 | 2 | 59.04977 | 0 | 0 | 126.2389 | 0 |
| 470.2861 | 1126.086 | 0 | 480.543 | 0 | 0 | 1133.405 | 4.153846 |
| 301.6181 | 1078.543 | 0 | 333.9367 | 0 | 0 | 1066.17 | 4.153846 |
| 81.35752 | 292.0488 | 2 | 89.59276 | 0 | 0 | 293.6426 | 0 |
| 194.4643 | 751.1768 | 2 | 217.8733 | 0 | 0 | 743.7116 | 2.076923 |
| 367.101 | 1211.663 | 2 | 399.095 | 0 | 0 | 1202.014 | 6.230769 |


| 126.9971 | 563.7222 | 0 | 126.2443 | 0 | 0 | 572.1914 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 484.1764 | 1227.963 | 0 | 492.7602 | 0 | 0 | 1232.201 | 8.307692 |
| 384.4984 | 446.6013 | 0 | 376.3626 | 0 | 0 | 458.726 | 0 |
| 284.6767 | 603.581 | 2 | 273.8877 | 0 | 0 | 612.0403 | 0 |
| 402.9839 | 408.8775 | 0 | 396.8576 | 0 | 0 | 418.5723 | 0 |
| 319.7991 | 455.1196 | 0 | 292.5195 | 0 | 0 | 474.5441 | 0 |
| 86.88185 | 305.4412 | 0 | 93.15907 | 0 | 0 | 301.7614 | 0 |
| 242.16 | 243.3794 | 0 | 242.2136 | 0 | 0 | 243.356 | 0 |
| 269.4194 | 263.5448 | 0 | 275.5685 | 0 | 0 | 258.9233 | 0 |
| 156.9845 | 451.5797 | 0 | 158.6607 | 0 | 0 | 451.9933 | 1.333333 |
| 167.5916 | 344.9772 | 0 | 150.3101 | 0 | 0 | 360.6967 | 1.333333 |
| 203.6556 | 581.8715 | 0 | 189.9753 | 0 | 0 | 597.17 | 0 |
| 163.3488 | 570.0268 | 0 | 154.4854 | 0 | 0 | 576.2167 | 1.333333 |
| 146.5594 | 473.2005 | 0 | 101.526 | 0 | 0 | 562.7899 | 3.666667 |
| 131.9035 | 430.0669 | 0 | 95.6687 | 0 | 0 | 515.4122 | 9.166667 |
| 482.0177 | 1220.426 | 2.285714 | 449.0572 | 0 | 0 | 1447.174 | 11 |
| 379.4261 | 537.9008 | 1.142857 | 0 | 0 | 0 | 726.7722 | 74.96037 |
| 682.3156 | 1184.904 | 0 | 0 | 0 | 0 | 1559.043 | 140.3104 |
| 407.1096 | 1110.055 | 3.428571 | 298.7206 | 0 | 0 | 1323.705 | 14.66667 |
| 182.3851 | 553.1245 | 1.142857 | 160.0986 | 0 | 0 | 644.6242 | 11 |
| 296.3758 | 724.3901 | 0 | 263.577 | 0 | 0 | 861.4132 | 7.333333 |
| 499.1244 | 905.5331 | 0 | 0 | 0 | 0 | 1025.687 | 57.66182 |
| 443.0213 | 583.6327 | 4.222222 | 0 | 0 | 0 | 707.7237 | 80.72655 |
| 739.0137 | 1525.267 | 0 | 0 | 0 | 0 | 1705.57 | 111.4795 |
| 573.2103 | 945.1324 | 0 | 0 | 0 | 0 | 1296.761 | 88.4148 |
| 584.2464 | 1523.763 | 4.222222 | 0 | 0 | 0 | 1695.313 | 86.49273 |
| 272.7773 | 481.3465 | 1.407407 | 0 | 0 | 0 | 527.4959 | 51.89564 |
| 211.697 | 343.7998 | 0 | 206.9568 | 0 | 0 | 410.6069 | 3.666667 |
| 671.303 | 1398.913 | 5.62963 | 486.1532 | 0 | 0 | 1421.332 | 22 |
| 499.1244 | 568.5906 | 0 | 0 | 0 | 0 | 734.0985 | 57.66182 |
| 773.8363 | 1227.434 | 1.407407 | 650.1567 | 0 | 0 | 1237.564 | 16.5 |
| 895.7155 | 1242.476 | 2.814815 | 650.1567 | 0 | 0 | 1286.377 | 29.33333 |
| 388.8527 | 512.9349 | 0 | 0 | 0 | 0 | 630.0646 | 63.42801 |
| 261.1698 | 719.0114 | 0 | 0 | 0 | 0 | 786.8481 | 38.44122 |
| 150.8981 | 345.9678 | 1.407407 | 0 | 0 | 0 | 386.8303 | 19.22061 |
| 400.4603 | 869.4322 | 0 | 0 | 0 | 0 | 990.5201 | 67.27213 |
| 464.3018 | 905.5331 | 2.814815 | 0 | 0 | 0 | 1057.922 | 61.50594 |
| 282.4503 | 902.5247 | 0 | 0 | 0 | 0 | 967.0758 | 40.36328 |
| 491.3861 | 1409.443 | 0 | 0 | 0 | 0 | 1491.641 | 73.03831 |
| 464.3018 | 818.2891 | 2.814815 | 376.8175 | 0 | 0 | 822.6496 | 9.166667 |
| 400.4603 | 631.7673 | 4.222222 | 331.9118 | 0 | 0 | 650.3669 | 3.666667 |
| 553.293 | 788.2049 | 0 | 402.199 | 0 | 0 | 803.9856 | 34.83333 |
| 533.947 | 589.6495 | 2.814815 | 0 | 0 | 0 | 719.4458 | 88.4148 |
| 299.8616 | 795.726 | 0 | 0 | 0 | 0 | 839.5977 | 57.66182 |
| 417.8716 | 527.977 | 0 | 0 | 0 | 0 | 646.1825 | 74.96037 |
| 692.5835 | 1102.584 | 4.222222 | 0 | 0 | 0 | 1248.407 | 121.0898 |
| 335.0324 | 479.3395 | 0 | 342.4092 | 0 | 0 | 477.1952 | 1.2 |
|  |  |  |  |  |  |  | 0 |


| 159.8143 | 437.1179 | 1 | 159.3974 | 0 | 0 | 433.7008 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 100.1246 | 296.7931 | 0 | 86.58623 | 0 | 0 | 306.9459 |
| 100.1246 | 271.9569 | 1 | 94.4577 | 0 | 0 | 278.3639 |
| 182.92 | 335.2893 | 1 | 173.1725 | 0 | 0 | 347.9548 |
| 417.8277 | 750.0546 | 1 | 397.5095 | 0 | 0 | 763.0152 |
| 129.0067 | 165.161 | 0 | 129.8793 | 0 | 0 | 166.5212 |
| 198.3238 | 365.0928 | 0 | 184.9797 | 0 | 0 | 371.5661 |
| 165.5907 | 480.5813 | 0 | 141.6866 | 0 | 0 | 499.5637 |
| 65.4661 | 233.4607 | 0 | 66.90754 | 0 | 0 | 232.3841 |


| 86.20892 | 650.3266 | 0 | 0 | 0 | 0 | 684.7922 | 14.81102 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 96.55399 | 514.7901 | 0 | 0 | 0 | 0 | 540.4237 | 11.51969 |
| 72.41549 | 373.0363 | 0 | 0 | 0 | 0 | 388.3896 | 8.228346 |
| 184.4871 | 974.8682 | 0 | 0 | 0 | 0 | 1014.412 | 31.26772 |
| 43.10446 | 197.7092 | 0 | 0 | 0 | 0 | 208.2484 | 8.228346 |
| 34.48357 | 200.1961 | 0 | 0 | 0 | 0 | 209.526 | 3.291339 |
| 56.89789 | 266.0992 | 0 | 0 | 0 | 0 | 273.4058 | 11.51969 |
| 93.10563 | 564.5282 | 0 | 0 | 0 | 0 | 539.4376 | 16.13744 |
| 89.65728 | 304.6463 | 0 | 0 | 0 | 0 | 323.2321 | 14.81102 |
| 17.24178 | 73.3638 | 0 | 0 | 0 | 0 | 61.05806 | 3.954545 |
| 93.10563 | 951.2425 | 1.333333 | 0 | 0 | 0 | 897.0839 | 17.13636 |
| 74.13967 | 348.1672 | 1.333333 | 0 | 0 | 0 | 366.6705 | 13.16535 |
| 260.3509 | 1076.831 | 0 | 0 | 0 | 0 | 1153.67 | 39.49606 |
| 122.4167 | 627.9444 | 1.333333 | 0 | 0 | 0 | 661.7955 | 27.97638 |
| 144.831 | 997.2503 | 0 | 0 | 0 | 0 | 1034.854 | 16.45669 |
| 86.837 | 483.0458 | 1.333333 | 0 | 0 | 0 | 507.677 | 14.23077 |
| 116.2996 | 662.2402 | 2.666667 | 0 | 0 | 0 | 711.5369 | 16.81818 |
| 55.82379 | 332.4186 | 0 | 0 | 0 | 0 | 344.589 | 12.93706 |
| 88.38767 | 651.8521 | 0 | 0 | 0 | 0 | 653.667 | 20.6993 |
| 15.50661 | 205.1646 | 0 | 0 | 0 | 0 | 198.599 | 2.587413 |
| 51.17181 | 519.4041 | 0 | 0 | 0 | 0 | 530.0358 | 9.055944 |
| 57.37445 | 409.0307 | 0 | 0 | 0 | 0 | 415.6112 | 7.762238 |
| 65.12775 | 296.0603 | 0 | 0 | 0 | 0 | 324.8606 | 11.64336 |
| 12.40529 | 120.7615 | 0 | 0 | 0 | 0 | 122.316 | 2.587413 |
| 176.7753 | 980.3752 | 1.333333 | 0 | 0 | 0 | 1032.452 | 29.75524 |
| 52.72247 | 250.6125 | 1.333333 | 0 | 0 | 0 | 264.3603 | 10.34965 |
| 55.82379 | 285.6723 | 0 | 0 | 0 | 0 | 301.1866 | 6.468531 |
| 12.40529 | 186.9855 | 0 | 0 | 0 | 0 | 186.762 | 2.587413 |
| 46.51982 | 460.9711 | 0 | 0 | 0 | 0 | 466.905 | 10.34965 |
| 32.56388 | 259.702 | 0 | 0 | 0 | 0 | 274.8821 | 2.587413 |
| 97.69163 | 697.3 | 1.333333 | 0 | 0 | 0 | 739.1566 | 16.81818 |
| 32.56388 | 171.4034 | 0 | 0 | 0 | 0 | 164.4032 | 7.762238 |
| 348.5711 | 642.2946 | 1.727273 | 318.7711 | 0 | 0 | 669.4399 | 0 |
| 595.9441 | 1697.399 | 0 | 528.7402 | 0 | 0 | 1754.303 | 1.416667 |
| 335.4528 | 1353.171 | 1.727273 | 313.0447 | 0 | 0 | 1378.57 | 1.416667 |
| 314.8384 | 1014.219 | 1.727273 | 251.9628 | 0 | 0 | 1067.664 | 5.666667 |
| 324.2086 | 1030.045 | 1.727273 | 314.9535 | 0 | 0 | 1051.788 | 0 |
| 271.7355 | 1151.382 | 0 | 244.3276 | 0 | 0 | 1184.088 | 0 |
| 194.9 | 643.6135 | 1.727273 | 192.7897 | 0 | 0 | 652.2409 | 0 |
| 646.5431 | 1434.941 | 1.727273 | 610.8189 | 0 | 0 | 1484.41 | 0 |
| 58.09518 | 109.467 | 0 | 51.53785 | 0 | 0 | 115.1013 | 0 |
| 369.1855 | 1382.186 | 3.454545 | 332.1328 | 0 | 0 | 1428.844 | 2.833333 |
| 333.5788 | 1198.862 | 0 | 322.5888 | 0 | 0 | 1203.933 | 0 |
| 833.9469 | 1908.419 | 5.181818 | 830.332 | 0 | 0 | 1927.617 | 5.666667 |
| 216.3268 | 1088.136 | 1.5 | 0 | 0 | 0 | 1128.304 | 45.105 |
| 111.0098 | 826.5759 | 0 | 0 | 0 | 0 | 838.8952 | 22.41 |
| 79.69935 | 344.2179 | 0 | 0 | 0 | 0 | 369.4964 | 5.82 |
|  |  |  |  |  |  |  |  |


| 206.3644 | 1021.331 | 0 | 0 | 0 | 0 | 1071.633 | 3 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 55.5049 | 363.4669 | 0 | 0 | 0 | 0 | 359.8185 | 1.5 |
| 176.4771 | 612.572 | 1.5 | 0 | 0 | 0 | 652.738 | 53.835 |
| 101.0474 | 334.0272 | 1.5 | 0 | 0 | 0 | 352.0123 | 37.83 |
| 111.0098 | 857.1479 | 3 | 0 | 0 | 0 | 877.6995 | 36.375 |
| 197.8252 | 430.2724 | 1.5 | 0 | 0 | 0 | 483.7255 | 37.83 |
| 163.6683 | 655.5992 | 0 | 0 | 0 | 0 | 690.0374 | 40.74 |
| 106.7402 | 404.2296 | 0 | 0 | 0 | 0 | 421.2781 | 0 |
| 82.54575 | 917.1595 | 0 | 0 | 0 | 0 | 902.8985 | 6 |
| 118.1258 | 492.5486 | 0 | 0 | 0 | 0 | 516.3624 | 30.555 |
| 15.65523 | 91.71595 | 0 | 0 | 0 | 0 | 96.10058 | 0 |
| 102.7341 | 595.3547 | 2.8 | 107.7877 | 0 | 0 | 592.4195 | 1.166667 |
| 295.7496 | 552.0098 | 1.4 | 301.4931 | 0 | 0 | 550.3768 | 0 |
| 386.031 | 390.1039 | 0 | 387.4108 | 0 | 0 | 393.6723 | 1.166667 |
| 110.5169 | 184.8532 | 0 | 107.7877 | 0 | 0 | 187.281 | 0 |
| 225.7036 | 323.8117 | 0 | 223.3861 | 0 | 0 | 326.1492 | 0 |
| 179.0063 | 399.0279 | 1.4 | 170.2733 | 0 | 0 | 406.4125 | 0 |
| 222.5905 | 285.5663 | 0 | 226.5104 | 0 | 0 | 285.3806 | 0 |
| 208.5813 | 662.9217 | 0 | 207.7647 | 0 | 0 | 663.7647 | 1.166667 |
| 163.4406 | 258.7944 | 0 | 160.9005 | 0 | 0 | 262.4482 | 0 |
| 305.089 | 450.0218 | 1.4 | 303.0552 | 0 | 0 | 458.6474 | 1.166667 |
| 59.14991 | 353.1333 | 0 | 48.42635 | 0 | 0 | 364.3699 | 0 |
| 236.5997 | 163.1807 | 0 | 245.256 | 0 | 0 | 160.5266 | 2.333333 |
| 214.8076 | 460.2206 | 0 | 224.9482 | 0 | 0 | 453.5513 | 0 |
| 384.3042 | 1470.678 | 0 | 337.3681 | 0 | 0 | 1351.865 | 1.5 |
| 430.3499 | 1411.738 | 3.058824 | 386.9341 | 0 | 0 | 1285.422 | 1.5 |
| 910.7096 | 1566.287 | 0 | 845.8907 | 0 | 0 | 1744.916 | 1.428571 |
| 825.863 | 1304.47 | 1.285714 | 732.8622 | 0 | 0 | 1285.411 | 1.428571 |
| 759.7535 | 1142.301 | 3.058824 | 748.3957 | 0 | 34.71508 | 1180.583 | 3.666667 |
| 646.4103 | 1389.285 | 0 | 628.6365 | 0 | 44.06145 | 1428.442 | 2.444444 |
| 619.8455 | 1225.097 | 0 | 593.9357 | 0 | 26.70391 | 1281.4 | 0 |
| 991.7528 | 1226.5 | 1.529412 | 940.6888 | 0 | 0 | 1372.507 | 0 |
| 866.0127 | 1160.544 | 0 | 893.6617 | 0 | 32.04469 | 1173.278 | 2.444444 |
| 922.6843 | 1000.566 | 1.529412 | 928.5991 | 0 | 42.72626 | 1018.399 | 1.222222 |
| 1119.264 | 1745.728 | 1.529412 | 1097.77 | 0 | 40.05587 | 1824.936 | 1.222222 |
| 1273.205 | 1488.556 | 0 | 1143.046 | 0 | 0 | 1459.602 | 0 |
| 1399.486 | 1199.873 | 1.285714 | 1281.597 | 0 | 0 | 1223.844 | 4.285714 |
| 1275.117 | 1272.731 | 2.571429 | 1095.647 | 0 | 0 | 1306.434 | 0 |
| 380.7622 | 1270.003 | 3.058824 | 334.858 | 0 | 0 | 1124.157 | 5 |
| 396.7011 | 1166.157 | 1.529412 | 359.8398 | 0 | 0 | 1042.557 | 1 |
| 329.4036 | 1279.826 | 1.529412 | 264.3408 | 0 | 0 | 1426.566 | 1.428571 |
| 692.456 | 1198.434 | 1.529412 | 625.3028 | 0 | 0 | 1354.487 | 1.428571 |
| 715.4788 | 1681.175 | 1.529412 | 663.5866 | 0 | 0 | 1844.024 | 0 |
| 952.7911 | 1215.274 | 1.529412 | 920.6353 | 0 | 0 | 1348.48 | 7.142857 |
| 1462.835 | 1344.379 | 3.058824 | 1365.457 | 0 | 0 | 1546.698 | 5.714286 |
| 556.0899 | 754.9852 | 0 | 528.6817 | 0 | 0 | 843.9264 | 2.857143 |
| 867.9209 | 902.9726 | 2.571429 | 751.0926 | 0 | 0 | 911.5006 | 7.142857 |


| 1135.705 | 1117.31 | 2.815126 | 1055.774 | 0 | 18.69274 | 1137.293 | 4.285714 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 552.5356 | 533.8658 | 0 | 525.0356 | 0 | 0 | 572.1281 | 0 |
| 1170.563 | 1344.265 | 0 | 1057.363 | 0 | 0 | 1497.144 | 2.857143 |
| 1103.479 | 2623.683 | 1.297297 | 1091.869 | 0 | 62.32159 | 2734.661 | 1.3 |
| 1023.517 | 1075.432 | 3.891892 | 1013.179 | 0 | 38.45374 | 1117.436 | 1.3 |
| 842.8021 | 1210.523 | 0 | 812.8803 | 0 | 46.40969 | 1272.443 | 0 |
| 1239.415 | 1713.804 | 1.297297 | 1257.624 | 0 | 58.34361 | 1758.36 | 3.9 |
| 767.6376 | 1030.401 | 1.297297 | 720.6859 | 0 | 0 | 1034.698 | 4.333333 |
| 1087.487 | 1225.092 | 2.594595 | 1056.586 | 0 | 0 | 1215.836 | 7.222222 |
| 470.178 | 1344.29 | 3.891892 | 444.7121 | 0 | 0 | 1342.241 | 0 |
| 965.9439 | 1501.896 | 5.189189 | 924.1181 | 0 | 0 | 1496.012 | 2.888889 |
| 927.562 | 515.2007 | 0 | 914.6006 | 0 | 0 | 502.4769 | 1.391304 |
| 1135.464 | 1071.458 | 1.297297 | 1122.819 | 0 | 0 | 1047.73 | 2.888889 |
| 658.8889 | 789.3563 | 0 | 636.4489 | 0 | 0 | 784.2275 | 0 |
| 500.5637 | 445.0062 | 1.297297 | 485.6035 | 0 | 0 | 442.8223 | 1.391304 |
| 537.3463 | 207.9345 | 1.297297 | 517.0165 | 0 | 0 | 212.9359 | 0 |
| 1447.317 | 924.4475 | 0 | 1403.33 | 0 | 0 | 911.4697 | 1.391304 |
| 1023.517 | 1640.96 | 0 | 971.1738 | 0 | 0 | 1628.181 | 4.173913 |
| 762.8398 | 931.0696 | 2.594595 | 738.595 | 0 | 0 | 920.5584 | 1.391304 |
| 1074.693 | 1768.105 | 3.891892 | 1056.034 | 0 | 0 | 1737.246 | 1.391304 |
| 1021.917 | 1123.111 | 2.594595 | 972.7453 | 0 | 0 | 1121.809 | 0 |
| 1001.127 | 1120.462 | 3.891892 | 976.4073 | 0 | 7.955947 | 1109.957 | 5.382609 |
| 935.5583 | 671.4826 | 0 | 908.3147 | 0 | 0 | 664.7756 | 0 |
| 745.2481 | 1209.198 | 2.594595 | 730.7376 | 0 | 0 | 1195.817 | 4.173913 |
| 997.9288 | 1301.908 | 0 | 999.4605 | 0 | 0 | 1263.333 | 5.565217 |
| 889.1802 | 1998.555 | 1.297297 | 836.0267 | 0 | 0 | 1995.625 | 1.391304 |
| 812.4164 | 455.6016 | 1.297297 | 787.3108 | 0 | 0 | 450.5413 | 5.565217 |
| 1567.26 | 1440.973 | 3.891892 | 1554.519 | 0 | 18.56388 | 1470.102 | 7.222222 |
| 1010.723 | 739.0282 | 1.297297 | 1017.673 | 0 | 18.56388 | 735.7441 | 2.744444 |
| 1288.991 | 1384.022 | 1.297297 | 1323.529 | 0 | 50.38767 | 1359.96 | 3.991304 |
| 235.0846 | 400.471 | 1 | 229.4215 | 0 | 0 | 403.8233 | 2 |
| 389.9854 | 330.7645 | 0 | 385.9262 | 0 | 0 | 328.6286 | 0 |
| 326.2027 | 366.3012 | 1 | 343.2431 | 0 | 0 | 360.656 | 0 |
| 400.9195 | 370.4015 | 0 | 385.9262 | 0 | 0 | 380.1509 | 0 |
| 233.2623 | 263.7915 | 1 | 227.6431 | 0 | 0 | 272.9289 | 0 |
| 158.5455 | 38.27027 | 0 | 161.84 | 0 | 0 | 34.81235 | 0 |
| 461.3013 | 134.2129 | 1 | 450.3367 | 0 | 0 | 146.5714 | 0 |
| 300.522 | 196.6685 | 0 | 299.217 | 0 | 0 | 203.8675 | 0 |
| 73.62789 | 65.11321 | 1 | 74.04865 | 0 | 0 | 69.28831 | 0 |
| 94.66443 | 357.4582 | 0 | 80.09344 | 0 | 0 | 373.0909 | 0 |
| 28.54959 | 156.8032 | 0 | 27.20154 | 0 | 0 | 159.8961 | 0 |
| 351.6107 | 261.7817 | 1 | 340.0193 | 0 | 0 | 273.1558 | 2 |
| 52.59135 | 6.644205 | 0 | 55.91429 | 0 | 0 | 5.32987 | 0 |
| 296.0142 | 231.2183 | 0 | 290.1498 | 0 | 0 | 239.8442 | 1 |
| 108.1879 | 107.6361 | 0 | 105.7838 | 0 | 0 | 111.9273 | 0 |
| 166.7897 | 308.2911 | 3 | 160.1869 | 0 | 0 | 315.7948 | 0 |
| 81.14094 | 146.1725 | 0 | 74.04865 | 0 | 0 | 153.2338 | 0 |


| 43.48291 | 505.1473 | 0 | 0 | 0 | 0 | 527.5731 | 1.846667 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 41.50641 | 293.853 | 0 | 0 | 0 | 0 | 302.2851 | 7.386667 |
| 53.36538 | 570.9144 | 0 | 0 | 0 | 0 | 583.1822 | 12.92667 |
| 53.36538 | 400.1998 | 0 | 0 | 0 | 0 | 430.6137 | 9.233333 |
| 27.67094 | 155.3223 | 0 | 0 | 0 | 0 | 156.8461 | 7.386667 |
| 7.905983 | 48.9755 | 0 | 0 | 0 | 0 | 51.33144 | 0 |
| 7.905983 | 141.3293 | 0 | 0 | 0 | 0 | 145.4391 | 1.846667 |
| 25.69444 | 174.9125 | 0 | 0 | 0 | 0 | 179.66 | 7.386667 |
| 15.81197 | 114.7426 | 0 | 0 | 0 | 0 | 122.6251 | 1.846667 |
| 39.52991 | 365.2173 | 0 | 0 | 0 | 0 | 375.0047 | 11.08 |
| 27.67094 | 142.7286 | 0 | 0 | 0 | 0 | 148.2908 | 1.846667 |
| 270.7799 | 1227.186 | 1 | 0 | 0 | 0 | 1311.803 | 40.62667 |
| 55.34188 | 411.3942 | 0 | 0 | 0 | 0 | 433.4655 | 3.693333 |
| 146.2607 | 1291.554 | 0 | 0 | 0 | 0 | 1327.488 | 27.7 |
| 49.41239 | 295.2523 | 0 | 0 | 0 | 0 | 302.2851 | 9.233333 |
| 156.1432 | 1056.471 | 0 | 0 | 0 | 0 | 1093.645 | 22.16 |
| 371.5812 | 2082.158 | 0 | 0 | 0 | 0 | 2184.438 | 49.86 |
| 21.74145 | 211.2943 | 0 | 0 | 0 | 0 | 212.4551 | 0 |
| 106.7308 | 961.319 | 0 | 0 | 0 | 0 | 1009.518 | 24.00667 |
| 328.0983 | 1542.028 | 0 | 0 | 0 | 0 | 1634.051 | 36.93333 |
| 303.7478 | 600.953 | 3.521739 | 275.8291 | 0 | 0 | 588.2045 | 3.428571 |
| 460.5208 | 1583.719 | 3.521739 | 426.5382 | 0 | 0 | 1536.45 | 2.285714 |
| 499.7141 | 1084.942 | 3.521739 | 478.1056 | 0 | 0 | 1091.545 | 3.166667 |
| 605.5359 | 1146.785 | 1.173913 | 604.4343 | 0 | 0 | 1139.879 | 1.583333 |
| 423.2872 | 766.3159 | 0 | 439.0684 | 0 | 0 | 802.1432 | 3.333333 |
| 415.4486 | 1290.637 | 3.521739 | 432.7357 | 0 | 0 | 1344.811 | 5 |
| 580.0603 | 1790.759 | 5.869565 | 569.4509 | 0 | 0 | 1795.075 | 11.08333 |
| 264.5545 | 637.2521 | 0 | 265.9741 | 0 | 0 | 668.2202 | 1.666667 |
| 487.9561 | 1192.495 | 2.347826 | 454.6602 | 0 | 0 | 1202.246 | 3.166667 |
| 201.8453 | 622.4636 | 3.521739 | 191.2727 | 0 | 0 | 610.6904 | 2.285714 |
| 178.3293 | 486.6778 | 0 | 154.9309 | 0 | 0 | 479.7356 | 0 |
| 555.0792 | 1198.047 | 0 | 0 | 0 | 0 | 1416.928 | 151.6667 |
| 289.784 | 582.3652 | 0 | 0 | 0 | 0 | 681.7431 | 71.94444 |
| 122.4439 | 668.987 | 0 | 0 | 0 | 0 | 659.0784 | 8 |
| 159.1771 | 935.5158 | 1.777778 | 0 | 0 | 0 | 1038.503 | 35 |
| 57.1405 | 413.1195 | 1.777778 | 0 | 0 | 0 | 419.5312 | 4 |
| 189.7881 | 660.9912 | 0 | 0 | 0 | 0 | 725.0742 | 87.5 |
| 369.3725 | 1341.972 | 1.777778 | 0 | 0 | 0 | 1340.169 | 12 |
| 455.0833 | 958.1707 | 3.555556 | 0 | 0 | 0 | 1148.275 | 126.3889 |
| 308.1506 | 1132.747 | 0 | 0 | 0 | 0 | 1148.532 | 10 |
| 306.1098 | 1307.323 | 0 | 0 | 0 | 0 | 1292.26 | 14 |
| 281.6211 | 1724.441 | 1.777778 | 0 | 0 | 0 | 1698.843 | 8 |
| 306.1098 | 723.6254 | 1.777778 | 0 | 0 | 0 | 754.8973 | 4 |
| 26.52952 | 159.9172 | 0 | 0 | 0 | 0 | 154.0871 | 2 |
| 169.3808 | 1424.596 | 1.777778 | 0 | 0 | 0 | 1575.809 | 31.11111 |
| 38.77391 | 329.1629 | 0 | 0 | 0 | 0 | 356.7596 | 3.888889 |
| 226.5213 | 1083.439 | 0 | 0 | 0 | 0 | 1208.939 | 40.83333 |
|  |  | 0 |  |  |  |  |  |


| 220.3991 | 1151.404 | 1.777778 | 0 | 0 | 0 | 1152.416 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 108.1588 | 526.3942 | 0 | 0 | 0 | 0 | 584.9702 | 11.66667 |
| 269.3767 | 1064.782 | 0 | 0 | 0 | 0 | 1059.187 | 12 |
| 550.1433 | 290.3822 | 3.545455 | 531.1037 | 0 | 0 | 316.4756 | 3.2 |
| 202.8653 | 206.0331 | 1.181818 | 208.6479 | 0 | 0 | 209.5957 | 0 |
| 471.0602 | 452.1665 | 1.181818 | 446.61 | 0 | 0 | 476.1014 | 0 |
| 195.9885 | 412.0661 | 1.181818 | 179.3337 | 0 | 0 | 426.1316 | 1.6 |
| 242.4069 | 399.6212 | 3.545455 | 239.6864 | 0 | 0 | 409.475 | 1.6 |
| 256.1605 | 475.6736 | 0 | 267.2762 | 0 | 0 | 474.7134 | 0 |
| 424.6418 | 1294.275 | 0 | 410.3983 | 0 | 0 | 1313.096 | 0 |
| 656.7335 | 1028.783 | 2.363636 | 625.9437 | 0 | 0 | 1067.411 | 1.6 |
| 145.8594 | 638 | 0 | 0 | 0 | 0 | 734.4323 | 18.21429 |
| 80.22266 | 447.8402 | 0 | 0 | 0 | 0 | 514.9804 | 16.39286 |
| 72.92969 | 427.1706 | 0 | 0 | 0 | 0 | 475.4791 | 10.92857 |
| 187.7939 | 1085.84 | 0 | 0 | 0 | 0 | 1050.532 | 20.05405 |
| 80.22266 | 587.0151 | 0 | 0 | 0 | 0 | 562.0024 | 5.72973 |
| 364.6484 | 1295.292 | 3.666667 | 0 | 0 | 0 | 1486.421 | 63.75 |
| 41.93457 | 290.7516 | 1.833333 | 0 | 0 | 0 | 318.9367 | 3.642857 |
| 253.4307 | 968.7127 | 1.833333 | 0 | 0 | 0 | 1132.372 | 18.21429 |
| 204.2031 | 1266.354 | 0 | 0 | 0 | 0 | 1386.936 | 43.71429 |
| 178.6777 | 932.8855 | 1.833333 | 0 | 0 | 0 | 1050.443 | 29.14286 |
| 136.7432 | 1204.346 | 1.833333 | 0 | 0 | 0 | 1162.675 | 12.89189 |
| 120.334 | 425.7927 | 0 | 0 | 0 | 0 | 422.7908 | 14.32432 |
| 76.35403 | 349.4088 | 0 | 0 | 0 | 0 | 376.0501 | 14.25882 |
| 272.693 | 1437.568 | 0 | 0 | 0 | 0 | 1516.948 | 33.86471 |
| 350.8649 | 1084.415 | 2.444444 | 0 | 0 | 0 | 1186.789 | 64.16471 |
| 483.5755 | 1146.809 | 2.444444 | 0 | 0 | 0 | 1332.11 | 65.94706 |
| 196.3389 | 888.4966 | 0 | 0 | 0 | 0 | 966.2576 | 23.17059 |
| 169.0696 | 934.6685 | 3.666667 | 0 | 0 | 0 | 991.7525 | 32.08235 |
| 150.8901 | 680.0992 | 0 | 0 | 0 | 0 | 739.3528 | 12.47647 |
| 136.3465 | 983.3361 | 0 | 0 | 0 | 0 | 1031.27 | 8.911765 |
| 76.35403 | 502.899 | 1.222222 | 0 | 0 | 0 | 523.9207 | 12.47647 |
| 152.7081 | 763.7077 | 0 | 0 | 0 | 0 | 808.1891 | 17.82353 |
| 101.8054 | 536.592 | 1.222222 | 0 | 0 | 0 | 572.361 | 17.82353 |
| 946.583 | 906.9439 | 0 | 1008.72 | 0 | 0 | 884.6596 | 0 |
| 937.3254 | 1201.273 | 0 | 983.2302 | 0 | 0 | 1194.393 | 1.714286 |
| 1740.417 | 1220.096 | 1.916667 | 1815.729 | 0 | 0 | 1185.649 | 6.857143 |
| 1448.804 | 1603.408 | 3.833333 | 1423.335 | 0 | 1.358974 | 1600.425 | 5.2 |
| 687.372 | 862.4523 | 0 | 685.4356 | 0 | 0 | 850.3649 | 2.6 |
| 687.372 | 2453.882 | 0 | 695.6817 | 0 | 0 | 2493.711 | 6.857143 |
| 657.285 | 1095.178 | 1.916667 | 633.0704 | 0 | 0 | 1136.685 | 3.428571 |
| 1175.707 | 1168.76 | 7.666667 | 1162.211 | 0 | 0 | 1183.601 | 1.714286 |
| 657.285 | 1623.943 | 0 | 657.8341 | 0 | 0 | 1598.941 | 2.6 |
| 629.5124 | 1543.516 | 0 | 633.0704 | 0 | 0 | 1572.122 | 0 |
| 421.2179 | 732.4 | 1.916667 | 405.8143 | 0 | 0 | 757.2068 | 3.428571 |
| 879.4659 | 1742.017 | 3.833333 | 855.6301 | 0 | 6.794872 | 1719.332 | 2.6 |
| 1263.654 | 1439.132 | 1.916667 | 1141.238 | 0 | 44.84615 | 1363.909 | 1 |
|  |  |  |  |  |  |  | 0 |


| 803.1106 | 409.0183 | 1.514706 | 779.3348 | 0 | 0 | 429.9096 | 6.237288 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 765.4942 | 492.6811 | 0 | 714.8643 | 0 | 0 | 554.5674 | 3.118644 |
| 1474.564 | 664.6547 | 4.544118 | 1418.351 | 0 | 0 | 746.3487 | 3.118644 |
| 1341.025 | 396.6238 | 9.088235 | 1293.203 | 0 | 0 | 444.2932 | 9.355932 |
| 1036.332 | 364.0882 | 0 | 1006.878 | 0 | 0 | 386.7588 | 1.559322 |
| 2067.022 | 508.1742 | 4.544118 | 2023.237 | 0 | 0 | 554.5674 | 4.677966 |
| 2824.993 | 580.9919 | 9.088235 | 2776.025 | 0 | 0 | 616.8963 | 12.47458 |
| 2524.062 | 536.0618 | 1.514706 | 2440.399 | 0 | 0 | 602.5127 | 12.47458 |
| 1320.336 | 455.4976 | 3.029412 | 1264.76 | 0 | 0 | 505.0239 | 4.677966 |
| 1777.376 | 429.1593 | 6.058824 | 1753.977 | 0 | 0 | 463.4713 | 4.677966 |
| 863.2969 | 266.4816 | 3.029412 | 858.9749 | 0 | 0 | 286.0737 | 0 |
| 951.6954 | 314.5103 | 1.514706 | 942.4073 | 0 | 0 | 326.0281 | 1.559322 |
| 1822.516 | 495.7797 | 1.514706 | 1740.704 | 0 | 0 | 572.1474 | 6.237288 |
| 1602.46 | 670.852 | 4.544118 | 1518.85 | 0 | 0 | 754.3395 | 12.47458 |
| 1705.905 | 467.8921 | 7.573529 | 1693.299 | 0 | 0 | 495.4349 | 4.677966 |
| 1679.573 | 591.8371 | 3.029412 | 1575.735 | 0 | 0 | 677.627 | 4.677966 |
| 1512.18 | 604.2316 | 1.514706 | 1605.761 | 0 | 0 | 0 | 212.2925 |
| 1248.865 | 430.7086 | 0 | 1298.697 | 0 | 0 | 0 | 119.2104 |
| 1751.044 | 721.9792 | 7.573529 | 1849.605 | 0 | 0 | 0 | 199.2283 |
| 1734.117 | 531.4139 | 4.544118 | 1847.799 | 0 | 0 | 0 | 156.7698 |
| 1862.013 | 449.3004 | 6.058824 | 1929.08 | 0 | 0 | 0 | 130.6415 |
| 663.9298 | 280.4254 | 1.514706 | 711.6645 | 0 | 0 | 0 | 80.01792 |
| 1186.798 | 314.5103 | 1.514706 | 1257.153 | 0 | 0 | 0 | 84.91698 |
| 1092.757 | 303.6651 | 3.029412 | 1172.259 | 0 | 0 | 0 | 89.81604 |
| 1258.269 | 334.6513 | 1.514706 | 1333.016 | 0 | 0 | 0 | 60.4217 |
| 1367.357 | 371.8348 | 1.514706 | 1398.041 | 0 | 0 | 0 | 133.9075 |
| 1559.201 | 399.7224 | 4.544118 | 1638.273 | 0 | 0 | 0 | 111.0453 |
| 1455.755 | 416.7648 | 6.058824 | 1490.16 | 0 | 0 | 0 | 142.0726 |
| 1690.858 | 672.4013 | 3.029412 | 1827.93 | 0 | 0 | 0 | 143.7057 |
| 1040.094 | 254.0871 | 0 | 1085.559 | 0 | 0 | 0 | 66.95377 |
| 232.0463 | 671.4416 | 0 | 0 | 0 | 0 | 780.198 | 23.47059 |
| 403.0278 | 916.7234 | 0 | 0 | 0 | 0 | 1087.066 | 39.11765 |
| 274.7917 | 416.5679 | 0 | 0 | 0 | 0 | 529.7819 | 33.25 |
| 409.1343 | 1740.267 | 5 | 0 | 0 | 0 | 1930.954 | 37.16176 |
| 285.4634 | 820.8162 | 3 | 245.8598 | 0 | 0 | 848.497 | 2 |
| 242.5366 | 594.1838 | 0 | 228.1402 | 0 | 0 | 601.503 | 2 |
| 1796.377 | 349.8002 | 0 | 1780.347 | 0 | 0 | 348.7519 | 10.09091 |
| 2098.943 | 353.8363 | 4.090909 | 2103.261 | 0 | 0 | 331.3143 | 3.363636 |
| 1642.501 | 207.1893 | 1.363636 | 1640.474 | 0 | 0 | 191.8135 | 0 |
| 2214.783 | 590.6242 | 4.090909 | 2239.679 | 0 | 0 | 549.9549 | 6.727273 |
| 1592.361 | 216.607 | 1.363636 | 1593.85 | 0 | 0 | 202.5444 | 6.727273 |
| 2053.991 | 511.2464 | 1.363636 | 2085.993 | 0 | 0 | 476.1805 | 5.045455 |
| 848.9136 | 142.6108 | 1.363636 | 856.5004 | 0 | 0 | 130.1113 | 3.363636 |
| 928.4452 | 121.0847 | 1.363636 | 929.0266 | 0 | 0 | 118.0391 | 0 |
| 1175.685 | 335.001 | 0 | 1182.868 | 0 | 0 | 327.2902 | 1.681818 |
| 525.0784 | 992.5686 | 1.692308 | 472.7811 | 0 | 0 | 1020.53 | 1.32 |
| 285.0426 | 1582.658 | 0 | 249.3224 | 0 | 0 | 1465.565 | 0 |


| 1111.335 | 135.3381 | 1.888889 | 1110.802 | 0 | 0 | 133.6337 | 26.66667 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 449.5946 | 905.3649 | 0 | 461.163 | 0 | 0 | 987.9509 | 0 |
| 1317.643 | 225.5634 | 0 | 1358.961 | 0 | 0 | 197.7093 | 1.333333 |
| 780.1165 | 825.8043 | 0 | 715.5349 | 0 | 0 | 772.4322 | 0 |
| 540.0807 | 803.3552 | 0 | 506.2033 | 0 | 0 | 773.2984 | 5.333333 |
| 965.3632 | 897.5869 | 0 | 1037.717 | 0 | 0 | 854.6143 | 1.333333 |
| 634.3804 | 1661.23 | 0 | 587.3316 | 0 | 0 | 1684.354 | 0 |
| 422.3464 | 430.9039 | 0 | 447.7952 | 0 | 0 | 419.335 | 0 |
| 500.1983 | 749.8039 | 1.888889 | 493.8802 | 0 | 0 | 734.7707 | 10.66667 |
| 860.2632 | 194.4512 | 0 | 860.5456 | 0 | 0 | 176.9817 | 5.333333 |
| 743.4854 | 833.8069 | 1.888889 | 776.8606 | 0 | 0 | 858.9724 | 2.64 |
| 535.7943 | 960.4985 | 1.692308 | 487.3603 | 0 | 0 | 982.1397 | 1.32 |
| 883.6187 | 611.3547 | 1.888889 | 897.5374 | 0 | 0 | 605.8833 | 2.666667 |
| 552.9397 | 1544.174 | 0 | 501.9394 | 0 | 0 | 1553.188 | 3.96 |
| 340.7652 | 1281.199 | 1.692308 | 321.2081 | 0 | 0 | 1247.257 | 9.266667 |
| 702.6131 | 409.1254 | 3.777778 | 716.4724 | 0 | 0 | 404.9851 | 4 |
| 396.4878 | 795.3377 | 0 | 368.916 | 0 | 0 | 729.8456 | 5.333333 |
| 816.5505 | 1075.951 | 1.692308 | 764.1832 | 0 | 0 | 0 | 979.491 | 10.66667


| 762.9711 | 620.5558 | 0 | 731.0404 | 0 | 0 | 611.0381 | 5.28 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 990.6651 | 897.5869 | 1.888889 | 1000.725 | 0 | 0 | 892.8806 | 8 |
| 829.1224 | 365.5683 | 1.888889 | 900.2564 | 1.608696 | 0 | 374.8328 | 4.111111 |
| 595.5668 | 224.0078 | 0 | 611.3378 | 0 | 0 | 215.248 | 0 |
| 698.7205 | 535.1298 | 1.888889 | 698.95 | 0 | 0 | 540.5117 | 4 |
| 652.0094 | 521.1293 | 1.888889 | 663.9051 | 0 | 0 | 519.7841 | 1.333333 |
| 469.3558 | 197.2309 | 0 | 431.1264 | 0 | 0 | 203.1462 | 3.96 |
| 921.5662 | 843.4428 | 3.384615 | 834.5897 | 0 | 0 | 868.2662 | 7.92 |
| 471.499 | 1095.193 | 1.692308 | 422.7954 | 0 | 0 | 1116.504 | 3.96 |
| 707.2485 | 1651.609 | 3.384615 | 603.9935 | 0 | 0 | 1708.347 | 2.64 |
| 666.5281 | 1430.325 | 1.692308 | 568.587 | 0 | 0 | 1479.608 | 5.28 |
| 205.745 | 841.8393 | 0 | 187.4463 | 0 | 0 | 847.7754 | 0 |
| 720.1075 | 710.352 | 0 | 662.8326 | 0 | 0 | 647.6095 | 13.33333 |
| 627.9509 | 760.0606 | 0 | 765.0051 | 0 | 0 | 946.92 | 0 |
| 292.1277 | 772.0309 | 2.5 | 277.6915 | 0 | 0 | 783.3821 | 3.5 |
| 336.2225 | 847.0895 | 2.5 | 308.3457 | 0 | 0 | 880.6296 | 3.5 |
| 363.7817 | 970.4 | 1.25 | 362.4415 | 0 | 0 | 958.0673 | 7 |
| 420.7374 | 990.0582 | 0 | 396.7021 | 0 | 0 | 1010.293 | 1.75 |
| 371.1308 | 1272.421 | 3.75 | 349.8191 | 0 | 0 | 1287.628 | 5.25 |
| 112.6069 | 176.9603 | 0 | 91.40896 | 0 | 5.16129 | 192.1719 | 0 |
| 122.7126 | 220.3215 | 0 | 101.8985 | 0 | 6.193548 | 233.6905 | 0 |
| 127.0437 | 110.1607 | 0 | 121.3791 | 0 | 5.16129 | 113.8797 | 0 |
| 135.7057 | 304.6999 | 0 | 92.90746 | 0 | 7.225806 | 338.0802 | 0 |
| 129.931 | 339.8576 | 0 | 94.40597 | 0 | 8.258065 | 364.1777 | 0 |
| 241.3559 | 88.87618 | 0 | 217.1549 | 0 | 0 | 109.8627 | 0 |
| 238.2214 | 158.8115 | 0 | 203.1949 | 0 | 0 | 191.5173 | 0 |
| 459.2031 | 241.8598 | 0 | 376.9189 | 0 | 0 | 322.1648 | 1.307692 |
| 700.559 | 731.4073 | 1.125 | 575.4605 | 0 | 0 | 862.5703 | 2.615385 |
| 304.0457 | 75.7633 | 0 | 254.3815 | 0 | 0 | 120.2551 | 0 |
| 443.5306 | 132.5858 | 0 | 406.3899 | 0 | 0 | 158.8555 | 1.307692 |
| 390.2443 | 218.548 | 0 | 344.3456 | 0 | 0 | 264.2642 | 1.307692 |
| 297.7768 | 323.451 | 0 | 259.0348 | 0 | 0 | 360.7652 | 0 |
| 460.7704 | 412.3272 | 2.25 | 404.8388 | 0 | 0 | 469.1432 | 3.923077 |
| 655.1089 | 364.2466 | 2.25 | 572.3583 | 0 | 0 | 434.9967 | 1.307692 |
| 667.6468 | 498.2894 | 0 | 601.8293 | 0 | 0 | 567.1288 | 1.307692 |
| 593.9863 | 463.3217 | 0 | 488.5985 | 0 | 0 | 562.675 | 1.307692 |
| 117.5435 | 20.39781 | 0 | 93.06639 | 0 | 0 | 34.1465 | 1.307692 |
| 488.9808 | 562.3968 | 1.125 | 440.5142 | 0 | 0 | 620.5755 | 0 |
| 509.355 | 804.2566 | 2.25 | 440.5142 | 0 | 0 | 883.3551 | 1.307692 |
| 283.6715 | 763.461 | 0 | 209.3994 | 0 | 0 | 847.724 | 0 |
| 228.9563 | 91.51402 | 0 | 224.9972 | 0 | 0 | 95.19259 | 0 |
| 147.5155 | 14.80374 | 0 | 154.1076 | 0 | 0 | 8.044444 | 0 |
| 124.4662 | 160.1495 | 0 | 126.3683 | 0 | 0 | 159.5481 | 0 |
| 172.1014 | 173.6075 | 0 | 169.5184 | 0 | 0 | 175.637 | 0 |
| 139.8324 | 6.728972 | 1.5 | 137.1558 | 0 | 0 | 8.044444 | 5 |
| 106.0268 | 207.2523 | 1.5 | 106.3343 | 0 | 0 | 207.8148 | 0 |
| 172.1014 | 65.94393 | 0 | 169.5184 | 0 | 0 | 69.71852 | 0 |
|  |  |  |  |  |  | 0 |  |


| 1072.138 | 538.6196 | 1.444444 | 1129.191 | 0 | 0 | 488.2943 | 1.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1017.209 | 635.6964 | 2.888889 | 1070.294 | 0 | 0 | 578.2024 | 3 |
| 1328.475 | 787.5746 | 1.444444 | 1370.87 | 0 | 0 | 728.5661 | 0 |
| 905.316 | 537.0538 | 2.888889 | 940.3152 | 0 | 0 | 497.5951 | 3 |
| 1072.138 | 475.9894 | 2.888889 | 1072.325 | 0 | 0 | 466.5923 | 1.5 |
| 1106.723 | 573.0662 | 1.444444 | 1117.005 | 0 | 0 | 548.7498 | 3 |
| 2002.706 | 554.0543 | 2 | 2006.353 | 0 | 0 | 554.2166 | 0 |
| 1518.781 | 443.911 | 2 | 1474.004 | 0 | 0 | 470.344 | 2.5 |
| 1893.513 | 539.0347 | 8 | 1845.644 | 0 | 0 | 562.4394 | 7.5 |
| 177.513 | 496.7157 | 0 | 177.6285 | 0 | 0 | 499.8453 | 0 |
| 272.076 | 382.6444 | 0 | 262.2925 | 0 | 0 | 396.3788 | 0 |
| 368.298 | 54.86976 | 0 | 386.7984 | 0 | 0 | 42.26097 | 0 |
| 252.168 | 54.86976 | 0 | 263.9526 | 0 | 0 | 42.26097 | 2 |
| 338.436 | 15.88335 | 0 | 345.2964 | 0 | 0 | 5.829099 | 4 |
| 250.509 | 270.017 | 0 | 244.0316 | 0 | 0 | 275.4249 | 0 |
| 1497.428 | 1126.442 | 2.545455 | 1436.682 | 0 | 52.71429 | 1099.268 | 3 |
| 1382.929 | 835.3562 | 5.090909 | 1413.197 | 0 | 14.64286 | 818.6251 | 7.25 |
| 1068.058 | 879.3223 | 2.545455 | 1019.921 | 0 | 43.92857 | 850.751 | 2 |
| 901.6772 | 288.0539 | 1.272727 | 942.5819 | 0 | 0 | 284.4128 | 0 |
| 602.9072 | 360.8254 | 2.545455 | 594.6184 | 0 | 11.71429 | 354.9433 | 1.75 |
| 253.6567 | 601.4582 | 1 | 0 | 0 | 0 | 712.7896 | 5.428571 |
| 261.3433 | 791.5418 | 0 | 0 | 0 | 0 | 900.2104 | 13.57143 |
| 1150.752 | 226.0941 | 0 | 1154.444 | 0 | 0 | 188.25 | 5.052632 |
| 1319.155 | 117.843 | 1.517241 | 1296.583 | 0 | 0 | 95.46964 | 8.421053 |
| 596.4265 | 149.3591 | 0 | 582.8714 | 0 | 3.88835 | 134.7367 | 1.5625 |
| 1534.921 | 298.7183 | 4.551724 | 1539.259 | 0 | 0 | 266.2393 | 5.052632 |
| 528.0129 | 211.0212 | 1.517241 | 512.4759 | 0 | 12.96117 | 193.0266 | 3.125 |
| 1010.417 | 527.5529 | 4.551724 | 991.5045 | 0 | 0 | 514.9982 | 1.684211 |
| 1173.557 | 260.3508 | 0 | 1185.645 | 0 | 0 | 224.5554 | 3.368421 |
| 1275.3 | 212.3914 | 0 | 1246.294 | 0 | 19.44175 | 190.2541 | 6.371711 |
| 1522.642 | 182.2456 | 1.517241 | 1501.124 | 0 | 0 | 155.9786 | 3.368421 |
| 303.6911 | 174.5771 | 0 | 314.4343 | 0 | 7.776699 | 172.0169 | 0 |
| 378.9063 | 260.3508 | 0 | 359.1144 | 0 | 1.296117 | 257.5292 | 3.368421 |
| 1282.317 | 590.5852 | 1.517241 | 1165.665 | 0 | 18.14563 | 625.0384 | 1.5625 |
| 571.8678 | 491.926 | 0 | 572.0218 | 0 | 0 | 471.9696 | 3.368421 |
| 587.6556 | 180.8753 | 1.517241 | 588.9129 | 0 | 12.96117 | 154.9465 | 0 |
| 964.8076 | 348.0479 | 1.517241 | 951.9891 | 0 | 16.84951 | 313.8323 | 1.5625 |
| 1552.463 | 205.5401 | 7.586207 | 1527.125 | 0 | 0 | 185.5607 | 6.736842 |
| 884.3752 | 957.6065 | 0 | 1009.317 | 0 | 23.3301 | 887.6596 | 0 |
| 991.1676 | 766.342 | 2.666667 | 1063.17 | 0 | 25.92233 | 744.5311 | 0 |
| 729.1924 | 501.9091 | 0 | 754.0288 | 0 | 0 | 521.7214 | 0 |
| 933.2321 | 489.1854 | 1.517241 | 922.1685 | 0 | 0 | 473.3143 | 1.684211 |
| 1001.179 | 1705.977 | 0 | 1125.71 | 0 | 37.58738 | 1638.756 | 4.6875 |
| 1419.144 | 1045.514 | 3.034483 | 1384.986 | 0 | 0 | 1024.618 | 5.052632 |
| 799.2749 | 698.3082 | 1.333333 | 847.7567 | 0 | 41.47573 | 656.553 | 0 |
| 1680.519 | 602.9176 | 6.068966 | 1660.597 | 0 | 0 | 574.1625 | 8.421053 |
| 1726.129 | 709.7985 | 1.517241 | 1754.2 | 0 | 0 | 650.8071 | 1.684211 |


| 1201.415 | 1240.011 | 4 | 1342.86 | 0 | 27.21845 | 1159.473 | 3.125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1220.92 | 776.9416 | 3.034483 | 1218.58 | 0 | 0 | 744.9321 | 3.368421 |
| 343.9508 | 82.89341 | 0 | 326.5948 | 0 | 10.36893 | 85.35189 | 1.5625 |
| 785.8797 | 448.0774 | 0 | 748.4262 | 0 | 0 | 425.7768 | 1.684211 |
| 408.7276 | 459.0396 | 3.034483 | 422.1411 | 0 | 7.776699 | 414.9415 | 3.125 |
| 1089.133 | 649.191 | 1.555556 | 1094.156 | 0 | 0 | 646.2655 | 1.363636 |
| 555.718 | 291.3443 | 3.111111 | 562.7087 | 0 | 0 | 285.4473 | 1.363636 |
| 1048.244 | 657.108 | 0 | 1088.639 | 0 | 0 | 625.4182 | 0 |
| 808.4861 | 655.5246 | 3.111111 | 818.3181 | 0 | 0 | 647.8691 | 2.727273 |
| 382.8693 | 107.6707 | 0 | 395.3672 | 0 | 0 | 96.21818 | 0 |
| 936.7287 | 712.5267 | 3.111111 | 936.0088 | 0 | 0 | 723.24 | 2.727273 |
| 1048.244 | 690.3592 | 1.555556 | 1053.7 | 0 | 0 | 683.1491 | 5.454545 |
| 925.5771 | 679.2755 | 1.555556 | 912.1029 | 0 | 0 | 702.3927 | 1.363636 |
| 307.8689 | 402.9711 | 2.181818 | 288.3416 | 0 | 0 | 427.0114 | 1.833333 |
| 463.5726 | 124.2242 | 0 | 458.5674 | 0 | 0 | 130.4326 | 0 |
| 362.7191 | 805.9422 | 0 | 302.2376 | 0 | 0 | 867.9976 | 1.833333 |
| 665.2798 | 683.233 | 7.636364 | 651.3741 | 0 | 0 | 701.8514 | 3.666667 |
| 373.3352 | 580.2178 | 0 | 316.1336 | 0 | 0 | 635.0823 | 0 |
| 553.8101 | 153.0078 | 1.090909 | 545.4173 | 0 | 0 | 150.6186 | 1.833333 |
| 403.4144 | 345.4038 | 1.090909 | 376.9285 | 0 | 0 | 368.0062 | 1.833333 |
| 1305 | 755 | 3 | 1290 | 0 | 0 | 752 | 13 |
| 988.0712 | 1208.144 | 2.230769 | 985.0281 | 0 | 0 | 1208.591 | 1.454545 |
| 913.6402 | 1506.687 | 4.461538 | 920.746 | 0 | 0 | 1493.265 | 4.363636 |
| 695.9296 | 938.8208 | 0 | 697.6495 | 0 | 0 | 927.7304 | 4.363636 |
| 394.4842 | 270.5938 | 2.230769 | 385.6924 | 0 | 0 | 271.9648 | 2.909091 |
| 604.7517 | 536.106 | 0 | 612.5703 | 0 | 0 | 535.0335 | 1.454545 |
| 1203.921 | 468.7752 | 2.230769 | 1120.418 | 0 | 46.77273 | 457.0529 | 0 |
| 962.0204 | 388.7404 | 2.230769 | 854.6775 | 0 | 38.42045 | 391.0198 | 1.6 |
| 366.5726 | 160.0696 | 2.230769 | 332.1751 | 0 | 10.02273 | 164.4355 | 3.2 |
| 275.3946 | 264.2418 | 0 | 233.4203 | 0 | 8.352273 | 279.6698 | 0 |
| 467.0544 | 378.5772 | 2.230769 | 430.9299 | 0 | 16.70455 | 376.7773 | 3.2 |
| 26.05084 | 651.7118 | 0 | 26.46909 | 0 | 0 | 649.4113 | 1.454545 |
| 364.7118 | 552.6212 | 2.230769 | 330.3796 | 0 | 26.72727 | 558.0448 | 0 |
| 385.1803 | 579.2994 | 0 | 389.4737 | 0 | 0 | 573.1594 | 2.909091 |
| 601.0301 | 1340.265 | 4.461538 | 597.4451 | 0 | 0 | 1340.761 | 2.909091 |
| 703.3727 | 1760.765 | 0 | 688.1962 | 0 | 0 | 1766.5 | 1.454545 |
| 437.282 | 576.7586 | 2.230769 | 431.068 | 0 | 0 | 576.972 | 1.454545 |
| 772.2214 | 1045.534 | 2.230769 | 782.7287 | 0 | 0 | 1037.025 | 4.363636 |
| 891.3109 | 1030.289 | 0 | 882.9331 | 0 | 0 | 1025.587 | 2.909091 |
| 1092.745 | 574.0567 | 5.076923 | 1106.339 | 0 | 0 | 557.965 | 1.5 |
| 1154.448 | 868.2409 | 0 | 1151.86 | 0 | 0 | 850.4595 | 3 |
| 1142.505 | 1008.177 | 1.692308 | 1159.776 | 0 | 0 | 983.9896 | 0 |
| 1068.86 | 906.4054 | 8.461538 | 1062.798 | 0 | 0 | 901.3282 | 9 |
| 939.4818 | 755.3378 | 3.384615 | 932.1751 | 0 | 0 | 756.6706 | 4.5 |
| 839.9604 | 877.782 | 3.384615 | 849.0512 | 0 | 0 | 861.5871 | 3 |
| 945.9635 | 487.604 | 0 | 948.6454 | 0 | 0 | 473.2958 | 1.8 |
| 518.5282 | 445.4653 | 4 | 532.8487 | 0 | 0 | 434.1057 | 5.4 |


| 744.5083 | 434.9307 | 0 | 735.5059 | 0 | 0 | 432.5984 | 1.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 360.4274 | 18.94788 | 0 | 345.489 | 0 | 0 | 18.91952 | 1.8 |
| 420.75 | 392.4919 | 1.333333 | 397.0093 | 0 | 0 | 398.6614 | 1.8 |
| 251.8468 | 169.1775 | 1.333333 | 250.0249 | 0 | 0 | 171.6271 | 1.8 |
| 530.8387 | 301.8127 | 0 | 512.1722 | 0 | 0 | 298.6582 | 1.8 |
| 473.5323 | 771.4495 | 1.333333 | 422.7694 | 0 | 0 | 801.3769 | 1.8 |
| 206.6048 | 8.120521 | 0 | 201.5352 | 0 | 0 | 6.756972 | 0 |
| 1271.366 | 560.2092 | 2.482759 | 1201.898 | 0 | 0 | 551.6032 | 7.714286 |
| 1438.361 | 429.9574 | 3.724138 | 1409.387 | 0 | 0 | 401.953 | 6.171429 |
| 1011.421 | 743.5734 | 4.965517 | 994.4093 | 0 | 0 | 700.0166 | 9.257143 |
| 937.3766 | 384.4325 | 1.241379 | 930.5172 | 0 | 0 | 370.3403 | 1.5 |
| 253.6431 | 171.983 | 0 | 243.2641 | 0 | 0 | 178.6032 | 1.5 |
| 1250.886 | 718.2818 | 2.482759 | 1246.47 | 0 | 0 | 671.5707 | 4.628571 |
| 1181.567 | 815.6545 | 0 | 1242.195 | 0 | 0 | 868.7286 | 1.5 |
| 1091.768 | 394.5492 | 2.482759 | 1090.681 | 0 | 0 | 394.2707 | 7.628571 |
| 649.0742 | 456.5136 | 1.241379 | 630.1512 | 0 | 0 | 442.7667 | 1.542857 |
| 1224.104 | 480.5406 | 1.241379 | 1325.821 | 0 | 0 | 482.1961 | 1.5 |
| 196.9279 | 102.431 | 0 | 187.5084 | 0 | 0 | 98.94227 | 3.085714 |
| 696.3369 | 834.6232 | 4.965517 | 662.3062 | 0 | 0 | 849.0122 | 6 |
| 1194.17 | 1260.787 | 3.724138 | 1175.77 | 0 | 0 | 1198.438 | 3.085714 |
| 415.9116 | 374.3159 | 2.482759 | 413.4406 | 0 | 0 | 351.2451 | 1.542857 |
| 787.7114 | 1268.374 | 3.724138 | 811.5118 | 0 | 0 | 1186.071 | 3.085714 |
| 500.9845 | 684.1381 | 0 | 516.4166 | 0 | 0 | 628.2834 | 0 |
| 825.5216 | 763.8067 | 0 | 819.2508 | 0 | 0 | 758.4164 | 6 |
| 1285.545 | 1262.051 | 2.482759 | 1292.578 | 0 | 0 | 1176.176 | 1.542857 |
| 937.4431 | 616.2252 | 0 | 919.9534 | 0 | 0 | 595.2997 | 0 |
| 478.9285 | 631.0257 | 1.241379 | 479.5297 | 0 | 0 | 589.9433 | 1.542857 |
| 365.4981 | 532.3884 | 0 | 365.7951 | 0 | 0 | 503.3688 | 1.542857 |
| 460.0235 | 402.1366 | 1.241379 | 442.6753 | 0 | 0 | 387.1116 | 1.542857 |
| 474.2023 | 577.9133 | 1.241379 | 456.4754 | 0 | 0 | 568.9181 | 0 |
| 638.0462 | 834.6232 | 3.724138 | 630.1512 | 0 | 0 | 805.1428 | 3.085714 |
| 1269.484 | 1039.532 | 2.482759 | 1313.625 | 0 | 0 | 1100.131 | 4.5 |
| 981.4884 | 459.0428 | 1.241379 | 958.9315 | 0 | 0 | 468.5098 | 3 |
| 697.9123 | 245.3286 | 1.241379 | 662.3062 | 0 | 0 | 266.6105 | 3 |
| 512.0124 | 182.0996 | 1.241379 | 494.3755 | 0 | 0 | 192.8397 | 0 |
| 499.409 | 36.67284 | 0 | 456.7088 | 0 | 0 | 63.41707 | 6 |
| 275.699 | 73.34568 | 1.241379 | 265.2364 | 0 | 0 | 80.24201 | 0 |
| 105.5533 | 5.058322 | 0 | 91.02787 | 0 | 0 | 14.23649 | 0 |
| 360.7718 | 30.34993 | 0 | 328.0142 | 0 | 0 | 45.29791 | 1.5 |
| 332.4142 | 13.91039 | 0 | 280.9308 | 0 | 0 | 42.70946 | 1.5 |
| 493.1073 | 26.55619 | 1.241379 | 459.8477 | 0 | 0 | 44.00368 | 1.5 |
| 551.398 | 37.93742 | 3.724138 | 514.7783 | 0 | 0 | 64.7113 | 0 |
| 1055.533 | 409.7241 | 1.241379 | 1024.001 | 0 | 0 | 428.035 | 7.5 |
| 190.6262 | 8.852064 | 1.241379 | 167.9307 | 0 | 0 | 22.00184 | 1.5 |
| 789.2868 | 54.37697 | 2.482759 | 764.3202 | 0 | 0 | 73.77088 | 0 |
| 428.515 | 330.0555 | 2.482759 | 433.1671 | 0 | 0 | 318.3796 | 3 |
| 623.8674 | 577.9133 | 0 | 612.084 | 0 | 0 | 583.6959 | 0 |


| 789.2868 | 459.0428 | 3.724138 | 761.1813 | 0 | 0 | 465.9213 | 1.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 261.5202 | 18.96871 | 0 | 257.3892 | 0 | 0 | 19.41339 | 0 |
| 524.6158 | 75.87484 | 0 | 516.3478 | 0 | 0 | 75.0651 | 1.5 |
| 945.2537 | 825.7711 | 1.241379 | 906.4454 | 0 | 0 | 852.8949 | 1.5 |
| 1126.427 | 1262.051 | 2.482759 | 1089.196 | 0 | 0 | 1278.695 | 1.5 |
| 1157.081 | 564.0313 | 5.866667 | 1157.986 | 0 | 0 | 589.2526 | 11.61111 |
| 360.0579 | 390.6574 | 1.285714 | 357.6779 | 0 | 0 | 400.2161 | 2.777778 |
| 654.2123 | 622.4902 | 2.571429 | 642.1944 | 0 | 0 | 660.8832 | 1.388889 |
| 548.6156 | 85.93434 | 0 | 581.8255 | 0 | 0 | 83.35602 | 0 |
| 948.3667 | 567.4139 | 1.285714 | 959.3938 | 0 | 0 | 630.9904 | 1.4 |
| 907.3865 | 521.1595 | 0 | 938.4683 | 0 | 0 | 494.7927 | 1.4 |
| 561.4046 | 242.4933 | 0 | 578.6411 | 0 | 0 | 219.4535 | 1.4 |
| 993.8819 | 166.128 | 5.866667 | 985.4728 | 0 | 0 | 160.8417 | 8.4 |
| 654.428 | 501.0634 | 0 | 705.0669 | 0 | 0 | 462.0791 | 1.4 |
| 1086.905 | 377.8072 | 4.4 | 1115.14 | 0 | 0 | 343.4925 | 4.2 |
| 1176.665 | 622.9799 | 5.866667 | 1205.907 | 0 | 0 | 584.755 | 2.8 |
| 843.7388 | 87.08321 | 2.933333 | 839.5969 | 0 | 0 | 79.05779 | 4.2 |
| 1457.367 | 407.2815 | 2.933333 | 1481.451 | 0 | 0 | 381.6583 | 4.2 |
| 1310.488 | 435.4161 | 5.866667 | 1329.092 | 0 | 0 | 410.2827 | 8.4 |
| 739.4046 | 561.0096 | 2.571429 | 754.3752 | 0 | 0 | 564.7787 | 1.388889 |
| 665.4641 | 375.2873 | 2.571429 | 658.4525 | 0 | 0 | 398.8996 | 1.388889 |
| 1152.185 | 874.8514 | 1.466667 | 1177.67 | 0 | 0 | 892.3892 | 2.333333 |
| 905.7545 | 198.2818 | 2.933333 | 917.3974 | 0 | 0 | 181.2877 | 2.8 |
| 589.1484 | 166.128 | 2.933333 | 584.2848 | 0 | 0 | 153.2873 | 0 |
| 1153.817 | 100.4806 | 1.466667 | 1137.832 | 0 | 0 | 89.96231 | 15.4 |
| 559.7726 | 156.7498 | 0 | 561.9351 | 0 | 0 | 131.0359 | 1.378378 |
| 791.5152 | 204.9805 | 1.466667 | 795.0449 | 0 | 0 | 202.0335 | 0 |
| 729.4995 | 104.4999 | 1.466667 | 726.1378 | 0 | 0 | 103.593 | 1.4 |
| 1362.712 | 450.1532 | 4.4 | 1360.138 | 0 | 0 | 384.4545 | 4.135135 |
| 1610.774 | 131.2947 | 0 | 1577.25 | 0 | 0 | 117.4379 | 0 |
| 1317.016 | 723.4605 | 4.4 | 1305.861 | 0 | 0 | 639.1092 | 6.891892 |
| 536.9247 | 36.17303 | 0 | 541.3617 | 0 | 0 | 25.89824 | 0 |
| 913.9144 | 40.19225 | 2.933333 | 914.1557 | 0 | 0 | 29.98744 | 1.4 |
| 891.0666 | 60.28838 | 1.466667 | 881.7388 | 0 | 0 | 50.43342 | 4.2 |
| 913.9144 | 76.36528 | 1.466667 | 917.3974 | 0 | 0 | 72.24246 | 0 |
| 562.5904 | 426.521 | 0 | 526.8141 | 0 | 0 | 421.5401 | 1.378378 |
| 690.3318 | 645.7555 | 0 | 681.6656 | 0 | 0 | 577.2998 | 2.756757 |
| 556.5086 | 450.1532 | 1.466667 | 542.7782 | 0 | 0 | 406.7059 | 2.756757 |
| 447.1653 | 29.47432 | 0 | 445.7319 | 0 | 0 | 23.17211 | 0 |
| 980.826 | 188.9036 | 1.466667 | 961.0367 | 0 | 0 | 165.6492 | 6.891892 |
| 1188.089 | 293.4034 | 1.466667 | 1176.552 | 0 | 0 | 250.9462 | 1.378378 |
| 747.4514 | 68.32683 | 1.466667 | 735.8629 | 0 | 0 | 58.61181 | 0 |
| 613.6283 | 409.961 | 0 | 608.2309 | 0 | 0 | 369.6202 | 0 |
| 739.4046 | 781.3148 | 0 | 734.347 | 0 | 0 | 747.8938 | 1.378378 |
| 822.9894 | 813.3359 | 3.857143 | 977.255 | 0 | 0 | 913.9655 | 3.378378 |
| 771.5526 | 557.1671 | 2.571429 | 793.414 | 0 | 0 | 506.8371 | 6.891892 |
| 501.5092 | 563.5713 | 2.571429 | 504.4645 | 0 | 0 | 527.8523 | 6.891892 |


| 916.2187 | 571.2564 | 1.285714 | 884.4398 | 0 | 0 | 610.8562 | 2.777778 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 692.7899 | 559.7288 | 2.571429 | 692.5944 | 0 | 0 | 577.9437 | 6.944444 |
| 626.8865 | 935.0161 | 0 | 608.2309 | 0 | 0 | 901.1811 | 1.378378 |
| 745.8342 | 999.0583 | 3.857143 | 753.5039 | 0 | 0 | 945.6839 | 4.135135 |
| 790.8414 | 699.3408 | 0 | 785.2655 | 0 | 0 | 722.7588 | 1.388889 |
| 499.9018 | 449.5762 | 0 | 502.8681 | 0 | 0 | 421.5401 | 1.378378 |
| 325 | 860 | 4 | 0 | 0 | 0 | 1051 | 47 |
| 789.8862 | 152.5059 | 2.857143 | 781.2901 | 0 | 0 | 153.9334 | 1.2 |
| 1575.984 | 175.9684 | 1.428571 | 1577.714 | 0 | 0 | 170.8492 | 1.2 |
| 1411.188 | 405.5652 | 7.142857 | 1401.782 | 0 | 0 | 397.5204 | 8.4 |
| 895.9621 | 241.3281 | 0 | 906.1452 | 0 | 0 | 226.6712 | 0 |
| 918.6926 | 97.20158 | 1.428571 | 911.8204 | 0 | 0 | 91.34511 | 4.8 |
| 784.2036 | 65.35968 | 2.857143 | 792.6406 | 0 | 0 | 62.58832 | 1.2 |
| 1216.084 | 134.0711 | 4.285714 | 1212.608 | 0 | 0 | 142.0924 | 1.2 |
| 401.0392 | 1481.182 | 3.75 | 413.4295 | 0 | 26.94444 | 1429.245 | 1.25 |
| 478.5882 | 1722.945 | 6.25 | 493.0202 | 0 | 49.84722 | 1641.267 | 1.25 |
| 476.3725 | 1693.873 | 0 | 519.5504 | 0 | 20.20833 | 1624.488 | 2.5 |
| 782.6697 | 287.0101 | 0 | 782.5718 | 0 | 0 | 272.2754 | 2.941176 |
| 540.1955 | 41.50973 | 0 | 545.9803 | 0 | 0 | 29.59515 | 4.411765 |
| 569.3538 | 175.5269 | 0 | 561.1464 | 0 | 0 | 169.2843 | 5.882353 |
| 758.1153 | 162.4809 | 2.384615 | 755.2727 | 0 | 0 | 157.4462 | 2.941176 |
| 351.434 | 231.2685 | 0 | 370.0533 | 0 | 0 | 219.0041 | 0 |
| 587.7696 | 27.27782 | 1.192308 | 582.379 | 0 | 0 | 18.9409 | 2.941176 |
| 288.5135 | 28.46382 | 0 | 297.2559 | 0 | 0 | 23.67612 | 1.470588 |
| 690.5909 | 45.06771 | 0 | 688.5418 | 0 | 0 | 34.33038 | 1.470588 |
| 526.3837 | 236.0125 | 2.384615 | 517.1647 | 0 | 0 | 229.6584 | 1.470588 |
| 606.1853 | 321.4039 | 0 | 599.0617 | 0 | 0 | 318.4439 | 0 |
| 302.3253 | 252.6164 | 0 | 295.7393 | 0 | 0 | 253.3345 | 0 |
| 698.2641 | 215.8506 | 1.192308 | 702.1913 | 0 | 0 | 201.247 | 0 |
| 507.968 | 23.71985 | 0 | 506.5484 | 0 | 0 | 18.9409 | 0 |
| 466.5325 | 391.3775 | 1.192308 | 456.5002 | 0 | 0 | 388.2884 | 1.470588 |
| 349.8994 | 579.9502 | 0 | 339.7211 | 0 | 0 | 574.146 | 0 |
| 448.1168 | 273.9642 | 1.192308 | 438.3008 | 0 | 0 | 275.8268 | 0 |
| 627.6704 | 504.0467 | 0 | 602.4472 | 0 | 0 | 537.3124 | 9.333333 |
| 888.5603 | 53.36965 | 1.192308 | 899.3509 | 0 | 0 | 34.33038 | 0 |
| 808.7587 | 54.55565 | 1.192308 | 797.7379 | 0 | 0 | 46.16844 | 2.941176 |
| 1216.975 | 67.60156 | 2.384615 | 1228.456 | 0 | 0 | 39.0656 | 2.941176 |
| 237.8702 | 491.0008 | 1.192308 | 227.4918 | 0 | 0 | 491.2796 | 0 |
| 290.0482 | 628.5759 | 0 | 280.5732 | 0 | 0 | 619.1306 | 2.941176 |
| 747.3728 | 549.1144 | 3.576923 | 731.007 | 0 | 0 | 543.367 | 5.882353 |
| 375.9884 | 519.4646 | 0 | 365.5035 | 0 | 0 | 516.1395 | 0 |
| 254.7513 | 600.1121 | 1.192308 | 244.1745 | 0 | 0 | 597.8221 | 1.470588 |
| 455.79 | 603.6701 | 1.192308 | 452.6239 | 0 | 0 | 605.0816 | 9.333333 |
| 570.8885 | 684.3176 | 0 | 577.694 | 0 | 0 | 670.7768 | 0 |
| 1048.164 | 914.4001 | 3.576923 | 1038.879 | 0 | 0 | 885.487 | 4.411765 |
| 1005.193 | 526.5806 | 3.576923 | 988.831 | 0 | 0 | 526.7937 | 4.411765 |
| 1141.777 | 228.8965 | 0 | 1208.049 | 0 | 0 | 200.8871 | 3.733333 |


| 1256.875 | 457.793 | 2.384615 | 1324.753 | 0 | 0 | 442.9197 | 5.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 425.8481 | 390.8418 | 5.142857 | 417.4025 | 0 | 0 | 400.7308 | 8.296296 |
| 616.8113 | 676.4015 | 0 | 532.8974 | 0 | 0 | 728.4714 | 8.296296 |
| 570.9801 | 868.2169 | 5.142857 | 522.7662 | 0 | 0 | 911.6626 | 8.296296 |
| 309.3605 | 298.5397 | 1.714286 | 303.9339 | 0 | 0 | 309.1352 | 3.111111 |
| 361.925 | 225.1241 | 2.713043 | 347.1232 | 0 | 0 | 243.173 | 0 |
| 479.4331 | 465.348 | 0 | 446.2278 | 0 | 0 | 494.6361 | 0 |
| 750.4852 | 804.4069 | 1.356522 | 659.1645 | 0 | 0 | 892.5556 | 1.368421 |
| 916.5633 | 557.3195 | 2.713043 | 867.4042 | 0 | 0 | 603.7876 | 0 |
| 510.7686 | 941.6777 | 1.356522 | 452.4906 | 0 | 0 | 1001.707 | 0 |
| 810.0226 | 510.6474 | 2.713043 | 752.5815 | 0 | 0 | 564.0476 | 1.368421 |
| 731.6839 | 358.2768 | 1.356522 | 704.5702 | 0 | 0 | 385.4845 | 1.368421 |
| 1428.899 | 343.177 | 9.495652 | 1423.232 | 0 | 0 | 341.2712 | 5.473684 |
| 1588.71 | 403.5762 | 4.069565 | 1561.014 | 0 | 0 | 417.2628 | 2.736842 |
| 653.3451 | 518.8837 | 0 | 618.456 | 0 | 0 | 547.1393 | 0 |
| 600.0748 | 237.4785 | 2.713043 | 611.3997 | 0 | 0 | 225.2946 | 1.301887 |
| 1339.593 | 323.9591 | 9.495652 | 1344.146 | 0 | 0 | 300.3928 | 6.509434 |
| 567.1725 | 67.2627 | 1.356522 | 561.6165 | 0 | 0 | 64.17482 | 2.603774 |
| 1435.166 | 359.6495 | 6.782609 | 1451.415 | 0 | 0 | 357.8512 | 1.368421 |
| 1254.987 | 333.5681 | 2.713043 | 1246.135 | 0 | 0 | 322.2395 | 3.90566 |
| 1516.638 | 100.2077 | 5.426087 | 1485.717 | 0 | 0 | 109.2337 | 2.603774 |
| 625.1432 | 83.73519 | 2.713043 | 611.3997 | 0 | 0 | 81.92531 | 5.207547 |
| 900.8956 | 325.3318 | 2.713043 | 903.6535 | 0 | 0 | 301.7582 | 1.301887 |
| 495.1009 | 49.41749 | 0 | 482.2746 | 0 | 0 | 43.6935 | 0 |
| 562.4722 | 141.3889 | 1.356522 | 560.0608 | 0 | 0 | 139.273 | 0 |
| 669.0129 | 60.39916 | 4.069565 | 662.7386 | 0 | 0 | 59.88603 | 1.301887 |
| 974.534 | 70.00811 | 2.713043 | 955.3453 | 0 | 0 | 72.36735 | 1.301887 |
| 936.9314 | 118.0529 | 1.356522 | 919.4331 | 0 | 0 | 113.33 | 3.90566 |
| 592.2409 | 63.14457 | 2.713043 | 592.731 | 0 | 0 | 53.25145 | 2.603774 |
| 667.4461 | 253.951 | 1.356522 | 684.5188 | 0 | 0 | 217.1021 | 2.603774 |
| 819.4233 | 253.951 | 0 | 838.5355 | 0 | 0 | 231.9292 | 1.301887 |
| 485.7002 | 216.8879 | 0 | 453.7965 | 0 | 0 | 207.5441 | 2.603774 |
| 206.8143 | 6.86354 | 0 | 197.577 | 0 | 0 | 9.557952 | 0 |
| 1790.824 | 557.3195 | 6.782609 | 1942.203 | 0 | 0 | 471.5 | 1.307692 |
| 1292.589 | 361.0222 | 1.356522 | 1336.467 | 0 | 0 | 337.5667 | 1.307692 |
| 860.1594 | 609.4824 | 1.356522 | 814.17 | 0 | 0 | 643.8559 | 1.368421 |
| 955.7327 | 388.4764 | 1.356522 | 979.114 | 0 | 0 | 382.6667 | 1.307692 |
| 1048.172 | 248.4602 | 1.356522 | 1070.455 | 0 | 0 | 233.7 | 1.307692 |
| 943.1985 | 396.7126 | 5.426087 | 908.1126 | 0 | 0 | 422.7895 | 6.842105 |
| 990.2018 | 612.2278 | 2.713043 | 973.8725 | 0 | 0 | 630.0392 | 2.736842 |
| 747.3516 | 483.1932 | 0 | 710.833 | 0 | 0 | 497.3994 | 1.368421 |
| 1543.273 | 275.9143 | 4.069565 | 1602.478 | 0 | 0 | 250.1 | 3.923077 |
| 1482.169 | 194.9245 | 4.069565 | 1544.789 | 0 | 0 | 164 | 1.307692 |
| 1720.319 | 251.2056 | 0 | 1778.751 | 0 | 0 | 232.3333 | 5.230769 |
| 792.7881 | 116.6802 | 5.426087 | 809.1158 | 0 | 0 | 107.9492 | 1.307692 |
| 844.4917 | 150.9979 | 4.069565 | 866.9406 | 0 | 0 | 143.5 | 0 |
| 791.2213 | 96.08956 | 0 | 809.2514 | 0 | 0 | 86.1 | 1.307692 |


| 1159.413 | 142.7616 | 4.069565 | 1177.821 | 0 | 0 | 135.3 | 2.615385 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 485.7002 | 26.08145 | 2.713043 | 451.1601 | 0 | 0 | 43.6935 | 3.90566 |
| 990.2018 | 78.24436 | 1.356522 | 973.8835 | 0 | 0 | 84.65615 | 0 |
| 723.85 | 64.51728 | 6.782609 | 695.4088 | 0 | 0 | 62.8094 | 2.603774 |
| 1024.671 | 76.87165 | 0 | 1006.815 | 0 | 0 | 81.92531 | 2.603774 |
| 1029.371 | 193.5518 | 1.356522 | 983.2179 | 0 | 0 | 208.9095 | 1.301887 |
| 1657.648 | 266.3054 | 4.069565 | 1613.286 | 0 | 0 | 281.2769 | 3.90566 |
| 554.6383 | 43.92666 | 1.356522 | 533.6135 | 0 | 0 | 46.42434 | 2.603774 |
| 582.8403 | 48.04478 | 2.713043 | 538.1522 | 34.48828 | 0 | 0 | 0 |
| 814.723 | 93.34415 | 2.713043 | 726.8735 | 102.1875 | 0 | 0 | 2 |
| 1129.645 | 119.4256 | 4.069565 | 996.7735 | 120.0703 | 0 | 0 | 7 |
| 1056.006 | 152.3706 | 0 | 993.6749 | 68.97656 | 0 | 79.19446 | 2.301887 |
| 1491.57 | 157.8614 | 2.713043 | 1439.045 | 0 | 0 | 173.4086 | 6.509434 |
| 1938.101 | 318.4683 | 2.713043 | 1930.654 | 0 | 0 | 285.3731 | 2.603774 |
| 1510.371 | 269.0508 | 0 | 1481.05 | 0 | 0 | 266.2572 | 2.603774 |
| 656.4787 | 54.90832 | 0 | 623.8455 | 0 | 0 | 71.00193 | 0 |
| 585.9738 | 124.9164 | 0 | 586.5069 | 0 | 0 | 124.3667 | 1.307692 |
| 562.4722 | 96.08956 | 0 | 567.2772 | 0 | 0 | 99.76667 | 0 |
| 719.1497 | 101.5804 | 1.356522 | 709.8977 | 0 | 0 | 110.7 | 0 |
| 1101.443 | 221.006 | 2.713043 | 1147.325 | 1.277344 | 0 | 180.5667 | 6.230769 |
| 488.8338 | 60.39916 | 1.356522 | 493.5632 | 0 | 0 | 61.5 | 1.307692 |
| 266.3517 | 42.55395 | 1.356522 | 288.446 | 0 | 0 | 27.33333 | 1.307692 |
| 700.3484 | 152.3706 | 1.356522 | 719.5126 | 0 | 0 | 142.1333 | 0 |
| 781.8207 | 93.34415 | 0 | 772.3944 | 0 | 0 | 105.2333 | 0 |
| 922.8304 | 134.5254 | 0 | 931.0397 | 0 | 0 | 136.6667 | 0 |
| 750.4852 | 123.5437 | 0 | 753.1647 | 0 | 0 | 125.7333 | 3.923077 |
| 830.3907 | 53.53561 | 0 | 833.2886 | 0 | 0 | 57.4 | 0 |
| 835.7213 | 273.8352 | 0 | 865.9492 | 0 | 0 | 248.1074 | 2.642857 |
| 785.5781 | 524.1592 | 3.454545 | 821.4465 | 0 | 0 | 489.2844 | 1.321429 |
| 640.7197 | 752.3552 | 3.454545 | 550.7214 | 0 | 0 | 750.5507 | 49.05679 |
| 709.4346 | 529.6913 | 5.181818 | 728.7324 | 0 | 0 | 508.6895 | 3.964286 |
| 551.5761 | 840.8676 | 1.727273 | 200.2623 | 0 | 0 | 985.3142 | 44.55738 |
| 440.1466 | 594.6925 | 0 | 456.1531 | 0 | 0 | 579.3793 | 1.321429 |
| 429.0036 | 540.7553 | 1.727273 | 215.0966 | 0 | 0 | 596.0599 | 38.9877 |
| 622.1481 | 80.21434 | 0 | 634.1641 | 0 | 0 | 59.60122 | 0 |
| 874.7217 | 326.3894 | 6.909091 | 871.5121 | 0 | 0 | 329.8858 | 3.964286 |
| 1236.868 | 612.6716 | 5.181818 | 1285.017 | 0 | 0 | 579.3793 | 1.321429 |
| 1526.584 | 793.8454 | 5.181818 | 1555.742 | 0 | 0 | 761.1752 | 5.285714 |
| 811.5783 | 874.0597 | 3.454545 | 687.9382 | 0 | 0 | 905.8829 | 18.03044 |
| 594.2907 | 900.3369 | 1.727273 | 107.5483 | 0 | 0 | 1081.381 | 61.26639 |
| 945.2937 | 786.9304 | 3.454545 | 995.7489 | 0 | 0 | 745.7083 | 5.285714 |
| 1079.009 | 770.3343 | 5.181818 | 537.7415 | 0 | 0 | 873.8358 | 111.6446 |
| 887.7218 | 987.4662 | 3.454545 | 0 | 0 | 0 | 1261.592 | 118.8197 |
| 1281.439 | 825.6545 | 1.727273 | 1268.328 | 0 | 0 | 810.9142 | 18.56557 |
| 869.1502 | 598.8416 | 3.454545 | 912.3062 | 0 | 0 | 569.6768 | 0 |
| 765.1493 | 156.2797 | 0 | 780.6523 | 0 | 0 | 146.9239 | 2.642857 |
| 1054.866 | 128.6196 | 1.727273 | 1056.94 | 0 | 0 | 113.6581 | 1.321429 |


| 387.7687 | 609.7148 | 1.3 | 357.6314 | 0 | 0 | 653.3102 | 1.311111 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 233.5683 | 417.2584 | 0 | 221.2683 | 0 | 0 | 440.3794 | 0 |
| 165.5387 | 452.8386 | 2.6 | 167.2377 | 0 | 0 | 464.5761 | 0 |
| 342.4156 | 600.0111 | 1.3 | 306.1736 | 0 | 0 | 640.4053 | 2.622222 |
| 605.4633 | 810.2576 | 1.3 | 548.0251 | 0 | 0 | 880.7589 | 5.244444 |
| 297.0625 | 456.0732 | 1.3 | 295.8821 | 0 | 0 | 474.2548 | 1.311111 |
| 294.7949 | 667.9369 | 0 | 283.0176 | 0 | 0 | 688.7986 | 1.311111 |
| 183.6799 | 266.8513 | 0 | 185.2479 | 0 | 0 | 280.6814 | 0 |
| 365.0921 | 870.097 | 1.3 | 311.3194 | 0 | 0 | 909.7949 | 5.244444 |
| 496.616 | 950.961 | 3.9 | 95.19684 | 0 | 0 | 1063.04 | 41.95556 |
| 990.6717 | 1006.611 | 4.333333 | 972.6624 | 0 | 0 | 1035.574 | 1.5 |
| 900.022 | 1259.015 | 2.166667 | 849.1841 | 0 | 0 | 1309.294 | 3 |
| 1053.263 | 1015.626 | 2.166667 | 996.4915 | 0 | 0 | 1067.508 | 3 |
| 966.9301 | 767.7288 | 4.333333 | 866.5144 | 0 | 0 | 850.0524 | 1.5 |
| 1092.113 | 637.0196 | 0 | 1057.148 | 0 | 0 | 667.5725 | 3 |
| 832.0807 | 377.9149 | 6.25 | 839.5511 | 32.72026 | 0 | 370.5508 | 8.545455 |
| 934.2372 | 1968.307 | 3.75 | 894.0453 | 73.62058 | 0 | 2016.991 | 2.848485 |
| 980.3723 | 998.5877 | 3.75 | 974.0837 | 72.25723 | 0 | 984.0636 | 4.272727 |
| 482.7716 | 1120.623 | 0 | 430.8447 | 50.44373 | 0 | 1164.588 | 1.424242 |
| 484.4193 | 927.7286 | 0 | 463.2006 | 25.90354 | 0 | 960.989 | 0 |
| 1003.44 | 641.668 | 2.5 | 1050.716 | 46.3537 | 0 | 604.0115 | 2.848485 |
| 863.3867 | 547.1893 | 1.25 | 865.0953 | 54.53376 | 0 | 532.073 | 2.848485 |
| 290.1173 | 146.0249 | 2.2 | 263.9562 | 10.90675 | 0 | 137.0902 | 1.424242 |
| 1176.277 | 223.6468 | 2.2 | 1168.219 | 17.72347 | 0 | 203.5994 | 4.272727 |
| 954.0094 | 652.1657 | 1.25 | 975.7866 | 34.0836 | 0 | 646.0887 | 0 |
| 428.398 | 328.0511 | 1.25 | 437.6565 | 13.63344 | 0 | 331.1883 | 0 |
| 333.3646 | 546.5503 | 2.2 | 306.5298 | 14.99678 | 0 | 521.2144 | 1.424242 |
| 290.1173 | 997.1414 | 2.2 | 257.494 | 0 | 0 | 914.856 | 2.333333 |
| 571.2248 | 57.01924 | 0 | 524.5066 | 20.45016 | 0 | 46.14919 | 0 |
| 944.923 | 65.81213 | 0 | 899.1541 | 25.90354 | 0 | 47.50652 | 0 |
| 194.6129 | 296.2219 | 0 | 178.2651 | 0 | 0 | 269.1496 | 0 |
| 654.1155 | 1170.981 | 0 | 592.6243 | 53.17042 | 0 | 1108.938 | 0 |
| 589.2445 | 1424.09 | 0 | 523.241 | 0 | 0 | 1298.994 | 4.666667 |
| 681.9777 | 1375.83 | 0 | 604.5449 | 59.98714 | 0 | 1341.041 | 2.848485 |
| 666.7293 | 609.1324 | 2.2 | 624.9802 | 28.63023 | 0 | 574.1502 | 2.848485 |
| 209.4102 | 152.2942 | 0 | 217.9768 | 10.90675 | 0 | 145.2342 | 0 |
| 272.0976 | 236.4213 | 0 | 248.6297 | 5.453376 | 0 | 233.4606 | 0 |
| 639.3016 | 573.4334 | 0 | 648.8215 | 27.26688 | 0 | 571.4356 | 1.424242 |
| 527.2591 | 39.36614 | 0 | 541.536 | 9.543408 | 0 | 32.5759 | 2.848485 |
| 1207.753 | 1013.022 | 5 | 1178.437 | 51.80707 | 0 | 1054.645 | 4.272727 |
| 1285.194 | 666.5999 | 5 | 1292.534 | 69.53055 | 0 | 644.7313 | 1.424242 |
| 1519.165 | 320.1779 | 0 | 1544.57 | 38.17363 | 0 | 302.6844 | 1.424242 |
| 786.8044 | 1586.659 | 1.394231 | 887.366 | 0 | 0 | 1714.761 | 1.611111 |
| 854.7789 | 1000.685 | 1.394231 | 889.2224 | 0 | 0 | 1108.283 | 3.222222 |
| 536.9983 | 806.7758 | 1.394231 | 510.022 | 0 | 0 | 838.3296 | 0 |
| 610.0708 | 1064.378 | 5.576923 | 646.0322 | 0 | 0 | 1168.315 | 1.611111 |
| 737.5229 | 754.4061 | 1.394231 | 738.709 | 0 | 0 | 749.3794 | 3.96 |


| 722.2287 | 1163.456 | 2.788462 | 803.8274 | 0 | 0 | 1248.358 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 538.6976 | 898.7765 | 0 | 566.1004 | 0 | 0 | 901.714 | 1.434783 |
| 890.4655 | 1098.347 | 1.394231 | 956.0534 | 0 | 0 | 1185.248 | 1.611111 |
| 606.6721 | 1043.147 | 2.788462 | 655.3142 | 0 | 0 | 1132.912 | 1.611111 |
| 457.1283 | 1197.425 | 1.394231 | 514.2268 | 0 | 0 | 1280.683 | 3.222222 |
| 1087.591 | 1188.933 | 1.394231 | 1214.095 | 0 | 0 | 1272.987 | 0 |
| 890.4655 | 813.8528 | 1.394231 | 905.9302 | 0 | 0 | 923.5695 | 1.611111 |
| 907.4591 | 1176.194 | 0 | 849.4342 | 0 | 0 | 1070.086 | 3.782609 |
| 851.3801 | 1111.086 | 5.576923 | 909.643 | 0 | 0 | 1217.572 | 3.222222 |
| 598.1753 | 730.3444 | 2.788462 | 595.175 | 0 | 0 | 751.6688 | 0 |
| 958.4399 | 1241.302 | 0 | 884.2111 | 0 | 0 | 1333.094 | 1.434783 |
| 463.9257 | 702.0365 | 2.788462 | 478.8764 | 0 | 0 | 702.6156 | 2.869565 |
| 747.7191 | 1125.24 | 0 | 778.1742 | 0 | 0 | 1132.553 | 1.434783 |
| 423.141 | 690.7133 | 0 | 429.2785 | 0 | 0 | 718.4857 | 0 |
| 737.5229 | 863.3916 | 2.788462 | 759.3612 | 0 | 0 | 865.6455 | 1.434783 |
| 1094.389 | 434.5266 | 0 | 1132.201 | 0 | 0 | 411.1816 | 0 |
| 664.4504 | 939.823 | 1.394231 | 627.9802 | 0 | 0 | 855.2832 | 1.26087 |
| 837.7853 | 1120.994 | 2.788462 | 784.5798 | 0 | 0 | 1024.244 | 1.26087 |
| 688.2414 | 717.6058 | 0 | 645.3802 | 0 | 0 | 653.5778 | 0 |
| 1152.167 | 1501.735 | 1.394231 | 1053.488 | 0 | 0 | 1393.601 | 3.782609 |
| 863.2757 | 1058.716 | 0 | 782.998 | 0 | 0 | 986.2607 | 0 |
| 803.798 | 1152.132 | 1.394231 | 748.1981 | 0 | 0 | 1063.537 | 1.26087 |
| 548.8938 | 853.4839 | 1.394231 | 616.3295 | 0 | 0 | 909.716 | 1.611111 |
| 829.2884 | 665.2362 | 0 | 784.6493 | 0 | 0 | 699.0865 | 4.542857 |
| 501.3117 | 846.4069 | 0 | 481.5416 | 0 | 0 | 857.8422 | 3.96 |
| 662.751 | 1534.289 | 1.394231 | 624.7959 | 0 | 0 | 1560.738 | 3.96 |
| 239.61 | 1020.501 | 0 | 172.5956 | 0 | 0 | 1074.768 | 3.96 |
| 246.4074 | 1065.793 | 0 | 177.7734 | 0 | 0 | 1129.704 | 1.32 |
| 168.2368 | 648.2514 | 2.788462 | 120.8169 | 0 | 0 | 681.7662 | 1.32 |
| 446.9321 | 912.9305 | 0 | 463.9665 | 0 | 0 | 908.6689 | 6.057143 |
| 1077.395 | 863.3916 | 1.394231 | 1024.649 | 0 | 0 | 830.966 | 2.571429 |
| 627.0644 | 757.2369 | 1.394231 | 644.7729 | 0 | 0 | 771.8672 | 2.869565 |
| 737.5229 | 1330.472 | 0 | 749.0996 | 0 | 0 | 1341.75 | 5.73913 |
| 956.7406 | 1027.578 | 5.576923 | 920.4444 | 0 | 0 | 985.0494 | 2.521739 |
| 591.3778 | 652.4976 | 1.394231 | 564.7076 | 0 | 0 | 582.8499 | 2.521739 |
| 1556.615 | 576.0662 | 4.182692 | 1478.772 | 0 | 0 | 501.9048 | 1.26087 |
| 970.3355 | 895.9457 | 0 | 890.5613 | 0 | 0 | 834.3268 | 0 |
| 963.538 | 587.3894 | 1.394231 | 908.9628 | 0 | 0 | 569.5385 | 3.857143 |
| 844.5827 | 1176.194 | 0 | 801.54 | 0 | 0 | 1116.402 | 3.857143 |
| 1014.519 | 585.974 | 1.394231 | 951.932 | 0 | 0 | 566.8709 | 1.285714 |
| 904.0604 | 556.2507 | 0 | 871.643 | 0 | 0 | 591.4243 | 0 |
| 813.9942 | 1549.859 | 0 | 887.366 | 0 | 0 | 1671.661 | 0 |
| 790.2031 | 1145.055 | 1.394231 | 833.53 | 0 | 0 | 1256.055 | 3.222222 |
| 565.8874 | 969.5463 | 0 | 590.3397 | 0 | 0 | 1068.262 | 0 |
| 645.7574 | 400.5571 | 0 | 635.1517 | 0 | 0 | 400.0446 | 2.64 |
| 642.3587 | 920.0075 | 0 | 634.6213 | 0 | 0 | 858.9761 | 1.285714 |
| 1051.905 | 1212.994 | 1.394231 | 930.1067 | 0 | 0 | 1142.124 | 5.043478 |


| 638.9599 | 836.4991 | 2.788462 | 585.2712 | 0 | 0 | 772.7673 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 536.9983 | 604.3741 | 1.394231 | 502.4085 | 0 | 0 | 584.2105 | 2.571429 |
| 1048.506 | 583.1432 | 4.182692 | 984.2231 | 0 | 0 | 621.5697 | 9.085714 |
| 457.1283 | 588.8048 | 0 | 482.6677 | 0 | 0 | 644.9594 | 0 |
| 445.2327 | 750.1599 | 2.788462 | 398.3687 | 0 | 0 | 702.3004 | 2.521739 |
| 893.8642 | 985.1157 | 0 | 882.5203 | 0 | 0 | 913.6625 | 0 |
| 540.397 | 711.9442 | 0 | 545.5771 | 0 | 0 | 728.5849 | 0 |
| 681.444 | 1456.443 | 0 | 673.7749 | 0 | 0 | 1485.738 | 1.514286 |
| 1245.632 | 237.7865 | 6.971154 | 1218.042 | 0 | 0 | 221.0985 | 8.173913 |
| 829.2884 | 1147.886 | 5.576923 | 885.2891 | 0 | 0 | 1122.558 | 4.542857 |
| 975.4335 | 1292.257 | 1.394231 | 947.5496 | 0 | 0 | 1308.597 | 1.32 |
| 689.9408 | 832.2529 | 0 | 656.1059 | 0 | 0 | 792.2854 | 0 |
| 904.0604 | 942.6538 | 2.788462 | 856.0777 | 0 | 0 | 902.992 | 2.571429 |
| 610.0708 | 1047.393 | 0 | 595.31 | 0 | 0 | 1066.573 | 1.514286 |
| 484.318 | 403.3879 | 1.394231 | 521.6524 | 0 | 0 | 446.3919 | 0 |
| 771.5102 | 1012.008 | 5.576923 | 751.9602 | 0 | 0 | 949.6755 | 3.857143 |
| 837.7853 | 438.7728 | 2.788462 | 832.9029 | 0 | 0 | 455.9066 | 0 |
| 768.1114 | 985.1157 | 0 | 816.377 | 0 | 0 | 933.907 | 6.6 |
| 504.7104 | 505.2964 | 2.788462 | 472.6607 | 0 | 0 | 489.5097 | 2.571429 |
| 664.4504 | 1149.302 | 1.394231 | 631.6998 | 0 | 0 | 1157.876 | 3.96 |
| 897.2629 | 472.7423 | 1.394231 | 849.4671 | 0 | 0 | 453.4967 | 3.857143 |
| 790.2031 | 523.6966 | 2.788462 | 764.1802 | 0 | 0 | 552.6659 | 1.514286 |
| 684.8427 | 1290.841 | 5.576923 | 738.8529 | 0 | 0 | 1388.433 | 3.222222 |
| 790.2031 | 467.0807 | 1.394231 | 748.1981 | 0 | 0 | 421.7476 | 1.26087 |
| 756.2159 | 802.5296 | 2.788462 | 743.7111 | 0 | 0 | 821.1037 | 7.571429 |
| 830.9878 | 717.6058 | 0 | 794.9293 | 0 | 0 | 678.9112 | 1.285714 |
| 798.6999 | 458.5883 | 0 | 749.7799 | 0 | 0 | 415.1987 | 0 |
| 863.2757 | 479.8193 | 0 | 820.4702 | 0 | 0 | 528.2625 | 0 |
| 970.3355 | 808.1912 | 1.394231 | 914.287 | 0 | 0 | 855.5556 | 7.571429 |
| 545.4951 | 945.4846 | 0 | 568.0178 | 0 | 0 | 940.2498 | 0 |
| 791.9025 | 1310.657 | 2.788462 | 772.709 | 0 | 0 | 1349.366 | 3.028571 |
| 956.7406 | 713.3596 | 0 | 896.8886 | 0 | 0 | 647.0289 | 0 |
| 723.928 | 1336.134 | 0 | 735.1823 | 0 | 0 | 1349.366 | 1.514286 |
| 861.5763 | 986.5311 | 1.394231 | 872.2392 | 0 | 0 | 1001.263 | 1.434783 |
| 729.0261 | 969.5463 | 0 | 708.991 | 0 | 0 | 909.661 | 1.285714 |
| 655.9536 | 894.5303 | 1.394231 | 637.954 | 0 | 0 | 921.5884 | 3.028571 |
| 790.2031 | 1033.239 | 2.788462 | 768.4868 | 0 | 0 | 969.6827 | 3.857143 |
| 458.8276 | 760.0677 | 1.394231 | 454.9326 | 0 | 0 | 773.31 | 1.434783 |
| 951.6425 | 629.8513 | 0 | 871.5796 | 0 | 0 | 585.4695 | 2.521739 |
| 591.3778 | 972.3771 | 5.576923 | 615.6983 | 0 | 0 | 978.1794 | 4.304348 |
| 1141.971 | 223.6326 | 0 | 1135.621 | 0 | 0 | 233.7243 | 1.434783 |
| 431.6378 | 568.9892 | 0 | 456.6779 | 0 | 0 | 615.713 | 0 |
| 491.1155 | 740.2522 | 1.394231 | 506.6105 | 0 | 0 | 747.8934 | 1.514286 |
| 627.0644 | 481.2347 | 1.394231 | 686.8733 | 0 | 0 | 514.1204 | 3.222222 |
| 888.7661 | 607.2049 | 1.394231 | 829.6352 | 0 | 0 | 593.5472 | 1.285714 |
| 594.7765 | 319.8795 | 0 | 560.2516 | 0 | 0 | 314.7801 | 0 |
| 659.3523 | 492.5578 | 0 | 652.8006 | 0 | 0 | 458.832 | 0 |


| 287.1921 | 716.1904 | 0 | 251.9895 | 0 | 0 | 749.3794 | 0 |
| ---: | ---: | ---: | ---: | :--- | :--- | ---: | ---: |
| 579.2218 | 717.9016 | 2 | 563.4433 | 0 | 0 | 725.5546 | 0 |
| 920.4073 | 1132.656 | 4 | 883.4476 | 0 | 0 | 1156.305 | 1.5 |
| 797.4218 | 1097.967 | 0 | 763.6914 | 0 | 0 | 1130.338 | 1.5 |
| 975.9491 | 1559.475 | 4 | 938.4177 | 0 | 0 | 1600.803 | 0 |
| 1755.601 | 1036.389 | 7 | 1752.834 | 0 | 0 | 1030.003 | 1 |
| 1430.399 | 674.6107 | 0 | 1454.166 | 0 | 0 | 656.9975 | 0 |
| 934.6413 | 865.418 | 0 | 863.7115 | 0 | 0 | 918.5915 | 0 |
| 647.0594 | 652.5594 | 0 | 608.9477 | 0 | 0 | 688.555 | 1.375 |
| 815.5002 | 574.8737 | 1.142857 | 805.7165 | 0 | 0 | 582.8626 | 2.75 |
| 751.8214 | 755.1044 | 2.285714 | 743.579 | 0 | 0 | 766.27 | 2.75 |
| 412.8855 | 421.0562 | 4.571429 | 401.8226 | 0 | 0 | 430.5412 | 4.125 |
| 762.0922 | 852.9883 | 0 | 733.2227 | 0 | 0 | 878.1797 | 0 |


| From: | Ryan Wesdock |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Regarding The Court"s Role in Redistricting |
| Date: | Friday, December 03, 2021 4:33:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of the Supreme Court of Virginia,
I am writing in regards to the Supreme Court of Virginia's authority under the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia to consider the district maps put forward by the two Special Masters. In this consideration, the court has to follow the relevant laws setting out the requirements for redistricting set out in Va. Code §24.2-304.04. This section of the law requires a number of things to be taken into account when considering whether the districts are lawful. This includes requirements to meet Constitutional, especially Fourteenth Amendment, demands, as well as relevant federal law such as the Voting Rights Act of 1965. The Court must also meet requirements of preserving communities of interest, of compactness, of not unduly favoring one party or another, of contiguity, and of approximately (within 5\%) equal population. Therefore, neither the Court nor the Special Masters are legally empowered to do any of the following, all which have been proposed in the 450 pages of comments so far:
(1) Base districts on religious jurisdictions, such as Catholic dioceses, which would be an obvious violation of the Establishment Clause of the $1^{\text {st }}$ Amendment;
(2) Base districts on where people work, shop, or worship rather than where they live. Such districts would almost certainly violate a number of legal requirements. Many residents of Northern Virginia, for instance, commute far for work, either out-of-state to Maryland or the Capital. A substantial portion of the population is nonreligious, many of whom do not attend houses of worship. In addition, there are those people of faith who do not attend services. People increasingly shop online and non-locally. Where we work, where we shop, and where those who worship have their services are three completely different areas. Basing districts on these three criteria would be impossible, since they would generate contradictory boundaries or have to include boundaries outside the Commonwealth, discriminatory even if we could, since it would exclude representation for those who do not attend religious services and disproportionately benefit centers of economic activities e.g. cities, and even if weren't, it would be illegal since none of these criteria are contained in the relevant legislation;
(3) Ignore demographics, such as race, as this would violate §24.2-304.04, the Voting Rights Act of 1965, and would probably also engender challenges under the Fourteenth Amendment;
(4) Have the districts drawn purely by computer algorithm. Computers, although they have the appearance of objectivity, are not objective. Computers do exactly as they are told, to the irritation of many. Algorithms are made by humans, and like all things made by humans, such as laws, institutions, governments, corporations, and so on, suffer from human biases. Computational models might inform the recommendations made by the Special Masters, who are hopefully aware of that model's biases, but to rely solely on such models would not be wise. Further, there is nothing in the law expressly allowing computers to be the sole deciders of district lines, and it would seem to cut against the purpose of the law to allow that;
(5) Count the incarcerated population as part of the district in which they are incarcerated
rather than their previous address. This is expressly forbidden in the relevant statutes, and it is expressly stated that incarcerated individuals should be counted as living at their address previous to incarceration (if they were living in the commonwealth).

The court cannot and almost certainly will not make its decision on what the Special Masters present based on these criteria, regardless of personal preferences. Personally, I'd prefer we do away with this convoluted mess and move to proportional representation - you cannot gerrymander districts that do not exist - but that's a legislative not a judicial question. But even disregarding these proposals, the primary issue remains, which is that given so many criteria actually presented in law, how do we create a map that meets all of them? Inevitably, not all of the legal criteria will be met perfectly well. Trade-offs will have to be made between the criteria, necessitating that the court rank some criteria higher than others. Suppose, for instance, the maps generated by the Special Masters meets all the criteria except that in some cases it divides communities of interest; the map meets contiguity, not favoring any party, and so on but, for example, it maintains the division of Lynchburg, Albemarle, and Charlottesville that quite a number of residents have protested here. Should the court go forward with approving the map? Suppose, instead, that all criteria are met, except for that the districts are not as compact as they might be. Should the court reject that map? To what extent can each criteria be imperfectly met while still being legally met? Such trade-offs are inevitable. Further, the Court will have to make decisions about boundaries for which, assuming they read these comments, there have been multiple, contradictory suggestions. On what reasonable grounds will they accept some proposals but reject others? The Special Masters will present maps, but the Supreme Court gets to make the final decision; the plans are only submitted for consideration. The Justices will, therefore, have to decide which trade-offs are acceptable, which proposals have merit, and what the hierarchy of criteria will be; the question is what grounds for making these decisions are justified and whether or not the Court will make their reasoning about such grounds explicit.

Some of the criteria in the relevant law are hard requirements and cannot be traded-off. This includes following applicable Constitutional and federal law, the near equal population of districts, and where incarcerated individuals are counted for the purposes of determining that population. These are inflexible boundaries; they are either done or not and they must be done. So it is in the remaining criteria that the trade-offs will have to be made.

When deciding between competing goods - between multiple good criteria - it helps to have a guiding principle which takes priority and therefore helps sort out which criteria should take precedence. The foremost principle the Supreme Court considers is constitutionality. The Constitution, national then state, should always win out. That criteria is not helpful here, because each of the criteria is constitutional. The situation is not deciding constitutionality but balancing various constitutional goods - having compact districts, having contiguous districts, and so forth. These are only good, however, because they help ensure that the popular will is translated into law. After all, government only derives just power from the consent of the governed, or, as the Virginia Constitution puts it, "That all power is vested in, and consequently derived from, the people, that magistrates are their trustees and servants, and at all times amenable to them." That was the entire purpose of the constitutional amendment, at least initially - to have voters pick the elected officials that they want rather than the other way around.

It is this constitutional ideal to which the Court ought to defer when considering the trade-offs of different maps. Perfectly smooth districts might look pleasant enough on a map, but if greater representation of the will of the people can be achieved by a few serrated edges, then the trade-off is worth it. The problem, after all, with the gerrymandered districts that we have is that they thwart consent of the governed by artificially boosting one party and the preferences of its voters at the expense of everyone else. Their distorted proportions and boundaries are merely consequences of this. Compactness is no doubt a good thing and a legal requirement, and ceteris paribus should be sought, but if a small amount of compactness can
be sacrificed to better ensure that the will of the people is actually translated into law through our representatives, then that sacrifice ought to be made. Political maps are for political contests, not beauty contests. Contiguity is good because contiguous areas presumably share preferences and a lack of contiguity enables bizarre gerrymandering. In other words, contiguity is valuable insofar as it helps ensure consent of the governed. I cannot imagine a scenario under which any contiguity would have to be traded off against some other criteria in order to better secure the consent of the governed, but if somehow this trade-off existed, then it, again, might be worth it. In other words, rather than start with contiguity and compactness and then make corrections for the remaining criteria, I'd propose going the other way around; start with the districts that would reflect those criteria which are necessarily connected to the consent of the governed and then see where the possibilities are for other criteria only accidentally connected to it, such as greater compactness, contiguity, and so on.

Preserving the ability of groups to elect officials that represent them and preserving communities of interest are more directly connected to the consent of the governed and should receive greater weight. "Cracking" divides communities of interest. Lynchburg, Albemarle, and Charlottesville should probably not be divided as they are. The same is probably true for not dividing up college campuses, as some other commentators have mentioned. The risk with both of these, though, is that of "packing" one party's voters into one, solid district, giving the other party the advantage in multiple surrounding areas. Once again, this is an issue, because the will of the voters is being distorted to the advantage of one party. Consent of the governed should be the guiding principle in deciding whether or not the proper balance between these two is struck. Not unduly favoring one party or another is also particularly germane, since parties are omnipresent in elections. Likewise, not diluting or diminishing the ability of minority groups to elect candidates of their choice should receive higher weighting. Consent of the governed means consent of all the governed.

None of the criteria can be ignored; they are all good criteria and legally need to be met to some extent. The extent to which trade-offs are necessary is unclear to me as I have no experience with drawing such districts. Perhaps, all criteria can be met equally and perfectly. Perhaps the only trade-offs required are minute and would go unnoticed by the average citizen. I am skeptical, however. The Supreme Court will likely be in the position of determining which trade-offs are acceptable constitutionally. In determining this, Justices ought to look to consent of the governed as an animating principle of the amendment, the Virginia Constitution, and the U.S. Constitution.

Thank You For Your Time, Ryan Wesdock

| From: | Praveen Meyyan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public Comment on Redistricting |
| Date: | Friday, December 03, 2021 6:13:54 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney

Clerk of the Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

To whom it may concern,

Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

As a resident of South Arlington, I think the area south of Route 50 should be kept together as a community of interest. For a long time county officials, state government and local residents have used Route 50 as a natural line for delineation as the areas south of Route 50 have historically been home to many of Arlington's communities of color. Perhaps this could change in the far future but for now, it best serves the interest of this community to have a district that is united both north and south of Columbia Pike with the Pike being the main artery and business center of the district.

Thank you for your time.

Sincerely,
Praveen Meyyan
2601 16th St S, Apt 623
Arlington, VA 22204

# Christopher M. Woodfin 

To: Sean P. Trende and Bernard N. Grofman
Special Masters - Redistricting
Virginia Supreme Court
From: Christopher M. Woodfin, Esq.
RE: Redistricting Virginia's Congressional Districts
DATE: December 4, 2021

## Memorandum on Congressional Redistricting

The Richmond area has been split up and divided by congressional districts for too many years. As someone who grew up in Chesterfield County, I ask that you keep the Richmond suburbs of Chesterfield and Henrico in their own district to provide the much-needed representation for central Virginia. The counties of Henrico and Chesterfield have a lot in common, which is why, for years, the majority of the two counties have been joined in a congressional district, and at the very least split between 2 congressional districts, of which they both share a part.

In addition to the numerous examples of case law out there, redistricting in Virginia is required to meet various criteria set by the United States Constitution, federal law (specifically the Voting Rights Act of 1965), the Constitution of the Commonwealth of Virginia, and the Virginia State Code. Most of the first three requirements have been since codified in the Virginia State Code, where it boils down the redistricting requirements to seven criteria for drawing districts: 1) drawn so that the population in each district is "proportional", defined as no more than a $5 \%$ deviation, 2) drawn to be in compliance with federal law, 3) "drawn to give racial and language minorities opportunity to elect candidates of their choosing," 4) drawn with consideration for communities of interest, defined as a group of people "who share similar social, cultural, and economic interests," and who live in a "geographically defined" area, 5) drawn in a manner that the districts are contiguous, 6) drawn in a manner so that the districts are compact, and 7) drawn in a manner so that when viewed statewide should not unduly favor or disfavor a political party. Va State Code §24.02-304.04.

The current proposed map by the commission has Chesterfield and Henrico split between 3 districts, the $1^{\text {st }}$, the $4^{\text {th }}$ and the $5^{\text {th }}$. By maintaining Chesterfield and Henrico in no more than 2 congressional districts 6 out of the 7 criteria will be met and the $7^{\text {th }}$ can be met, depending on the rest of the state.

## PROPORTIONAL - no more than a 5\% deviation

Chesterfield and Henrico County are two of the largest counties in the Commonwealth, with Chesterfield recording a population of 364,548 and Henrico at 309,550 . The two counties combined would
come in just under the required population of 786,776 . There are other criteria that need to be met that may require the county to be split off into an additional district, but the proportional criteria could easily be met by including most of Chesterfield and Henrico Counties, along with a piece from Hanover that all share a connection as a Richmond suburb.

## FEDERAL LAW - VOTING RIGHTS ACT OF 1965

The second and third criteria in the Virginia code refers to compliance with federal law and specifically outlines the need to create districts in compliance with the Voting Rights Act of 1965, "drawn to give racial and language minorities opportunity to elect candidates of their choosing" Id. It was to meet this criteria that the eastern section of Henrico was combined with the City of Richmond to create the $3{ }^{\text {rd }}$ Congressional District, and later, with the addition of the eastern/southern portion of Chesterfield, the creation of the $4^{\text {th }}$ Congressional District. As a result, Chesterfield and Henrico counties currently share two congressional districts, which helps the districts meet the requirements of the Voting Rights of Act of 1965. This split can, and should, be maintained with this year's redistricting to meet the requirement.

## COMMUNITIES OF INTEREST

Western/northern Chesterfield has grown so much down routes 360 and route 60 that it no longer has the rural feeling, as it once did, it is now solidly a Richmond suburb. It would be completely against any concept of communities of interest to combine the suburbs of western Chesterfield with the rural farmland of counties like Halifax, Pittsylvania and Henry counties. In order to maintain any semblance of communities of interest for the Richmond suburbs, western/northern Chesterfield and western Henrico must be the base of a district, with the surrounding counties of Hanover, Powhatan or Amelia making up the remaining constituents necessary to reach the proportional requirement.

## CONTIGUOUS AND COMPACT

By combining parts of Chesterfield and Henrico into 2 districts, rather than splitting into a $3^{\text {rd }}$, the counties will make up a significant portion of the proportional representation for congressional districts, so they will require the addition of fewer counties in each district to reach the necessary proportion. This will cause the districts to inherently be more compact and certainly be contiguous, respecting the natural configuration of the land.

Woodfin Law Offices, PLLC
3300 Acorn Street, Suite 319, Williamsburg, VA 23188
Ph: 757-808-5236.office@woodfinlaw-va.com

## NEITHER FAVOR NOR DISAFAVOR A POLITICAL PARTY

This is the one requirement where it may not automatically meet this requirement, but it certainly does not go against it. By allowing Chesterfield and Henrico to be split between two districts, as they currently are now, it would still create two districts where one has a voting tendency of Democrat and one Republican. This certainly meets the requirement of not favoring or disfavoring either party. The requirement is written on a statewide basis, but by allowing these two counties to split between both parties, it would allow the remainder of the state to continue along that pattern and meet the requirement without any problem.

## CONCLUSION

In conclusion, the communities of interest requirement and the requirement about not favoring any political party are a bit at odds with each other. The entire concept of communities of interest is communities "who share similar social, cultural, and economic interests," and who live in a "geographically defined" area. It is inherent that communities who share those things will also likely have the similar voting tendencies. So if the Commission, and now the Court, are to follow the communities of interest requirement, it does make it a bit more difficult to follow the final requirement about partisanship.

The general make-up of the Commonwealth stands to reason that the 3 western districts in the state are likely going to lean Republican. This isn't due to any bias or gerrymandering on behalf of the map drawers, but simply because as communities of interest they tend to vote similarly on various issues. Likewise, the 3 more northern Virginia districts are likely going to lean Democrat. Again, not due to any bias on the part of the map drawers, but because as communities of interest they tend to vote similarly. Those areas will make up 6 districts with an even partisan split, leaving 5 to be drawn in the rest of the state.

The Commission, and the Court, have been instructed to maintain the two minority majority districts to meet the requirements of the Voting Rights Act of 1965, while meeting the other requirements. Based off of past voting history, those districts will likely lean Democrat as far as their voting tendencies. Therefore, after meeting the Voting Rights Act requirement, and given the make up of the western and northern parts of the state, the map will likely consist of 3 Republican or lean Republican districts, and 5 Democrat or lean Democrat districts, leaving 3 districts left to be drawn.

In the end, with 3 districts left to be drawn, there would be 5 Democrat and 3 Republican districts, so if partisan parity is the goal, then 2 of those districts should lean Republican and 1 should be a true tossup. With that in mind, it would be easy for the commission to leave the Richmond suburbs mostly intact, only split between two districts, rather than three, and still meet all of the requirements as laid out by the Virginia State

## Woodfin Law Offices, PLLC

3300 Acorn Street, Suite 319, Williamsburg, VA 23188
Ph: 757-808-5236.office@woodfinlaw-va.com

Code. In viewing the state as a whole, with respect to all of the requirements, southern/eastern Chesterfield combined with eastern Henrico and the city of Richmond, should make up the bulk of one of the minority districts to allow for compliance with the Voting Rights Act of 1965 and western/northern Chesterfield combined with western Henrico should remain together and make up the bulk of a Richmond suburb centered district to allow the area to be properly represented.

| From: | Monica Sarmiento |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Erin Corbett; Margie Del Castillo |
| Subject: | VACIR Map Submission |
| Date: | Friday, December 03, 2021 10:40:36 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of the Supreme Court,
In reference to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A, please consider these maps created by our coalitions:

## "VACIR Map of Virginia State House Districts"

## --

Thank you,
Monica Sarmiento, Executive Director
Virginia Coalition for Immigrant Rights
http://www.vacir.org
Make a tax-deductible gift to VACIR

| From: | B Lynn Pascoe |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia State Redistricting - Northern Virginia |
| Date: | Saturday, December 04, 2021 3:43:19 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Lynn Pascoe. İ live at 5902 Mount Eagle Dr. in the Montebello Condominium which is located in Fairfax County at the north end of Richmond Highway. I am also CoChair of the Mount Vernon Council of Citizens Associations.

The Mount Vernon Council is a non-partisan citizens’ organization that has been working in support of the concerns of people in the Mount Vernon District for over fifty years. A current key issue of concern is working with our neighbors in Lee District and county and state officials to improve Fairfax County’s oldest highway (Route 1 or Richmond Highway) and transform it into the promised "Main Street" for this rapidly urbanizing area. We have also been fighting together for better schools, an up-to-date business climate, improved housing, a healthier natural environment, adequate storm-water management (we border the Potomac River), a safer and more equitable community, and an overall improvement in the quality of life of our people.

Indeed, if one were to judge by the number of community meetings, passed resolutions, official briefings, and letters to officials, our district would qualify for one of the top "communities of interests" in the state. Unfortunately, past gerrymandering or splitting off parts of our community to give adequate numbers to our neighbors have not left us with a unified representation in Richmond based on our existing Mount Vernon District. We need a political structure attuned to fight for our needs and to support our concerns whatever party is in power. We have great hope that this current redistricting effort will result in the drawing of boundaries that conform more closely to the Mount Vernon District.

Thus, for the state Senate, we support maps that keep our district together. Some other totally unacceptable maps treat the northern part of our district as appendages of Alexandria City where we have relatively little in common other than the same Post Office designation. (A case in point was the dispute over fixing Alexandria's decrepit waste water system.) Currently our district is divided up nonsensically presumably to serve some past gerrymandering aim or to make numbers add up. The current map runs totally against the law's demand that we keep "communities of interest" together.

The current districts for the House of Delegates also do not sufficiently keep our community together and dilute our voice in Richmond. We have great hope that the process will produce the fair and logical system of representation in Richmond. For us, the baseline should be Fairfax County's Mount Vernon District.

Thank you very much for your time and attention.

| From: | vabn22@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | redistricting |
| Date: | Sunday, December 05, 2021 8:13:21 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

An observation about this procedure. It has certainly been a disappointing start, showing the need for politicians to be completely removed from the process. Yet legal necessity
( Federal law to protect minority representation) and a Virginia law which expresses a requirement not to disfavor either political party, complicate matters. The former law is unavoidable until we can put skin color based race behind us ( not likely for the foreseeable future ), while the latter, shocking in its arrogance and hubris, allows gerrymandering to drive a process promulgated to end it.

Until the "needs" of the politicians are ignored and districts are formulated based on commonalities of interests, compactness of geography and the like ( admittedly, details details details ), success is unlikely. While we must work to remove the cited latter law, I urge you to give as little attention as possible to political party needs. For once, let the politicians work for the position to which they aspire.

Dexter E Oliver
2901 Broadstone Ct
N Chesterfield VA 23236
vabn22@aol.com
804-745-9441

| From: | hydro4u@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Cc: | hydro4u@aol.com |
| Subject: | Comments on Redistricting |
| Date: | Sunday, December 05, 2021 2:05:34 PM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSMuriel-Theresa Pitney<br>Clerk of Court Supreme Court of Virginia<br>100 North Ninth St<br>Richmond VA 23219

RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
To Whom It May Concern,
Pursuant to Rule 4 (a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting.

## Be Bold, Create a New Gold Standard in Redistricting

The Virginia Supreme Court is in the unique position to redefine and establish the new Gold Standard in Redistricting. This is a unique opportunity to respect the choices of a free people and create colorblind districts that keep those communities whole. Redistricting criteria consistently espouse the principle of compact, contiguous, and keeping communities of interest intact. Finally meeting this goal can now be done with very little effort. The Congressional A5 proposal by the Redistricting Commission is an almost perfect roadmap which can be perfected with two minor changes. First, eliminate ALL split precincts. Second, abandon the arbitrary and unrealistic attempt to make all districts exactly equal in population numbers. These two previous considerations unfailingly cause communities to be unnecessarily divided.

American people have the right and freedom to choose where they will live. With this choice, they establish communities. There are a plethora of reasons involved making this choice whether it be schools, work, family, or other factors such as the current representation or even the racial makeup of the neighborhood. They have the freedom to make that choice, whatever their reasons may be, their choice should be respected. Census blocks and Voting Precincts are, or should be, established to confirm these communities of interest. It should not be up to government political interests to arbitrarily tear apart the people's community of choice.

For example, in the Congressional A5 Map the $3^{\text {rd }}$ Congressional District keeps all of Hampton, all of Norfolk, and all of Portsmouth intact with no split precincts. Additionally, Newport News is intact except for 500 voters in the Saunders Precinct split into the $1^{\text {st }}$ District. The arbitrary desire to have an exactly equal number of voters in each district should not preempt the need to keep these 500 voters intact with their community of interest. Similarly, Chesapeake has several split precincts apparently for the sole reason of keeping a precise number of voters in the districts. By allowing a minor deviation from the ideal number of voters in the entire district, communities of interest could easily remain intact.

Expanding on the above example, the $2^{\text {nd }}$ District should include all precincts in Chesapeake not in the rd

3 District along with all of Accomack, Northampton, and Virginia Beach continuing along the North Carolina border to include all of Isle of Wight, Southampton, Suffolk, and Franklin. If Southampton, for example, would have to be split, all precincts should remain whole. Statewide, no city or county should be split more than once, and no individual precinct should ever be split.

This would put critics of the new districts in the unenviable position of justifying why an exactly equal number of voters is so important that it demands splitting and dividing many precincts and communities across the State. Establishing districts with the primary purpose to keep precincts intact would thereby also establish colorblind political districts since race is not considered. Similarly, critics would need to justify why dividing communities solely based on race is not in itself a racist concept.

This same criteria should also be used for redistricting the General Assembly.
Establishing colorblind districts that respect the citizen's free choice of communities could in fact become the Gold Standard for other states to emulate.

Carl Anderson
Hampton

Carl Anderson
16 Banister Drive
Hampton, VA 23666
7578706081

December 5, 2021

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219

RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
To Whom It May Concern,

Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

I urge you to maintain the unique character of the Columbia Pike corridor and not split it along its most significant identity feature into two House of Delegates districts.

My name is Reid Goldstein and I'm writing about redistricting plans in Arlington, VA. I am a 36year resident of the Columbia Pike corridor in South Arlington and have held multiple positions with civic and governmental organizations during that time, all with the intent to represent and improve my community. I believe that community improvement is not a spectator sport and that the benefits of a healthy community come when we actively work for them. I have been the president of my neighborhood civic association; the President of the Board of the Columbia Pike Revitalization Organization; and I served for 8 years on Arlington County's Housing Commission, to name a few of my community engagement activities. I am currently an elected member of the Arlington School Board.

Columbia Pike is South Arlington's Main Street, which forms a focal point for the entire community both North and South of it. It is THE central corridor for commercial activity, transportation, housing, and the lifeblood of the economic community in South Arlington. Along with community roads of similar size and characteristics to its north (eg, Rt 29, Washington Blvd, and Wilson Blvd), Columbia Pike traverses the entire latitude of Arlington County - from the Pentagon on the east to the county line on the west. The most utilized bus line in the Commonwealth, the \#16 Metrobus, travels down Columbia Pike to and from the Pentagon, which as you know, is the world's largest office building.

Currently the Columbia Pike corridor, and nearly the entirety of South Arlington is contained in one House of Delegates district - the 49th. The proposal to split this district down the centerline of Columbia Pike unnecessarily divides a community whose cohesive feature is the Columbia Pike corridor. This proposal will separate those neighborhoods north of Columbia Pike from their neighbors south of Columbia Pike and combine them with the racially and socioeconomically dissimilar $47^{\text {th }}$ House district. Doing so will dilute the power of the $49^{\text {th }}$ district to
represent the concerns and interests of South Arlington residents. It will also divide the advocacy in the House of Delegates for the interests of residents of the $47^{\text {th }}$ with respect to housing, transportation, and economic livelihood-3 essential components of a healthy community.

- South Arlington is a vibrant, ethnically and culturally diverse community of interest.
- The Columbia Pike corridor is known as "the World in a Zip Code". Residents here hail from 135 countries.
- South Arlington is, and has historically been, the home of a majority of Arlington's lower-income communities and communities of color. They have faced disproportionate economic hardship compared to families in North Arlington and have specific infrastructure and public service needs that are unique to this area.
- The Columbia Pike corridor is disproportionately home to many of Arlington's poorest residents and has benefitted significantly from political cohesion in local and state affairs.
- Speaking as a School Board member, I can say that Arlington Public Schools has historically recognized the unique geography and demographics of South Arlington and the Columbia Pike corridor in its school boundary assignments, Capital Improvement Plans, and annual resource budgeting plans.

Thank you for your consideration of my request.

Reid Goldstein

Reid Goldstein, 3711-16 ${ }^{\text {th }}$ St. South, Arlington, VA 22204
reidgoldstein@gmail.com

| From: | Steve Baker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting comments, Arlington |
| Date: | Monday, December 06, 2021 10:03:37 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of the Court
Supreme Court of Virginia
100 N Ninth St
Richmond, VA 23219
RE: rules and procedures for implementing the requirements of article II, section 6-A

To whom it may concern,

Pursuant to rule 4(a) of the rules and procedures for implementing the requirements of article II section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

South Arlington is defined as anything below Arlington Boulevard. Maps that divide South Arlington by using Columbia Pike as a district boundary are egregious. The communities of interest in this area date back over 150 years and today comprise one of the most diverse communities in Virginia. It should be preserved, not cut in half.

Sincerely,
Steve Baker

Steve Baker
1121 Arlington Blvd \#339
Arlington, VA 22209

| From: | Sally Tierney |
| :---: | :---: |
| To: | Redistricting |
| Subject: | map |
| Date: | Monday, Dec |
| EXTERNAL EMAIL |  |
| THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS |  |

Please keep our communities intact. We need a map that doesn't divide us. Thank you!-Sally

Sally Tierney, Private Investigator
Viken Investigations
703-774-7310

```
From: League of Women Voters Arlington and Alexandria VA
To: Redistricting
Subject: Communities of Interest
Monday, December 06, 2021 10:40:32 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

December 6, 2021

TO: Justices of the Supreme Court of Virginia and Special Masters
Redistricting@vacourts.gov
The League of Women Voters of Arlington and Alexandria City urges the special masters to draw concise districts that represent established communities of interest (COI). COIs are defined in Virginia Statute as a "neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests." Preservation of COIs was "extremely important to the Commission" per their guidelines and criteria. To that end, we suggest that districts affecting our area be drawn around the 4 major high schools in the area; WashingtonLiberty, Wakefield, Yorktown, and Alexandria High. These represent long established communities with many commonalities.

Members of The League of Women Voters of Arlington and Alexandria City took advantage of the transparency provisions and attended all the Commission meetings and hearings either in person or virtually. We invite you to read the LWV Virginia redistricting blogs which cover Virginia's redistricting process in detail beginning with the selection of Commission members in January 2021 to the latest information provided through the SCoVA website. We captured citizen comments which are not available from any other source unless one has the time to listen directly to the video transcripts of the meetings and hearings.

Thank you,
Joan Porte
President
League of Women Voters of Arlington and Alexandria City (VA), educating the County's voters since 1944

* Like us at facebook.com/LWVArlington
* Our website: https://my.lwv.org/virginia/arlington

| From: | Steve Baker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA-07, U.S. House District |
| Date: | Monday, December 06, 2021 10:57:17 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney
Clerk of the Court
Supreme Court of Virginia
100 N Ninth St
Richmond, VA 23219
RE: rules and procedures for implementing the requirements of article II, section 6-A
To whom it may concern,
Pursuant to rule 4(a) of the rules and procedures for implementing the requirements of article II section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the U.S. House, Virginia.

Regarding the issue of compactness, Culpeper and Nottoway counties should be removed from the 7th district to help alleviate a large increase in population there. Also, Eastern Henrico county represents an historic community of interest which has been severed from the rest of the county in the districting process. It is egregious to divide the county this way and that section should be restored to the rest of the county.

Sincerely
Steve Baker
Steve Baker
1121 Arlington Blvd \#339
Arlington, VA 22209

| From: | marybesssmith@gmail.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Redistricting Maps |
| Date: | Monday, December 06, 2021 11:45:43 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Members of the Supreme Court of Virginia:
When considering the redistricting maps for the geographic area which currently makes up HOD 19, I ask that you please refrain from splitting Botetourt County into three separate House Districts, as was previously portrayed on one of the earlier maps. Botetourt certainly meets the criteria for a "community of interest" and a "community of place", and splitting it into three separate House Districts seriously undermines this precept.

I also ask that you consider the significant geographical challenges (i.e., the Blue Ridge Mountain range) that separate Botetourt and Bedford Counties, in any maps that pair these two disparate geographical areas into the same district. Combining Botetourt with it's neighbors to the north, and west of the Blue Ridge mountains would eliminate this significant geographic obstacle.

Thank you for your consideration,

Mary Bess Smith
Mayor, Town of Fincastle

| From: | Dolores Brown |
| :--- | :--- |
| To: | Redistricting |
| Subject: | comment on redistricting |
| Date: | Monday, December 06, 2021 11:49:21 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Ms. Pitney -
I appreciate the opportunity to comment upon the redistricting issue.
Our democracy is in trouble. It will not be extinguished by a big bang, but by the drip by drip undermining of peoples' faith in the democratic process and an undermining of the rule of law.

The redistricting process will be a vivid example of whether Virginia is able to draw the maps without any consideration of political implications, or whether the State will abet a descent into sham democracy, as I have seen vividly in other countries. I urge that we scrupulously take politics out of the redistricting process and draw maps that meet the established statutory criteria of Virginia. Our democratic system is more fragile than many think.

Thank you - Dolores Brown
2213 Whiteoaks Drive
Alexandria VA 22306

| From: | gbooth123@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on redistricting for the record |
| Date: | Monday, December 06, 2021 11:53:30 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

In redrawing legislative districts, I urge you to strictly adhere to the principle to maintain the communities of interest in the state as required by Virginia law.

As a long-term resident of the Mount Vernon area of Fairfax County, I strongly urge you to not merge Fairfax County and Alexandria city districts or create a district with parts in both jurisdictions.

Many neighborhoods in the Mount Vernon area have an Alexandria postal address which creates confusion. Don't compound the confusion.

There are many factors that create a community of interest for our area, like the U.S. 1 corridor. Mount Vernon is a distinct community of interest and district lines should not cut out and separate communities on either side of the highway.

Mount Vernon and Lee magisterial districts have a natural boundary of Cameron Run and Hunting Creek and the Beltway/l-95/I-495.

Putting Fairfax County residents in an Alexandria district or vice versa creates much confusion about which elected officials represent whom.

Counties and cities are different and are treated differently under state law.

Thank you for considering my views.

Glenda Booth
7708 Tauxemont Road
Alexandria, VA 22308

| From: | Loanne Collins |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA Redistricting Comment |
| Date: | Monday, December 06, 2021 10:36:43 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Members of the Virginia Supreme Court,
I am a resident and voter in Fairfax County (Reston).
The intent of the voters who passed Amendment 1, was the expectation to end gerrymandering and allow voters to choose their representatives by ensuring their vote was equal to everyone else's.

I was against Amendment 1 as written. It preserved partisan politics in the commission make-up. The VA Redistricting Commission resulted in gerrymandered map submissions including an unnecessary reorientating of congressional district lines. The commission played out as expected with the maps being rejected, punting the redistricting process to the VA Supreme Court.

I appreciate the non-partisan role of SCOVA and thank you for rejecting the initial partisan Special Masters put forth. My hope is that the Judiciary will stay the course and the final product will adhere to fair district maps being produced.

Thank you for allowing the public to submit detailed comments and hope the Court (and Special Masters) will use them to inform their decisions.

Respectfully,
Joanne Collins
11744 Great Owl Cir
Reston 20194

| From: | csilas1955@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | District 1 |
| Date: | Wednesday, December 08, 2021 10:09:35 AM |



Please review the District 1 boundaries. There is no logical reason for a district to include both Prince William County and Newport News.

Sent from the all new AOL app for Android

| From: | Steve Schawaroch |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Clerk of the Supreme Court of Virginia |
| Date: | Wednesday, December 08, 2021 11:30:02 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am responding to a November 4 press release with:

## Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia

For the 7 酋 Congressional District, where I live, the current/old map is horribly disjointed. Almost anything would be better. Thank you for doing this!!!

I see map "B5 Statewide CD,"
(That title is on the top right, hope that is the correct way to refer to it. That is the one that has all of my county, Goochland. It includes Western Henrico, Western Chesterfield, and goes West to Charlottesville.)

This makes the most sense versus the others I've seen. The "B5" map groups a mixed area, not a guaranteed safe seat for either party, but these have far more in common than the deep rural areas that were previously used to dilute suburban representation.

Regarding VA House District 56, where I live...
-Currently, District 56 is a small piece of Henrico (Short Pump), Goochland (where I live), and a tiny corridor going North to the West side of Lake Anna. Clearly drawn to deny voters representation.

- I would prefer to have all of Goochland County together.
-Second choice would be for the Eastern third or half of Goochland to be joined with the close parts of Chesterfield and close part of Powhattan. (Or maybe third of Goochland with just Chesterfield.)

We are a suburban area and almost everyone I know is a swing voter. For the VA House, we all know we are in safe districts where the general election is of no importance.

Thank you for doing this incredibly complicated work.
Steven Schawaroch
sschaward@gmail.com
703-475-7629

Mrs. Muriel-Theresa Pitney
Clerk of the Court

Supreme Court of Virgnia
100 North $9^{\text {th }}$ Street
Richmond, Virginia 23219

Re: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A

## To Whom It May Concern,

Pursuant to Rule 4(a) of the rules and procedures for implementing the requirements of Article II Section 6-A of the constitution of Virginia, I'm submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

I submit these comments as a resident, since 2006, and active community member of the Columbia Pike Corridor in Arlington (zip code: 22204) and as the former Executive Director of the Columbia Pike Revitalization Organization (www.columbiapike.org, today: Columbia Pike Partnership) from 2009-2016.

Published preliminary maps showed Columbia Pike as the dividing boundary between a northern and a southern future district. Such division ignores the fact that Columbia Pike is, in reality, the historic and current central axis of Arlington's most culturally, socially and economically diverse community, the geographic extend of which is mostly congruent with ZIP code 22204. This community has all the characteristics of a "Community of Interest" as defined by Virginia Code and therefore it is important that it is included in one voting district and not divided in two or three as proposed.

Columbia Pike is Arlington's oldest main street (chartered by Congress in 1810). With its surrounding neighborhoods it forms a major South Arlington corridor. The arrival of a new federal workforce during the New Deal era and the construction of the Pentagon in 1941 were catalysts for vigorous urban growth along both sides of the Pike. Significant "Garden Apartment" complexes (a typical legacy multifamily housing type in Arlington) were constructed on both sides of the arterial street along with the corresponding neighborhood commercial areas. Still today, Columbia Pike ranks among the 2 or 3 highest ridership bus-transit corridors in the Commonwealth. The combination of available and affordable workforce housing, good transit, schools and other services attracted immigrant communities that began to arrive in the region. Columbia Pike soon became what the Brookings foundation described as "World in a Zip-Code", Northern Virginia's most diverse, multicultural neighborhood.

There are more than 85 languages spoken in Elementary Schools along Columbia Pike. Among others, we have vibrant Latinx, Ethiopian, Mongolian and Middle-Eastern communities rooted on both sides of the Pike. Dividing them politically will be detrimental to their community cohesion.

The unique Columbia Pike Documentary Project has been documenting these communities for 25 years. There is a current photographic exhibit at the Virginia Library in Richmond, documenting our community along the Pike.

Arlington County has planned Columbia Pike always as one district, especially since the late 1990s when the County Board adopted the "Columbia Pike Initiative" with the goal of revitalizing the corridor. As a citizen and, later, as the Executive Director of the Columbia Pike Revitalization Organization I was deeply involved with the multiyear community-lead planning efforts. In 2012, the Columbia Pike Neighborhoods Plan received the Benjamin Banneker Award for Outstanding Social Commitment and Community. As a member of the Committee that co-authored this plan I firmly believe that the proposed political division will be detrimental to the revitalization efforts of our community.

On Columbia Pike, we are one, very tightly knit set of neighborhoods. We face significant common challenges. We are much more diverse and less wealthy than Arlington neighborhoods north of Arlington Blvd (R50). We have experienced disinvestment and lagged economically behind the rest of the County. We are the last in line to see investment in schools, public infrastructure, facilities and services. Columbia Pike is still the largest repository of affordable housing in Arlington and home to a disproportionately high share of moderate and low-income residents.

The existence of long-standing community-institutions like the Pike-Presidents-Group (which is the standing conference of all Civic Association Presidents along the corridor) and the Columbia Pike Partnership (former Columbia Pike Revitalization Organization, founded in 1986), is a testimony to the fact that we stand and advocate for our community interests as one community.

It would be therefore appropriate to be represented as ONE district in the General Assembly.
Thank you for your consideration.
With kind regards,
Takis Karantonis
1401 S. Edgewood St.
Arlington VA 22204

| From:  <br> To: Matt Glunt <br> Subject: Redistricting <br> Date: Redistricting maps <br>  Thursday, December 09, 2021 9:21:09 AM |
| :--- | :--- |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a 17 year resident of Spotsylvania county and have enjoyed my time here. Unfortunately, each of the redistricting maps, US Congress, House of Delegates, and the state senate carve me away from the rest of the county. I live near the corner of Courthouse Road and Leavells Road in the NE part of the county. Each map takes that little slice of the county and removes it from the districts covering the rest. All 3 of my representatives will change under this plan.

I'd like to see Spotsylvania kept together as much as possible and not split between, in some cases, 3 districts.

Thank you
Matthew Glunt
10508 Bent Tree Dr, 22407

| From: | Sharon Barnes |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mount Vernon District |
| Date: | Thursday, December 09, 2021 9:47:56 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

You did not even mention the Mount Vernon District. You split it all up and made a mess without referring to it or explaining it.

Sharon Barnes
1408 Oakbrooke Avenue
Alexandria, VA 22308
36th Senatorial District
Sharonwbarnes@gmail.com

| From: | Dianne Hansen |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Limit to the number of vertices which shape voting Districts |
| Date: | Thursday, December 09, 2021 11:01:20 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Clerk of the Supreme Court, This is in reference to Procedures for Implementing the Requirements of Article II, Section 6-A. In order to keep the shapes "compact", would it be possible to limit to the number of vertices on the shape of each voting region? A triangle would have 3 vertices, a square 4. I realize it's difficult to follow the boundaries of the Western side of Virginia can cause odd shaped districts, perhaps the state edges can count as one side ( 2 vertices). The number would have to be determined, but it may be a helpful indicator when a shape is not concise.
Thank you for your time, Dianne
703-620-1658
Dianne Hansen
3626 W Ox Rd, Fairfax, VA 22033

| From: | Megan Doney |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Montgomery County, VA |
| Date: | Thursday, December 09, 2021 11:36:40 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
I am writing to request that Montgomery County be kept together as one district. Blacksburg/Christiansburg/Radford are communities of interest with overlap in employment, health care, and the arts and should also be grouped together.
Respectfully,
Megan Doney
Christiansburg, VA
--
Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing. --Arundhati Roy

| From: | Lacob Levy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | 2nd and 3rd CD Redistricting: Constituent Input |
| Date: | Thursday, December 09, 2021 2:06:49 PM |
| Attachments: | Screen Shot 2021-12-09 at 1.23.18 PM.png |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSGood afternoon,
My name is Jacob Levy. I'm a Virginia Beach resident, lifelong Norfolk/Virginia Beach resident, and 3rd year student at Georgetown Law (where I've studied election law encompassing redistricting under Rick Hasen). I write in regard to the 2nd and 3rd congressional districts in the Virginia redistricting process - my community.

The redistricting commission's allocation of Chesapeake to the 2nd and 3rd is a commendable improvement. However, I write to voice that the northern half of Norfolk should remain in the 2nd district where it has historically been. In turn, Suffolk, Isle of Wight, Franklin, and the eastern sliver of Southampton should remain in the 3rd rather than be moved to the 2nd. These two changes entail virtually identical population sizes and would effectively "cancel each other out", with virtually no other changes necessary in response (This suggestion can be viewed in the image attached at bottom of this email, or at this link: https://davesredistricting.org/maps\#viewmap::118ae4b3-d87b-406c-b9df7611b85e383b)

This largely keeps the redistricting commision's Chesapeake changes intact, while better preserving communities of interest: The Suffolk/Franklin areas share more with Portsmouth and the rest of the 3rd, while the northern part of Norfolk is far more a community of interest with Virginia Beach. I speak from personal experience, having lived in various parts of Virginia Beach but always gone to school in, worshiped in, and visited friends and family in these relevant parts of Norfolk that have always been with us in the 2nd. Further, this proposal strengthens minority representation, keeping the 3rd district closer to its current state than the new redistricting proposal, which diminishes its Black representation. This proposal is also more geographically compact/clean (and as for partisan effect, if that's a consideration, it leaves the already-competitive 2nd district virtually unchanged and still very competitive for both parties.)

Perhaps most importantly, this change to the 2nd/3rd CDs in the redistricting proposal can be done without making any other changes to any other districts on the map. Redistricting is difficult when one change messes up the map somewhere else, and I understand that may leave the Supreme Court hesitant to make changes to the Special Masters' map. However, that is not a problem with this suggested change here: all other districts remain unchanged, and the 2nd/3rd CD's end up at even more equal population parity after this change.

Please feel free to reach out to me with any questions about this proposal to keep these designated parts of Norfolk with their communities of interest in Virginia Beach at 757-477-

2212 or jml437@georgetown.edu. I am more than happy to discuss further in writing, on call, or in person at your convenience.

Thank you for your time and service, Jacob Levy

| From: | Lohn McAuliff |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Citizen Map Comments |
| Date: | Thursday, December 09, 2021 3:20:18 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Mr. Trende \& Dr. Grofman,

I hope this email finds you well. My name is John McAuliff and I live in Warrenton, Virginia. My comments are as follows:

In general, these maps are an immense improvement on the 2010 maps and the work of the commission. I have one suggestion, which is to include the Warrenton precincts in Senate District 31. Warrenton is the heart of Fauquier County, 50-50 politically speaking, and is a town whose economy hums on the tourism and wedding industry as does rest of the Northern Piedmont that this district is designed to include. We have very little in common with Southern Fauquier and points south (though nothing against them either). It also looks a bit odd with the little notch from where Warrenton is excluded.

Sincerely yours,

John
--

| From: | $\underline{\text { Gordon Goetz }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting Commission - Rte 123 Core Community |
| Date: | Thursday, December 09, 2021 5:08:16 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Virginia Redistricting Commission,
Thank you for your service on the historic first Virginia Redistricting Commission, and for your thoughtfulness and consideration during this difficult and complex process. I am writing today to express my support of your recommendation to separate the Virginia Route 123 Core Community. The communities along Route 123 in central Fairfax, including Fairfax City, the Town of Vienna and George Mason University, may very well have social, historic and cultural ties that constitute a community of interest, the reality is that I have never felt any connection to the town of Vienna or any community north of Fairfax City.

The fact of the matter and daily reality of being a resident of Fairfax (Kings Park West) since 2012 is that my family and I have much more of a connection with the neighboring communities of Springfield, Burke, Fairfax City, and George Mason University than any other communities in Fairfax. I see my neighbors in these communities as the ones that we share similar social, cultural, and economic interests with. For me, I have never considered the Route 123 Core community as having any significant effects on the lives of me and my family.

Sharing a main road such as Rte 123 may have in the past contributed to a broder common identity, however shifting demographics and home prices have changed that connection. I don't see where linking Fairfax with Vienna where home prices are significantly higher lends itself to a shared experience.

In conclusion, I support the breaking apart of the Route 123 Core Community. Best wishes, and thank you for your service.

Gordon Goetz
ghgoetz@gmail.com
10003 Enford Ct.
Fairfax, Virginia 22032
Gordon H. Goetz
Fairfax, VA

| From: | Tim Huson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Written public comment regarding the redistricting maps proposed by the Special Masters |
| Date: | Thursday, December 09, 2021 5:15:14 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Justices of the Virginia Supreme Court:
I write to submit a public comment regarding the redistricting maps proposed by the Special Masters. Having reviewed the Special Masters' maps and their explanatory notes, I observe:

1. All in all, this seems like a solid, non-partisan result that accomplishes the goals set out in the new redistricting law.
2. The Special Masters’ maps and the accompanying notes are impressive. Including notes on how they came up with each district and how they considered alternatives is a valuable communication of their logic, impartiality, and transparency. They appear to have been wholly non-partisan and professional. The notes show how and what they were thinking, and how they have tried to meet the competing goals of drawing districts. The rigor of their computational checks also shines through.
3. The interactive maps, with comments pinned to specific locations, are a great communication and transparency tool.
4. I have only one suggestion. The U.S. Congress and state Senate maps apparently would not produce a result to the unfair advantage of either party. However, on page 49 of the notes, the Special Masters explain that the state House of Delegates map could slightly favor the Republicans vs a hypothetically perfect result in the number of Delegates elected that would mirror the statewide proportion of votes in the most recent relevant election. The notes state "This gives Republicans a slight advantage. However, it is difficult to eliminate this advantage given Virginia’s political geography. ... overall, this map is well-balanced, does not unduly favor an[y] party and did not need to be adjusted." I encourage the Special Masters to elaborate on why it is difficult to eliminate this slight Republican "advantage given Virginia's political geography." Throughout the paper they have shown how they considered alternative approaches and why they made the choices they did. If they explain this House map result more thoroughly and how they considered addressing this slight advantage but determined they could not or should not do so, then they will have made it easier to understand and assess their analysis and choices.

Tim Huson
Arlington, Virginia
tim@huson.com
U.S. Cell: +1 (703) 899-6216

| From: | Dustin Howard |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Disenfranchised in Stafford |
| Date: | Thursday, December 09, 2021 7:53:15 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
The Special Masters' decision to divide the Fredericksburg region into two separate Congressional Districts, and intersperse us with Northern Virginia counties is most disheartening. I do not believe Prince William voters will have our best interests at heart, nor will Loudoun voters have Spotsylvania in mind.

The southern exurbs of the DC metro do not consider themselves to be part of Northern Virginia. Please consider placing Loudoun and Prince William in their own districts, and allow Stafford and Spotsylvania to remain part of the same voting district.

I would express concern to my elected representatives, but given the process, this is my only hope of being heard.

Sincerely, Dustin Howard Stafford, VA

| From: | Tim Michel |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank you. |
| Date: | Thursday, December 09, 2021 7:21:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep working against gerrymandering so democracy can survive.
Tim Michel

| From: | $\underline{\text { Cathy Hosek }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Maps brought forward from the Supreme Court |
| Date: | Thursday, December 09, 2021 10:14:05 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello again,
I have just taken a look at the new maps drawn by the Supreme Court and I would like to make some comments.

My current district is the 36th Senate District. The new map has me as a resident of the 34th district. In my previous comments, I stated that I-95 should be the western boundary of this district. Fairfax County has much more in common than the areas south of Occoquan in Prince William County or West of I-95. Howeer, this map pairs the Mount Vernon District with Springfield. The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they REMOVED a Springfield district because we do not share common interests. Here is a link to that map: https://www.fairfaxcounty.gov/redistricting/sites/redistricting/files/assets/documents/2021-adopted-redistricting-plan-map.pdf

The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I-95 are not communities of interest. An example is the Mount Vernon High School that is located on 8515 Old Mount Vernon Road that would be split in half with this map. See the map of the school boundaries on this map: https://www.fcps.edu/sites/default/files/boundary-maps/Mountvernon_HS.pdf The memo that states that the 34th district is anchored in West Springfield and Franconia is not true. Looking at the map of Fairfax County AND the school boundary of Mount Vernon High School will inform the Special Masters where the boundaries should be.

The Mount Vernon Community, which contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK - details here: https://fairfaxcountygis.maps.arcgis.com/apps/MapSeries/index.html? appid=7e2f347f24bd4f7e909a92b3b2f274a9 ) is of concern to all of the residents who live along the corridor, but is not of interest to West Springfield or even Franconia.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with organizations like the MVCCA (Mount Vernon Council of Citizens' Associations) - https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ - which both include members all along the Route 1 Corridor.

Mason Neck is also a part of the Mount Vernon District, as is Lorton who have nothing in common with the residents of Haymarket and Fredericksburg.

Please share the links above with the Special Masters, because I believe they need to know that the boundaries they have submitted do not recognize Mount Vernon as a community of interest, which we absolutely are.

Sincerely,
Cathy Hosek
Proud Mount Vernon Resident

| From: | Robert Fasick |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Congressional Map Proposal |
| Date: | Thursday, December 09, 2021 11:56:21 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,

It is with some consternation that I have viewed the maps as drawn by the Special Masters for the Supreme Court of Virginia. I am most interested in the Northern Virginia portion of the maps, and thusly that is the area on which I will comment. Having lived in Northern Virginia since 1976, I would say that there are certain areas (the $8^{\text {th }}, 11^{\text {th }}$ and $7^{\text {th }}$ Congressional Districts on the proposed maps), that appear to have been drawn without much information on or consideration of the nature of the communities and flow of life and activities in those new districts. It appears that the Special Masters had no real knowledge or understanding that Mount Vernon et al is one community!

Specifically, the $8^{\text {th }}$ Congressional District, and the $11^{\text {th }}$ Congressional District are of major interest to me, as well as the $7^{\text {th }}$ District on the new map. It is most concerning that sections of the Mount Vernon Community (yes, community is exactly the right word), those land parcels geographically located contiguous with the property of Mount Vernon (Plantation), have been taken from those communities, and in fact from parts of the greater Mount Vernon Community, with which they are most aligned. "Westgate" is in fact the West Gate of the Mount Vernon Plantation, and is intimately involved with community life in the area. Many of the normal civic and life activities of residents are rather neatly and naturally divided on the south by Fort Belvoir. (These are folks who would naturally be talking with each other about how things are going, and what they thought of what the government was doing in their community. A pretty good indicator of common interests!) Additionally, although County governmental boundaries are not necessarily a major consideration, government resources provided to the new $7^{\text {th }}$ District would primarily come from Prince William and Stafford Counties, while the Mount Vernon section of the new district would receive resources from Fairfax County. These resources would necessarily be provided to address quite different priorities. Congressional representation is certainly quite different from County or State House and Senate representation, but I truly believe that when possible, those jurisdictions should be aligned so that the everyday concerns of citizens can be more efficiently and effectively addressed.

My primary suggestion for modifying the proposed maps would be to incorporate those parts of the Mount Vernon area existing between the Mount Vernon Plantation and extending to the northern boundary of Fort Belvoir at US Route 1, and the Northern neck immediately to the south of Fort Belvoir be included in the revised maps for Congressional Districts 8 and 11, allowing Occoquan Bay to be a natural boundary between the $8^{\text {th }}$, the $11^{\text {th }}$ and the $7^{\text {th }}$. I believe that the normal life interests, and thus the necessary representation of residents living in the Mount Vernon and Mason Neck areas more closely align with those residents in the new $8^{\text {th }}$ and $11^{\text {th }}$ than in the new $7^{\text {th }}$.

Respectfully
Bole Fasick
\# 703-866-6124
e 571-331-6048

Conscience. Campassion. Commitment

```
From: Genie McCreery
To: Redistricting
Subject: Opinion: Supreme Courts Maps being considered
Date: Friday, December 10, 2021 12:30:49 AM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good evening,
Please keep Mount Vernon together. The Supreme Court choice of new maps cuts Mt Vernon in half and includes us with West springfield, which we do not have anything in common. Many of us have discussed and agreed on the following. These are some of many of the reason why Mount Vernon must stay together.

I am in the 36th Senate District. It only makes sense that I-95 should be the western boundary of this district. Fairfax County has much more in common than the areas south of Occoquan in Prince William County or West of I-95. Howeer, this map pairs the Mount Vernon District with Springfield. The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they REMOVED a Springfield district because we do not share common interests. Here is a link to that map: https://www.fairfaxcounty.gov/redistricting/sites/redistricting/files/assets/documents/2021-adopted-redistricting-plan-map.pdf

The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I-95 are not communities of interest. An example is the Mount Vernon High School that is located on 8515 Old Mount Vernon Road that would be split in half with this map. See the map of the school boundaries on this map: https://www.fcps.edu/sites/default/files/boundary-maps/Mountvernon_HS.pdf The memo that states that the 34th district is anchored in West Springfield and Franconia is not true. Looking at the map of Fairfax County AND the school boundary of Mount Vernon High School will inform the Special Masters where the boundaries should be.

The Mount Vernon Community, which contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK - details here: https://fairfaxcountygis.maps.arcgis.com/apps/MapSeries/index.html? appid=7e2f347f24bd4f7e909a92b3b2f274a9 ) is of concern to all of the residents who live along the corridor, but is not of interest to West Springfield or even Franconia.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with organizations like the MVCCA (Mount Vernon Council of Citizens' Associations) - https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ - which both include members all along the Route 1 Corridor.

Mason Neck is also a part of the Mount Vernon District, as is Lorton who have nothing in common with the residents of Haymarket and

Sincerely,
Genie McCreery
Concerned citizen of Mount Vernon

| From: | Carol Coyle-Shea |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mount Vernon district |
| Date: | Friday, December 10, 2021 6:21:00 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TWIMC:
Background: I've lived in Northern Virginia since 1964, all but 8 of those years in the Mount Vernon Magisterial District. I spent about 15 years as secretary on Mount Vernon Council of Citizens' Associations. [When I moved from Waynewood to Montebello, my Voting District changed to Lee but I remained in the Mount Vernon Magisterial District.)

It is my understanding that the Mount Vernon Voting District, under the proposed redistricting, would extend further to the west, incorporating areas that have nothing in common with the Mount Vernon area. Extending the MV Voting District into Springfield makes no sense except, perhaps, to "play with" the numbers.

In years past, Mason Neck, which abuts the Mount Vernon area, was part of the MV Voting District; this made sense due to proximity. Reinstituting that plus incorporating the area from Route One to North Kings Highway along the beltway (to correspond with MVMD boundary) would seem to me a more logical way of increasing the voter numbers in Mount Vernon Voting District.

Thank you for your consideration of this point of view.
Yours truly,
Carol Coyle-Shea
5903 Mount Eagle Drive, \#118
Alexandria, VA 22303

| From: | Len |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Route 123 Core Community |
| Date: | Friday, December 10, 2021 9:04:35 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Per your request

Virginia Redistricting Commission,
Thank you for your service on the historic first Virginia Redistricting Commission, and for your thoughtfulness and consideration during this difficult and complex process. I am writing today to ask that you keep the Virginia Route 123 Core Community together, at least as a State Senate district. The communities along Route 123 in central Fairfax, including Fairfax City, the Town of Vienna and George Mason University, have social, historic and cultural ties that constitute a community of interest. They are the 123 Core Community.

The Virginia Code defines communities of interest as a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests. Under this definition, the Route 123 Core constitutes one community. Historically, Route 123 has crossed Fairfax County from south to north, connecting Route One to the Chain Bridge. Along that route, Route 123 in central Fairfax is a distinct community, which has survived for generations.

For example, Fairfax City and Vienna are historic towns within Fairfax County, whose existence predate the Civil War. They share a main road (Rte 123), border a key regional Highway (I-66), co-host a METRO station (Vienna), have local historic societies and downtown districts, and share a common identity as small jurisdictions just outside the Beltway. Additionally, Fairfax City runs an independent bus service that connects George Mason University and parts of Fairfax County south and east of the City to the Vienna METRO.

A key part of central Fairfax's identity comes from George Mason University, Virginia's largest public university, and its 33,000 students, not to mention all the professors and staff who live in the area. The University is located partly in Fairfax City and partly in Fairfax County.
The University's neighboring precincts in the County are all part of the University community. In Villa, Woodson, Robinson, Laurel, Bonnie Brae and Sideburn, the community is centered around the University. This is where professors live, and where students rent homes and apartments. These same precincts even share Fairfax postal addresses which end at the VRE railroad tracks, where Fairfax becomes Burke.

In conclusion, please keep the Route 123 Core Community together. The precincts are linked economically, socially and physically and should stay together in redistricting.
Best wishes, and thank you for your service,

Jennifer Kuenning
one_snickers@yahoo.com
5106 Richardson Drive
Fairfax. Virginia 22032

| From: | Lanet I. Trettner |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Articl II, Section 6-A: Redistricting |
| Date: | Friday, December 10, 2021 9:20:06 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

3965 Mountain Valley Road
Keezletown, Virginia 22832
10 December 2021

The Supreme Court of Virginia
PO Box 1315
100 North Ninth Street
Richmond, Virginia 23218-1315

RE: The Rules and Prodecures for Implementing the Requirements of Article II, Section 6-A

Dear Justices:

I have looked at the redistricting maps that were released this week and I am writing to you regarding two considerations:

First of all, I was very pleased to see that none of the maps cross the Blue Ridge Mountains. It is extremely important to the integrity of our "communities of interest" that the Special Masters honored this natural boundary.

Secondly, I noticed the new districts were not renumbered as I and others have previously supported. It would be most beneficial to discussions of our electoral system if 1) each district were numbered in such a way as to be clearly identifiable as a Congressional, State Senate, or State House district while 2) giving each category of districts room for expansion in the event this is needed in the future.

This can be accomplished by preserving the current numbering system for Congressional districts (1-11), and by renumbering the Senate districts 100-139 and the House districts 200-299.

I strongly urge the Court to adopt this numbering system in order to clarify discussions of political districts. This would greatly increase accessibility to the political process for those Virginians not totally steeped in the politics of our great Commonwealth.

Thank you for your consideration of my suggestion.

Very truly yours,
Janet I. Trettner

| From: | Steve Baker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting comments - implementing Article II, Section 6A |
| Date: | Friday, December 10, 2021 9:33:40 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel-Theresa Pitney

Clerk of the Court
Supreme Court of Virginia
100 N Ninth St
Richmond, VA 23219
RE: rules and procedures for implementing the requirements of article
II, sec. 6-A
To whom it may concern,

Pursuant to rule 4a of the rules and procedures for implementing the requirements of article II section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia U. S. House Districts.

I applaud the panel of experts for working hard to adhere to the principles of compactness and keeping communities of interest together, however, in the case of the 4th District they have been too successful. The 4th CD is clearly racially packed, and as a result, ultimately restrains the voices of minority voters. The easiest way to resolve this issue without compromising compactness is for the 4th to cede a little turf to the 1st who cedes a little to the 5th who cedes a little back to the 4th. The intersection of these three districts near Richmond's west end make it the only plausible location for an adjustment. I would suggest moving all of Henrico County and Richmond north of Broad Street to the 1st CD as a minimal show of good faith in unpacking the 4th. Thank you.

Sincerely,
Steve Baker

Steve Baker
1121 Arlington Blvd \#339
Arlington, VA 22209

| From: | Sharon Abernathy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | FW: Gerrymandering |
| Date: | Friday, December 10, 2021 11:26:27 AM |

-----Original Message-----
From: Susan Perry [susanyperry60@gmail.com](mailto:susanyperry60@gmail.com)
Sent: Friday, December 10, 2021 10:37 AM
To: Internet Scclerksoffice [scvclerk@vacourts.gov](mailto:scvclerk@vacourts.gov)
Subject: Gerrymandering

EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY
LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Clerk Pitney,
I am writing to request the VA Supreme Court consider mathematical and other non-partisan technical methods to redistrict. There are mathematicians and technology experts who have worked on this issue for many years. Wisconsin is looking at technical options, as well.

Given these advancements, there is no reason to continue with trying to make the redistricting fair with innate human biases.

Thank you for your consideration,
Sincerely,
Susan Perry
Charlottesville, VA

| From: | Carol |
| :--- | :--- |
| To: | Redistricting; Redistricting |
| Subject: | Redistricting maps draft |
| Date: | Friday, December 10, 2021 1:03:21 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I think we should congratulate the special masters. The memo they wrote was like a manual that future commissions could use to do the job. Of course some individual incumbents will be out of jobs. Of course some voters will be in different districts. When things are done fairly, as I think is this case, that's what happens. The voters supported fair maps, and that's what was presented by the special masters. It is not about specific individuals. It's bigger than that. It's about the greater good. With these maps the voters of Virginia got what they voted for: the end of partisan gerrymandering.

I hope the Virginia Supreme Court is able to accept the maps as presented. I don't see how anyone could do a better job for the whole state.

Thank you.
Carol Rowan
1854 Laurel Mountain Drive Salem, VA
carol@rowandc.com
540-750-1085

| From: | Tracy Compton |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fwd: Dear Commissioners |
| Date: | Friday, December 10, 2021 8:18:07 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please see below for my request to not break up the 123 Corridor. It is a district that should stay together!
-Tracy
---------- Forwarded message $\qquad$
From: VA Redistricting < varedistrictingcommission@dls.virginia.gov>
Date: Thu, Dec 9, 2021 at 11:13 PM
Subject: Re: Dear Commissioners
To: [tracyannekelly@gmail.com](mailto:tracyannekelly@gmail.com)

Hello, and thank you for your interest.
The Supreme Court of Virginia has taken over the responsibility for redistricting and would like written comments emailed to the Court at Redistricting@vacourts.gov.
Best,

Virginia Redistricting Commission Support
Staff
-

On Thu, Dec 9, 2021 at 5:02 PM Tracy Compton [info@sg.actionnetwork.org](mailto:info@sg.actionnetwork.org) wrote:
Virginia Redistricting Commission,
The route 123 area is our community, our home. Please keep the district together so we have a voice for our community.

Thank you for your service on the historic first Virginia Redistricting Commission, and for your
thoughtfulness and consideration during this difficult and complex process. I am writing today to ask that you keep the Virginia Route 123 Core Community together, at least as a

State Senate district. The communities along Route 123 in central Fairfax, including Fairfax City, the Town of Vienna and George Mason University, have social, historic and cultural ties that constitute a community of interest. They are the 123 Core Community.

The Virginia Code defines communities of interest as a neighborhood or any geographically
defined group of people living in an area who share similar social, cultural, and economic interests. Under this definition, the Route 123 Core constitutes one community.
Historically, Route 123 has crossed Fairfax County from south to north, connecting Route One to the Chain Bridge. Along that route, Route 123 in central Fairfax is a distinct community, which has survived for generations.

For example, Fairfax City and Vienna are historic towns within Fairfax County, whose existence predate the Civil War. They share a main road (Rte 123), border a key regional Highway (I-66), co-host a METRO station (Vienna), have local historic societies and downtown districts, and share a common identity as small jurisdictions just outside the Beltway. Additionally, Fairfax City runs an independent bus service that connects George Mason University and parts of Fairfax County south and east of the City to the Vienna METRO.

A key part of central Fairfax's identity comes from George Mason University, Virginia's largest
public university, and its 33,000 students, not to mention all the professors and staff who live in the area. The University is located partly in Fairfax City and partly in Fairfax County.
The University's neighboring precincts in the County are all part of the University community. In Villa, Woodson, Robinson, Laurel, Bonnie Brae and Sideburn, the community is centered around the University. This is where professors live, and where students rent homes and apartments. These same precincts even share Fairfax postal addresses which end at the VRE railroad tracks, where Fairfax becomes Burke.

In conclusion, please keep the Route 123 Core Community together. The precincts are linked
economically, socially and physically and should stay together in redistricting.
Best wishes, and thank you for your service,
Tracy Compton
tracyannekelly@gmail.com
10511 Dillard Ct
Fairfax, Virginia, Virginia 22032

| From: | Katie Friesen |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Fwd: Dear Commissioners |
| Date: | Saturday, December 11, 2021 7:19:53 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Virginia Redistricting Commission,
Thank you for your service on the historic first Virginia Redistricting Commission, and for your thoughtfulness and consideration during this difficult and complex process. I am writing today to ask that you keep the Virginia Route 123 Core Community together, at least as a State Senate district. The communities along Route 123 in central Fairfax, including Fairfax City, the Town of Vienna and George Mason University, have social, historic and cultural ties that constitute a community of interest. They are the 123 Core Community.

The Virginia Code defines communities of interest as a neighborhood or any geographically
defined group of people living in an area who share similar social, cultural, and economic
interests. Under this definition, the Route 123 Core constitutes one community.
Historically, Route 123 has crossed Fairfax County from south to north, connecting Route One to the Chain Bridge. Along that route, Route 123 in central Fairfax is a distinct community, which has survived for generations.

For example, Fairfax City and Vienna are historic towns within Fairfax County, whose existence predate the Civil War. They share a main road (Rte 123), border a key regional Highway (I-66), co-host a METRO station (Vienna), have local historic societies and downtown districts, and share a common identity as small jurisdictions just outside the Beltway. Additionally, Fairfax City runs an independent bus service that connects George Mason University and parts of Fairfax County south and east of the City to the Vienna METRO.

A key part of central Fairfax's identity comes from George Mason University, Virginia's largest
public university, and its 33,000 students, not to mention all the professors and staff who live in the area. The University is located partly in Fairfax City and partly in Fairfax County.
The University's neighboring precincts in the County are all part of the University community. In Villa, Woodson, Robinson, Laurel, Bonnie Brae and Sideburn, the community is centered around the University. This is where professors live, and where students rent homes and apartments.
These same precincts even share Fairfax postal addresses which end at the VRE railroad tracks, where Fairfax becomes Burke.

In conclusion, please keep the Route 123 Core Community together. The precincts are linked
economically, socially and physically and should stay together in redistricting.
Best wishes, and thank you for your service,
Homan Wai
homan.wai@gmail.com
9200 Claytonia Ln
Annandale, Virginia 22003

| From: | Sara Breaux |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keeping Kings Park West in Fairfax VA as a complete entity |
| Date: | Saturday, December 11, 2021 10:26:22 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS <br> Hello

I am writing today out of concern for the new split of Kings Park West (KPW) along Commonwealth Blvd..

This neighborhood, while large, shares a good deal of common interests and should not be bifurcated in this way. Divisiveness already permeates society right now doesn't seem we need to/should in any way actually formalize it.

Please reconsider.
Thank you,
Sara Breaux
KPW Resident since 2005
5207 Pumphrey Drive
Fairfax, VA 22032

Sent from the all new AOL app for iOS

| From: | 亡jupiter |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Francine Jupiter |
| Subject: | Assembly District 44 |
| Date: | Saturday, December 11, 2021 11:01:08 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to comment on the boundaries of the new Assembly District 44.

I believe the map makers missed some key communities of interest in drawing the new boundaries by not being familiar with the geography, school pyramid, and community adhesion in this area.

For example, the bulge in moving the northern Huntington area into the District while shifting the southern section into the western area misplaces key communities. The southern area takes away a distinct School pyramid section and introduces and odd mix of school pyramid into the 44th. Similarly the shift causes residents in the southern section, who are faced with geographic and transportation limits into a relatively inaccessible part of the District. The residents in the north can and do easily access the western area of that area while the residents of the southern portion have limited access to the western section due to a large park and limited through roads in that direction. This would mean that those residents would not readily visit the offices and primary jurisdiction of their assigned delegate.

I urge the Commission to relook at the movement of the respective precincts and realign the Northern and Southern bulges.

Thank you<br>Jay Jupiter

| From: | Ann Saad |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Saturday, December 11, 2021 2:02:34 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to share an opinion with you.
I feel strongly that redistricting panels should ALWAYS, now and in the future, include an equal number of members of both political parties. That way, no matter who wins elections, redistricting will be as fair as possible. This would allow VA to be a leader in fairness and set an example for other states to follow.

Sincerely, Andrea Saad
annsaad2012@gmail.com
Moneta, VA 24121

| From: | Mary Shearon |
| :--- | :--- |
| To: | Redistricting |
| Subject: | December 2021 Redistricting Proposals for Fairfax County |
| Date: | Saturday, December 11, 2021 3:35:56 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Redistricting Special Masters -
I have read through the redistricting proposals for my area and am in disagreement with the plans.
*Shifting voters who live in Fairfax County along Mt. Vernon Memorial Highway into a new Congressional District with Fredericksburg and Manassas? Instead of the present 8th Congressional District? Doesn't make sense to me, having the district go all the way to Fredericksburg.
*And the proposal to divide up some of the people in the 22303/22306/22307/22308/22309/22315 ZIP Codes? Why? why split up people who live in the same areas? Seems like they would have the same concerns.
*And then we come to the proposal to split in half the Mt Vernon High School Pyramid and Mt. Vernon Supervisor District. This proposal would split neighbors from people across the street, again a problem for this resident.
*The renumbering/re-drawing of Virginia Senate District 34 to 36 and of Virginia House District 16 to 44 and their associated changes...again, this doesn't make complete sense to me, the splitting up of neighborhoods etc.

Thank you for your time.
Mary Shearon
7920 Fairfax Road
Alexandria, VA 22308

| From: | Łim Call |
| :--- | :--- |
| To: | Redistricting |
| Cc: | director@onevirginia2021.org |
| Subject: | Comments re CD map |
| Date: | Saturday, December 11, 2021 4:16:23 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

# Suggestions regarding Special Masters' Proposed Congressional District Map <br> James Call 12-11-21 

I appreciate the work of special masters Dr. Grofman and Mr. Trende. The process outlined in their memo to the court makes good sense and I am very pleased that the court is allowing a full week for citizens to provide direct input on their proposals. I tried to build on the approach of the special masters. My suggestions focus on several changes to their map which would better preserve communities of interest (COI) in Districts 1-5, 7 and 10, make these districts more compact and make them more competitive, while still keeping three "majority minority" districts.

My changes would reduce the number of split counties to five. I used District Builder's census blockgroups in splitting Prince William and Chesapeake. The special masters would no doubt want to use precinct boundaries to achieve such a split, but these were not available to me. No changes to the masters' map are proposed in the two solidly Republican districts (6 and 9) or the two solidly Democratic districts (8 and 11), including in the way the masters have split Roanoke, Bedford and Fairfax counties.

Here is a summary of my proposed changes:
-Richmond area: Divide the metro area into two districts, rather than three by putting all of Henrico in District 1 and putting all of Richmond and Chesterfield in District 4.
-Charlottesville: Keep all of Albermarle and Charlottesville together in District 5. Louisa, Fluvanna and Goochland also fit nicely into District 5 and presumably have more in common there, than with District 1.
-Districts 7 \& 10: Move northwestern Prince William into District 10 where residents have more in common with Loudoun and Fauquier. Place Spotsylvania, King George and Caroline in District 7 where there is a COI along I-95.
-Norfolk area: The way the masters drew District 2 creates a very spread-out district with a separate population west of the Great Dismal Swamp. My map puts Norfolk and a small adjoining area of northwest Chesapeake in District 2 with Virginia Beach, creating a more compact COI. Adding Suffolk, Isle of Wright, Franklin, Poquoson and the rest of Chesapeake to District 3 does not significantly dilute its majority minority character.

Attached is a link to my proposed map which was drawn with the District Builder app. I hope this can be considered as part of next week's public hearing and that it can be helpful to the court.

| From: | Kenneth Roberts |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting - Keep Mount Vernon Whole |
| Date: | Saturday, December 11, 2021 4:22:21 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The proposed map for CD8 cuts off our neighborhood from the rest of the 8th Congressional District and the proposed 34th Senate District. We are all one proud community in Mount Vernon. We have the same Supervisor and School Board member. You have split our high school district, middle school district and even our elementary school district right in half. This map does not respect our community or the historic nature it represents. The area along Dogue Creek belongs with everything to the North and Alexandria. We do not have the same issues as Clifton, Lorton, or Springfield - WE ARE MT. VERNON. Please keep the Fairfax County precinct 613 - Westgate in the 8th Congressional.

```
From: Luke Wills
To: Redistricting
Subject: Congressional Districts Map Proposal
Date: Saturday, December 11, 2021 4:56:14 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
My name is Luke Wills, and I am a current resident of Albemarle County. After reviewing the special masters' initial draft for Virginia’s Congressional Districts, I was pleased to see that this new map respects communities of interest and fixes many of the issues with split counties present in our current districts, while maintaining relatively equal distributions of population and ensuring a high level of compactness. As a previous resident of Williamsburg, I was particularly pleased to see that Williamsburg and other north Hampton Roads counties have been grouped with the rest of Eastern Virginia in District 1. This makes sense based on communities of interest I have observed during my time living there.

As a resident of Albemarle County, however, I was disappointed to see my county split between Districts 5 and 10. Albemarle County and Charlottesville make up one continuous community of interest, and in day-to-day life are not split along I-64 as in this current proposal. I hope that the court and the special masters will consider what I feel is a just and equitable solution to this issue: moving the entirety of Albemarle County and Charlottesville to District 10, and moving Louisa, Fluvanna, and Goochland Counties into the 5th District, which includes much of Southside and Piedmont Virginia, areas they have much more in common with than the eastern counties they are currently grouped with in District 1 . The portion of Spotsylvania County currently in District 10 could be transferred to District 1, aiding in compactness and population distribution. This change would also require some minor border adjustments in Henrico and Chesterfield Counties. The change would affect districts $1,4,5$, and 10 . I have included an example of what such a change might look like below:
https://www.virginiaredistricting.org/legdistricting/comments/plan/521/1
This change would allow the 10th District to contain all of Loudon, Fauquier, Rappahannock, Culpeper, Madison, Orange, Greene, and Albemarle Counties, as well as Charlottesville City, with no county splits and greater continuity for communities of interest. District 10 would remain the median district for the purposes of partisan analysis, coming in 2 points more Democratic than the state as a whole, rather than 2 points more Republican under the current plan. Other points of analysis would remain unchanged, except that District 5 would be expected to become 3 points more Republican.

I believe that this change would create a more compact, fair map that would respect my community of interest without upsetting the racial, political, or geographic balances the special masters have skillfully crafted under their current proposal. I hope they will consider this change.

Thank you, Luke Wills

| From: | Hank Hart |
| :--- | :--- |
| To: | Redistricting |
| Date: | Saturday, December 11, 2021 6:54:28 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The proposed map for CD8 cuts off our neighborhood from the rest of the 8th Congressional District and the proposed 34th Senate District. We are all one community down here. We are part of Mt. Vernon. We have the same Supervisor and School Board member. You have split our high school district, middle school district and even our elementary school district right in half. This map does not respect our community. The area along Dogue Creek belongs with everything to the North. We have nothing to do with Clifton, Lorton, or Springfield - ARE ARE MT. VERNON. Please fix this. Gail Richmond

| From: | hankwills |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Scott@scottsurovell.org |
| Subject: | Redistricting Maps |
| Date: | Saturday, December 11, 2021 7:53:26 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

KEEP COMMUNITIES TOGETHER!

PROPOSED MAPS ARE TERRIBLE IN THE WAY THEY SPLIT SPLIT UP NEIGHBORHOODS !

DO NOT DO THAT !
START OVER AND BE REASONABLE !

KEEP NEIGHBORS TOGETHER!
Henry B. Williams
Collard Street
Alexandria 22306

Sent from my Galaxy

| From: | Miss Paula |
| :--- | :--- |
| To: | Redistricting |
| Subject: | comments |
| Date: | Saturday, December 11, 2021 9:04:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I don't really understand how they came up with the redistricting plan. It makes no sense to split Mt. Vernon or associate it with Quantico, Manassas, and Fredericksburg! That is totally bizarre. We don't have the same issues or concerns that they do.

## Paula Croisetiere

7912 Grimsley st.
22309

## Muriel Pitney

From:
Sent:
To:
Subject:

CONTRARYMARY 1 [ContraryMary1@msn.com](mailto:ContraryMary1@msn.com) Friday, December 10, 2021 9:27 PM
Internet Scclerksoffice
Virginia Redistricting, specifically Isle of Wight Co.

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern,
And I suspect it is of no real concern; except, of course, to the citizens who will be affected by yet another government farce.

I see the usual plan is to be enacted in Isle of Wight as well as many other counties. The plan of Divide and Conquer, while an old favorite of tyrants and those others who would care to gain control, should be outlawed in a land supposedly based on the God Given freedoms of man. Of course, the powers that be would never outlaw their devices, nor would they relinquish their control over the masses. Therefore, I'm sure I'm wasting my time in stating that the proper, just, and righteous endeavor for the Supreme Court of Virginia to undertake would be to scrap all Redistricting plans and set about to clean up the disaster that has stolen free and fair elections, true representative government, and implemented Communist rule while slowly stealing the rights of the people of Virginia.

Sincerely, Paula Buss

Get Outlook for Android

| From: | Rainey Astin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | I am against the proposed redistrict plan |
| Date: | Saturday, December 11, 2021 9:49:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

It needs more thought and consideration. Please take a pause and thoughtfully consider splitting school areas and neighborhoods in half in a haphazard fashion. This should never be the result of a plan.

Rainey Astin
2204 SHERWOOD Hall lane
Alexandria Va

Sent from my iPhone

```
From: Barbara Mann
To: Redistricting
Subject: understanding the Mt. Vernon Community
Date: Saturday, December 11, 2021 10:37:15 PM
Importance: High
```


## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This is the information I just received about the proposed redistricting:
[The proposed redistricting of] the district cuts off at Mt. Vernon Memorial Highway. Voters in 22308 will be grouped with voters on Rolling Road in Springfield instead of with their neighbors on Ferry Landing Road. The 8th Congressional District cuts off in approximately the same spot and puts George Washington's Mt. Vernon Estate in the same district as Quantico, Manassas, and Fredericksburg!

Voters in zip codes 22308 typically do not have any occasion to go to Rolling Road, much less vote with them. This is due to significant physical distance between the two areas. An extraordinary distance would be put to put the Mt. Vernon Estate in the same district as Quantico, Manassas and Fredericksburg.

Why is this being done? The Mt. Vernon area is diverse and its residents work tirelessly to connect on all levels. Voting is one great way we connect in our diverse community, no matter the party. To disassemble all the positive work we have seen over the 48 years we have lived in Mt. Vernon through redistricting, and thus put us further apart rather than closer, boggles our minds.

Please revisit the redistricting map for our area and make some small, but significantly needed adjustments.

Thank you,


Alexanddria, VA 22309

| From: | Pamela Patrick |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Scott@scottsurovell. org |
| Subject: | Outrage on the redistricting! |
| Date: | Sunday, December 12, 2021 8:24:12 AM |

EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Having lived in the Wessynton community for over twenty years, we totally reject the redistricting of our neighborhood to be shunted south almost an hour away!
We live in the Little Hunting Creek watershed, shop here, attend schools here, seek medical care here, attend church here and find our friends among the people here. We drive these roads, walk these streets and are concerned with the taxes that maintain them. We have our mail delivered by the local post office, not Fredericksburg. Our vote should remain here, not fall on deaf ears 45 minutes away by interstate roads!! Perhaps we should consider voting in Maryland???
Pamela Patrick
8801 Anne Tucker Lane
22309

Sent from my iPad

| From: | Mary Lib Morgan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redrawn maps |
| Date: | Sunday, December 12, 2021 9:44:35 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Special Masters and associated personnel,
It is with deep disappointment that I express my opposition to the proposed maps for Virginia's congressional districts. To split areas of Henrico and Chesterfield sharing common interests, to add minority voices to the already solidly Democratic district including the city of Richmond, and to delete a district served by a current congresswoman who has done so with a high level of effectiveness are unconscionable. Each of these gestures is a direct reflection of a desire to silence voices of activists, women, and minorities who have led our area in making progress around obtaining greater equity in representation.

Please reconsider these maps. A healthy democracy demands that each citizen's voice is heard. These maps seem to have the opposite effect.

Mary Lib Morgan
VA 07
23233

| From: | Cathy Breitenfeld |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Mount Vernon |
| Date: | Sunday, December 12, 2021 11:43:00 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not split up the Mount Vernon Voting District. Leave it like it is now. The neighborhoods that attend Mount Vernon High School or Hayfield Secondary School should stay together with the other neighborhoods that attend that High School. Zipcode 22308 should stay intact. I like the Congressional District as it is now. Thank you very much for listening. Sincerely, Cathy Breitenfeld, 1113 Cameton Road, Alexandria, VA 22308

| From: | Paul Thiel |
| :--- | :--- |
| To: | Redistricting |
| Subject: | The 7th District ?? |
| Date: | Sunday, December 12, 2021 12:47:04 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

You couldn't be more biased in the new 7th,,

You are simply saying "boy we really screwed up the last time we supposedly did our job"
Credibility in the process is a waste of voters confidence in your decisions!

Politics pure and simple!!

Sent from my iPad

| From: | info@call2sisters.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Homework |
| Date: | Sunday, December 12, 2021 12:50:44 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please go back and think again. The proposed redistributing splits up communities in ways that don't make any sense. Please do your due diligence and reconsider the plans. Splitting up school pyramids and splitting up Mt. Vernon-makes no sense from a representative standpoint.

You can do better.

Annabel Baer
Call 2 Sisters, LLC
Annabel J. Baer
(571) 969-0516
call2sisters.com

## Welcoming clients of all races, cultures, identities, \& orientations.

(2)

| From: | Scot Mann |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA Court Ordered Redistricting Maps |
| Date: | Sunday, December 12, 2021 2:56:39 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the honorable Virginia Supreme Court Judges/Justices,
I am writing to you after reviewing the proposed redistricting maps submitted to the court by your two appointed special masters. I am in utter shock at how transparent these maps are in favor of Democrat politicians and voters. Under the proposed maps, the Chesterfield County house of delegates and state senate seats are moving significantly to democrat advantages in the manner that south Richmond residents, Eastern Henrico, and Petersburg residents were carved up to dilute GOP and independent voter strength in the county. The districts will become significantly less competitive, not only in the house of delegates but also the state senate and especially the 4th congressional district for the US House. It seems Chesterfield was split between the 4th and 5th to provide incumbent protection. In addition to this, the proposed 7th congressional district is in fact a new district designed to deliver Democrats a safe seat.

Your honors, I implore you to review these areas of the state in all three of the special master submitted maps and carefully consider how best to address the lack of competition that is created by the special masters' partisan proposals. I honestly do not think the actual Democrat politicians in the house of delegates could have done a more efficient job than the special masters in submitting a clearly partisan array of maps, all to the advantage of the Democrat party.

And to finalize, I leave with you my final point for consideration. The maps were based on an Attorney General race from 2017, however, a much more recent election this year for the Attorney General race would have served the public interest by providing a much more competitive set of statistics that would be of benefit to all Virginia voters.

Please consider increasing the perceived competitiveness of the districts for house of delegates, state senate, and US House as what has been submitted to you is in fact a farce meant to grant electoral advantage to one party over the other.

Sincerely and with the utmost respect, Scott Mitchell Mann

Sent from my iPhone

| From: | Kate Offringa |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please don't cut us off |
| Date: | Sunday, December 12, 2021 3:08:33 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We live in the Mount Vernon neighborhood along route 235.
The new proposed Congressional map carves us out of our community and puts us with faraway Fredericksburg. The new map cuts us off from our own high school just down the road.

Please don't split us off from our own community and put us in a district that isn't ours.
Kate and Tom Offringa
4101 Nellie Custis Court
Alexandria VA 22309

| From: | Suzanne Dash |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mt Vernon |
| Date: | Sunday, December 12, 2021 3:22:45 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please don't destroy the Mt Vernon district. Mt Vernon should not extend further West than a mile west of Richmond Hwy. The Mt Vernon estate needs to be part of Mt Vernon plus neighborhoods South. Don't destroy Mt Vernon by attaching it to Springfield. This is a terrible idea.

Suzanne Dash
1200 Gladstone Pl
Alexandria, VA 22308

| From: | цim Carmalt FMP |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Opposition |
| Date: | Sunday, December 12, 2021 3:35:31 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Sirs/madams,
As a long time Fairfax County resident I am writing to voice my absolute opposition to ANY redistricting currently being considered in Fairfax County Virginia. If any further information is necessary I'll be happy to provide it.

Jimmy Carmalt
703-407-4163

| From: | Howard Soroos |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Westgate prcinct \#613 in Fairfax County |
| Date: | Sunday, December 12, 2021 3:22:54 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We live in Westgate precinct \#613 just west of Mt Vernon which is a part of the Mt Vernon magisterial district of Fairfax County and the Mt Vernon High School attendance area. The proposed maps for Virginia senate and house districts and congressional districts all separate us from the rest of the Mt Vernon magisterial district and put us into districts to the south from which we are effectively separated by Fort Belvoir.

Westgate precinct \#613 needs to be in the same districts as the rest of the Mt Vernon magisterial district of which we are a part. In short, Westgate precinct should be made part of House district \#16, Senate district \#34, and Congressional district \#8.

In general, the proposed maps do not reflect natural community boundaries and seem to needlessly divide magisterial districts and school attendance areas.

Howard Soroos

| From: | Andrew Bennett |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Full support of redistricting |
| Date: | Sunday, December 12, 2021 3:45:54 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I fully support this redistricting. As my District Supervisor is planning on lying to and ignoring those he serves and wants to move a homeless shelter from a sparsely dense area (that will end up in another district after the redistricting) to a parcel of land in our residential neighborhood that was slated for a fire station only. If this redistricting helps in anyway to make our voices heard more, then please make this happen!
-Andrew

| From: | LAMES MURRAY |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mount Vernon Virginia |
| Date: | Sunday, December 12, 2021 3:54:05 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Gentlemen:
Mount Vernon, Virginia, is a historical area that has always identified itself as part of River Farm along the Potomac River. This unites it with the areas north of the district outline you currently propose. Changes to one area affect the other. Your separation goes against long standing sense of unity within that area and needs reconsidered. We live in the River Farm area and regularly participate in events at Mount Vernon itself, and we own property along Richmond Highway such that those areas need a unified approach to traffic solutions, schools, shopping and more. It is illogical to separate those areas.

James and Sherry Murray
1203 Lyndale Drive
Alexandria, VA 22308

| From: | Leslye |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Feedback |
| Date: | Sunday, December 12, 2021 4:19:59 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom it May Concern,

I understand that you have myriad considerations as you redraw districts in VA to correct gerrymandering. I do not envy you, but even so I have concerns about what I fear is a plan with lasting negative effects in our neighborhood.

Please consider in your planning that the Mount Vernon area has a strong community with a long and rich history of shared print and online media, public transportation infrastructure, schools and churches. 22308 belongs in this community rather than the one shared by Rolling Road in Springfield, quite far away. The Mount Vernon High School Pyramid would be split under your current plan (my home is not in the MVHS pyramid but I am concerned nonetheless), and our Mount Vernon Supervisor district would be split in half. Fort Belvoir area would also be split in half, which makes no community sense at all.

The Mount Vernon, and more specifically Fort Hunt area, has a very active and thriving close-knit community. Please consider redrawing your districting to reflect the existence of our district as an existing community.

Thank you for your consideration,
Leslye Barrett
7822 Jackson Rd
Alexandria, VA 22308

Sent from my iPhone

| From: | Lane Reese |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Lane Reese |
| Subject: | Comments about redistricting - 34th Senate District |
| Date: | Sunday, December 12, 2021 4:37:47 PM |

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Following are comments/criticism/suggestions for the new redistricted map.

- I-95 should be the western boundary. Everything East of I-95 in Fairfax County has much more in common than everything to the South of the Occoquan or West of I-95
- West Springfield and the communities East of I-95 are not communities of interest.
- Mt. Vernon High School pyramid is split in half
- Fort Belvoir is split in half
- The Greater Mount Vernon Community is not recognized or even mentioned.
- The Mount Vernon Estate \& communities along Mt. Vernon Memorial Highway are drawn in with Woodbridge and Lorton instead of Mt. Vernon
- The exact same southern boundary is used for the 8th Congressional District because there seems to be no recognition of Mt. Vernon's existence as a distinct community

Thank you.
Jane and David Reese
824 Arcturus on the Potomac
Alexandria, VA 22308

| From: | Erika Kronstedt |
| :--- | :--- |
| To: | Redistricting; Scott Surovell |
| Subject: | redistricting |
| Date: | Sunday, December 12, 2021 4:57:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
I just saw the rezoning map for the House of Delegates. It's really strange to me that you would want to separate the current district, especially in 22309. I think that the district should consist of the following zip codes and their dwellings their entirety. Zip codes 22306, 22307, 22308 and 22309. I do not understand why you would want to move the Frye/Pole Rd district to the Hayfield district and the Mt. Vernon Hwy district to the Lorton community. All of these communities are separated by Ft. Belvoir, the Coast Guard and a marsh. The Telegraph Rd people do not know the headaches of the Rte 1 constituents.
Please redraw your districts in accordance with the communities in mind.
Erika Kronstedt, 22306

| From: | Patsy Quick  <br> To: Redistricting <br> Subject: Dividing the Mt. Vernon community in the redistricting plan <br> Date: Sunday, December 12, 2021 5:05:13 PM |
| :--- | :--- |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters,
I am highly in favor of redrawing voting districts in Virginia in a fair and nonpartisan way. At this point, we the citizens have to trust the Special Masters to take on this task in a completely non-partisan way because this is what the citizens voted for. We expect no less.

However, I am disappointed that the Mt. Vernon Community is being divided in the new redistricting map proposals. I am also disappointed that there is no mention of $M t$. Vernon in the description as if our community does not exist or matter. My street in the Mt. Vernon community will be grouped with voters from an area much farther from me and having different needs and concerns. I don't see how this fits with the "communities of interest" rules. I don't feel that my vote will enable me to elect a representative who will be looking out for my concerns. I don't understand how our community can be divided this way. We are one of the older communities in Fairfax County and deserve to be treated as a community of interest.

I can understand the difficulty in drawing a map that makes everyone happy, but separating my Mt. Vernon neighborhood from the rest of Mt. Vernon is a bad idea. Already, my mailing address does not represent the actual community of Mt. Vernon in Fairfax County where I live. Please don't separate my Neighborhood's voting districts and stick us with completely different communities just to be fillers! Keep us together following the "communities of interest" rule.

I ask that you reconsider this aspect of both proposals.
Please don't divide the Mt. Vernon Community as you consider the redistricting map proposals.

Sincerely,

## Patricia Quick

5508 Old Mill Rd.
Alexandria, VA 22309

| From: | Mary Anne Mulligan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Congressional map: 8th/11th district line splits Kingstowne precinct in Fairfax County |
| Date: | Sunday, December 12, 2021 8:15:31 PM |
| Attachments: | Screen Shot 2021-12-12 at 10.35.20 AM.png |

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We very much appreciate all of the hard work put in by the Special Masters. We realize that nobody will be 100 percent happy, and we won't quibble at all about a few oddities that we have noted. And in the scheme of things, the matter we mention below may seem minor, too. But we bring it to your attention nonetheless. Please note that we don't live in the affected area; we live in the adjacent Villages precinct and just noticed this as we were reviewing the maps.

We were surprised to see a random division of the Kingstowne precinct (421) in Fairfax County. At present, Kingstowne precinct is entirely in the 8th congressional district. The new map shows it divided between the 8th and 11th congressional districts.

Kingstowne precinct remains entirely within the Lee magisterial district, entirely within the new 17th House of Delegates district, and entirely within the newly reconfigured 34th Senate district. The very large planned community called Kingstowne has several major roads that divide it. Kingstowne precinct is just one of several precincts within the larger Kingstowne community, but major roads, like Kingstowne Village Parkway, are the dividing lines.

In this screenshot, the 11th district is bright green; the 8th district is purple. The area between Beulah Street and Kingstowne Village Parkway, south of Manchester Boulevard, is Kingstowne precinct. The diagonal border at the top of this map cuts across a series of parking lots (perhaps following some high power lines?). The jagged line follows Park Village Drive and Kingstowne Commons Drive, community roads within Kingstowne, not major thoroughfares. It not only divides a community of interest, it divides an actual community.

If you extended the purple area west along Manchester Boulevard and south along Beulah Street, you'd keep it entirely in the 8th.


Thank you again for all of your hard work on redistricting.

## Best, <br> Mary Anne Mulligan and Edward Joseph 703-587-7032

| From: | Niro Rasanayagam |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thank you, Special Masters! |
| Date: | Sunday, December 12, 2021 8:27:04 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Dr. Grofman and Mr. Trende, Special Masters for VA Redistricting,

A note of appreciation to THANK YOU both for heeding public input and drawing truly neutral maps for Virginia's districts.

Thank you also for keeping the City of Lynchburg whole as a single community of interest within one State House and Senate map, and one Congressional House district.

Your bipartisan and amicable work in drawing these fair maps gives me hope for our future. Many thanks for all your hard work and for listening!

Sincerely,

Niro Rasanayagam
Lynchburg, VA

| From: | Milan Yager |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Oppose new districts |
| Date: | Sunday, December 12, 2021 9:17:23 PM |
|  |  |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Mt. Vernon on the eastern side of Fairfax County and oppose the new district lines. Really, a district that puts Woodbridge and Mt. Vernon together? Stop gerrymandering. Keep the districts as similar as possible to existing lines, as geographically tight and as close to similar north/south and east/west axis.

Milan Yager
9110 Old Mt. Vernon Road
Alexandria, VA. 22309

```
From: Mickey Fenyk-King
To: Redistricting
Subject: State Redistricting
Date: Sunday, December 12, 2021 9:40:16 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Westgate precinct \#613 which should be included in Congressional district \#8 along with the rest of the Mt. Vernon magisterial district. The map puts us into Congressional district \#7 from which we are totally separated by Fort Belvoir.

The current recommendations will have a substantial negative impact on our community for the next 10 years, by separating key areas from Mount Vernon District cores in Mount Vernon and in Lorton. While the Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their explanatory memorandum and their maps. This matters because what they've done ignores our area as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches and, I believe as a result, are proposing to shift voters:

- Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
- Living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.

Please do NOT continue with the ill advised recommendations for redistributing of those of us living on land that was part of the original Mount Vernon estate.

Cordially, Mickey Fenyk-King
3802 Densmore Court
Alexandria, VA 22309-2913
Sent from my iPad

| From: | Mateo Dunne |
| :--- | :--- |
| To: | Redistricting |
| Subject: | District 34 |
| Date: | Sunday, December 12, 2021 11:40:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
I am writing to oppose the proposed redistricting changes to District 36 of the Virginia Senate.

In its current form, Senate District 36 represents a distinct community along the Route 1 corridor. Our community from Alexandria to Fort Belvoir has suffered neglect from state and local politicians for decades. The state and Fairfax County has invested hundreds of millions of dollars in Northern Virginia from Fairfax to McLean, but they have neglected the Route 1 corridor.

It is only recently through the persistent leadership of the state representatives representing the Route 1 corridor that our area has begun to attract the transportation and other investments by state and local authorities.

The proposed redistricting would dilute the representation of the Route 1 corridor by dividing it up into smaller pieces among a larger number of districts.

It is absolutely essential that the redistricting preserve the geographic integrity of the Route 1 corridor, so our distinct community and interests can be effectively represented.

V/r,
Mateo Dunne
8701 Camden St
Alexandria VA 22308
703-795-7895

| From: | Megssalot |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Monday, December 13, 2021 12:26:34 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

It looks like the Mount Vernon area is not directly mentioned as a long standing district and the needs of those who live in Mount Vernon are being considered.

Warmly,
Ms. Timmerman

## Sent from Yahoo Mail on Android

| From: | Ben Lesser |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistributing comment |
| Date: | Monday, December 13, 2021 12:32:30 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
Please accept the redistricting plan developed by the special masters and do not attempt to second guess their efforts as advocated by partisan politicians such as Dan Storck.

Sincerely,

Ben Lesser
9014 Admiral Vernon Terrace
Alexandria VA 22309
bentale@hotmail.com

| From: | Stephanie Shaefer |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Proposals - don"t make sense |
| Date: | Monday, December 13, 2021 6:38:12 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please note that I would like to have another committee look at the new redistricting proposals - they just don't make sense 1 . It seems that there is no consideration or mention of the existing Mount Vernon Community and keeping the 8th district in -tact including those living along Mount Vernon Memorial Highway it is closer to Northern Virginia so why would it be place in Fredericksburg and Manassas which are about 1 hour drive away. I'd like to propose that the Mount Vernon Community not be split up - it affects schools, churches, etc.
2. Also why won't those living in Mason Neck and East of I-95 remain where they are in Fairfax County? Just looking at the new proposed map shows them with Fredericksburg and Manasass - it doesn't make sense. Please reconsider.
Thank you for your help.
Sincerely,
Stephanie L. Shaefer, Ph.D.

| From: | Lauren Lundberg |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Changes to Mount Vernon Community Districts |
| Date: | Monday, December 13, 2021 7:55:54 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do NOT implement the below changes proposed by the Special Masters as they do not reflect the reality of our community.

- Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
- Living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.
--
Regards,
Lauren Lundberg
(C) (218)-393-5260

| From: | Lourdes Winberry |
| :--- | :--- |
| To: | Redistricting |
| Subject: | redistricting |
| Date: | Monday, December 13, 2021 8:17:49 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

PLEASE do not split Mount Vernon into 2 districts. This is a long standing community and should remain in the 8 district

Please keep Belle View and new Alexandria in the 16 district
The plan to redistrict is racists, and cunning meant to favor Republicans.

Many voters did not understand the language they were voting for.
This plan is meant to divide communities and hence diabolical.
Maybe a lawsuit is in order if you cant be decent
ML Winberry

| From: | marangerw@verizon.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Issue |
| Date: | Monday, December 13, 2021 9:24:10 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This new redistricting is so corrupt. You are cutting out the Mt. Vernon area district.
I will no longer vote for any of these issues that cut us out of traditional representation.
This is not what our Republic stands for.

From:

Attachments:

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Hi,

I live at 8308 Winslow Ave in Springfield, VA 22152. Currently, the map cuts through our tiny, quiet street of 10 houses, splitting me from my neighbors across the street. This makes it hard to get a cohesive response when such a small neighborhood is cut in half. Fairfax County is looking are combining my side of Winslow (north) with my neighbors on the south for magistrate districts. I would like to propose that the commonwealth take the same borders or at least merge the neighborhood into one or the other. Again, it is such a weird way to split a quiet, small street, and it makes it more difficult for a neighborhood to be represented when split between two. I attached a photo. Thanks for considering!

Ashley

9:06 $\downarrow$



Sent from my iPhone

| From: | Camela Speer |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Don"t split the Mount Vernon District |
| Date: | Monday, December 13, 2021 10:01:30 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello Redistricting,
Current maps show the Mount Vernon Magisterial District being split in two ways that would be harmful to our close community. I, personally, live in Lorton and have far more in common with the Fairfax County community than the Prince William one I am proposed to be moved into. I also serve the Mount Vernon District through the Supervisor's office and splitting the long standing community in half would be detrimental.

While the Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their explanatory memorandum and their maps. This matters because what they've done ignores our areas as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches and, I believe as a result, are proposing to shift voters:
<!--[if !supportLists]-->• <!--[endif]-->Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
<!--[if !supportLists]-->• <!--[endif]-->Living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.

Both proposals basically split the Mount Vernon High School Pyramid and Mount Vernon Supervisor District in half. They've also drawn the renumbered 34th Senate District (formerly 36th) from Mount Vernon and Lee Districts over I-95 and into Springfield by Rolling Road. They've also redrawn a renumbered 16th House of Delegates District (formerly 44th) into Wilton Woods and Burgundy Farm instead of including the Mount Vernon Estate and the neighborhoods along Mount Vernon Highway. On the positive side, Belle View/ New Alexandria has been included in the $16^{\text {th }}$ House of Delegates District.

Please do not do this.
Camela Speer
9211 Ox Road
Lorton, VA 22079

| From: | Deborah Matthews |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public comment - redistricting |
| Date: | Monday, December 13, 2021 10:07:48 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

When I moved to Virginia more than three decades ago, it was to the Mount Vernon area of Fairfax County. A place where I have raised a child, attended church, and given of my time, treasure, and talent to make this community better for all who reside on land that was once George Washington's. This is a unique place bordered by Richmond Highway on the west, the Beltway to the north, the Potomac River to the east, and Mount Vernon, our namesake, and Fort Belvoir to the south. This community is reinforced by our magisterial district, Supervisor and School Board member, and Senator and Delegate with similar boundaries.

The line proposed by the Special Masters for our 8th Congressional District and Senate District 34 cuts out our namesake, divides the boundaries for Mount Vernon High School in half, and splits Fort Belvoir in two - abandoning our community of natural interest.

We and our Lee District neighbors on the west side of Richmond Highway have worked together to use existing community structures to strengthen and support our natural community of interest. This is best highlighted and supported by the years of work that VDOT and Fairfax County have expended on the US 1 Bus Rapid Transit project that builds on our north/south community of interest. One need only look at the 2015 final report (link to it here). More appropriate would be using I-95 as the western boundary.

I acknowledge that a western boundary of I-95 creates a district that covers a significant area. However, Fort Belvoir has a lot of open land and the Mason Neck area is zoned for very low density. The result of using I-95 as our western border is a district that has approximately the same population as Springfield, even though Springfield is geographically much smaller.

The Special Masters propose to take our natural north/south community of interest, hack it in half, and convert it from north/south to east/west. Springfield is not part of our community. Including it makes a mockery of a natural community.

Thank you for your consideration.
--
Deborah G. Matthews
7904 Candlewood Drive
Alexandria, Virginia 22306
debomatt@gmail.com

| From: | Marie McCain |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Opposition to plans which divide the Mount Vernon Community |
| Date: | Monday, December 13, 2021 10:03:27 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom it May Concern:

I am a resident in the Mount Zephyr Subdivision, within the Mount Vernon District, for 17 years. I am member of the Mount Zephyr Citizens Association, my husband has served as Treasurer. I am past President (2020) of the Whitman Middle School PTSA and actively engaged in the MVHS PTSA. Both my husband and I serve as adult volunteers in local BSA and Girl Scout Troops. Our children play or have played in Gunston soccer, Woodlawn Baseball and Fort Hunt Baseball/basketball. We use the Sherwood Hall library. Neighbors send their children to St. Louis Catholic school. Our lives take place in the Mount Vernon/Ft Hunt/Ft Belvoir area as is common with most of our neighbors. I understand that the current redistricting proposal would not affect boundary changes but would affect our School Board representative and Supervisor. The Mount Vernon Pyramid is one of FCPS most needed areas and our needs are specific. We would suffer further disruption to our schools should our school board member and Supervisor be split between our high school and elementary schools.

I am not sure how Mount Vernon was not considered as a community of interest when considering redistricting for the next 10 years. I cannot imagine how dividing my neighbors who use the same libraries, schools, shopping, RT 1 Hwy as I do would serve them. Fredericksburg and Manassas share no overlapping parks, school, shopping or transportation issues with Mount Vernon. I do not support any proposals which splits the Mount Vernon HS Pyramid or the Mount Vernon Supervisor's District in half.

Please reconsider these plans and listen to the comments from the people living in this district.

Sincerely,
Marie Zito-McCain

| From: | Wyatt Durrette |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Pairing Incumbents |
| Date: | Monday, December 13, 2021 11:09:12 AM <br> image001.png <br> image002.png |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

With the current districts being gerrymandered as they are--House, Senate and Congress--and you ignore incumbents and apply neutral principles, including the requirement of rough partisan parity with the past election, it is logical and almost inevitable that a host of incumbents will be paired and/or be removed from their districts. The problem isn't the drawing of the current map, it is the effect of the prior gerrymandered maps and absent major demographic changes over the next decade is unlikely to be repeated, if neutral principles continue to be applied 10 years from now. Please do not be influenced by the expected effect of past gerrymandering on these new districts. It is worth repeating that no district is $\qquad$ 's district (fill in an incumbent's name). They merely serve in office temporarily. Every district belongs to the people who reside in it. This shake-up was entirely expected, and the Special Masters were right to ignore incumbents. There may indeed be good reason to shift some boundaries but effects on current office holders is not one of them.

## Wyatt

Wyatt B. Durrette, Jr. Attorney

DURRETTE, ARKEMA, GERSON \& GILL $\sim$
attorneys at law

wdurrette@dagglaw.com $\perp$ www.dagglaw.com
Direct: 804-775-6809 | Mobile: 804-690-4430 | Fax: 804-775-6911
Bank of America Center | 1111 E. Main Street, 16th Floor | Richmond, VA 23219
and it cannot be used by the recipient or any other taxpayer for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.

| From: | Elaine Kolish |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Proposed District 34 (former 36th Senate District) |
| Date: | Monday, December 13, 2021 11:21:43 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## To: The Honorable Members of the Supreme Court

We are writing to express our extreme dismay over the proposed boundaries of Proposed District 34 and to ask you to revise them.

We have lived in the Mount Vernon area (in the Waynewood subdivision), on land formerly owned by George Washington, for about 40 years. We love our community and are very active in its civic life, the schools and area non-profits that serve the community. The area and neighborhoods surrounding Mt. Vernon estate have been recognized as the community of Mt. Vernon for 200 some years. Your proposed map inexplicably splits our community in half, and excludes the Mason Neck area which has long been recognized as part of our community. We have one citizen's council that ably represents our community, two high schools, one school board member and one supervisor. Our community has been diverse voices and groups but we are all linked by long association, including our schools, our two school pyramids and our representatives. Your proposed map would split the Mount Vernon school pyramid in half and split Fort Belvoir in half. These divisions do not make sense and would injure the long established relationships that make the Greater Mount Vernon community a distinct and vibrant community.

Linking us with West Springfield, on the other side of I-95, does not make sense. Describing our Mount Vernon community as a "Springfield and Franconia District" does a grave disservice to the residents of the greater Mount Vernon area. We recommend that I-95 be the western boundary of our district. The neighborhoods east of I-95 have far more in common currently and historically than with the neighborhoods south of Occoquan and west of I-95.

We urge you to reconsider your boundaries. It is important to the greater Mount Vernon neighborhoods and community that we continue to be recognized as an important and distinct district and not one that is lost by being folded into Woodbridge, Lorton and West Springfield.

Thank you for your consideration.

Respectfully,
Elaine Kolish and David FitzGerald

920 Emerald Drive
Alexandria, VA 22308
C 571-282-1263
H 703-360-7319

| From: | Parrishco |
| :--- | :--- |
| To: | Redistricting |
| Subject: | proposed boundary changes |
| Date: | Monday, December 13, 2021 12:01:18 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: The Honorable Members of the Supreme Court

We are writing to express our extreme dismay over the proposed boundaries of Proposed District 34 and to ask you to revise them.

We have lived in the Mount Vernon area (in the Stratford Landing subdivision), on land formerly owned by George Washington, for more than 40 years. We love our community and are very active in its civic life, the schools and area non-profits that serve the community. The area and neighborhoods surrounding Mt. Vernon estate have been recognized as the community of Mt. Vernon for 200 some years. Your proposed map inexplicably splits our community in half, and excludes the Mason Neck area which has long been recognized as part of our community. We have one citizen's council that ably represents our community, two high schools, one school board member and one supervisor. Our community has been diverse voices and groups but we are all linked by long association, including our schools, our two school pyramids and our representatives. Your proposed map would split the Mount Vernon school pyramid in half and split Fort Belvoir in half. These divisions do not make sense and would injure the long established relationships that make the Greater Mount Vernon community a distinct and vibrant community.

Linking us with West Springfield, on the other side of I-95, does not make sense. Describing our Mount Vernon community as a "Springfield and Franconia District" does a grave disservice to the residents of the greater Mount Vernon area. We recommend that l-95 be the western boundary of our district. The neighborhoods east of I-95 have far more in common currently and historically than with the neighborhoods south of Occoquan and west of I-95.

We urge you to reconsider your boundaries. It is important to the greater Mount Vernon neighborhoods and community that we continue to be recognized as an important and distinct district and not one that is lost by being folded into Woodbridge, Lorton and West Springfield.

Thank you for your consideration.
Respectfully,
Suzanne and Charles Parrish

| From: | gbooth123@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on redistricting |
| Date: | Monday, December 13, 2021 12:58:16 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TO: The Virginia Supreme Court
SUBJ: Communities of Interest, Redistricting

In redrawing legislative districts, I urge you to strictly adhere to the principle of
maintaining communities of interest in the state as required by Virginia law, especially in the Mount Vernon area of Fairfax County where I have lived for 50 years.

The Special Masters' memorandum and maps totally fail to recognize the longstanding existence of the Mount Vernon community and seem to create arbitrary lines that do not represent communities of interest.

Mount Vernon and Lee magisterial district are clearly-defined, Fairfax County districts which share print media, infrastructure and wellestablished institutions such as commercial districts, schools and churches.

Both proposals basically split the Mount Vernon magisterial district and the Mount Vernon High School pyramid in half. A district with a clear community of interest would not abruptly stop in the middle of Mount Vernon magisterial district nor split Fort Belvoir in half. The entire Fort Belvoir installation is an integral part of the Mount Vernon community, not just half of it. Stretching the $34^{\text {th }}$ (formerly 36 th) Senate district across I-95 into Springfield by Rolling Road is clearly not a community
of interest.

The U.S. 1 corridor is clearly a community of interest around which many institutions, much public infrastructure is built. Major transportation projects are underway along the Fairfax County portion of the U.S. 1 corridor, including new bus rapid transit stations. Mount Vernon is the anchor of the community of interest.

These maps also effectively split the Hayfield Secondary School District in half. Parents in that and the Mount Vernon pyramid areas would not be voting with parents of other students in the same schools under your proposals. All of the parents of a school would most likely have common interests.

Senate district 34 boundaries should respect natural, historic communities of interest and extend at least to the Occoquan River and keep Mason Neck in the district, as it is a longstanding part of the current Mount Vernon magisterial district, geographically, culturally and otherwise.

For Congressional district 8, the special masters split Kingstowne between two different congressional districts. Kingstowne is the largest homeowners' association in the area and should not be divided. It is a clear community of interest.

The boundaries of these districts should treat eastern Fairfax County as one compact community of interest in the state and federal districts you are mapping.

Thank you for considering my views.

Glenda Booth
7708 Tauxemont Road

Alexandria, VA 22308

| From: | Carla Heath |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Thanks for a job well done! |
| Date: | Monday, December 13, 2021 1:42:02 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Special Masters,

Thank you for respecting and keeping in mind the opinions and interests of the citizens of the Commonwealth: for reviewing and heeding the dozens of emails, letters, and comments at redistricting commission meetings and hearings; for sharing your map drawing process and rational behind it in a most useful and interesting memo; for posting maps and scheduling two public hearings for public input, and for restoring the City of Lynchburg to single state senate and house districts.
Respectfully.
Carla Heath
Lynchburg

| From: | Beth Hedquist |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redrawn maps |
| Date: | Monday, December 13, 2021 2:09:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Special Masters and associated personnel,
It is with deep disappointment and much concern that I express my opposition to the proposed maps for Virginia's congressional districts. To split areas of Henrico and Chesterfield sharing common interests, to add minority voices to the already solidly Democratic district including the city of Richmond, and to delete a district served by a current congresswoman who has consistency led with a high level of effectiveness are unconscionable. Each of these gestures is a direct reflection of a desire to silence voices of activists, women, and minorities who have led our area in making progress around obtaining greater equity in representation. This is not a move that will strengthen Democracy, trust in government, or resolve the painful partisan divide that has been encouraged by those who would use that to maintain power.

Please reconsider these maps. A healthy democracy demands that each citizen's voice is heard. These maps seem to have the opposite effect.

Sincerely, Beth Hedquist 4671 C Four Seasons Ter. Glen Allen, VA. 23060

Muriel-Theresa Pitney<br>Clerk of Court<br>Supreme Court of Virginia<br>100 North Ninth Street, $5^{\text {th }}$ Floor<br>Richmond, Virginia 23219-1315

## Dear Madame Clerk:

My name is Tom Davis. Formerly, I represented Virginia's Eleventh Congressional District in the United States Congress for fourteen years, but today I write as an interested citizen to comment on the congressional map proposed by the Court's special masters on December 8, 2021. I applaud the effort of the Special Masters and this Court for conducting a process that is vastly improved over those of our neighboring states. The Special Masters generally did a good job with the information they had available and given the constraints and timeline under which they were operating. With that said, I would like to offer a few suggestions that I think will improve the map, particularly with regard to the traditional redistricting metric of compactness and overriding one person one vote concerns.

My first proposed change is to the northeastern boundary of the Ninth Congressional District. Congressman Morgan Griffith, a resident of Salem, Virginia, has ably represented this district for more than a decade in Congress, and yet the special masters' proposal places the City of Salem in the adjacent Sixth Congressional District. This writes Rep. Griffith out of his own district and moves him to a district with incumbent Congressman Ben Cline, creating an unnecessary primary election between the two when a slight adjustment would allow both to continue representing their current districts. I propose returning the City of Salem to the Ninth Congressional District where it currently resides, and offsetting the resulting change in population by shifting the portions of Roanoke County south and east of the City of Roanoke into the Sixth District.

My other suggested changes all involve the four Northern Virginia districts: the Seventh, Eighth, Tenth, and Eleventh. The special masters' proposal creates districts in this region that are not terribly compact; the Tenth District, which extends all the way from Leesburg to Charlottesville, is particularly unwieldy, but the Seventh District is also more dispersed than it needs to be due to a misguided attempt to follow county lines rather than communities of interest that reside below the county level. For example, I continue to firmly believe that Interstate 66 or Highway 50 form a more natural boundary between two districts than do the boundaries of Fairfax County. Therefore, I propose the following changes, all of which are depicted on the sample map I have submitted with this letter:

1. The borders of the Eighth District should be slightly adjusted so that it does not extend west of the Beltway, and so that it encompasses the area around Mount Vernon.
2. The Eleventh District should be shifted south. I understand that the special masters were trying to keep this district contained within the borders of Fairfax County, but the county itself does not really constitute a single cohesive community of interest. It makes more sense to combine the dense and diverse communities in Manassas, Manassas Park, and the I-95 corridor with the southern portion of Fairfax County (basically, everything south of Highway 50 and west of the Beltway) than it does to combine them with the more exurban parts of the county along Highways 7 and 267.
3. The Tenth District should constitute all of Loudoun County and the parts of Fairfax that are west of the Beltway and north of Highway 50. Suburban Loudoun County has more in common with the adjacent parts of Fairfax than it does with the rural counties that the special masters have placed within the district in their proposal. These changes make the Tenth District substantially more compact, moving from a 0.38 on the Reock scale and 0.25 on Polsby-Popper to 0.44 and 0.39 , respectively.
4. The Seventh District should encompass everything outside of Loudoun County that the special masters currently include in the Tenth, including Stafford County, the City of Fredericksburg, and the less dense parts of Prince William County west of the I-95 corridor. This creates a district that is substantially more compact than the special masters’ Tenth District and follows more natural boundaries on the basis of community density. This also improves the Seventh District's compactness scores, from 0.34 to 0.57 on Reock and 0.25 to 0.4 on Polsby-Popper.

The four changes to the Northern Virginia districts that I have proposed above result in a dramatically more compact map, moving from a statewide score of 0.384 on the Reock scale and 0.291 on Polsby-Popper to 0.411 and 0.321 , respectively. My changes also better reflect the underlying communities of interest in this part of the Commonwealth that I know and love. I hope that you will consider making these changes to create a better overall map.

Finally, the map and files I have attached here use the Commonwealth's adjusted population, and ensure that there is no more than a deviation of one person between the Congressional districts. I have serious concerns that the tentative map's proposed Congressional deviations would violate the U.S. Supreme Court's command that Congressional Districts be nearly as equal in population "as practicable."

Please do not hesitate to contact me if you require any additional information, and I look forward to presenting my proposal during the Court's public hearing next week.

| From: | Lynn and Ted Thompson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Virginia Redistricting maps |
| Date: | Monday, December 13, 2021 3:33:35 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

From: Thomas E. (Ted) TThompson and Lynn C. Thompson: 93344 Brambly Lane, Alexandria, 22309
To: Chief Justice of the Virginia Supreme Court and Member Justices
Special Masters
Others who may be recipients on this email site

We offer the following comments on the redistricting maps presented for consideration by the Special Masters.

1. While the Special Masters' memo specifically references the communities of Springfield and Franconia which are rather sprawling large communities, there is absolutely NO mention or even recognition of the existence of the compact and closely knit Mount Vernon Community anywhere. The Special Masters completely ignore our areas as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches and, I as an apparent result, are proposing to shift voters by:
o Shifting those voters Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
o Shifting those voters living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.
2. They have also redrawn a renumbered 16th House of Delegates District (formerly 44th) into Wilton Woods and Burgundy Farm instead of including the Mount Vernon Estate and the neighborhoods along Mount Vernon Highway
3. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Senate District \#34 and putting it in Senate District \#33 with Woodbridge and Manassas violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#34, removes us from an existing compact district and fails the equity test - many minority students from \#34 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.
4. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Delegate District \#16 and putting it in Delegate District \#19 with Lorton, Gunston, and Woodbridge violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#16, removes us from an existing compact district and fails the equity test - many minority students from \#16 are taught in our community where we have historically provided Food for Thought packets for those students in greatest
need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.
5. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Congressional District \#8 and putting it in Congressional District \#7 with Prince William and Stafford Counties violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#8, removes us from an existing compact district and fails the equity test - many minority students from \#8 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.
6. The proposed redistricting for our Congressional, Virginia Senate and Delegate Districts has unreasonably removed the Mount Vernon Estate and surrounding neighbors from the Mount Vernon District and requires that we be combined with Prince William and Stafford Counties and the towns of Woodbridge, Manassas, Lorton and Gunston. By not recognizing the Mount Vernon neighborhood we are unreasonably and split.
7. While Lynn and I recognize the necessity of redrawing the various districts to rid Virginia of Gerrymandering, these maps totally remove us from the Mt Vernon neighborhood area splitting and are unfair and uncalled for by the guidelines.
8. As a result, we are split from our contiguous community. The redistricting does not respect our natural boundaries, denies our participation with our larger community of interest.
9. We support the comments made by Mr. Thomas Russel and our District Supervisor Mr. Dan Stork.

Respectfully Submitted:
Ted and Lynn Thompson

| From: | Connie Graham |
| :--- | :--- |
| To: | Redistricting |
| Cc: | tw-russell@att.net; poulh@erols.com |
| Subject: | Mount Vernon Community |
| Date: | Monday, December 13, 2021 3:34:09 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whomever it May Concern;
Thank you so much for your work on this very important project; it is much appreciated.

However, I would like to direct your attention to the Mount Vernon area. My husband and I have lived for seven years in the Riverwood HOA, adjacent to the Mount Vernon Estate. Our neighbors are either retired, or work in government-affiliated jobs within the Military District of Washington, for the most part. Most of our areas of interest (shopping, etc) lie to the North. Politically and culturally, we are more similar to those in the $8^{\text {th }}$ District. Request your consideration to place the Mount Vernon areas omitted from the initial proposal within the $8^{\text {th }}$ District, it makes much more sense than the proposed configuration. I also concur with a comment proposing that the $8^{\text {th }}$ district boundary extend to the Occoquan River, which would better align the Ft Belvoir Community northward, as well. Thank you for your consideration in this matter.

Sincerely,
Lt. Col. Constance Graham, USAF, Ret
3716 Carriage House Court
Alexandria, VA 22309

| From: | Lanet Cole |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Monday, December 13, 2021 3:51:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have studied the proposed changes and feel they will be damaging to the Mt Vernon community including Hallowing Point and Mason Neck.

Please revise.
Janet Cole
Hallowing Point
Dec.13, 2021

Sent from my iPhone

| From: | $\frac{\text { Paula Lettice }}{\text { To: }}$ |
| :--- | :--- |
| Subject: Virginia Redistricting Proposal <br> Date: Monday, December 13, 2021 3:57:36 PM |  |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters,
First, I am highly in favor of redrawing voting districts in Virginia in a fair and nonpartisan way. At this point, the citizens of Virginia have to trust the Special Masters to take on this task in a completely non-partisan way because this is what the citizens voted for. We expect no less.

However, I am extremely disappointed that the Mount Vernon Community is being further divided in the new redistricting map proposals. Mount Vernon is a special community running from the city of Alexandria down and around George Washington's Mount Vernon -- the five farms that were originally part of that estate have an incredible history that should not be destroyed. I am also disappointed that there is no mention of Mount Vernon in the description as if our community does not exist or matter.

My street, Nomini Lane, in the Mount Vernon community will be grouped with voters from an area much farther from me and have different needs and concerns - e.g., we dine in Old Town Alexandria almost exclusively -- and feel that Alexandria, the City and the portion of Fairfax County, are bonded. I don't see how this fits with the "communities of interest" rules. I don't feel that my vote will enable me to elect a representative who will be looking out for my concerns. I don't understand how our community can be divided this way. We are one of the oldest communities in Fairfax County and deserve to be treated as a community of interest.

I can understand the difficulty in drawing a map that makes everyone happy, but separating my Mt. Vernon neighborhood from the rest of Mt. Vernon is a bad idea. Already, my mailing address does not represent the actual community of Mt. Vernon in Fairfax County where I live. Please don't separate my Neighborhood's voting districts and stick us with completely different communities just to be fillers! Keep us together following the "communities of interest" rule.

## I ask that you reconsider this aspect of both proposals.

Please don't divide the Mount Vernon Community as you consider the redistricting map proposals.

Sincerely,

Paula G. Lettice

9016 Nomini Lane
Alexandria, VA 22309

| From: | Barbara Rufe |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting comment |
| Date: | Monday, December 13, 2021 4:51:38 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Several years ago, we, the residents of the Mt. Vernon area, wanted to differentiate our geographical area from the City of Alexandria with which we are in many cases identified. Mt. Vernon, VA was thought to be the proper identity. That never happened.
Now we are being broken up and absorbed by other geographical areas.
Is there a way we can go back to the drawing board and define our boundaries and declare ourselves THE MOUNT VERNON, VA community?
That's what I want to see.
Barbara Rufe

Sent from my iPad

| From: | Elizabeth Promen |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Proposed District 34 (former 36th Senate District) |
| Date: | Monday, December 13, 2021 5:43:55 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Date: December 13, 2021 at 11:21:35 AM EST
To: redistricting@vacourts.gov
To: The Honorable Members of the Supreme Court
We are writing to express our extreme dismay over the proposed boundaries of Proposed District 34 and to ask you to revise them.

We have lived in the Mount Vernon area (in the Stratford Landing subdivision), on land formerly owned by George Washington, for about 40 years. We love our community and are very active in its civic life, the schools and area non-profits that serve the community. The area and neighborhoods surrounding Mt. Vernon estate have been recognized as the community of Mt. Vernon for 200 some years. Your proposed map inexplicably splits our community in half, and excludes the Mason Neck area which has long been recognized as part of our community. We have one citizen's council that ably represents our community, two high schools, one school board member and one supervisor. Our community has been diverse voices and groups but we are all linked by long association, including our schools, our two school pyramids and our representatives. Your proposed map would split the Mount Vernon school pyramid in half and split Fort Belvoir in half. These divisions do not make sense and would injure the long established relationships that make the Greater Mount Vernon community a distinct and vibrant community.

Linking us with West Springfield, on the other side of I-95, does not make sense. Describing our Mount Vernon community as a "Springfield and Franconia District" does a grave disservice to the residents of the greater Mount Vernon area. We recommend that I-95 be the western boundary of our district. The neighborhoods east of l-95 have far more in common currently and historically than with the neighborhoods south of Occoquan and west of l-95.

We urge you to reconsider your boundaries. It is important to the greater Mount Vernon neighborhoods and community that we continue to be recognized as an important and distinct district and not one that is lost by being folded into Woodbridge, Lorton and West Springfield.

Thank you for your consideration.
Respectfully,

Liz and Peter Promen
2210 Cavendish Drive
Alexandria, VA 22308

| From: | Robin Whitworth |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Comments |
| Date: | Monday, December 13, 2021 6:24:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My address: 4817 Stillwell Ave, Alexandria, Virginia 22309
This address is in Fairfax county, my precinct is Westgate.
Generally, I think the redistricting of our location is much better than it has been. Specific comments follow:

1. Congressional District: Like the change. We are moved from the 8th district to the 7th. We are now grouped with Mason Neck, Woodbridge, Manassas, and Fredericksburg which is fine. While not all parts of any district are going to share specific issues, we have much more common with district 7 than Arlington and the City of Alexandria.
2. Senate District: Like the change. Our new area is much like the Congressional District and it is good to have some common boundaries. The old Senate District was insanely twisted. Again, we have more in common with Woodbridge and Mason Neck than Alexandria City.
3. Delegate District: Like the change. Again, the consistency of boundaries is refreshing and the issues we'd address with our Delegate would be common with those of our Senator and US Congressman. Excellent!

Well done in our case!

Thank you!
--
Robin Whitworth
703-973-3458 (c)

| From: | Mitch King |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Re: State Redistricting |
| Date: | Monday, December 13, 2021 7:02:46 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Westgate precinct \#613. The proposed redistricting for our Congressional, Virginia Senate and Delegate Districts has removed the Mount Vernon Estate, the Mount Vernon Civic Association and our Westgate neighborhoods from the Mount Vernon District and requires that we be combined with Prince William and Stafford Counties and the towns of Woodbridge, Manassas, Lorton and Gunston. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Congressional District \#8 and putting it in Congressional District \#7 with Prince William and Stafford Counties violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#8, removes us from an existing compact district and fails the equity test - many minority students from \#8 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.
<!--[if !supportLineBreakNewLine]-->
<!---endiff]->
These same concerns apply to Senate District \#34 and putting it in Senate District \#33 with Woodbridge and Manassas, and Delegate District \#16 and putting it in Delegate District \#19 with Lorton, Gunston, and Woodbridge. These moves violate five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in Senae District \#34, and Delegate District 16 and removes us from an existing compact district and fails the equity test - many minority students from \#34 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.

The current recommendations will have a substantial negative impact on our community for at least the next 10 years, by separating key areas from Mount Vernon District cores in Mount Vernon and in Lorton. While the Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their explanatory memorandum and their maps. This matters because what they've done ignores our area as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches.

How can Mount Vernon and its original Westgate lands be removed from the Mount Vernon District? Please do not continue with this ill-advised proposal.

Cordially,
Norman M. King
3802 Densmore Court
Alexandria, VA 22309-2913
m my iPad

| From: | $\frac{\text { Carol Mattaino }}{\text { To: }}$ |
| :--- | :--- |
| Subject: | $\frac{\text { Redistricting }}{\text { Mt. Vernon redistricting }}$ |
| Date: | Monday, December 13, 2021 7:33:23 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I strongly disagree with the splitting up of the Mt. Vernon district. We have lived here for 47 years, and have been completely satisfied with the community services and the representation. We live on Robertson Blvd, and our neighborhood would be impacted. Please reconsider this decision.
Carolyn Mattaino, 4019 Robertson Blvd, Alexandria, Va. 22309.

```
From: KATHERINE WARD
To: Redistricting
Subject: Virginia State Congressional Redistricting -Do You Remember George Washington?
Date: Monday, December 13, 2021 8:05:15 PM
importance: High
```


## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My comments relate to your maps for delegate and senator ( new senator district 34/ new delegate districts 16 and 19)

I want to remind you that George Washington - the father of our Country owned the land my community is on. He also lived at Mount Vernon Estate located just south of my community and owned a large swath of the districts you are now trying to tear asunder. An area we all care about.

I am shocked that your redistricting maps FAIL to even recognize that a Fairfax County Virginia has a historical area called Mount Vernon! You need to restore this "community of interest" ( educational, environmental, transportation)!

Senate 34th map: You need to redraw the map- this needs to include the following boundaries- The Potomac River on the east to Telegraph Road on the West and from the City of Alexandria boundary on the north to the Prince William county line to the south.

Delegate maps: They should also include the boundary lines mentioned above-
The communities within these natural and man made boundaries all care about education, land use development, the arts and recreation, transportation needs and environmental protections. We work, play and live in the same geographic areas and should not in any way be torn apart by number crunching without any consideration for us as individuals and our "common interests".

## Katherine Ward

1029 Gladstone Place
Alexandria, VA 22308
703-627-8782 cell

| From: | Allison Niedbala |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Maps brought forward from the Supreme Courtas they affect Mt. Vernon Area |
| Date: | Monday, December 13, 2021 9:54:47 PM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,

I have just taken a look at the new maps drawn by the Supreme Court and I would like to make comments.

My current district is the 36th Senate District. The new map has me as a resident of the 34th district. The proposed map pairs the Mount Vernon District with Springfield

The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they removed a Springfield district because we do not share common interests. The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east of I-95 are not communities of interest.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with many established organizations. The Mount Vernon community covers the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95.

Please share the links above with the Special Masters, because they should know that the boundaries they have submitted do not recognize Mount Vernon as a community of interest. It is.

Sincerely,

Allison Niedbala
Long Time Mount Vernon Resident

| From: | Ruth Driscoll-Lovejoy |
| :--- | :--- |
| To: | Redistricting |
| Cc: | Monsieur George Driscoll-Lovejoy |
| Subject: | VA Maps and Redistricting |
| Date: | Monday, December 13, 2021 11:49:50 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you for accepting comments on the proposed maps drawn by the Special Masters appointed by the Supreme Court of Virginia. We are of the opinion that the maps should not split up or otherwise separate contiguous neighborhoods, schools, or magisterial districts.

Thank you.
Ruth \& George Driscoll-Lovejoy
Alexandria, VA 22306

The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
P.O. Box 1315

100 N. Ninth Street
Richmond, VA 23219-1315

Re: Proposed Second Congressional District Map

Dear Ms. Pitney,
Pursuant to Rule 4a of the rules and procedures for implementing the requirements of article II section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting of the Second Congressional District of the U. S. House of Representatives. It appears that the map proposed by the Special Masters for this district is deficient in the following respects, and should be redrawn:

Compactness/Contiguity - The Special Masters have recommended a weird, sprawling Dr. Seuss-style "Crooked J" shaped map that skips around the heart of what should be the Second District: the northern portion or all of Norfolk, along with all of Virginia Beach. In addition to Norfolk and Virginia Beach, out of geographic necessity, the Second District must also include the Eastern Shore, since the Eastern Shore is a peninsula connected only by a lengthy bridge-tunnel to Virginia Beach, with no land connection to any other Virginia jurisdiction. The Second District should also arguably include the northern portion of Chesapeake, which would make a district that is contiguous, compact, and urban/suburban in nature.

In contrast, there is no reason whatsoever to include the largely landlocked and extremely rural Southside jurisdictions of Southampton County, City of Franklin, Isle of Wight, or City of Suffolk. Adding these jurisdictions to the Second Congressional District creates a district that is neither compact nor contiguous on even a cursory examination, as the Special Masters specifically acknowledged.

On its face, the odd meandering Crooked $J$ shape of this proposed district encircles and skirts contiguous jurisdictions that should have been included in the Second Congressional District, particularly Norfolk. The Crooked J map makes a large loop around nearby jurisdictions, then wanders miles away, deep into random unrelated, non-contiguous rural areas that have nothing whatsoever in common with the core South Hampton Roads cities of Norfolk and Virginia Beach. Unfortunately, the Crooked J shape provides instant visual evidence of unacceptable gerrymandering, and negates the contention that a fair and equitable process occurred.

Communities of interest - Norfolk and Virginia Beach are inextricable communities of interest. The prime geographic feature of these two communities of interest is the water - the Atlantic Ocean, the Chesapeake Bay, Hampton Roads (the waterway that connects the ocean to the bay), and the mouths of important rivers such as the Elizabeth River, Little Creek, the Lynnhaven, and the Lafayette River, as well as numerous smaller inland waterways. These prominent water features define both the shoreline and the inland areas around them, and have led to thriving military, industrial, and tourism uses in both of these adjoining cities.

Military bases include numerous huge U.S. Navy installations. The crown jewel of these military bases is in northern Norfolk: Naval Station Norfolk is the largest naval base in the world, headquarters of the U.S. Navy's Fleet Forces Command, with an adjacent airfield, aircraft
carrier strike groups, military sealift command, destroyer squadrons, a submarine squadron, six aircraft carriers, and amphibious assault ships.

Along its border with Norfolk, Virginia Beach hosts Joint Expeditionary Base Little Creek. Further inland, Virginia Beach features the huge Naval Air Station Oceana, where the fighter jets and pilots that are an integral part of the aircraft carriers from Naval Station Norfolk are housed and trained, as well as the 203rd Red Horse Squadron of the Air National Guard at Camp Pendleton. Further east are the Fort Story Army/Navy joint base and the Dam Neck Naval Base.

The pre-eminence of U.S. military bases in the neighboring cities of Norfolk and Virginia Beach leads to a large population of active duty military service members and veterans and their families, who live in the surrounding urban/suburban areas of both cities. In addition, many private companies of all kinds support the military, veterans, and their families. For example, the private shipbuilding/repair companies along the Norfolk waterfront of the Elizabeth River serve both military and private customers. At the nearby Waterside/Town Point Park area, water-themed tourism, restaurants, and offices predominate. Similarly, on the Chesapeake Bay and at the Virginia Beach Oceanfront and other beaches, the tourism industry also thrives, with restaurants, hotels and entertainment that complement the military presence in the area.

Norfolk and Virginia Beach are two sides of the same coin, interchangeable and intertwined communities of interest which should share and anchor the Second Congressional District.

In contrast, the largely landlocked and unrelated non-contiguous rural areas of Franklin, Southampton, Isle of Wight and Suffolk do not belong in the Second District. Their pointless inclusion in the Crooked J map smacks of political manipulation, not geographic or social necessity. In fact, while the Special Masters describe this Crooked J map as competitive, the Second District would reportedly go from currently competitive to +5 or more Republican if that skewed map were adopted.

Federal Court Case - On information and belief, the current boundaries of the Second and Third Congressional districts were set by a federal court case that spanned several years, culminating in the U.S. District Court's adoption of the present map at Personhuballah v. Alcorn, 155 F. Supp. 3d 552 (E.D.Va. 2016). The federal District Court found that the Third Congressional District had been racially gerrymandered in an unconstitutional manner. The Court relied on neutral principles such as land contiguity and compactness to alter both the Second and Third Congressional districts so that minority voters were not "packed" into a single tortuous district, diluting their influence and ability to elect other candidates of choice. Given the history of this litigation, the Special Masters and this Court should adhere to the Personhuballah precedent/map as closely as possible, as in its present non-compliant Crooked J configuration, the Second District map will most likely be litigated in federal court again.

Other Considerations - No doubt it will be argued that the meandering, odd-shaped Crooked J map was necessary to create a minority opportunity district for the current incumbent in the Third Congressional District, who has been in office since 1993. At best, that is a convenient and cynical fiction. The Crooked J map emanated from the Special Masters' inexplicable choice to map Districts $8,11,6,9$, and 3 , then to take up the Second Congressional District last in chronological order in the Hampton Roads area.

In the first instance, the Special Masters demonstrated little justification for changing the courtordered Third Congressional District, which they conceded "consistently elects the candidate of choice of the African-American population." Nevertheless, they shifted all of the adjacent City of Norfolk from the Second to the Third Congressional District, split Chesapeake between
the Second and Third Districts, and cut out the heart of the Second District, including the neighborhood and longtime home in the City of Norfolk of the current two-term female incumbent. To add insult to injury, they shifted Isle of Wight, Franklin, Suffolk, and a portion of Southampton County, all rural jurisdictions extremely far away from Virginia Beach/Norfolk, to the Second District.

The Special Masters claimed that the remapping of the Third Congressional District "left few options" for the Second District. However, they failed to explain why they found it necessary to drastically change the recently litigated and established boundaries of the Third District in the first place. The Special Masters admitted that the Second District "loses functional contiguity" in Suffolk and Chesapeake, a problem that was not present with the prior boundaries established by the federal District Court. Moreover, while emphasizing (or overemphasizing) compactness for the Third District, they completely abandoned any pretense of an attempt to create a compact Second District with their sprawling, ugly, disjointed Crooked J design.

Gender Equity - The Special Masters contend that they developed the Crooked J Second District Congressional map without any knowledge of the identity of the incumbents. Given the skewed results, that contention strains credulity. Two of the three female members of Congress in Virginia have had their hometown drawn out from under them by this all-male map-making team. None of the eight male members of Congress have suffered that arbitrary and unfair fate. The results speak for themselves, and should be remedied immediately.

The Second District incumbent is a retired U.S. Navy Commander who overcame many obstacles to graduate from the U.S. Naval Academy, become a nuclear engineer, and serve on active duty as a surface warship officer for two decades. She went on to achieve election to Congress twice, defeating the same male former member of Congress two times in a row, despite fraud and criminal conduct by his campaign. She is a brilliant Representative of the anchor cities of Norfolk and Virginia Beach, as well as the entire Hampton Roads area. Her decades-long public service and sacrifice should not be wiped out by the hasty and illinformed stroke of the Special Masters' pen.

Women and minorities in the Second and Third Districts should not be abandoned to fight over the leftover scraps of Hampton Roads geography. Each of these overlapping groups (overlapping in the sense that many women are also minorities) have complementary, not competing, equity interests that supersede the Special Masters' arbitrary and unreasoned insistence that the re-mapping of the Third District occur at all, and that it occur first before any consideration of a balanced, fair re-mapping of the Second District. These protected equity interests of minorities and women should be put front and center, considered first, not last, and resolved before the Special Masters address more mundane matters.

Like racial equity, gender equity is not an "issue," an interest, or an elusive, far off goal. It is an imperative, a constitutional and legal right. This map should be modified so that it does not discriminate against the few courageous representatives of over half of Virginia's population, women. To quote the late Justice Ruth Bader Ginsburg (quoting Sara Grimke), "I ask no favor for my sex. All I ask of our brethren is that they take their feet off our necks."

It is now 2021, soon to be 2022. In 2021, women deserve their rights, from the courts and from all branches of government. That includes the right and opportunity to elect candidates of their female gender, without arbitrary, unfair interference from the courts and the Special Masters. The electoral fate of the current two-term female incumbent in the Second District should depend on the will of the voters of the Second District, not on the whims of unelected Special Masters who report only to the court.

Conclusion - For the reasons set forth above, the City of Norfolk, or at least the northern portion of the City of Norfolk, should be returned to the Second District map. The Special Masters should be specifically instructed to re-design the Crooked J map so that the Second District is compact, contiguous, and recognizes communities of interest, with an equal emphasis on the rights of the affected communities and all of their voters to elect candidates who achieve the imperative of gender equity as well as racial equity.

Respectfully submitted,
Susan B. Potter, Esq.

| From: | Ann Andrews |
| :--- | :--- |
| To: | Redistricting |
| Subject: | State Redistricting - Special Masters" memo |
| Date: | Tuesday, December 14, 2021 7:28:59 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Morning:
The Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their memorandum and their maps.

This matters because what they've done ignores our areas as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches.

I am writing to request that Gunston Manor Subdivision remain part of the Mt. Vernon District.

Sincerely,
Ann Marie Andrews

| From: | Ben Eggeman |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Huh? |
| Date: | Tuesday, December 14, 2021 7:29:23 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a longtime resident of the Fort Hunt / Mount Vernon area, I cannot make hide, nor hair of your redistricting memo. I find it incomprehensible. Skip the diatribe. Say what you mean to say. Brevity is key.

| From: | Mike Smith |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Tuesday, December 14, 2021 7:39:17 AM |

## EXTERNAL EMAIL

# THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON 

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSI live at 5122 Richardson Street, Chincoteague, VA 23336 and want to comment on the Masters' proposed redistricting of the $2^{\text {nd }}$ and $3^{\text {rd }}$ Congressional Districts. By intentionally placing Elaine Luria's home address outside the boundaries of the revised $2^{\text {nd }}$ District, the Masters appear to be targeting her in order to deprive her of reelection and to increase the number of Republican Congressional members who represent Virginia voters. Indeed, that conclusion is made obvious by how the Maters also propose to redistrict other female Democratic Congressional members.

In addition, the Masters have split between the $2^{\text {nd }}$ and $3^{\text {rd }}$ districts voters, such as active and retired military members, who live in Norfolk or Virginia Beach and clearly share common interests. By doing so, the Masters will dilute those voters' power to advocate effectively for issues that affect them.

Moreover, by removing Suffolk and the Isle of Wight from the $3^{\text {rd }}$ District, the Masters will create much less compact $2^{\text {nd }}$ and $3^{\text {rd }}$ Districts. That change will complicate Congressional members' ability to keep in touch with voters whom they represent, especially by meeting in person with them.

For those reasons, I urge the Masters to recommend district boundaries that properly address those issues.

Thank you.
Ralph Michael Smith

| From: | Priscilla Bornmann |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Objection to the Proposed Restructuring Plan which divides the Mount Vernon community in two |
| Date: | Tuesday, December 14, 2021 7:52:44 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please note my strong objections to the Special Masters' current redistricting recommendations which would separate key areas away from the Mount Vernon District core in Mount Vernon and in Lorton. If accepted, these recommendations will have a substantial negative effect on the Mount Vernon community.

The Special Master’s report fails to mention or recognize the existence of the Mount Vernon community, contrary to the interest of those of us who live in that community, and despite the fact that we are a long-recognized "community of interest." In addition, the plan would split the Mt. Vernon High School Pyramid, and groups the Mt. Vernon estate with voters on Rolling Road in Springfield instead of their neighbors on Ferry Landing Road.

Please do not accept the illogical and fact-blind redistricting plan which has been proposed by the Special Masters.

Priscilla G. Bornmann

Sent from my iPhone

| From: | Frank Cohn |
| :--- | :--- |
| To: | Redistricting |
| Subject: | The Mount Vernon District |
| Date: | Tuesday, December 14, 2021 8:27:55 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Redistricting Committee:
I am glad that you are involved to make fair distributions of voters within the State. Unfortunately, somehow you overlooked the Mount Vernon District as an established entity which should not be torn apart. Not sure how the population count goes, but cutting up the District into so many parts does not seem proper or fair. Please look at that again and see if you can repair it. Thank you for your work and efforts!
Frank Cohn
9002 Belvoir Woods Parkway, Fort Belvoir, VA 22060
Tel 703-781-5949; e-mail: FCohn22309@aol.com

| From: | Holly Herman |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public comments for redistricting |
| Date: | Tuesday, December 14, 2021 8:44:20 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

PUBLIC COMMENTS Submitted By:<br>Holly Wyatt Herman<br>24th Senate District, 25th House District, and Augusta County Resident

Four comments of concern: 1) Augusta County should not be split; and its two independent cities within it should be maintained as a whole. There are many regional partnerships and communities of interest among the county and cities and they are strengthened by maintaining representation within one Senate district.
2) These seats are indeed the people's seats and no one individual should be given preference to maintain a seat. Institutional knowledge, however, is a highly valued trait to ensure an effective and prudent government (knowledge of policy, process and the history of both). It sincerely concerns me that both the Senate and House maps will certainly result in a loss of much institutional knowledge and though we may be making progress in improving our partisan mapping process, we will in fact, take some steps back in good governance with the loss of that institutional knowledge. 3) I do not believe nesting of the districts is helpful and it actually creates problems of splitting up communities of interest. For example, Rockingham Co and Augusta Co are number $1 \& 2$ in the state for an agricultural based economy. The nesting plan has broken up those two communities of interest. There are other nesting problems throughout the maps. 4) Had the maps started at another area of the state rather than the Winchester corner, the maps might look differently and not split where they do. I would suggest picking a few different corners or middle of the state to develop maps without nesting parameters and see if they can better reflect communities of interest.

| From: | nearmissmk@verizon.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | RState Redistricting |
| Date: | Tuesday, December 14, 2021 9:03:03 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Westgate precinct \#613. The proposed redistricting for our Congressional, Virginia Senate and Delegate Districts has removed the Mount Vernon Estate, the Mount Vernon Civic Association and our Westgate neighborhoods from the Mount Vernon District and requires that we be combined with Prince William and Stafford Counties and the towns of Woodbridge, Manassas, Lorton and Gunston. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Congressional District \#8 and putting it in Congressional District \#7 with Prince William and Stafford Counties violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#8, removes us from an existing compact district and fails the equity test - many minority students from \#8 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.

These same concerns apply to Senate District \#34 and putting it in Senate District \#33 with Woodbridge and Manassas, and Delegate District \#16 and putting it in Delegate District \#19 with Lorton, Gunston, and Woodbridge. These moves violate five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in Senae District \#34, and Delegate District 16 and removes us from an existing compact district and fails the equity test - many minority students from \#34 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor.

The current recommendations will have a substantial negative impact on our community for at least the next 10 years, by separating key areas from Mount Vernon District cores in Mount Vernon and in Lorton. While the Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their explanatory memorandum and their maps. This matters because what they've done ignores our area as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches.

How can Mount Vernon and its original Westgate lands be removed from the Mount

## Vernon District? Please do not continue with this ill-advised proposal.

Cordially,
Norman M. King
3802 Densmore Court
Alexandria, VA 22309-2913

From: Mickey Fenyk-King [tjsamjoey@verizon.net](mailto:tjsamjoey@verizon.net)
Sent: Sunday, December 12, 2021 9:40 PM
To: redistricting@vacourts.gov
Subject: State Redistricting

I live in Westgate precinct \#613 which should be included in Congressional district \#8 along with the rest of the Mt. Vernon magisterial district. The map puts us into Congressional district \#7 from which we are totally separated by Fort Belvoir.

The current recommendations will have a substantial negative impact on our community for the next 10 years, by separating key areas from Mount Vernon District cores in Mount Vernon and in Lorton. While the Special Masters' memo references the communities of Springfield and Franconia, there is NO mention or recognition of the existence of the Mount Vernon Community anywhere in their explanatory memorandum and their maps. This matters because what they've done ignores our area as long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches and, I believe as a result, are proposing to shift voters:

- Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
- Living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.
Please do NOT continue with the ill advised recommendations for redistributing of those of us living on land that was part of the original Mount Vernon estate.

Cordially,
Mickey Fenyk-King
3802 Densmore Court
Alexandria, VA 22309-2913
Sent from my iPad

| From: | Barbara Shear |
| :--- | :--- |
| To: | Redistricting |
| Subject: | redistricting in Mt. Vernon area |
| Date: | Tuesday, December 14, 2021 9:18:50 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I strongly oppose the proposed redistricting of the Mt. Vernon area. It will break up an area with a strong sense of community and will separate long-established neighborhoods in a way that makes no sense geographically or socially. Please reconsider this action for the wellbeing of all the citizen involved.
Barbara Shear
1820 Drury Lane
Alexandria, VA 22307

| From: | grandmaclare@cox.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mt. Vernon District in Fairfax County |
| Date: | Tuesday, December 14, 2021 9:20:27 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters,
I am highly in favor of redrawing voting districts in Virginia in a fair and nonpartisan way. At this point, we the citizens have to trust the Special Masters to take on this task in a completely non-partisan way because this is what the citizens voted for. We expect no less.

However, I am disappointed that the Mt. Vernon Community is being divided in the new redistricting map proposals. I am also disappointed that there is no mention of $M t$. Vernon in the description as if our community does not exist or matter. My street in the Mt. Vernon community will be grouped with voters from an area much farther from me and have different needs and concerns. I don't see how this fits with the "communities of interest" rules. I don't feel that my vote will enable me to elect a representative who will be looking out for my concerns. I don't understand how our community can be divided this way. We are one of the older communities in Fairfax County and deserve to be treated as a community of interest.

I can understand the difficulty in drawing a map that makes everyone happy, but separating my Mt. Vernon neighborhood from the rest of Mt. Vernon is a bad idea. Already, my mailing address does not represent the actual community of Mt. Vernon in Fairfax County where I live. Please don't separate my Neighborhood's voting districts and stick us with completely different communities just to be fillers! Keep us together following the "communities of interest" rule.

I ask that you reconsider this aspect of both proposals.
Please don't divide the Mt. Vernon Community as you consider the redistricting map proposals.

Clare O. Coulter
8025 Lynnfield Drive
Alexandria, VA 22306

| From: | Kathleen Hanrahan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Proposed Re-Districting for Mount Vernon Community |
| Date: | Tuesday, December 14, 2021 10:35:50 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a long-time resident of the Mount Vernon area, I am extremely concerned by the proposed maps breaking our historic community in two. Neighbors to the east/south of Mount Vernon Memorial Highway are being grouped into districts either centered in Springfield or with Fredericksburg, Manassas and Quantico.

The residents of the areas being severed from the Mount Vernon Community share our schools, parks, libraries, transportation, infrastructure and community activities for which they deserve to have a voice and a vote. The proposed maps that sever the historic Mount Vernon Estate and surrounding neighborhoods from our districts need to be corrected immediately.

I applaud the effort to approach redistricting in a non-partisan way, but the Special Masters were clearly uninformed about this historic community. Please remedy this error before the final draft maps are submitted for approval. Thank you for your attention.

Respectfully,
K. Hanrahan

Alexandria, VA 22309

| From: | Nancy Davies |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Proposed Redistricting |
| Date: | Tuesday, December 14, 2021 10:44:11 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As both a female and a suburbanite, I will not be fairly and equally represented by the most recent proposed map. Bob Good is not remotely representative of my interests. Please reconsider, especially along gender lines. So far, what the latest group has done to women and suburban representation is discouraging.

## Nancy Davies

8456 W. Bon View Drive
North Chesterfield, VA 23235
(c) 804.937 .6123

| From: | Gmail |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistributing public comments |
| Date: | Tuesday, December 14, 2021 10:49:10 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Redistricting Public Comments
Submitted by Judith W Wyatt
Resident of Augusta County

* The splitting of Augusta County and the cities of Staunton and Waynesboro is a prime example that you have failed your task to keep local communities of interest together! These three communities have spent years building shared partnerships and they work best within one Senate District.
* Re institutional wisdom-I understand you were to give no thought to present incumbency representation. But, you have also given no thought to the loss of institutional wisdom made possible by the current proposals.
* Surely there are better choices for mapping than the one currently proposed. I suggest a new starting point that will hopefully address peoples’ concerns.

Thank you,
Judy Wyatt
thecwyatts@gmail.com
Sent from my iPhone


COUNTY OF FREDERICK

Roderick B. Williams<br>County Attorney

540/722-8383
Fax 540/667-0370
E-mail rwillia@fcva.us
December 14, 2021
VIA EMAIL TO Redistricting@yacourts.gov
Honorable Muriel-Theresa Pitney, Clerk of Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street
Richmond, VA 23219-1315
Re: Decennial Redistricting Pursuant to the Constitution of Virginia, art. II, §§ 6 to 6-A, and Virginia Code § 30-399

Dear Ms. Pitney:
Pursuant to the Court's Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I write on behalf of Frederick County and its Board of Supervisors (collectively, "Frederick County" or "the County") regarding the state legislative and congressional district maps proposed by the Court's Special Master. I write for two specific reasons, first, to request the opportunity to participate on behalf of Frederick County in the Court's December 15 public hearing, and, second, to include here full detail of slight adjustments that Frederick County requests to Special Masters' maps.

Frederick County last week completed its own local magisterial district redistricting, with the Board of Supervisors adopting new maps for the County's magisterial districts and precincts. Concerning the congressional and state legislative districts, Frederick County very much appreciates that the Special Masters' proposed maps leave the County intact within a single congressional district, a single State Senate district, and just two House of Delegates districts. I write now, however, to respectfully request two possible adjustments the Special Masters' proposed maps for House of Delegates Districts 31 and 32.

Frederick County seeks, if and to the extent possible, to have its precincts and, preferably as well, its magisterial districts, correspond with the House of Delegates districts. Most importantly, the County's two requested adjustments will help avoid the prospect of confusing and disfavored split precincts. See Va. Code § 24.2-307. With respect to the magisterial districts, the County's two requested adjustments would keep the entirety of three of its six magisterial districts within House District 32 and the entirety two other of its six magisterial districts within House District 31. Only one of the County's six magisterial districts would be split between two

Honorable Muriel-Theresa Pitney, Clerk of the Court
December 14, 2021
Page 2

House of Delegates districts, an outcome the County recognizes is inevitable, given the location of the City of Winchester, being wholly surrounded by the County, and given the combined population of the City and the County.

Taken together, the County's two requested adjustments will not increase the deviation in population totals between the two House of Delegates districts; in fact, the two adjustments will reduce the deviation in population totals. The currently proposed populations of the two districts are 87,054 for District 31 and 85,347 for District 32 ; the proposed populations of the two districts, with the County's revision, would be 86,680 for District 31 and 85,721 for District 32 Accompanying this letter are maps that illustrate the County's suggested adjustments: one overall map (Map 1), illustrating both changes together, and then four separate maps, two illustrating the subject areas without the County's requested changes (Maps 2 and 4) and two illustrating the subject areas with the County's requested changes (Maps 3 and 5).*

The County's first requested adjustment, identified as " $\# 2$ " on the accompanying overall map (Map 1), involves shifting an area bounded by, generally, Marlboro Road on the north, the Town of Stephens City, Interstate 81, and Route 11 on the east, Vaucluse Road on the south, and Hites Road on the west, from House of Delegates District 32 to District 31. Maps 2 and 3 accompanying this letter illustrate the area in greater detail. The specific census blocks involved, 13 in all, are as follows:

| 510690506002055 | 510690506002017 |
| :--- | :--- |
| 510690506002054 | 510690506002016 |
| 510690506002051 | 510690506002014 |
| 510690506002031 | 510690506002013 |
| 510690506002030 | 510690506002012 |
| 510690506002029 | 510690506002006. |

510690506002028
This shift would involve moving a population of 205 people.
The County's second requested adjustment, identified as "\#3" on the accompanying overall map (Map 1), involves shifting an area bounded by, generally, Sulphur Spring Road on the north, Opequon Creek on the east, and Route 50, Airport Road, and Victory Road on the southwest, from House of Delegates District 31 to District 32. Maps 4 and 5 accompanying this letter illustrate the area in greater detail. The specific census blocks involved, 32 in all, are as follows:

[^23]Honorable Muriel-Theresa Pitney, Clerk of the Court
December 14, 2021
Page 3

| 510690509001047 | 510690509001010 |
| :--- | :--- |
| 510690509001046 | 510690509001009 |
| 510690509001045 | 510690509001008 |
| 510690509001044 | 510690509001007 |
| 510690509001043 | 510690509001006 |
| 510690509001042 | 510690509001005 |
| 510690509001041 | 510690509001004 |
| 510690509001039 | 510690509001003 |
| 510690509001038 | 510690509001002 |
| 510690509001037 | 510690509001001 |
| 510690509001036 | 510690509001000 |
| 510690509001035 | 510690508051013 |
| 510690509001034 | 510690508051003 |
| 510690509001033 | 510690508051002 |
| 510690509001032 | 510690508051001 |
| 510690509001028 | 510690508051000 |

This shift would involve moving a population of 579 people.
Accordingly, Frederick County respectfully requests the foregoing adjustments to the Special Masters' proposed House of Delegates Districts 31 and 32. Should the Court or the Special Masters require further information, the County can readily provide it, upon request to the undersigned County Attorney. The County very much appreciates the Court's consideration of the County's concerns.

Respectfully submitted,


Roderick B. Williams
County Attorney
Attachments (3 maps)
cc: Board of Supervisors
County Administrator

## Proposed State House / Precinct Edits







| From: | Greg Brandon |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please Make Minor Adjustment To Proposed House of Delegates District 7 |
| Date: | Tuesday, December 14, 2021 11:09:15 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Do the Special Masters really need to cleave off 81 voters from the current HD 34 to glom onto the proposed HD7? It appears from the VPAP map - www.vpap.org/redistricting/plan/2021-house-vasupremecourt-statewide-1/district-7/ - that they have unnecessarily created a split precinct. Please avoid splitting precincts. I think it is unfair for localities to clean up the mess by healing the splits through the creation of additional precincts that may need new polling locations and definitely need additional staffing. Thank you for this consideration.
Gregory Brandon
gbrandon1955@gmail.com
Fairfax County
McLean

| From: | Greg Brandon |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Please Make Minor Adjustment To Proposed Senate District 35 |
| Date: | Tuesday, December 14, 2021 11:19:16 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like the Special Masters to adjust the proposed SD35 to remove the 215 voters that were apparently taken from the current SD39. Please see this map: www.vpap.org/redistricting/plan/2021-senate-vasupremecourt-statewide-1/district-35/. It appears this would unnecessarily create a split precinct which should be avoided. I think it is unfair for localities to clean up the mess by healing the splits through the creation of additional precincts that may need new polling locations and definitely need additional staffing. Thank you for this consideration.
Gregory Brandon
gbrandon1955@gmail.com
Fairfax County
McLean

| From: | ralph slawson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Mt Vernon |
| Date: | Tuesday, December 14, 2021 11:22:20 AM |

## EXTERNAL EMAIL <br> THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I oppose the map that divides up Mt Vernon. This historic district should not cut up into areas, some of which are not compatible with historic areas in the current district. Please review the proposed splitting up of our district.

Ralph Slawson

| From: | $\underline{\text { Greg Brandon }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Proposed House of Representatives District 10 |
| Date: | Tuesday, December 14, 2021 11:46:40 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like the Special Masters to shift the voters in Charlottesville City from the proposed CD5 to the proposed CD10. I think it unfair to the Democrats in this college town to be stranded in a Republican congressional district.
Thank you for this consideration.
Gregory Brandon
gbrandon1955@gmail.com
Fairfax County
McLean

| From: | Suchada Langley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on State House District 12 |
| Date: | Tuesday, December 14, 2021 12:13:25 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Suchada Langley (at 2435 Flint Hill Rd, Vienna) and I am in new drawn district 12. My current HOD is Mark Keam. The new district 12 is expanded from Vienna to Tysons areas which unfortunately includes where Delegate Marcus Simon, another great delegate, lives.
Vienna and Tysons/Pimit have very different characteristics, both economically, socially, and culturally. In Vienna, we are mostly small businesses. We enjoy our Church street events of ViVA Vienna, Memorial Days, Taste of Vienna, Holidays, Oktoberfest, and so on. We line up Maple eve to watch Halloween Parade as well as July 4th Firework. We hang out at local brewery, bar, and coffee shops. We got our own neighborhood group chats on most things Vienna.
Please do not destroy this well balance of our community by adding the busy and commercialized Tysons areas.

Sincerely,
Suchada Langley
Vienna residence since 1991.

| From: | Katie Cachine |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mount Vernon redistricting |
| Date: | Tuesday, December 14, 2021 12:47:20 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I am extremely alarmed that the plans for redistricting would split the Mount Vernon community in half. My address is 4319 Ferry Landing Rd, Alexandria, VA 22309. I would no longer be in the district I am currently, with the rest of my Mount Vernon neighbors. It splits neighborhoods and communities apart. I live and work in this community. However, my residence and my place of employment would now be served in different districts, which is not something I want to happen. There is absolutely no reason that my neighborhood should share a district with Manassas and Fredericksburg, rather than with the rest of the community of which I am a part of. It splits the Mount Vernon High School pyramid in half. It splits the original land of George Washington's Mount Vernon into 2 very different districts with different needs. This needs to be adjusted to reflect that we are a long standing community of interest that shares infrastructure with the rest of the Mount Vernon neighborhood. Thank you for considering my feedback.
Sincerely,
Katie Cachine

## Goochland County Congressional and House of Delegates Concerns December 13, 2021

To the Honorable Supreme Court Justices, Thank you for the opportunity to share concerns regarding the recently released congressional and statewide district maps by the Special Masters. I am Wendy Hobbs, a resident of Goochland County with 24,727 residents, and of that population, only 3,900 are African Americans. I oppose the proposed Special Masters' maps, which eliminated the current Congressional District 7.

## The Opposition Concerns:

- Goochland County is an exurb of Richmond City, Henrico, Chesterfield, and Hanover Counties. Our residents work and shop in the Richmond Metropolitan Areas.
- The proposed Special Masters' Map assigns Goochland in Congressional District 1 with the Hampton Roads and Northern Neck areas.
- Goochland is in Central Virginia, and our community interests are different from those proposed areas, which concerns may be more focused on climate control and military efforts.
- Goochland serves on several Regional Boards and initiatives in the Richmond Metropolitan area. The county participation on regional boards and commissions assists residents with school, transportation, health, and other regional initiatives. Also, when federal funds are acquired, they are funneled to a district that impacts Goochland County.
- Goochland services are rendered primarily by Richmond City and surrounding counties. The resources these larger populated areas can get due to their population sizes directly ensures Goochland County receives its fair share of resources,
- In the proposed Special Masters' maps, Goochland will compete with other localities of similar sizes, resulting in the possible loss of federal and state resources for the most vulnerable populations.
- The map proposed by the state-appointed redistricting committee to keep the current congressional district intact and add Charlottesville and Albemarle County is a map that benefits the community interest of Goochland County.
- Goochland is one of the wealthiest counties in the state. However, of the 3,900 African American residents, a significant number of them live below the poverty level and struggle to have adequate medical and housing options. Studies have shown this population die at a higher rate than their white or economically stable populations. The resources gained at the federal and state levels are needed and would be further detrimental if the redistricting maps resulted in reducing the funding resources.


## On splitting communities of interest in Goochland County:

o The new maps for Goochland County do not meet the guidelines for redistricting regarding compactness. Congressional District 1 does not favor Goochland County community interest. Additionally, the CD-01 map assigning Goochland with the Northern Neck and Hampton Road results in communities with no real connections
and removes Goochland from a district where residents work, shop, and live every day.
o The Congressional map for District 1 includes the entire county, yet the House of Delegates maps split the county. The maps should not divide a county with 24,727 residents. A county this size should not rely on two House of Delegates members to represent the county's interest. Further, it results in logistical difficulties for our county to educate residents on who represents them or is campaigning.

- Goochland County is bound on the north by Interstate 64, and on the south, by Route 288 and Route 60. It makes sense to keep the county as a whole in the same House of Delegates and Senate districts.

Thank you for the opportunity to testify to keep Congressional District 7 intact and add Charlottesville and Albemarle County to CD-7. It is also requested to designate only one House of Delegates for Goochland County for a population of just under 25,000.

Respectfully submitted
Wendy S. Hobbs
Goochland County, Virginia

| From: | Adele Coble |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on Mount Vernon area |
| Date: | Tuesday, December 14, 2021 1:18:30 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
I'm a mother of two sons and voter in the Mount Vernon area (Waynewood neighborhood). I also was a deputy campaign director on the successful campaign to pass Florida state constitution amendments to prevent gerrymandering back in 2010. I have seen first hand what splitting communities like the Mount Vernon area can do to sever local ties-- Florida was riddled with examples. In some cases, it can affect voter turnout, connection to or interest in local politics that deeply affect the community. At worst, it can develop estrangement from neighbors. In my current neighborhood, it would potentially bisect our community and I would hate for my sons to grow up with any barriers that divide our little Mayberry-like area.

I urge you to think again about creating boundaries that follow natural geographic or current sociopolitical divisions, rather than creating boundaries that have never existed before.

Thank you for your time,
Adele Coble
922 Croton Dr, Alexandria, VA 22308
573-999-1848

| From: | Lainge Bailey |
| :--- | :--- |
| To: | Redistricting |
| Cc: | MtVernon.Office@fairfaxcounty.gov |
| Subject: | Redistricting@vacourts.gov |
| Date: | Tuesday, December 14, 2021 1:35:05 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON

 ANY LINKS OR DOWNLOADING ANY ATTACHMENTSFr. Lainge Bailey, 7820 West Boulevard Dr. Alexandria, VA 223081001, 703-660-2327 laingebailey@earthlink.net.

The Mount Vernon Idea
I chose to live, teach and volunteer in Mount Vernon because of its unifying, local, "Town Hall" approach to government: I call it The Mount Vernon Idea.. Last week's Special Masters' redistricting proposal can negatively effect Fairfax County precinct changes and shows a lack of understanding of our community. For nearly 40 years, I have been a Virginia taxpayer and a resident of Mount Vernon District, Fairfax County, VA - George Washington's neighborhood. I also had a residence in Fairfax City in the 60s and 70s. I respect Virginia law, history and civic processes, very like Connecticut, the state of my birth. In fact the New England states and our Commonwealth share many of the founding principles that built and held together our democratic ideals. I was shocked to learn that our well-designed, County redistricting plan may be ignored and therefor disrespected by the new redistricting Masters. Mount Vernon has been recognized since Washington's day as the oldest, largest and most populace District in the County. This last census did not indicate any logical reason for the radical District splitting proposed by the Masters that may ultimately disrupt school assignments, VDOT and economic development, and safety and community services, especially along Mount Vernon's Route One Corridor. In the last 30 plus years from the Beltway through Lorton, commercial and residential development has strengthened the District, the County and the Commonwealth. The "Route One Corridor" built opportunity through community and raised economic and educational standards for all. And that success benefits all: in the Commonwealth and nation. Do not carve up Mount Vernon District!Stick with the Fairfax County Redistricting Plan. Respectfully Submitted, Lainge Bailey

| From: | Ahmad Fryar |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting Objection |
| Date: | Tuesday, December 14, 2021 2:39:24 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
My name is Ahmad Fryar and I am sending this email to strongly oppose the redistricting of Virginia more specifically the Lorton area of Fairfax county which has been put forth. I have been a resident of Lorton for more than a decade and have watched my children grow here.

Lorton as well as the Mt. Vernon district is a very culturally diverse community with a great mix of all socioeconomic classes and a true treasure in the state of Virginia. The proposed redistricting will disrupt the growth and attractiveness of the area to potentially new residents and businesses negatively impacting the growth of Lorton by diminishing the diversity of this area.

In conclusion I strongly disagree with the proposed redistricting due to the impact it will have on the future of Lorton our children, community and a place I call home.

Ahmad Fryar<br>8645 Spring Creek Court<br>571-523-3699<br>Fro1@yahoo.com

| From: | Dean Tinnin |
| :--- | :--- |
| To: | Redistricting |
| Subject: | DO NOT REDISTRICT! |
| Date: | Tuesday, December 14, 2021 2:45:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I DO MOT SUPPORT ANY REDISTRICTING AT THIS TIME!!
thank you.
Sent from my iPhone

| From: | Lacquelin M Johnson |
| :--- | :--- |
| To: | Redistricting |
| Subject: | RE: Redistricting of our Area! |
| Date: | Tuesday, December 14, 2021 2:58:47 PM |



Please Do No Redistrict!

Please Do No Redistrict!

Please Do No Redistrict!

Thank You,

Mrs. J Johnson

| From: | Gary Hodnett |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Congressional Hurt Precinct 48 |
| Date: | Tuesday, December 14, 2021 3:05:23 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Court's Special Masters,

I strongly urge the Court's Special Masters to reconsider the move of the Hurt Precinct from Pittsylvania (48) to Campbell (51). Considering that Hurt Precinct (48) remaining in with Pittsylvania County it easily falls within the listed Deviation guideline. If you consider COI again Hurt Precinct (48) is obviously within the Communities of Interest intent. As example Town of Hurt, Renan, Grit and Motley are all rural communities with the same values and their residents intertwined. Moving Hurt (48) into Campbell (51) will be detrimental to the COI intent. Also, The Town of Hurt, Chatham and Gretna all work harmoniously together on issues and would destroy this as well making each a weaker community. Within the Town of Hurt limits, we are fortunate to have the Southern Virginia Multimodal Park. We are partnered with Pittsylvania County, City of Danville on this project. It offers a future to the Town of Hurt and even a more important reason that we stay in Precinct (48) within Pittsylvania County.

Gary Hodnett
Mayor, Town of Hurt
garv.hodnett@townofhurtva.gov
434-259-1735

## "Pursuant to the Virginia Freedom of Information Act (FOIA), emails and attachments may be released to others upon request for inspection and copying without prior notification."

| From: | Tim Stevens |
| :--- | :--- |
| To: | Redistricting |
| Subject: | comments on new proposed political maps |
| Date: | Tuesday, December 14, 2021 3:11:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I agree with and support adding Falls Church City with Arlington for both the new House District 1 , and the new Senate District 40. It is a better fit from a community of interest perspective (i.e. older, established suburbs) than the current maps which include Falls Church City with newer suburban areas to the west.

Tim Stevens
106 Gresham PI
Falls Church, VA 22046

| From: | Aliscia Andrews |
| :--- | :--- |
| To: | Redistricting |
| Subject: | District lines |
| Date: | Tuesday, December 14, 2021 3:16:37 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern;
Thank you for your ability to make the maps as fair as possible. I recognize you may be receiving large amounts of hate mail but it’s unwarranted. Thank you for your service to the people of our GREAT Commonwealth.

Thank you,
Aliscia Andrews

| From: | scottflannery |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Prince William County |
| Date: | Tuesday, December 14, 2021 3:19:37 PM |



Do not remove Representative Witman from the county. Thank you
V/r
Scott Flannery

Sent from my Galaxy

| From: | itlangmesser@verizon.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Redistricting |
| Date: | Tuesday, December 14, 2021 3:34:57 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
As a citizen living in Prince William County, I have followed with great interest the proposed redistricting of the state. This is an area where gerrymandering can occur, and it is never for the good. I would recommend that proposed House Map C1 be adopted as the one for District 7 which includes Prince William County.

A citizen,
James E. Langmesser

| From: | Arina van Breda |
| :---: | :---: |
| To: | Redistricting |
| Subject: | Redistricting comment re Northern Virginia and the Mt Vernon community |
| Date: | Tuesday, December 14, 2021 3:36:25 PM |
| Attachments: | pastedGraphic.png |
|  | pastedGraphic 1.pnq |
|  | pastedGraphic_2.pnd |
|  | pastedGraphic_3.png |
|  | pastedGraphic_4.png |
|  | pastedGraphic_5.pnq |
|  | pastedGraphic 6.pnd |
|  | pastedGraphic 7. png |
|  | pastedGraphic_8.png |
|  | pastedGraphic_9.pna |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We are all residents of the Mt. Vernon community and are writing regarding the proposed redistricting of the Mt. Vernon area of Fairfax County. The Mt Vernon area is a community in the real sense of the word. Those of us who live here describe themselves as living in Mt Vernon. We are a community with schools, churches, transportation systems, ecological resources and media (Mt Vernon Gazette) that serve this area as a discrete portion of Fairfax County and Northern Virginia. We want legislators who know our community of Mt Vernon and will represent our interests.

First, in the explanatory memo to the proposed redistricting map, the southern boundary of CD8 is drawn along VA-235 because of inability to add population to CD8. "This version of the 8th had too many people, so we moved Springfield and Franconia into the Fairfax district, with a few precincts around Lorton moved into the Prince William County district (the newly created 7th district)."
This is problematic for a couple reasons:

- You should have included the entire Mt. Vernon Community all the way down to the Estate in the district instead of cutting it off from the rest.
- Second, you should not have divided Kingstowne - the largest HOA in the area in half.
- Third, in light of the fact that you only drew that line because you ran out of room to add people - it should not have been used as a boundary that governs the House and Senate Districts because it is not based in any community of interest.
- A series of other problems flow from that decision as detailed below.

First, here is what the proposed CD8/SD34 Line does to Fairfax County's Mt. Vernon


Here's what the proposed CD8/SD34 Line does to the original Mt. Vernon Estate that our


Here is what the proposed CD8/SD34 Line does to Mt. Vernon High School boundary:


Here's how the proposed CD8/SD34 Line divides Fort Belvoir Military Installation (in gray) in


VDOT and Fairfax County are currently in the process of condemning land and finalizing engineering plans for the U.S. 1 Bus Rapid Transit which will run from Huntington Metro to the Woodbridge VRE. This project was planned North/South not East/West because that is the natural community of interest.


The only people who see Springfield belonging in the same community with Mt. Vernon are the Special Masters of this Redistricting. The special masters state in their memo that travel arteries were important to communities of interest. The Route 1 corridor is such an interest: "We also were mindful of the Commonwealth's major metropolitan areas and the travel arteries that feed them: Northern Virginia,..." Those of us living here identify as a community with residents of the other side of VA 235 and down the length of Rt 1 into the Lorton areanot with the residents of Springfield.

When VDOT and Fairfax County planned out the project, the project is based around the U.S. 1 Corridor in Mt. Vernon which is the anchor of the community of interest. Here is how it was analyzed showing proposed bus transit stations and here is how the proposed CD8/SD34 boundary ignores our natural community of interest and divides it right in half:


The natural community of interest and most of our existing community structures are built up around Mt Vernon as a distinct historical and administrative entity. Any proposed revisions should respect existing local boundaries and anchor the newly numbered SD34 in Mt. Vernon and Lee (Franconia) communities and use I-95 as the boundary and look like this:


It might look like a lot of land to the south, but the military base has a lot of open land and Mason Neck is zoned for very low density so it is about the same population as the densely populated part of Springfield that is currently included in the proposal. The new SD33 to the south should extend further up the west side of I-95 where it has more in common with the citizens, high schools and political districts on the West side of I-95. This makes much more sense.

Likewise, the newly numbered HD16 and HD17 seem to have zero relationship to the actual communities in the area. They should follow our roads/community lines and take account of the obstruction created by largest park in Fairfax County (Huntley Meadows) as a natural
boundary:


Here is what HD17 should use I-95 as the western boundary, Fort Belvoir as the boundary to the south and Huntley Meadows to the east and should look like this:


The newly created HD19 should take up the remaining territory to the south and HD18 adjusted accordingly.

These changes will keep the Eastern part of Fairfax County as one consolidated community of interest and "nest" the delegate districts mostly within one senate district as was given as an objective in the redistricting effort.

The currently proposed dividing line cuts through the heart of an established and well-defined existing community. I strongly urge the redistricting masters to reconsider and redraw the boundaries as suggested above to protect the interests and cohesiveness of our community.

Thank you for considering this.
Arina van Breda
7821 Southdown Rd
Alexandria, VA 22308

Elizabeth Ketz-Robinson
Donald W. Robinson
7823 Southdown Road
Alexandria VA 22308

David Reese

Jane S Reese
824 Arcturus on the Potomac
Alexandria VA 22308
Kenneth S. Rholl
Paula Neumann
1134 Cameron Rd
Alexandria VA 22308
Elizabeth Woodruff
7952 Bolling Rd
Alexandria VA 22308
Adriana van Breda
John C. Ring
8809 Anne Tucker Lane
Alexandria VA 22309

| From: | CRBROWN |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Proposed maps unfair to PWC Republicans |
| Date: | Tuesday, December 14, 2021 3:52:14 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Although we're excited to have proposed maps, as they are currently drawn, we would lose Rep. Wittman, leaving Prince William County with no Republican representation in the Congress. The current proposed maps also do not present a district that would provide a fair contest for Republicans

Sent from my iPhone

| From: | delighteddiva@verizon.net |
| :--- | :--- |
| To: | Redistricting |
| Subject: | making a way for both parties to be represented equitably is imperative |
| Date: | Tuesday, December 14, 2021 4:05:51 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
The easiest way to make the district more competitive/equitable is to recommend that the three Fairfax County precincts be removed from the 7th and replaced with the three northernmost precincts in Spotsylvania County (Riverbend, Elys Ford, and Wilderness School). The other recommended change would be to encourage the Supreme Court to simply use the originally agreed upon House Map "C1".

Tracy Comer
Manassas Va

| From: | Polaski, Donald |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Redistricting |
| Date: | Tuesday, December 14, 2021 4:18:29 PM |
| Attachments: | Henrico Plan.xlsx |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:

My name is Don Polaski and I have served as a volunteer canvasser for the last several elections in Henrico County, working for candidates of the Democratic Party. I live in Richmond City. While I have political interests, I have tried to make these comments simply about the shape of the House of Delegates districts in Henrico with observations drawn from miles and miles of walking through western Henrico neighborhoods.

My largest concern about the proposed map is the "bite" of Henrico County taken by District 59. District 59 unites this section of Henrico with large sections of Hanover and Louisa counties. I do not see a clear community of interest between western Hanover, eastern Louisa, and the residents of the part of Henrico proposed to join the 59th.

Many of the neighborhoods share various matters in common with each other: house setback from streets, distance between houses, and size of lots. As a canvasser I tend to notice these matters. As one moves toward the border with Hanover, lots become larger and houses are spaced further apart. Townhome developments become fewer.

I believe using l-295 as a boundary would help better reflect common interests of the citizens of Henrico. It would also follow the pattern of using major thoroughfares seen, for example, in the use of Broad Street as the northern boundary of the proposed 58th district. I have avoided disturbing the 58th district as proposed.

I suggest, moving from east to west, that the southern boundary of district 59 run along l-295 from I-95 to Nuckols Road, north on Nuckols to Twin Hickory, west on Twin Hickory to Pouncey Tract (271), and north on Pouncey Tract (271) to the Goochland border. There may be a more elegant way to draw the western end of this border, but I wanted to keep all my alterations in Henrico, since I have never canvassed in Goochland, where other population shifts could occur.

I have assigned the territory lost by district 59 to districts 57 and 80 and made adjustments in order to reach proper population markers. District 57 would receive a portion of Glen Allen precinct and the entirety of the Staples Mill precinct from the 59th. Because of the population

District 80 gains from District 59, it gives the Dumbarton precinct to the 57th. This creates a sharp north-south boundary between 57 and 80 along the railroad, which then follows the less elegant precinct boundaries before reaching Broad Street.

I am attaching a spread sheet detailing the population transfers. Some of these figures are estimates since I have to grade papers right now instead of learning census software. Since I am also not possessed of knowledge of mapping programs, I'm attaching photos of maps that shows the boundaries. The Masters' boundaries are in black, mine are in bronze.

Cordially,

Don Polaski
1313 Brookland Parkway
Richmond VA 23227
804.938.1789
Add Glen Allen south of I-295 census ..... 2232
Staples Mill census ..... 5116
Dumbarton census ..... 6708
Minus River's Edge census ..... -5487
Shady Grove census ..... -5070
Sadler census ..... -3481
Result ..... 85279
HoD 59 ..... 85992
Add River's Edge census ..... 5487
Shady Grove census ..... 5070
Sadler census ..... 3481
Minus Glen Allen south of I-295 census ..... -2232
Staples Mill census ..... -5116
Mountain census ..... -1384
Randolph census ..... -409
Hunton south of I-295 est ..... -400
Longdale census ..... -2509
Greenwood, portion ..... -1200
Yelllow Tavern, portion est ..... -120
Result ..... 86660
HoD 80 ..... 85889
Add Mountain census ..... 1384
Randolph census ..... 409
Hunton south of I-295 est ..... 400
Longdale census ..... 2509
Greenwood, portion est ..... 1200
Yelllow Tavern, portion est ..... 120
Minus Dumbarton census ..... -6708
Result ..... 85203


| From: | Dee Spraker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting of Prince William county |
| Date: | Tuesday, December 14, 2021 4:25:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your Honor,
Your proposed redistricting map leaves many of residents in our area without a voice. Your proposal "wipes away" our representation. As a resident and a Republican one at that I employ you to redesign your proposal that allows equal opp for representation of the republicans party.

Thank you
Delores Spraker
DUMFRIES, va 22025

Sent from Yahoo Mail for iPhone

| From: | Marc Bosch |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting - Mt. Vernon area |
| Date: | Tuesday, December 14, 2021 4:42:10 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very much opposed to breaking the Mt. Vernon area and the Mt Vernon Estate area south of Old Mill Road from the overall Mt Vernon area district, and putting it in with the Woodbridge/Lorton/Stafford areas in all 3 districts (House, VA House, and VA Senate). This is a very bad proposal. It ignores the reality of functional, close-knit communities and neighborhoods that currently exist.

We are part of the Alexandria to Mt.Vernon/River Village community - schools, businesses, culture - and should remain pare of those districts.
The proposal violates the five redistricting requirements.
We are NOT part of Manasas, Woodbridge, Stafford or even Fredericksburg. Please make adjustments.

Respectfully, Marc Bosch

| From: | Gary Campbell |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Concerned about the Redistricting maps!!!! |
| Date: | Tuesday, December 14, 2021 4:42:58 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ladies \& Gentlemen of the Court,
My family and I are extremely concerned about the new redistricting maps.
The best way to make the district more competitive is that the three Fairfax County precincts be removed from the 7th and replaced with the three northernmost precincts in Spotsylvania County (Riverbend, Elys Ford, and Wilderness School). The other change would be to simply use the originally agreed upon House Map "C1".

We look forward to your reply.
Gary Campbell \& Family
Prince William County, VA

| From: | $\underline{\text { Odile Bosch }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting - Mount Vernon Area |
| Date: | Tuesday, December 14, 2021 4:46:55 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very much opposed to breaking the Mt. Vernon area and the Mt Vernon Estate area south of Old Mill Road from the overall Mt Vernon area district, and putting it in with the Woodbridge/Lorton/Stafford areas in all 3 districts (House, VA House, and VA Senate). This is a very bad proposal. It ignores the reality of functional, close-knit communities and neighborhoods that currently exist.

We are part of the Alexandria to Mt.Vernon/River Village community - schools, businesses, culture - and should remain part of those districts.
The proposal violates the five redistricting requirements.
We are NOT part of Manasas, Woodbridge, Stafford or even Fredericksburg. Please make adjustments.

Respectfully,
Odile Bosch

Good afternoon my name is Jose Feliciano and I am a resident of Spotsylvania County. 1st of all, I would like to thank you for all the hard work you are doing. I know all to well the good the bad and the ugly of redistricting. I would also like to apologize, to you because you are undertaking what myself and the rest of the Virginia Redistricting Commission were supposed to do. Unfortunately, we failed at our task, and now it falls upon you to ensure fair maps for the people of Virginia. I am not speaking to you today as a member of the redistricting commission but rather as a resident of Spotsylvania County. After looking over the three proposed maps I have issues many issues, but I will stick to Spotsylvania County because that affects my neighbors and myself. In all three maps Spotsylvania County is divided into sections. Spotsylvania county is a community of interest so Spotsylvania should not be divided up. More so Spotsylvania county has nothing in common with Northern Virginia, Spotsylvania county is not Northern Virginia we do not claim to be Northern Virginia and we do not want to be part of Northern Virginia. The division of Spotsylvania county will dilute the vote of the residents of the county. Not only that but it will disenfranchise voters in the northern section of Spotsylvania county. In the US Congressional map, the northern section of Spotsylvania county is placed in the new 7th district. No part of Spotsylvania county should be in the 7th new! The new $7^{\text {th }}$ district should not go below the Rappahannock river or west of I 95. That section of Spotsylvania county should be placed in the new $10^{\text {th. }}$ District. In the State Senate map almost the same section as northern Spotsylvania county is placed in the 27 district, with the City of Fredericksburg and Stafford County. Again, this section of Spotsylvania county should not be separated from the rest of County. As stated, before that will disenfranchise voters in that section, we have nothing in common with either the City of Fredericksburg or Stafford County. The northern section of Spotsylvania county should be in the $28^{\text {th }}$ district. I would hope that you would see that Spotsylvania county is a community of interest completely different from the City of Fredericksburg and Northern Virginia. The I urge you; I implore you to reconsider the partitioning of Spotsylvania county. At a minimum please place the northern section of Spotsylvania county into the 10th. Congressional District, and the $28^{\text {th }}$ State Senate district. Thank you very much.

Jose Feliciano

| From: | Tory Gussman |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on Redistricting 69th District |
| Date: | Tuesday, December 14, 2021 4:56:48 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The City of Williamsburg should be included in the 69th District where it shares a significantly greater community of interest. Extending a portion of the 69th District across the York River into Gloucester is clearly an aberration and should not even be proposed let alone approved.

I have lived in Gloucester County, worked in the City of Williamsburg and in James City
County where I was a city planner for many years. I now live in upper James City County and am familiar with all these areas.

Victoria Gussman

| From: | Lohn S. Perry |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Mt. Vernon Redistricting |
| Date: | Tuesday, December 14, 2021 5:12:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I understand that current redistricting proposals dismember the area that we know as "Mount Vernon" and lump it with distant and strongly dissimilar areas such as Quantico, Manassas and Fredericksburg. This proposal lumps together the divergent interests of the areas affected, and more significantly the historic role of the current Mt. Vernon district. As currently defined, the Mr. Vernon district is centered on our first President's estate, and includes most of his extensive properties in the area, some of which extend a considerable distance northward of his home estate. Thus, the linkages of the present district with George Washington and Mr. Vernon are strong. The area between the present estate and Alexandria' southern boundary was frequently traversed by Washington, his colleagues and distinguished visitors, and comprises a historically significant unified national asset. Moreover, it is at present an increasingly unified area. Until quite recently, a "Mount Vernon" high school served most of the area, innumerable entities proudly carry the "Mount Vernon" name, and most of its inhabitants think of themselves as "Mount Vernon" citizens. Thus, I believe that the case for preserving the integrity of the current district boundaries is exceedingly strong. The dismemberment of the district as currently envisaged seems to reflect ignorance of both history and reality. We Mount Vernon residents treasure our identity and connection to our country's first President, and strongly oppose actions that threaten those values.

## John S. Perry, PhD (Colonel, USAF Retired)

6205 Tally Ho Lane, Alexandria VA 22307
Tel: 703-329-1646; Mobile: 571-212-4684
Email: johnperry@cox.net

| From: | Loe Duffus |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Modification of the new 7th Congressional District |
| Date: | Tuesday, December 14, 2021 5:17:20 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Court:

The new 7th District does not reflect the community interests of Prince William County as drawn. It is an improvement to have a district that is more contiguous, but I believe that it would be politically more fair if the Fairfax precincts were replaced by the three northern precincts of Spotsylvania County instead - Riverbend, Elys Ford, and Wilderness School. This would better balance the party registrations of the new 7th and give Republicans a fighting chance. In terms of commonality, the fast-growing areas of northern Spotsylvania are closer in common interest to Prince William County than they are to Fairfax anyway. Please consider this alteration as a more equitable way to draw this district..

[^24]```
From: Katherine White
To:
Subject:
Date:

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Redistricting Committee Members - Judges - Concerned Parties, I am very concerned that the new maps drawn will wipe out the progress women have made in Virginia. The Commonwealth was proud to elect 3 women to Congress these past few years. The maps put all three women in districts where it will be beyond difficult to get elected. Two of the candidates were drawn OUTSIDE of their home districts! It seems by disconnecting them from their neighborhoods and the communities where they served proudly, these Congresswomen will now be left on the losing side of the maps. District 10 includes Loudoun County that has gone mainly democratic now and deserves to have representation that celebrates diversity, inclusion, and believes in women's equality. Citizens should not be ruled by a minority voice in such a large population that desires leadership that reflects their values.

We hope you take a hard look at the map lines again, especially in District 2 and 10.

Thank you,
Katherine White
Annandale citizen

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219

RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
To Whom It May Concern,
Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding redistricting for the Virginia House of Delegates.

The draft maps preserve the unity of Columbia Pike, a vibrant, multicultural community of interest that is currently being featured in a special exhibit at the Library of Virginia (https://www.lva.virginia.gov/news/calendar/?event=481). Notably, the draft map does not split the large and growing Latino population of Arlington that concentrates along the Pike. This is one of the most heavily concentrated Latino districts in the Commonwealth.

Virginia's Latino community has very little direct representation in the House of Delegates or in the State Senate. While there are many dedicated legislators committed to advancing the interests of all Virginians, including Latinos, the Latino community has particular needs linked to cultural, ethnic, linguistic, social, and immigration needs that distinguish it in special ways from other constituencies. These needs are best understood by those with direct lived experience and understanding. Any final version of the redistricting process must take those needs and concerns into consideration or risk accidentally creating circumstances where the Virginia Latino population - which now numbers over 850,000 - will not fully realize the promise of equal representation.

Virginia's Latino community has faced significant disparities in access to COVID-19 information and care during the pandemic, further highlighting the need to elect leaders from communities who can effectively serve under the worst and the best circumstances of public life.

I address this letter in my dual capacity as Chairman of the Virginia Latino Advisory Board (www.vlab.virginia.gov) and the Chairman of the Redistricting Advisory Committee (https://www.fairfaxcounty.gov/redistricting/2021-redistricting-advisory-committee) of Fairfax County, home to more Latinos than any other part of the Commonwealth. Thank you for the opportunity to provide these comments.

In service,


Paul Berry
\begin{tabular}{ll} 
From: & Paula \\
To: & Redistricting \\
Subject: & Redistricting of District 2 \\
Date: & Tuesday, December 14, 2021 5:45:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am concerned about the potential for losing Elaine Luria as my Congresswoman first and foremost. That being said I am curious how it happens that the redistricting strategically affects 3 women and their positions in office and seems, yet again, favor male politicians. By choice or by accident this is very unfair to women voters. So, I am opposed to the changes as given especially where the second district is concerned. Paula Nees
\begin{tabular}{ll} 
From: & Richard H Schumacher \\
To: & Redistricting \\
Subject: & Mt. Vernon Redistricting Proposal \\
Date: & Tuesday, December 14, 2021 5:48:35 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello:

It is our understanding that you have agreed to a redistricting proposal that will move the Mt. Vernon Estate and much of the Mt. Vernon Civic association community to other districts. I am including the following analysis of the situation by Tom Russell who is the President of the Mt. Vernon Civic Association. We agree with his assessment and object to the redistricting plan as formulated. His analysis is as follows:


Tom Russell Mount Vernon Union Farm • 4 hr ago
The Supreme Court of Virginia proposes the removal of George Washington's Estate and the 900 plus homes in Mount Vernon Civic Association Community from the Mount Vernon District and our now being combined with voters for Congressional, Virginia Senate and Delegate candidates in Woodbridge, Manassas, and in the Prince William and Stafford Counties. Below is the testimony I submitted opposing these changes. At the end of this post is a link you can use to submit your concerns. Tom Russell, MVCA Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Senate District \#34 and putting it in Senate District \#33 with Woodbridge and Manassas violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#34, removes us from an existing compact district and fails the equity test - many minority students from \#34 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic Association from Delegate District \#16 and putting it in Delegate District \#19 with Lorton, Gunston, and Woodbridge violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#16, removes us from an existing compact district and fails the equity test - many minority students from \#16 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor. Moving George Washington's Mount Vernon Estate and the Mount Vernon Civic

Association from Congressional District \#8 and putting it in Congressional District \#7 with Prince William and Stafford Counties violates five redistricting requirements: we are split from our contiguous community, does not respect our natural boundaries, denies our participation with our larger community of interest in District \#8, removes us from an existing compact district and fails the equity test - many minority students from \#8 are taught in our community where we have historically provided Food for Thought packets for those students in greatest need and we raise funds for our community food banks among our Association Members to support the families in need along the Rt 1 corridor. Link: https://www.vacourts.gov/courts/scv/districting/maps_special_masters.pdf? emci=5059a782-fc58-ec11-94f6-0050f2e65e9b\&emdi=7f2c7b31-1159-ec11-94f6\(\underline{0050 f 2 e 65 e 9 b \& c e i d=1917334}\)

Mt. Vernon is a community. We are neighbors. Please do not break us up. We have absolutely nothing in common with Woodbridge, Manassas, Lorton, Gunston, etc. This is a disappointing, purely political manipulation.

Respectfully,
Richard H. and Susan J. Schumacher
4320 Ferry Landing Road
Alexandria, VA 22309
\begin{tabular}{ll} 
From: & Sue Myers \\
To: & Redistricting \\
Subject: & Prince William County redistricting map \\
Date: & Tuesday, December 14, 2021 5:57:31 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing this to you regarding the lack of fair representation in my district where I love being represented by Mr Whittman. I feel the new lines leave the resulting district as a democratic strong hold not a competitive race. I already have no republican representation for the state now you take away a competitive district to make it another strong democratic win. I voted for redistricting to be done by a commission of both parties now I learn that the children can't do what the voters want. I find that unacceptable. I highly recommend that you not give this new district a 14 point lean to the left. This is unacceptable also.
Please do not fail to live up to our American values by delivering unfair advantages to one or the other party.
Sincerely
Sue Myers
\begin{tabular}{ll} 
From: & Deborah Daily \\
To: & Redistricting \\
Subject: & Redistributing \\
Date: & Tuesday, December 14, 2021 6:11:20 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The new maps put Williamsburg in the 71st District, which runs ail the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities. We should remain in the 69th district.

Debbie Daily
Williamsburg Va.
\begin{tabular}{ll} 
From: & Barnard, Jayne W \\
To: & Redistricting \\
Subject: & 71/69 \\
Date: & Tuesday, December 14, 2021 6:23:55 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I have just looked at the proposed map. I'm in the proposed 71st. It is a strange district - I lived in New Kent County for 25 years and it has no real connection with Williamsburg. Different school division; different library system; shopping focus on Providence Forge or Quinton, not Williamsburg; different judicial districts; completely different educational levels. Big outings take place in Richmond, departures head out from the airport in Richmond. Charles City County is even more remote. They are so dissimilar from where I live in Williamsburg. Lumping New Kent, Charles City, and the City of Williamsburg makes no sense.

My corner of Williamsburg should be with the rest of "cosmopolitan" James City County. Same school division, combined library system, shopping focus on Williamsburg, JCC and "down peninsula." Common judicial district, more commonality of income levels and education. Even the churches are different here - Williamsburg has a temple, a Greek Orthodox Church, etc. And many, many ethnic restaurants. That’s not New Kent or Charles City, I can guarantee you.

Why has Williamsburg been shoved into a district to which it does not belong? (For that matter, why has the 69th crossed the York to Gloucester, with which it has nothing in common?). If these maps are supposed to represent "communities of interest," then Williamsburg and JCC should be oriented toward NN and its several colleges and universities (and its blistering growth rate) not toward rural New Kent or Charles City County.

Sent from my iPad
\begin{tabular}{ll} 
From: & Barbara O"Brien \\
To: & Redistricting \\
Subject: & My Vernon District \\
Date: & Tuesday, December 14, 2021 6:55:26 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We who live in the Mt Vernon District reside in one of the most historic and oldest part of Fairfax County. We are a community and need to remain that way. Most of Mt Vernon residents live on one of the five original farms of George Washington. Putting us in a district with residents far removed from our area makes no sense. We support local food pantries, contribute to hyperthermia shelters, and our local high schools. It is important that we remain in our current state, house of delegates and Congressional district.
Thank you for attention to this important matter.
Barbara F O’Brien
4200 Pickering place
Alexandria, VA 22309
Mt Vernon Magisterial District
Sent from my iPhone
\begin{tabular}{ll} 
From: & cbwyatt824@gmail.com \\
To: & Redistricting \\
Subject: & Public comments about redistricting \\
Date: & Tuesday, December 14, 2021 6:57:10 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please accept the following comments of concern regarding redistricting:
- I do not believe the communities of Augusta County, Staunton, and Waynesboro should be split. We have a long history of cooperation through city and county partnerships and organizations. I do not believe the proposed senate district keeps our community with similar communities of interest.
- Too many districts would face losing representative institutional wisdom all at once and would jeopardize good governance.

Thanks for consideration.
Charles B Wyatt
cbwyatt824@gmail.com
Sent from my iPhone
\begin{tabular}{ll} 
From: & Larry J. Zaragoza \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Tuesday, December 14, 2021 6:57:51 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This map would split the Mount Vernon Community and while I appreciate the need for redistricting, I do not see a reason to make this split because it adds the Rose Hill area and excludes our longtime neighbors to the south. This map would be inconsistent with school districts, community organizations and the historic property of our fist president, George Washington.Preserving alignment with existing boundaries helps to maintain a sense of community.

Moreover, in this age of never ending spam calls, I am disappointed that your system requires a phone number to post comments on the map (an address and email is not enough). I fear that any information provided will be available for unsolicited marketing, which is a disincentive to post comments on the map.

Finally, the maps would benefit from explanation and providing only 5 days for comment almost ensures that the voices of many concerned citizens will not be heard.

I appreciate that this is a difficult job but this map does not make sense to me.
Larry Zaragoza
\begin{tabular}{ll} 
From: & Vicki Metcalf \\
To: & Redistricting \\
Subject: & Comment on proposed maps \\
Date: & Tuesday, December 14, 2021 6:58:20 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you very much for your hard work on the redistricting maps. Overall, they seem very good and fair. But there is one point that I would like to see changed. It doesn't make sense to me to divide Albemarle County and Charlottesville into two Congressional districts. We have a community of interests and I would like to see Albemarle and Charlottesville kept together. I also think we should be moved out of the 5th District, since our interests and very different from the southern part of the state.

Sincerely,
Victoria Metcalf
127 Birdwood Court
Charlottesville, VA 22903
\begin{tabular}{ll} 
From: & \begin{tabular}{l} 
Betty Hudson \\
To:
\end{tabular} \\
Subject: & Redistricting \\
Date: & District 69 and 71 \\
& Tuesday, December 14, 2021 7:18:23 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Williamsburg should be part of James City County, not Gloucester. Williamsburg and JCC rely on the same services, schools, hospitals, etc. Gloucester is a totally different population and is not even adjacent to the city of Williamsburg.

\section*{--}

Rev. Betty Hudson
120 John Bratton
Williamsburg, VA 23185
Rev.BettyHudson@gmail.com
\begin{tabular}{ll} 
From: & R McCarter \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Tuesday, December 14, 2021 7:20:29 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

There is no reason to redistrict moving Mason Neck and Lorton out of its current district \#8. We belong where we are. I have lived here for almost 39 years now. This area is strong and works together with the Mt. Vernon communities which make an impressive district. There are no similarities between our area and Prince William County/Woodbridge just south of us. If I wanted to be a part of that area, I would be living there. The natural boundary is dividing point of the river/bay.
Please convene a new committee to review any redistricting along with public comment considered and not as an afterthought.
\begin{tabular}{ll} 
From: & rhagen12@verizon.net \\
To: & Redistricting \\
Cc: & rhagen12@verizon.net \\
Date: & Tuesday, December 14, 2021 8:06:34 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Richard Hagen, I am a resident of Virginia Beach. I want to begin by thanking the Special Masters for an excellent job. I so hope that the maps are accepted with only minor changes. It is especially important to NOT consider where incumbents live or political party. As we all know in the past the number 1 criteria was incumbency and party lines. I was glad to hear that a lot of incumbents from both parties were drawn into different districts. Please continue to follow this criteria (or lack of criteria) of not even considering political party lines as stated in the Master's Memorandum
"Incumbency: The Statutory Criteria make no mention of protecting incumbents. We therefore maintained ignorance about the residences of incumbents. Even as we submit these plans to the Court, we do not know which incumbents have been placed in districts with other incumbents, with one exception described below. We plan on maintaining that ignorance until the maps are finally approved, unless otherwise instructed by the Court"

I thank the Court for being non-patrician and representing the citizens and not the party that appointed them. Looking forward to an early Christmas Present of Fair Maps. 2

Richard Hagen
\begin{tabular}{ll} 
From: & Loyce Ross \\
To: & Redistricting \\
Subject: & I'm against the redistricting plans for the Mt Vernon Area \\
Date: & Tuesday, December 14, 2021 8:07:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in zip code 22308. The plans do not take into account that the Mt Vernon Area is a community. I live on one of the 5 farms of the Mt Vernon estate. Our area is also called the Friends \& Family of the Mt Vernon Estate. It also borders the 1st Freed Slave Community Gum Springs. As the new redistricting is planned Mt Vernon Estate will be separated from the rest of Mt Vernon as well as my zip code 22308. From what I understand I will no longer be able to vote along with other families @ our local grammar school where my granddaughter attends which is only \(11 / 2\) blocks from my home. It is dividing our community up. Please don't do this. It's history is of a really a close knit community of Friends \& Family of Mt Vernon.
Thanks,
Joyce Ross
2403 Stirrup Ln
Alexandria, VA 22308
joyce.ross@att.net
Sent from my iPhone
\begin{tabular}{ll} 
From: & Linda Plaut \\
To: & Redistricting \\
Subject: & Montgomery County \\
Date: & Tuesday, December 14, 2021 8:32:08 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I'm concerned that the redistricting plans for the Montgomery County area fail to support communities of interest. Having lived near major universities my whole life, I realize that I have a particular interest in higher education and the powerful sense of community these institutions encourage. To separate Blacksburg, Christiansburg, and Radford will undermine the special contributions our communities have made to the state through the years. Please re-unite us!
—Linda Plaut
Blacksburg, VA
\begin{tabular}{ll} 
From: & Herbert Loveless \\
To: & Redistricting \\
Subject: & Statement on Redistricting of Congressional Districts \\
Date: & Tuesday, December 14, 2021 8:46:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I used to live in Short Pump in Henrico Co. and now live in Chesterfield Co. Both areas are suburbs of Richmond. They have similar characteristics and similar problems such as traffic, public education, income distribution and types of employment. Both should be included in the same Congressional District.

\section*{Herbert Loveless}


PO Box 2692Virginia Beach, VA 23450

December15, 2021

\author{
Muriel-Theresa Pitney \\ Clerk of Court \\ Supreme Court of Virginia \\ 100 North Ninth Street, \(5^{\text {th }}\) Floor \\ Richmond, Virginia 23219-1315
}

Dear Madame Clerk:
My name is Ronald Taylor, and I am the current President of the Hampton Roads Black Caucus. I write on behalf of our membership to comment on the state legislative maps proposed by the Supreme Court's special masters on December 8, 2021.We believe that these maps, if adopted in their current form, would represent a step backwards for Black representation in the Commonwealth of Virginia, which has already declined in recent elections after previous rounds of court-ordered redistricting. In the interest of offering constructive criticism rather than empty complaints, we have included with this letter proposed maps that do a better job of meeting our representational goals (see attached).

First, some recent history might be in order. In the 2011 redistricting cycle, Virginia's Third Congressional District was drawn to include a Black voting-age population (BVAP) of \(56.3 \%\); after court-ordered redistricting in 2016, the Third District's BVAP was deliberately dropped to \(47.27 \%\) with the portions of the district containing the heavily Black cities of Richmond and Petersburg reallocated to the adjacent Fourth District (which increased to BVAP \(39.68 \%\), still well short of a majority). In other words, a congressional map that originally featured one Black-majority district after legislative redistricting became a map with zero Black-majority districts after the federal court intervened. Thankfully, this has not affected Virginia's Black representation in the U.S. Congress where Congressmen Bobby Scott and Donald McEachin still proudly serve. Nonetheless, we provide our map that shows it is eminently possible to have a majority black Congressional district in the Commonwealth. Representative Scott is 75 years old, and while we'd be really happy if he remained in Congress for many years to come, we know the reality is that someone other than Representative Scott may very well serve the people of that district during this coming decade. Without him seeking that seat, we have serious doubts about whether his district as configured would still elect a Black member.

Unfortunately, court-ordered redistricting had a more deleterious effect in the General Assembly. The General Assembly in 2011 adopted a redistricting plan featuring twelve Black majority House of Delegates districts, a portion that came remarkably close to matching the proportion of Virginia's population that is Black. After years of litigation, however, those twelve districts-all of which featured BVAPsover 50\%-were ordered redrawn by the same federal court that previously ordered a redo of the
congressional map. Under a plan developed by one of the same special masters this Court is using now, BVAP was deliberately lowered in each of the challenged districts-districts originally drawn with a BVAP high enough to preserve the ability of the Black communities in each to elect their favored representatives. What was publicized as an effort to help the Black community only made it harder to elect Black representatives.

At the time, "experts" reassured us districts didn't need a BVAP over \(50 \%\) to elect Black representatives. Any Black person who grew up in the American South could have told you that was a laughable claim then, but it is no laughing matter anymore. The 2019 redistricting plan designed by special master Dr. Bernard Grofman has had a predictable effect: Black delegates have lost elections in districts that were deliberately made less Black.

In the most recent state elections, four Black Members of the House of Delegates were defeated in their campaigns for reelection, three of them in districts that were redrawn in 2019. In this most recent election, four incumbent Black legislators, comprising nearly a quarter of the Black Caucus in the House, were defeated for reelection. Two of those legislators were in districts that the federal court specifically asserted would retain Black representatives, writing, "Based on the data in the record, we further conclude that black voters in Districts 63 and 75 will continue to have a reasonable opportunity to elect candidates of their choice." The Black legislators representing Districts 63 and 75 lost reelection in November. Is this what progress looks like?

It should be clear by now that the state of Black representation in Virginia in 2021 is not good, but the special masters' maps would make the problem even worse. Currently, only five State Senate districts are home to voting-age populations that are more than \(50 \%\) Black. Perhaps unsurprisingly, four of these five districts align almost perfectly with the four represented by Black Senators (District 16 is the only Black-majority district represented by a white Senator). The connection is clear for anyone willing to see it: Black candidates have a better chance of getting elected in Black-majority districts, thereby enabling them to better represent the interests of Black communities in the state legislature. The pathway to greater Black representation is through the creation of more Black-majority districts.

The special masters' proposed State Senate map, however, takes us backwards. It only has twoBlack-majority districts, Districts 13 and 23. That's right-two out of forty, a mere \(5 \%\), in a state that is nearly \(19 \%\) Black according to the 2020 Census. \({ }^{1}\) It is entirely possible that if the special masters' map is adopted by this Court, there would be no Black members left representing residents of this Commonwealth in the Virginia State Senate. Back when Section 5 of the Voting Rights Act was still enforced, a plan like this would have been illegal; now, it is merely disrespectful. We have fought so hard for a seat at the table, and this plan would callously show us the door.

The special masters' proposed House of Delegates map fares no better. It features only five Black-majority districts out of 100 , matching the proposed Senate map's embarrassing \(5 \%\). The congressional map might be the worst of all, preserving the current post-redistricting status quo of zero Black-majority districts. So, to reiterate, under the 2011 legislative maps, there existed twelve Blackmajority House of Delegates districts, five State Senate districts, and one Congressional district for a total of eighteen. After successive rounds of court-ordered redistricting and the special masters' newest

\footnotetext{
\({ }^{1}\) U.S. Census Bureau, Virginia Adds More Than 600,000 People Since 2010, (Aug. 25, 2021), https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-censusdecade.html\#:~:text=Population\%20(up\%207.4\%25\%20to\%20331.4,or\%20More\%20Races\%2010.2\%25).
}
proposal, there would be five Black-majority House of Delegates districts, two State Senate districts, and zero congressional districts for a total of seven. From 18 districts with BVAPs sufficient to elect Black representatives to 7 in only five years!

Our maps actually move the ball forward in terms of Black representation. Our Senate map takes the number of Black-majority districts from four to five, none of which have a BVAP higher than \(53 \%\). Our House plan restores the same number of Black-majority districts, twelve, that we had after the 2011 redistricting cycle. Our plans demonstrate that it is possible to create up to seventeen Black-majority districts in the General Assembly, matching our previous peak. When better Black representation is possible, I don't know why we should have to settle for less.

The special masters apparently think that "opportunity districts," in which different minority group's aggregate to an outright majority of a district's voting population, are sufficient to protect Black representation. Their map does a pretty good job of creating such districts, but we know from history, both distant and recent, that the best way to protect Black representational gains is to create Blackmajority districts. The "opportunity district" experiment of the last decade has only resulted in backsliding. The current abysmal numbers in the General Assembly indicate we need to do more in our efforts to create districts where Black voters can elect people who will represent their interests, not less. The special masters' plans seem to see minority groups as interchangeable; we are not. Anyone who has paid the slightest attention to American politics knows that Black voters tend to vote more cohesively than Hispanics or Asians and often for different candidates, and yet these maps treat us as if we're all the same. There is sadly no guarantee that opportunity districts will result in the election of any Black representatives. This Court should revise the proposed plans to give Black voters representation commensurate with our voting strength.

To be clear, we are not asking the Court to create "safe" districts where Black voters constitute seventy or eighty percent of voters. We simply ask the Court to create more than five House of Delegates districts, more than two State Senate districts, and any congressional districts where Black voters constitute more than \(50 \%\) of the voting-age population (and ideally with BVAPs even higher than that, given the disappointing results of the most recent election indicate a bare majority is not always enough).We think a good target for the number of Black-majority districts would be 18 across all three maps, the highest number we had previously achieved in a state that has only grown more diverse in the years since.

Thank you for reviewing our proposed maps and taking our concerns seriously.

\author{
Sincerely,
}

Ronald Taylor
Hampton Roads Black Caucus/President
\begin{tabular}{ll} 
From: & Timothy Cox \\
To: & Redistricting \\
Subject: & Proposed Redistricting \\
Date: & Tuesday, December 14, 2021 9:08:40 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom it Concerns:
I disagree with the proposed redistricting. To make the 7th district more competitive, remove the three Fairfax County precincts and replace them with the three northernmost precincts in Spotsylvania County (Riverbend, Elys Ford, and Wilderness School). Or, simply use the originally agreed upon House Map C1.

Thank you for your time.
Sincerely,
Tim
\begin{tabular}{ll} 
From: & Nicole Medrano \\
To: & Redistricting \\
Subject: & Oppose Redistricting of Mount Vernon Community \\
Date: & Tuesday, December 14, 2021 9:15:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters,
My name is Nicole Medrano and I live at 3702 Riverwood Rd., Alexandria, VA 22309. My family and I are longtime residents of Mount Vernon and vehemently oppose the proposed redistricting of the small subset of the Mount Vernon community. This change splits our community in two and disregards the affected neighborhood's inherent interests in our local community. We live on the original Mount Vernon farm, our children go to the Mount Vernon pyramid schools and we support Mount Vernon area businesses. This proposed change makes no sense and must be remedied by redrawing the lines to ensure that Congressional District 8 , House of Delegates District 16 and Senate District 34 include the entirety of the Mount Vernon community.

Thank you,
Nicole Medrano
```

From: B Lynn Pascoe
To: Redistricting
Subject: Redistricting - Fairfax County, Mount Vernon District
Date: Tuesday, December 14, 2021 9:50:14 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

In my earlier submission (B. Lynn Pascoe, December 4, 2021) I emphasized the strong community of interest of the people of Mount Vernon District in Fairfax County. For over fifty years, we have fought together to improve the lives of our people along Route 1 (Richmond Highway) as the region rapidly urbanizes, to upgrade our schools and housing, and to develop a better environment and quality of life for our citizens. We have been extremely active as a community, reaching consensus on issues before us and lobbying officials and developers to get results. As I noted before, we probably have one of the more developed "communities of interest" in the state.

We were pleased that the Special Masters recognized this in drawing new suggested state districts that did not lump some of us with Alexandria and therefore weaken our voice in Richmond. We are appalled, however, that the current proposals lop off the southern part of our district to put it in a separate Congressional District. To add insult to injury, our namesake historical anchor -- Mount Vernon -- is now not even proposed to be in our district. As I read the map, the Mount District is the only part of Fairfax County that received this kind of treatment.

To make matters even worse, through the non-mandated "principle: of nesting, districts for state senator (District 34) and the House of Delegates (District 8) are similarly lopped off in the middle of our district, and areas that really have no "community of interest" with Mount Vernon are added in to make the numbers add up. Mount Vernon district is not even named, perhaps hoping no one will notice that it has been chopped up.

Mount Vernon District is a clear "community of interest" that runs from the Beltway (Alexandria City) to the Occoquan River. Congressional and state office district lines can easily be drawn that will preserve this area's cohesion and give it the political voice it deserves in Washington and Richmond. We ask that the boundary lines be revised to meet the intent of the redistricting law and the interests of the people of Mount Vernon.
\begin{tabular}{ll} 
From: & Cgibson \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Tuesday, December 14, 2021 10:03:17 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please put Williamsburg back into the 69th district. It makes no sense not to include Williamsburg. Also, please take Gloucester out. Parts of Gloucester are over an hour away. Please don't create more confusion and drama. Please make it sensible. Thank You.

Cynthia Gibson
4792 Bristol
Williamsburg, VA 23185
\begin{tabular}{ll} 
From: & Beth Hoer \\
To: & Redistricting \\
Subject: & District 69 \\
Date: & Tuesday, December 14, 2021 10:43:25 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please add Williamsburg and omit Gloucester from District 69. Williamsburg and James City County share services; both localities belong to Peninsula geography. Gloucester does not.

Sent from my iPhone
\begin{tabular}{ll} 
From: & Chris Le Menestrel \\
To: & Redistricting \\
Subject: & Written Comment on Congressional Maps - CD-2 \\
Date: & Tuesday, December 14, 2021 10:51:19 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To:
The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
P.O. Box 1315

100 N. Ninth Street
Richmond, VA 23219-1315
While there are many issues with the CD-2 Congressional District in the proposed maps, the problem that stands out the most by far is that the City of Norfolk, or at least the northern portion of it, should be returned to the Second District map, as it is
historically, economically and geographically best connected to that District - as opposed to the rural areas that were added to CD-2 in the South of it which have no direct connections.

Please respectfully instruct the Special Masters to re-design the proposed odd-shapped CD-2 map so that the Second District is compact, contiguous, and recognizes communities of interest, with an equal emphasis on the rights of our Tidewater communities.

Thank you for your consideration and respectfully,
Zoe LeMenestrel
504 Settlement Drive
Williamsburg, VA 23185
\begin{tabular}{ll} 
From: & Davis, Tom (WAS - X75486) \\
To: & Redistricting \\
Subject: & Fwd: Map \\
Date: & Tuesday, December 14, 2021 11:04:54 PM \\
Attachments: & image001.png
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This is the Map to accompany my submission in the interests of full transparency.

Subject: Re: Map
[External email]


\footnotetext{
:
//
}

NOTE: This e-mail is from a law firm, Holland \& Knight LLP ("H\&K"), and is intended solely for the use of the individual(s) to whom it is addressed. If you believe you received this e-mail in error, please notify the sender immediately, delete the e-mail from your computer and do not copy or disclose it to anyone else. If you are not an existing client of H\&K, do not construe anything in this e-mail to make you a client unless it contains a specific statement to that effect and do not disclose anything to H\&K in reply that you expect it to hold in confidence. If you properly received this e-mail as a client, co-counsel or retained expert of H\&K, you should maintain its contents in confidence in order to preserve the attorney-client or work product privilege that may be available to protect confidentiality.
\begin{tabular}{ll} 
From: & B W \\
To: & Redistricting \\
Subject: & Splitting the West Potomac pyramid into 2 senate districts \\
Date: & Wednesday, December 15, 2021 6:02:19 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

While I need to read further into this matter, I need to voice my concern with your plan if it will cause the split of the West Potomac pyramid school district into two separate senate districts. The reason for my concern is that it would likely dilute the advocacy for the school in Richmond, as well as create the potential for conflicting advocacy for the entire school community. If part of the goal of redistricting is to aim for greater equity and advocacy for all in our democracy, then this is not the way to do it. Further thought and effort needs to be given to the entire Mount Vernon area and in particular the area surrounding the West Potomac pyramid school district.

Thank you.
Kirsten Luescher
8007 Karl Road

Sent from my iPad
\begin{tabular}{ll} 
From: & Carol De Spirito \\
To: & Redistricting \\
Subject: & Map \\
Date: & Wednesday, December 15, 2021 7:53:16 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not change the map!!! We in PWC need our voice heard!!!
Sent from my iPhone

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
In my humble opinion, the map says it ail. Gerrymandering at its best. My advice is to change it to avoid getting in the National news (again !remeber the recent Yorktown boat fiasco)

1. Williamsburg has been separated from lower J ames City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower James City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
2. The 69th takes a head-scratching jog across the York River and picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities.
\begin{tabular}{ll} 
From: & Mike B. \\
To: & Redistricting \\
Cc: & Cheryl Bechtold \\
Subject: & Comments on Redistricting Maps - Cheryl and Mike Bechtold \\
Date: & Wednesday, December 15, 2021 8:36:08 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Comments against removing us from the 16th District.
We live at 9004 Volunteer Drive, Alexandria, VA 22309 in the Westgate area of Mount Vernon and strongly object to being removed from the rest of our Mount Vernon Community in the16th House Delegate District and tacked on to the 19th District.

Our interests are better served by representatives that live and work in in the same community as we do. Splitting us off from District 16 and the rest of the Mount Vernon Community ignores our long-standing community of interest and relationship with District 16.

This proposal would separate us from our Mount Vernon Community of Interest where we live together, work together, go to school together and conduct business with. We have shared interests in public transportation, GW Parkway issues, northern Route 1 corridor development, infrastructure and other community interests. The proposed redistricting line literally splits our community off from Mount Vernon High School and Walt Whitman Middle School where we send our children to school and would severely dilute our opportunity to be fairly represented on a variety of local issues including noise pollution, air pollution, and development along the Route 1 corridor and adjacent areas near our home. This proposal moves us to a District along with Mason Neck, Woodbridge, and Marumsco where we share none of those common interests and violates your own guiding principles.

It appears that the Special Masters may have been too focused on the math as a priority rather than keeping communities together. Do not sacrifice our Community in order to make your numbers work...

We hope you will take our comments into consideration and incorporate them into a final decision that maintains our Mount Vernon community integrity.

Respectfully, Cheryl and Mike Bechtold
\begin{tabular}{ll} 
From: & Dr. Nancy Parrish \\
To: & Redistricting \\
Subject: & My input about redistricting in Goochland \\
Date: & Wednesday, December 15, 2021 9:24:09 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Supreme Court Redistricting Masters,
1. As a decades-long resident of Goochland County, I have always felt the views of our county as a whole would be better represented if our county as a whole could be in the same district.
2. I also think that a district that follows the corridor of 164 makes sense as a home for Goochland as we do all of our business in Charlottesville or Richmond. We don't at all have connection with the counties east of Richmond. We do have great contact with counties such as Fluvanna, Louisa, and Hanover.

I appreciate that you have a difficult job, but please consider these two points in your decision.

Thank you,

\author{
Dr. Nancy C. Parrish \\ nancyparrish9@gmail.com \\ Goochland County resident \\ 2600 Elk Island Road \\ Columbia, Virginia 23038 \\ (804)402-4864
}
\begin{tabular}{ll} 
From: & aracoma1@verizon.net \\
To: & Redistricting \\
Subject: & redistricting map \\
Date: & Wednesday, December 15, 2021 9:28:04 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Second try}
------Original Message-----
From: MAILER-DAEMON@aol.com
To: aracoma1@verizon.net
Sent: Wed, Dec 15, 2021 9:22 am
Subject: Failure Notice

Sorry, we were unable to deliver your message to the following address.
<redistricting@vacourts.gov>:
No mx record found for domain=vacourt.gov
---------- Forwarded message ----------
I strongly support the special masters' districts. Gerrymandering is a bane and a threat to effective, democratic government. The map has been properly and ethically drawn.

Bill McMichael
12005 Taliesin Place, Apt. 25
Reston, VA 20190
703-268-8104
aracoma1@verizon.net
\begin{tabular}{ll} 
From: & \(\underline{K K}\) \\
To: & Redistricting; scottsurovell@gmail.com \\
Subject: & New proposed maps \\
Date: & Wednesday, December 15, 2021 9:39:14 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I, Karen Kopicki, am a resident in the Fort Hunt neighborhood and would like to voice my concern for the new maps being generated and I OPPOSE the redistricting maps and OPPOSE this effort to be forced into a grouping of neighbors unfamiliar to myself and my family.

Not exactly sure what this map change is trying to do, but I OPPOSE it!
Thank you for your attention to this matter,
Karen Kopicki
Alexandria, Va. 22308
\begin{tabular}{ll} 
From: & \multicolumn{1}{c}{ Marcie Grau } \\
To: & Redistricting \\
Subject: & Fair Map: 7th District \\
Date: & Wednesday, December 15, 2021 9:48:23 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court of Virginia,
Looking at the maps as they are currently drawn, we would lose Rep.
Wittman, leaving Prince William County with no Republican representation in the Congress. The current proposed maps also do not present a district that would provide a fair contest for Republicans. This district must be fair and drawn in a way that makes it competitive and not a clear cut continuous victory for Democrats.
The easiest way to make the district more competitive is to remove the three Fairfax County precincts from the 7th District and replace them with the three northernmost precincts in Spotsylvania County (Riverbend, Elys Ford, and Wilderness School).

Or you could simply use the originally agreed upon House Map "C1".
Your thoughtful consideration of these alternatives is greatly appreciated in order to ensure Virginia is a safe place for all citizens with equal representation.

\section*{Marcie Grau}

1399 Mercer Rd., Haymarket, VA 20169
571-359-0202
\begin{tabular}{ll} 
From: & Sherry Nachnani \\
To: & Redistricting \\
Subject: & Virginia Maps \\
Date: & Wednesday, December 15, 2021 9:53:01 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a resident of the Mount Vernon, VA community, and respectfully encourage you to KEEP MOUNT VERNON TOGETHER. I have been a leader at my daughter's public schools for the past six years, and the proposed maps will severely impact our community, and do not recognize our community interests. In addition, the Mount Vernon Estate is a critical anchor of our community, along with many other organizations along the route 1 corridor.

Thank you for your time and consideration.
Respectfully, --
Sherry Nachnani, RN, MS
9326 Old Mansion Rd, Alexandria, VA 22309
"You must be the change you wish to see in the world." -Mahatma Gandhi
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Lara Traylor } \\
To: & Redistricting \\
Subject: & Stafford is NOT Prince William County \\
Date: & Wednesday, December 15, 2021 9:55:59 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very concerned about the proposed redistricting of Stafford and Fredericksburg.

The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock
Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Thank you,
Michael and Lara Traylor
22406
\begin{tabular}{ll} 
From: & LoAnn Flanagan \\
To: & Redistricting \\
Subject: & Reuniting Kings Park West neighborhood \\
Date: & Wednesday, December 15, 2021 9:57:41 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

December 15, 2021
Muriel-Theresa Pitney
Clerk, Supreme Court of Virginia
100 North \(9^{\text {th }}\) Street, Fifth Floor
Richmond, Virginia 23219
Dear Ms. Pitney,
The current draft maps for the Virginia House of Delegates and Virginia Senate districts both divide the Kings Park West neighborhood of Fairfax County along its main thoroughfare--Commonwealth Boulevard. The northern half of the neighborhood is now drawn in House of Delegates District 15 and Senate District 35 along with voters in Burke, Annandale, and Springfield. The southern half of the neighborhood is drawn into HoD 10 and Senate District 36 along with voters in Fairfax Station, Clifton, Centreville, and Chantilly. Neither splitting large, tightly knit neighborhoods such as Kings Park West, nor combining residential areas that have very different interests are considered good practice for drawing voting districts.

Under the current draft maps, residents in the northern half of Kings Park West will be able to work with legislators in synergy with our neighbors in Burke, Springfield, and Annandale because we share very similar suburban housing styles and common transportation routes. In addition, our jobs, places of worship, libraries, shopping centers, and the offices where we seek professional services are frequently in those communities slightly to the north and east of Kings Park West. Neighbors in the southern half of the neighborhood will have none of these commonalities with other residents in their districts where the housing styles and transportation routes are much different, and the commercial sites are a much greater distance from Kings Park West. It is likely that the state legislators for the southern half of the neighborhood will not be oriented to the needs of a small group of residents with very different lifestyles from most of their constituents. This is the type of problem that Virginia's new redistricting process was designed to minimize.

Over the past half century, residents of Kings Park West have built a strongly unified community through our Civic Association, Kings Park West Herald newsletter, three neighborhood pools, multiple annual holiday celebrations, a soccer field with its own youth league, an annual college scholarship program, a block captain system, and many on-line groups dedicated to communication within the neighborhood. Voting districts that split Kings Park West will dilute votes from the southern half of our neighborhood into very dissimilar communities and hinder the entire neighborhood from working effectively with our legislators.

I respectfully ask that the Kings Park West neighborhood be reunited in House of Delegates District 15 and Virginia Senate District 35.

Sincerely,
JoAnn Kennedy Flanagan
5229 Richardson Drive
Fairfax, Virginia 22032
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ sally lineberger } \\
To: & Redistricting \\
Subject: & Redisticting \\
Date: & Wednesday, December 15, 2021 10:26:05 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To members of the Commission:
I hope the final plan adds Williamsburg back into the 69th without the added portion of Gloucester. Thank you for your consideration of this comment.

Respectfully
Mark and Sally Lineberger
Williamsburg VA
\begin{tabular}{ll} 
From: & Lorretta Hawe \\
To: & Redistricting \\
Subject: & Prince William County \\
Date: & Wednesday, December 15, 2021 10:26:54 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please help us to get a Republican to represent those of us who are Republicans. It's not fair for Democrats to hold all office's.

Please help us save AMERICA...
--
Lorretta D. Hawe
\begin{tabular}{ll} 
From: & Schone, Harlan \\
To: & Redistricting \\
Subject: & williamsburg \\
Date: & Wednesday, December 15, 2021 10:27:52 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

With respect to changes of lines for 69th and 71st districts, I feel strongly that the 69th should continue to include Williamsburg (I live in Williamsburg).
Thank you
Harlan Schone
320 Indian Springs rd
Williamsburg, Va 23185
\begin{tabular}{ll} 
From: & jwlc2@hushmail.com \\
To: & Redistricting \\
Subject: & Redistricting the Ninth Congressional District \\
Date: & Wednesday, December 15, 2021 10:30:10 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of the Supreme Court of Virginia:

Please accept this as my comments on the proposed redistricting of the Ninth Congressional District in Virginia.

I am perplexed and nonplussed at removing the City of Salem and west Roanoke County from our district. Both are solid members of the Ninth and have strong ties to southwest Virginia, not to mention that the current Congressman from the Ninth resides in Salem. From the outside this looks like a gerrymander and is reminiscent of 1970 when redistricting put Sixth District Congressman Richard Poff and Ninth District Congressman William Wampler in the same district.

I understand that an argument is made that Salem needs to be lumped in with Roanoke because of some imagined valley commonality. Anyone who lives in the area would quickly contest this myth. These are distinct communities with separate lifestyles and for a large part the economic and employment situations distinct and unique.

The City of Salem and west Roanoke County have far more commonality with southwest Virginia than the City of Bedford, which is historically and practically a part of Virginia's Piedmont region.

Please correct this obvious error in the current plan.

Respectfully submitted,

John W. L. Craig, II
11 Hidden Valley Lane
Radford, VA 24141
540-230-6878
\begin{tabular}{ll} 
From: & Stanley Naimon \\
To: & Redistricting \\
Subject: & 7 th district represented by Spannberger \\
Date: & Wednesday, December 15, 2021 10:31:12 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

We live in Midlothian, Walton Park

Sent from Mail for Windows
We would like to stay in A. Spannberger's district .
I srongly object being moved to another district. Walton Park should be represented by A.
Spannberger. Thank you S Naimon
\begin{tabular}{ll} 
From: & DIANA MEAD \\
To: & Redistricting \\
Subject: & Albemarle County \\
Date: & Wednesday, December 15, 2021 10:46:04 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Esteemed Special Masters:}

I am writing to express my heartfelt conviction that Albemarle County should not be divided between two congressional districts. I've lived in North Garden and other parts of southern Albemarle for decades. It's no secret that Charlottesville and, increasingly, Albemarle County, comprise a bright blue oasis right smack in the center of Virginia. I grew up in Lynchburg, where Jerry Falwell flourished and George Wallace had a large fan base. That's why I moved here in 1978 - I wanted to be in a community centered around a large university, where the populace tended to be educated, liberal, and supportive of the arts. I wanted to have my people around me, and I found them here. I am not surprised that we have a very high rate of vaccination. Nearly 79\% of Albemarle County's electorate voted Democrat in the November election. Albemarle County has endured decades of partisan gerrymandering, with the county being carved up three or four ways to water down or even eradicate our influence. That is why it is so distressing to yet again see us being carved up. It would be such a relief NOT to live in a district where the most extreme candidate can simply primary himself into a guaranteed win, and then disregard, to the extent possible, his constituents with dissenting views. (I am using the male gender intentionally, since I can remember no 5th District representative who was not a white male.) Fanatical elected representatives have no interest in working across the aisle. We have suffered through so many terrible congressmen, culminating with Bob Good, a Bible-thumping, race-baiting, homophobic, fascistic Neanderthal, who would undoubtedly love to establish a Christian theocracy ruled by President-for-Life Donald Trump. Please have mercy on us.

I understand that your purpose is not to concern yourselves with political ramifications; that you are trying to create districts of roughly equal populations, while also attempting to keep together communities of interest. I would argue that Charlottesville and Albemarle County are one of the most coherent communities of interest within the Commonwealth. If I knew the number of people in the portion of Albemarle County that you have mysteriously added to the proposed 5th District, it would be much easier for me to suggest a logical adjustment. Maybe the eastern portion of Loudoun County would be equally compatible with the 2nd or the 7th districts. I understand that it's not that simple. But I must reiterate that no part of Albemarle County belongs in the 5th District. All of Albemarle County belongs in the proposed 10th District.

Very sincerely yours,
Diana Mead
3018 Old Lynchburg Rd
North Garden, VA 22959
\begin{tabular}{ll} 
From: & Virginia Manuel \\
To: & Redistricting \\
Subject: & 10th Congressional District \\
Date: & Wednesday, December 15, 2021 11:15:40 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

It appears that you arbitrarily redrew these district lines to assure that a Republican wins the seat. This new district does not reflect the demographics of the region.

Virginia W. Manuel
Fairfax Station, VA

Sent from my iPhone
\begin{tabular}{ll} 
From: & Mark Downey \\
To: & Redistricting \\
Subject: & HD69 \\
Date: & Wednesday, December 15, 2021 11:17:04 AM \\
\hline
\end{tabular}


As a resident of Upper York County, it makes no sense to have part of Gloucester in the new HD69 district, also most of what we do is in City of Williamsburg and James City County.

Thanks
Mark Downey
121 Horseshoe Dr, Williamsburg, VA 23185
\begin{tabular}{ll} 
From: & Kripa Patwardhan \\
To: & Redistricting \\
Subject: & comments on redistricting process \\
Date: & Wednesday, December 15, 2021 11:29:41 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Two comments:
I consider myself to be part of the silver line corridor. I am walking distance from Herndon Monroe Park and Ride, and as such, I expect the maps to reflect this fact, as opposed to put in the same district as Chantilly and Centreville (!!!!), as some proposed maps have done.

Please make sure that immigrant communities and non-white communities are neither "packed" nor "cracked". Let opportunity districts be meaningful opportunity districts.

Thank you.
K.M. Patwardhan, she/her, MPP

Homebound Teacher
Fairfax County Public Schools

Chief Justice and Justices of the Virginia Supreme Court,
The proposed congressional map radially splits apart the largest community of shared interest in Central Virginia, namely the greater Richmond area. In my area, Henrico County and Chesterfield County, and the City of Richmond are proposed to be split between 3 different congressional districts, rather than 2 as in the current map, which marginalizes the voting power a diverse community of interest. A careful reading of the Special Masters' report, specifically pages \(3,6,16\), and 17 will show that although the Special Masters allude to taking communities of interest into account where practical, their method over-optimized on making populations within congressional boundaries as equal in headcount as possible. The over-optimization on headcount criteria is clearly reflected in the extremely forced narrow range of the "Pct Deviation" statistics listed on page 17, where less than 10 percent of the permissible range was used. The Special Masters then drew the congressional boundaries for the greater Richmond area last (see page 16), which effectively relegated the greater Richmond community of interest. It is in the report, we can all follow the description of the method that the Special Masters followed and see how we got to this flawed congressional map.

It may seem counter-intuitive, that making the population sizes as similar as possible was the wrong primary criteria. What I am saying is that an error of over-weighting that criteria is clearly what happened, and the Pct Deviation data on page 17 is prima facia evidence that communities of interest were not sufficiently considered by the quantitative approach used by the Special Masters. The array of numbers on that page seems to convey certainty, but it is also evidence of the flawed method. The headcount criteria then interacted with the compactness criteria, particularly because the greater Richmond area was last to be considered, and thus the greater Richmond community of interest was left out of the process, at least from what I can see. The Special Masters have latitude to make more accommodations for Central Virginia in the congressional map, and to start solving for the major issues in the congressional map from the center out.

Furthermore, here in Virginia, our state legislators are part-time state employees. State legislature maps that force so many boundary changes to optimize on an incomplete set of goals would places a great burden on citizen-legislators to move their households in order to compete for re-election. This at a time when home prices are high and inventory of available homes is low. In general, voters like their representatives and don't want their representatives to relocate. Both parties would agree to that, it is bipartisan. The Special Masters have agreed to be blind to this issue. Is that what the voters intended?

In closing, the Special Masters need clear guidance from and dialog with this Court, and the Special Masters have many degrees of freedom to improve all 3 maps. Only the Supreme Court of Virginia can guarantee that the intent of the constitutional amendment is fulfilled. This includes weighting communities of interest as well as the nature of a part-time state legislature. And the Court has the power to compel corrective action. Leaving the greater Richmond community of interest last to be considered needs remedy. I recommend that the revisions start at the top and center of the maps and move outward.

I applied to be a member of the redistricting commission. I am grateful for the transparency of this process and the opportunity to testify today.

Respectfully Submitted,
William Panak
1517 Jonquill Dr, Henrico VA 23238
\begin{tabular}{ll} 
From: & katherine slaughter \\
To: & Redistricting \\
Subject: & Charlottesville - Albemarle \\
Date: & Wednesday, December 15, 2021 11:53:08 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court:
I appreciate the task of the special masters and realize the difficulties that drawing lines entails. Still, I believe that this map could have been configured in a way that truly represents communities of interest. Like a puzzle, if you change one part, others must also change; while I am not a demographer and do not have all the population numbers in hand, I request a second look to be taken of the Charlottesville-Albemarle area, and its potential to be located intact within Congressional District 10.

Charlottesville and Albemarle share a common community in Central Piedmont, housing the University of Virginia and the Medical Center, which is a hub of jobs for people in our Planning District 10 region -- Nelson, Fluvanna, Greene, Louisa. Through the planning district, these counties have shared decades of planning for economic development, transportation, environmental and other services. To separate us politically makes no sense as we need representatives to serve our common interests.

To keep this community intact, Charlottesville-Albemarle or Cville-AlbemarleNelson could be added to Congressional District (CD) 10, which of course would entail further change to those districts as well as CD 5.

CD 5 is much more similar to most of CD 4 as both these districts (without Albemarle and Nelson) historically comprise Southside Virginia sharing cultural, economic, agricultural, and other ties and connected well by transportation corridors such as US 58, 95, and 29.

Charlottesville Albemarle could be appended to CD 10 while the northernmost parts of CD 10 -- Loudoun and/or Spotsylvania --join the adjacent 7th.

I realize that this is a complex endeavor, but I hope that the Court and the Masters will give some harder look at keeping the Charlottesville-Albemarle area together and connected to the rest of the Piedmont.

Ours is an important educational, medical, economic hub in the Central Piedmont and should not be appended to a largely Southside rural community.

Thank you.
Sincerely,
Katherine Slaughter
Former Mayor, City of Charlottesville

Kay Slaughter
\begin{tabular}{ll} 
From: & Kripa Patwardhan \\
To: & Redistricting \\
Subject: & comments on redistricting process \\
Date: & Wednesday, December 15, 2021 11:29:41 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Two comments:
I consider myself to be part of the silver line corridor. I am walking distance from Herndon Monroe Park and Ride, and as such, I expect the maps to reflect this fact, as opposed to put in the same district as Chantilly and Centreville (!!!!), as some proposed maps have done.

Please make sure that immigrant communities and non-white communities are neither "packed" nor "cracked". Let opportunity districts be meaningful opportunity districts.

Thank you.
K.M. Patwardhan, she/her, MPP

Homebound Teacher
Fairfax County Public Schools
\begin{tabular}{ll} 
From: & Dianne Carter de Mayo \\
To: & Redistricting \\
Subject: & Gloucester County and CD1 redistricting \\
Date: & Wednesday, December 15, 2021 11:57:22 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a teacher at school and we are unable to load the webex platform on our school internet system. I'm the Gloucester County Democratic Committee Chair, a Member of the DPVA's Central Committee, and a life-long resident of the 1st Congressional District. All I really wanted to say was a) Keep all of Gloucester County in one HOD district. My house and my child's school should not be in two House of Delegates districts and voters should not have to pay a toll to cross the bridge and meet with their elected representatives. We don't even have public transportation that goes over the Coleman Bridge. This disenfranchises some of our most vulnerable voters, violates the principle of not crossing rivers or mountains, and separates communities of interest from one another.
b) The Southern existing 1st Congressional District, and Gloucester County in particular, is not a community of interest with Short Pump, Fluvanna, and the Charlottesville suburbs. We're a rural coastal community with much more in common with the existing northern edge of CD1 than we have in common with those in the proposed redrawn district. I'm sure they're perfectly nice people, but this is not a useful solution.
Thank you for your time,
Respectfully submitted,
Dianne Carter de Mayo,
Gloucester
\begin{tabular}{ll} 
From: & katherine slaughter \\
To: & Redistricting \\
Subject: & Charlottesville - Albemarle \\
Date: & Wednesday, December 15, 2021 11:53:08 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court:
I appreciate the task of the special masters and realize the difficulties that drawing lines entails. Still, I believe that this map could have been configured in a way that truly represents communities of interest. Like a puzzle, if you change one part, others must also change; while I am not a demographer and do not have all the population numbers in hand, I request a second look to be taken of the Charlottesville-Albemarle area, and its potential to be located intact within Congressional District 10.

Charlottesville and Albemarle share a common community in Central Piedmont, housing the University of Virginia and the Medical Center, which is a hub of jobs for people in our Planning District 10 region -- Nelson, Fluvanna, Greene, Louisa. Through the planning district, these counties have shared decades of planning for economic development, transportation, environmental and other services. To separate us politically makes no sense as we need representatives to serve our common interests.

To keep this community intact, Charlottesville-Albemarle or Cville-AlbemarleNelson could be added to Congressional District (CD) 10, which of course would entail further change to those districts as well as CD 5.

CD 5 is much more similar to most of CD 4 as both these districts (without Albemarle and Nelson) historically comprise Southside Virginia sharing cultural, economic, agricultural, and other ties and connected well by transportation corridors such as US 58, 95, and 29.

Charlottesville Albemarle could be appended to CD 10 while the northernmost parts of CD 10 -- Loudoun and/or Spotsylvania --join the adjacent 7th.

I realize that this is a complex endeavor, but I hope that the Court and the Masters will give some harder look at keeping the Charlottesville-Albemarle area together and connected to the rest of the Piedmont.

Ours is an important educational, medical, economic hub in the Central Piedmont and should not be appended to a largely Southside rural community.

Thank you.
Sincerely,
Katherine Slaughter
Former Mayor, City of Charlottesville

Kay Slaughter
```

From:
To:
Subject:
Date:

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Muriel-Theresa Pitney

Clerk of Court
Supreme Court of Virginia
100 North Ninth Street, 5th Floor
Richmond, Virginia 23219-1315
Dear Madam Clerk:
My name is Roy L. Perry-Bey, and I have been a resident of Virginia, for most of my life. During this time, I have served as a civil-right activist throughout Virginia, primarily with the Coalition for Equal Justice, Citizens of Hampton Roads March Against Poverty Campaign and the United Front for Justice. I have been on the front lines of issues like treatment of veterans, confederate statutes, housing discrimination, police brutality and voting rights throughout the Commonwealth.

I write to urge this Court to reject the voting mapssubmitted by the Special Masters because they sharply limit the number of majority-Black Senate and House Districts throughout Virginia. Since 2010, Virginia has had five majority-Black Senate Districts (out of forty) and ten majority-African American House Districts (out of ninety-eight). If approved, the Special Master's maps will reduce the number of Senate Districts to two, and the number of House Districts to five.

The harm to Virginia's African American communities that results from reducing majority-African American voting districts by more than half should be obvious. As those majority-minority Districts disappear, so too does the political power of Virginia's minority communities. And as someone who has devoted his life to ensuring equal justice for all, I must object to proposed maps that needlessly reduce these critical districts by greater-than fifty percent.

Virginia not only has a moral imperative to protect minority political power; it has a legal one as well. Section 2 of the Voting Rights Act prevents "a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). Such a "denial or abridgment" occurs if "the political processes leading to nomination or election in the State or political subdivision are not equally open to participation" by members of a protected class
"in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b).

Virginia’s African American communities almost certainly satisfy the criteria necessary to trigger Section 2. They are "sufficiently large and geographically compact to constitute a majority" in several of the non-majorityminority districts. See Thornburg v. Gingles, 478 U.S. 30, 50 (1986). They are "politically cohesive." Id. at 51. And the "the white majorit[ies]" in these non-majority-minority districts "vote sufficiently as a bloc to enable" them "to defeat the minority's preferred candidate." Id. Because this is the case, Virginia must include majority-minority districts.

In other words, there are great "reasons to believe" that more voting districts must have a greater percentage of minority population. See BethuneHill v. Va. State Bd. of Elections, 137 S. Ct. 788, 801-02 (2017). Compliance with the Voting Rights Act is a compelling interest. Id. at 801. To satisfy this compelling interest, the Court should reject the Special Master's proposed maps, thereby avoiding a likely Voting Rights Act violation.

Mr. Roy L. Perry-Bey<br>Political \& Civil Rights Activist<br>United Front For Justice

(202) 798-9756

## PRIVILEGED AND CONFIDENTIAL

This communication, and any accompanying documents are confidential and privileged. They are intended for the sole use of the addressee. If you receive this transmission in error, you are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon this communication is strictly prohibited. Moreover, any such disclosure shall not compromise or waive the attorney-client, accountant-client, or other privileges as to this communication or otherwise. If you have received this communication in error, please contact me at the above email address. Thank you.

| From: | Kristy Lumley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Stafford should not be lumped in to PWC |
| Date: | Wednesday, December 15, 2021 12:41:44 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Thank you,
Kristy Lumley
Aquia Harbour

| From: | Florence Keenan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Rectortown, VA |
| Date: | Wednesday, December 15, 2021 12:54:57 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We love our new US House District. Thank you for releasing us from District 5 and placing us in our cohort with Loudoun (District 10?) that shares our watershed (Goose Creek, Potomac and Chesapeake Bay) and values. We're beginning to feel reinfranchised.

Florence Keenan

## Senate of Virginia

RICHARD H. STUART
TWENTY-EIGHTH SENATORIAL DISTRICT


December 15, 2021

## Via Electronic Mail

Redistricting@vacourts.gov

Muriel-Theresa Pitney, Clerk of Court
Supreme Court of Virginia
Post Office Box 1315
100 North Ninth Street, 5th Floor
Richmond, Virginia 23219-1315
Dear Ms. Pitney:
As members of opposing parties who have both represented the Northern Neck, we are putting aside occasional differences to beg consideration of keeping the Northern Neck in a whole and distinct State Senate district as it had been before the most recent redistricting in 2011 and thus mirroring the long-standing tradition of the House of Delegates maps.

The Northern Neck is a distinct geographic area with very distinct communities of interest. It is the Northern most peninsula in Virginia on the Eastern side of Virginia bounded by two rivers and the Chesapeake Bay: the Potomac on the North and the Rappahannock on the South, and yet, the Special Masters cut it in to three different districts.

One of the most historical areas in the country, three of the first five presidents were born there: George Washington and James Monroe in Westmoreland, and James Madison in King George. The Northern Neck and her people are intertwined from county to county adopting mutual aid agreements for fire, rescue, and police services. The Northern Neck Tourism Council at NorthernNeck.org boosts the history of the region and regionally promotes tourism throughout the Northern Neck.

There is an economic development partnership through the Northern Neck Planning District that promotes economic development through the Northern Neck. The Northern Neck faces special challenges due to its isolation by the rivers and its rural nature. It runs from the tip of Northumberland and Lancaster counties, where it meets the Chesapeake Bay all the way to Eastern Stafford County.

The Neck is comprised entirely of Northumberland, Lancaster, Richmond, Westmoreland, and King George Counties with its Eastern boundary being at Stafford County. All of these people enjoy much the same way of life, while it is anchored by the employment
center of the Dahlgren Naval Base in King George others, farm, fish, or work in service industries.

The Northern Neck is a very close-knit community and very much keeps unto themselves. It is truly a community of common interest and should not be divided into three Senate districts as the Special Masters have done. In particular, King George has no common interest with Hanover County where it would now lie in the newly drawn 25th district.
Additionally, the lower counties in the Northern neck have no common interest with James City County, where they would now lie in the newly drawn 26th district.

The Special Masters recognized in their memorandum that the public wanted to keep the Northern Neck whole, and for some reason the Masters thought they had, yet it was cut into three distinct districts. Perhaps the Masters did not understand the true boundaries of the Northern Neck.

One simple look at a map, shows a clear and distinct peninsula, which is the Northern most in our Commonwealth. We strongly believe that it is important to keep the Northern Neck whole, much as the Special Masters did with the Eastern Shore and Middle Peninsula.

We respectfully ask this Honorable Court to take our comments into consideration.
Very Truly Yours,


Richard H. Stuart
Member, Senate of Virginia
Twenty-Eighth District


Albert C. Pollard, Jr.
Former Member, Virginia House of Delegates Ninety-Ninth District

| From: | Linda Guthrie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Citizen Comments for redistricting |
| Date: | Wednesday, December 15, 2021 1:08:30 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have only lived in Virginia for 3 years, but even I k ow that Williamsburg belongs in the Hampton Roads COI, not the Richmond one. Also why is Gloucester in 71 but not Williamsburg? Very strange. Please adjust so the groupings reflect the real communities as we who live here experience them.

Sent from my iPhone

| From: | RONALD GREEN |
| :--- | :--- |
| To: | Redistricting |
| Date: | Wednesday, December 15, 2021 1:18:43 PM |

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

## Virtual redistricting Hearing Comment Inbox

Muriel-Theresa Pitney<br>Clerk of Court<br>Supreme Court of Virginia<br>100 North Ninth Street, 5th Floor<br>Richmond, Virginia 23219-1315

## Dear Madam Clerk:

My name is Ronald M. Green, of whom works with Roy L. Perry-Bey, and I have been a resident of Virginia, for most of my life. During this time, I have also served as a civil-right activist throughout Virginia, primarily with the Coalition for Equal Justice, Citizens of Hampton Roads March Against Poverty Campaign and the United Front for Justice. I have been on the front lines of issues like treatment of veterans, confederate statutes, housing discrimination, police brutality and voting rights throughout the Commonwealth.

I write to urge this Court to reject the voting mapssubmitted by the Special Masters because they sharply limit the number of majority-Black Senate and House Districts throughout Virginia. Since 2010, Virginia has had five majority-Black Senate Districts (out of forty) and ten majority-African American House Districts (out of ninety-eight). If approved, the Special Master's maps will reduce the number of Senate Districts to two, and the number of House Districts to five.

The harm to Virginia's African American communities that results from reducing majority-African American voting districts by more than half should be obvious. As those majority-minority Districts disappear, so too does the political power of Virginia's minority communities. And as someone who has devoted his life to ensuring equal justice for all, I must object to proposed maps that needlessly reduce these critical districts by greater-than fifty percent.

Virginia not only has a moral imperative to protect minority political power; it has a legal one as well. Section 2 of the Voting Rights Act prevents "a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). Such a "denial or abridgment" occurs if "the political processes leading to nomination or election in the State or political subdivision are not equally open to participation" by members of a protected class "in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b).

Virginia's African American communities almost certainly satisfy the criteria necessary to trigger Section 2. They are "sufficiently large and geographically compact to constitute a majority" in several of the non-majorityminority districts. See Thornburg v. Gingles, 478 U.S. 30, 50 (1986). They are "politically cohesive." Id. at 51. And the "the white majorit[ies]" in these non-majority-minority districts "vote sufficiently as a bloc to enable" them "to defeat the minority's preferred candidate." Id. Because this is the case, Virginia must include majority-minority districts.

In other words, there are great "reasons to believe" that more voting districts must have a greater percentage of minority population. See Bethune-Hill v. Va. State Bd. of Elections, 137 S. Ct. 788, 801-02 (2017). Compliance with the Voting Rights Act is a compelling interest. Id. at 801. To satisfy this compelling interest, the Court should reject the Special Master's proposed maps, thereby avoiding a likely Voting Rights Act violation.

Ronald M. Green

## Political \& Civil Rights Activist

United Front For Justice
757-348-0436

| From: | IEWAN TIWARI |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on VA Senate Redistricting |
| Date: | Wednesday, December 15, 2021 1:23:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Once a decade we have Census: Based on the population shift the redistricting is done to have a proper representation of the population and voice to the table. Now after a major increase of Asian American and Hispanic population in Northern Virginia, the map drawers included no minority-majority Senate districts, while its clearly possible to draw at least one around South Riding, Chantilly, Centreville, Manassas area. I request the the Virginia Supreme Court to take this request into account while approving the final map.

Thank you,
Jewan "Jack" Tiwari
Manassas, VA 20109

| From: | Virginia House Democratic Caucus |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Special Masters" December 7 Draft Map |
| Date: | Wednesday, December 15, 2021 2:36:47 PM |
| Attachments: | VA House Dems Map Memo_Dec15.pdf |
|  | VA House Dems Maps_Charts.xlsx |

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To The Virginia Supreme Court:

On behalf of the Virginia House of Delegates Democratic Caucus, we are submitting two maps for the Court's consideration.

We urge the Court to adopt a House of Delegates map that reflects as many of the regional highlights as possible contained in our first map (Map 1). Map 1 reflects a balanced and fair approach. It was developed before the Court released the Special Masters' map and represents our model plan drafted in accordance with all applicable federal and state constitutional and statutory requirements. It properly reflects the population and demographic changes resulting from the 2020 federal decennial census and does so in a way that is least disruptive, by following the generally accepted redistricting principle that recognizes as a legitimate criteria not making unnecessary changes to current districts where it is possible.

The changes in the Commonwealth's ethnic and racial demographics are also reflected in Map 1.

Importantly, the map provides racial and minority group members with the opportunity to elect their preferred candidates of choice. Districts are all contiguous and compact without splitting precincts. Further, the plan provides partisan balance and does not unduly favor either major political party.

Key highlights of Map 1 include:

## Northern Virginia:

- Creating more geographically compact districts, eliminates winding, reaching districts
- Limiting the number of districts that cross county lines
- Preserving communities of interest, using Homeowners Association boundaries in places where there are no incorporated cities
- Splitting Arlington into fewer districts and keeping two districts entirely in the county. It follows the Route 50 dividing line that has been used for years in Arlington and by regional governments. Communities north of Route 50 are included in North Arlington and everything south is in South Arlington. The map keeps the neighborhoods
north and south of Columbia Pike together in the natural Columbia Pike corridor community of interest.
- Giving Alexandria one district entirely within the locality with only one other district taking up the remaining precincts, allowing its communities to stay together
- Prince William County has fewer districts that reach outside the county, keeping 6 of 7 districts entirely within county lines and keeping the cities of Manassas and Manassas Park whole


## Richmond:

- Eliminating the partisan gerrymandering in western Henrico County and creating more compact districts there, while keeping eastern Henrico communities of interest together
- Keeping Petersburg with suburban Chesterfield County, not with more rural Dinwiddie County
- Limiting the number of districts Richmond is cut into


## Hampton Roads:

- Providing more compact districts in the Peninsula, keeping Williamsburg with historical communities in James City County, Jamestown and the unincorporated community of Grove
- Newport News is condensed primarily into two districts with the northern precincts being included with the community of Grove where they make up a community of interest
- Norfolk has two districts entirely within the city limits
- Virginia Beach has 4 of its 6 districts entirely within city limits, rather than having multiple districts cross over city limits and keeps the regions of the city together


## Southside/Southwest:

- Drawing together the southside cities of Danville and Martinsville, as they are likely to have similar interests and issues
- Keeping the cities of Blacksburg and Radford together as a community of interest because of the two colleges there (Virginia Tech and Radford College)

All districts were drawn using 2020 federal decennial population data adjusted for prisoner reallocation as required by state law.

Should the Court not be inclined to adopt the suggestions contained in Map 1, we hope that it will, at minimum, take up the changes we suggest in Map 2, which is adapted from the Special Masters’ map.

Map 2 suggests several modifications to the draft map that would be less disruptive to voters who know and understand their districts. This map also provides for competitive districts. This plan keeps the cores of several current districts intact and attempts to avoid any unnecessary shifts in certain precincts to other districts. The map also follows the generally accepted redistricting principle that recognizes as a legitimate criteria not making unnecessary changes to current districts where it is possible. Since this map works from the Special Masters’ plan, we ask the Court to incorporate as many of these changes as possible in its final plan. These changes would not be difficult to make.

Key features in Map 2 include:

- HD 10/11: Moving the Sideburn precinct from HD 10 to HD 11 to keep the George Mason University area together, and balancing population deviation by moving the Villa precinct from HD 11 to HD 10.
- HD 14/15: Moving the Wakefield precinct from HD 15 to HD 14, to keep it with the rest of the Annandale community.
- HD 19/25: Moving the Cardinal precinct and Fitzgerald precinct from HD 25 to HD 19 to keep the Cardinal Drive community together.
- HD 78/79: The Ginter Park neighborhood has been split between proposed districts 78 and 79, as has the historic Jackson Ward neighborhood. Moving precinct 213 from 79 to 78 and moving precincts 307 and 308 from 78 to 79 would allow these communities to remain intact.

We are attaching supporting data charts for each map and shape files can be found at this link: VA House Democrats Maps. We thank the Court for considering these submissions as it prepares its final maps.

Sincerely yours,

Charniele Herring
Speaker Majority Leader
House of Delegates House of Delegates

| From: | $\underline{\text { Iva Robinett }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA02 and VA03 |
| Date: | Wednesday, December 15, 2021 2:09:33 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I disapprove of the proposed redistricting plan.
VA02 and VA03 should not be redrawn to dilute the votes of the military and veterans, the minority representation in VA03 and what should be a shared federal representation of future environmental solutions for the contiguous waterfronts of Norfolk and VB.

```
Iva Robinett
222 83rd St
VB 23451
ivarobinett@gmail.com
757-839-6297
```

Sent from my iPhone

| From: | Susan Hippen |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Public Comment |
| Date: | Wednesday, December 15, 2021 2:16:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Justices of the Virginia Supreme Court,
Virginia Congressional District 2 (VA-CD02) has long been viewed as the congressional district housing Virginia’s military region. The current district includes Naval Station Norfolk the largest naval installation in the world; and Naval Air Station Oceana, known as the Master Jet Base; Joint Base Langley Air Force Base and Fort Eustis, major installations for the Air Force and Army; and several smaller military installations. Our congressional representative is usually a member of the Armed Services Committee and a strong advocate for the military in general.

The newly drawn Virginia congressional districts submitted by the court-appointed masters removes the military voting block that VA-CD02 has traditionally maintained. Separating the installations into different districts would not increase political strength for our military population. Having different legislators for all the military installations in the Hampton Roads could unnecessarily pit Virginia districts against each other for precious funding in Congress.

I request another look at the lines for VA-CD02 and that the current military community be maintained in a single congressional district. I realize that VA-CD02 does not contain all the military installations in Hampton Roads or Virginia. However, it does consolidate a significant voting block of like-minded voters who have and continue to contribute to our nation.

Thank you for taking the time to review my comment on VA-CD02.
Submitted respectfully,
Susan Hippen

| From: | Cathy Slusher |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting proposal |
| Date: | Wednesday, December 15, 2021 2:09:43 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Judges and Court Reviewers,
I am very opposed to the proposed redistricting lines that I have reviewed. Regardless of personal politics, this outline is heavily weighted to a Democrat majority and shows favoritism to a fault. This is not good for democracy. This is definitely not good for Virginia. It is most definitely not good for my family or my community.

I urge you to send the redistricting plan back to the drawing board and expect something in return that illustrates fairness, equality, and conscientious deliberation and thought. You are welcome to contact me.

Most sincerely,
Catherine Slusher
3337 Baybrook Dr, Harrisonburg, VA 22801
540-476-4060

| From: | Bateschapelhill |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on Redistricting Draft Maps - December 15, 2021 |
| Date: | Wednesday, December 15, 2021 2:06:39 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a long-term resident of Northern Virginia, in Prince William County (Bristow, VA).
I have reviewed the summary report on development of the newly released draft redistricting maps for the Virginia House of Delegates, Virginia Senate, and Virginia congressional districts in the U.S. House of Representatives.

From my vantage point as an independent voter, I believe the maps have accomplished their primary purpose: to reduce the influence of political gerrymandering on elections throughout the Commonwealth of Virginia. I know that some of the Democratic candidates (now incumbents) I recently have supported in the Virginia House and Senate will face more challenging races in 2022 and beyond. I suspect the same is true with respect to Republican incumbents. This project has been about fairness and a balancing of legitimate interests, not about protecting incumbents as has been the case in the past. I'm pleased that the map-drawers appear to have fairly applied the fair-voting redistricting standards set forth by enacted VA legislation, the constitutional amendment, and the courts.

## Congratulations!

Sincerely,
Chris Bates
12525 Erroll Lane
Bristow, VA 20136

| From: | David Cariens |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Reject the Map |
| Date: | Wednesday, December 15, 2021 1:55:23 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The redistricting maps are objective and balanced. They tilt toward conservatives. I urge the Virginia Supreme Court to reject the maps and have the people they hired go back to the drawing boards and produce a truly fair set of maps. Abigail Spanberger's treatment is ugly and disgusting.

If Congresswoman Spanberger is drawn out of her district, then produce a map that does the same thing Delegate Margaret Ransone.

David Cariens
(434) 591-5183 Home and work
(804) 436-2810

| From: | Marion Bozzo |
| :--- | :--- |
| To: | $\frac{\text { Redistricting }}{\text { marion bozzo }}$ |
| Cc: | Redistricting |
| Subject: | Wednesday, December 15, 2021 2:17:22 PM |
| Date: |  |

EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am opposed to the plan that divides the Mount Vernon Community in two.

Marion Bozzo
870 Highgate Rd
Alexandria, Va. 22308

| From: | Carol Mournighan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Virginia Redistricting 2021 |
| Date: | Wednesday, December 15, 2021 2:33:14 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court of Virginia
I want to congratulate the Supreme Court of Virginia for developing proposed new districts for the Virginia Senate, House of Delegates and U. S. House of Representatives which make sense and fulfill the will of the voters of Virginia when they passed the redistricting constitutional amendment. When I first reviewed the maps the the special masters had produced, the first word that came to my mind was"Integrity". I urge the Supreme Court to stand by these maps: I understand the issue regarding the Voting Rights Act and minority representation, and am confident that the Supreme Court can work this issue out.

You did a great job. Thank you.
Carol Mournighan
7204 Churchill Road
Mclean, VA 22101
--
Carol
Carol Mournighan
clmourn@gmail.com
571-334-1433

```
From: Owen Williams
To: Redistricting
Subject: Concerns Regarding the Proposed Maps in the Hampton Roads Areas
Date: Wednesday, December 15, 2021 2:58:49 PM
```


## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
My name is Owen Williams and I am a current student at the College of William \& Mary in Williamsburg, Virginia on Virginia's Lower Peninsula.

I and many other students have significant concerns regarding the special master's proposed maps as they affect Hampton Roads and the Lower Peninsula. My main concerns are as follows:

The City of Williamsburg has been separated from lower J ames City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated. These communities are intrinsically linked.

Lower J ames City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services. Splitting these communities of interest makes absolutely no sense. They should be represented by the same elected officials because the residents of both live and work in both areas.

The proposed 69th House District takes an incredibly confusing path across the York River and picks up a small portion of Gloucester. This is a very different community to Williamsburg and should be part of a district that is on the other side of the York River with the rest of Gloucester County.

The new proposed maps put Williamsburg in the new 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. We are connected far more to the eastern end of the lower peninsula. Many William \& Mary students actively interact with Newport News, Hampton and Norfolk far more than they do with New Kent or other areas closer to Richmond or the other peninsulas. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities.

Given the dynamics above, we would like to see some significant changes in the House of Delegates districts on the Middle Peninsula. Thank you for considering our voices in this process, and please protect communities of interest.

Best,

## Owen R. Williams

B.A. Government \& History William \& Mary '23

## Senate of Virginia

RICHARD L. SASLAW
Majority Leader
35th Senatorial District
Post Office Box 1856
Springfield, Virginia 22151


Committee Assignments:
Chair, Commerce and Labor Education and Health Judiciary
Finance \& Appropriations Rules

December 15, 2021

Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. $9^{\text {th }}$ St, $5^{\text {th }}$ Floor
Richmond, VA 23219
Dear Ms. Pitney:
Pursuant to the Court's Redistricting Rule 4, the Virginia Senate Democratic Caucus respectfully submits the following comments on, and proposed amendments to, the draft Senate map released by the Court's Special Masters on December 7, 2021.

To begin with, my colleagues and I want to thank the Special Masters for their diligent efforts thus far. The Redistricting Amendment, its implementing legislation, and this Court's rules place a premium on transparency and public input in the redistricting process. By releasing their draft maps early along with a detailed memorandum explaining their approach and data regarding the draft districts, the Special Masters have given the public, along with the parties specifically mentioned in Va. Code Ann. § 30-399(F), an opportunity to review and comment on the draft maps, including to propose amendments that will ensure the maps ultimately adopted by the Court comply with the governing laws and advance the goal of fair elections for Virginia voters. In addition, the Court has created a robust public comment process by providing multiple ways for the public to share their views on the important work of drawing new districts. It is in this spirit that we submit the comments and proposed amendments below.

In summary, in recognition of the Special Masters' reasonable approach in many areas, we are not proposing any wholesale overhaul of their draft Senate map. Instead, the Senate Democratic Caucus respectfully submits that certain districts in seven specific regions should be modified to better reflect important communities of interest and other significant considerations regarding the makeup of the Virginia Senate. Of particular note, the Special Masters' draft Senate map pairs the two longest-serving African American members of the General Assembly, including the current Senate President Pro Tempore, in a single district. While we understand that the Special Masters chose generally not to consider incumbent addresses or pairings, a map that effectively expels at least one of these historic African American figures and civil rights icons from the Virginia Senate will not help move the Commonwealth forward. We have
therefore proposed modifications to the draft Senate map that will avoid this unacceptable result while simultaneously improving the preservation of well-recognized communities of interest in the relevant regions. These and other proposed modifications, including to better preserve college and university communities, are detailed below.

## I. Hampton Roads

We appreciate the Special Masters' recognition that the Senate districts in the Hampton Roads region are "among the most difficult districts to draw in the commonwealth, as they require a careful balancing of competing considerations based upon geography, community, and race." Memo from Special Masters to Supreme Court (Dec. 17, 2021) (hereinafter "Special Masters Memo"). Respectfully, however, the Special Masters' draft districts in this region would do significant harm to African American representation and would divide, rather than unite, well-recognized communities of interest.

Our proposed amendments to the Hampton Roads districts, shown in Figure 1 below, are aimed primarily at unpairing two long-serving African American Senators who have overcome tremendous challenges and racial discrimination to become historic and consequential figures in our Commonwealth. Additionally, our amendments better respect the region's main communities of interest by uniting Norfolk with South Norfolk on the one hand and with the Eastern Shore on the other, as well as keeping whole the suburban area of Virginia Beach. These amendments recognize the historic connections binding the City of Norfolk to these two areas, as well as the unity of economic and political interests that exist between them.

Figure 1. Proposed Amendments to Hampton Roads Districts ${ }^{1}$


[^25]
## A. Senators Lucas and Spruill Should Not Be Paired in a Single District

Due to the Special Masters' decision not to consider incumbent addresses, the Special Masters' draft of the Hampton Roads districts inadvertently "double bunked" two heroes of Virginia's civil rights movement: Senator L. Louise Lucas and Senator Lionell Spruill, Sr. Specifically, the Special Masters' draft Senate District 18 combines northern portions of Chesapeake (where Senator Spruill resides) with the southern half of Portsmouth (where Senator Lucas resides).

Both of these respected legislators have overcome unimaginable hurdles in their personal lives and political careers, including invidious racial discrimination, and both have contributed immensely to improving the Commonwealth's record on civil rights. Pairing them in a single district, which would effectively expel at least one of them from the Senate, fails to respect the unique role that each of these iconic figures has played and continues to play in the troubling and evolving story of race relations in Virginia.

Senator L. Louise Lucas, the President Pro Tempore of the Virginia Senate, could not go to school when she was a girl because Portsmouth's school system was shut down by segregationists engaged in the strategy of "Massive Resistance." She became a mother at age 14, and even after the Portsmouth schools were reopened she was not able to complete high school. Despite these extreme obstacles placed in front of her as a result of racial discrimination, Senator Lucas persevered. In 1971, she became the first female shipfitter at Norfolk Naval Shipyard. From there, she rose to become the Command Federal Women's Program Manager at the Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) and Equal Employment Manager at the Supervisor of Shipbuilding Conversion and Repair (SUPSHIP). Since leaving federal employment, Senator Lucas has been a business owner, a civic leader, and a college professor.

While Senator Lucas has been an activist all her life, her career in politics formally began in 1984 when she was elected as the first African American woman to serve on Portsmouth's City Council. She was elected to the Virginia Senate in 1991, where she has served with distinction ever since. As one of just three African American women in the chamber, Senator Lucas is a role model to generations of Virginians, especially African American women and girls. Senator Lucas is both the first woman and the first African American to serve as President Pro Tempore of the Virginia Senate. She serves as the Chairman of the Education and Health Committee and is third in seniority on the Finance Committee. Her loss in the Senate would deprive Virginia's African American community of significant influence on a statewide basis.

Senator Lionell Spruill, Sr. was born one of 16 children in the era of segregation, meaning his mother was denied access to a hospital. Because of a preventable mishap during birth, Senator Spruill was born with serious hearing problems and a speech impediment that rendered his speech unintelligible. He grew up in poverty, in a segregated school system with no resources to help him overcome his impediment.

Despite these hurdles, Senator Spruill obtained a job with the phone company, which paid for medical procedures that helped him hear and learn to speak. He began as a lineman and worked his way up to installer, then technician. He first entered politics when he realized that his hometown of South Norfolk was completely unrepresented in the leadership of the newly
merged City of Chesapeake. He ran and won as the first representative for South Norfolk on the Chesapeake City Council. In 1993 he won election to the House of Delegates, where he served with distinction until his election to the Senate in 2015. As the only African American man in the Virginia Senate, Senator Spruill is, like Senator Lucas, a role model to generations of Virginians. Senator Spruill is third in seniority among members in the majority on the Commerce and Labor Committee, and is chairman of its Energy Subcommittee.

While some pairing of incumbents may be unavoidable, this particular pairing is both harmful to minority representation in the Commonwealth and easily avoidable. By reuniting all of Portsmouth in a single district that connects with Suffolk and additional counties to the west, Senator Lucas would no longer be paired in the same district as Senator Spruill, giving both of them the opportunity to continue their historic representation of minority opportunity districts.

## B. Norfolk and Northeastern Chesapeake Form a Well-Recognized Community of Interest, and Portsmouth Should Be Kept Whole

In addition to unpairing Senators Lucas and Spruill, our proposed amendments to Senate Districts 17 and 18 better preserve communities of interest by undoing a jurisdiction split in Portsmouth and combining the southern portion of Norfolk proper with the South Norfolk community of City of Chesapeake. This is superior to the Special Masters' configuration, in which the southern portion of Portsmouth is lumped together with the northern portion of Chesapeake in one district, while the northern portion of Portsmouth is sheared off into a separate district.

Uniting the southern portion of Norfolk with the northeastern portion of Chesapeake in District 18 would preserve a well-known community of interest. Indeed, the northeastern portion of Chesapeake is officially known as "South Norfolk," rightly reflecting its longstanding ties to the City of Norfolk. See "South Norfolk Community," City of Chesapeake Official Website (accessed Dec. 14, 2021). ${ }^{2}$ This part of Chesapeake started as a "street car suburb" of Norfolk and was incorporated into the City of Chesapeake in 1963. See Suzy Looman, "History of South Norfolk,' HistoricSouthNorfolk.com (July 5, 2021). ${ }^{3}$ The Special Masters appear to have recognized the ties between Norfolk proper and South Norfolk in drawing House District 92, which straddles both areas.

Modifying Senate District 18 to include South Norfolk and Norfolk would allow the redrawing of District 17 to include the entirety of Portsmouth and undo a jurisdiction split, which was one of the Special Masters' primary objectives. Portsmouth, one of Virginia's oldest settlements, is a community of interest unto itself. Its residents have immense hometown pride. For instance, the City hosts the annual Portsmouth Invitational Tournament, where college basketball seniors play in front of NBA scouts. Many top basketball stars played in the Tournament before successful pro careers, including Jimmy Butler, Scottie Pippin, Dennis Rodman, and John Stockton. See Portsmouth Invitational Tournament, Wikipedia (accessed Dec. 14, 2021). ${ }^{4}$ The City is also home to the African American Historical Society of Portsmouth, which recently put up murals honoring the City's Black history at the Portsmouth

[^26]Welcome Center. J. Reyes, "Portsmouth group hopes murals in city's Welcome Center are first step toward a more prominent display of African American history," Virginian Pilot (Nov. 26, 2021). ${ }^{5}$ Keeping Portsmouth whole would also ensure that the entirety of draft House District 88 falls within Senate District 17, which better respects the "nesting" concept endorsed by the Special Masters for state legislative districts. Special Masters Memo at 9.

In order to equalize population, our proposed District 17 drops most of the City of Suffolk but retains the eastern portion of Southside, traveling along the Route 17 corridor. See "Route 17 Arterial Preservation Plan," VDOT (Sept. 1, 2020); ${ }^{6}$ see also Special Masters Memo at 7 (defining communities of interest with respect to "travel arteries").

## C. The Eastern Shore and Norfolk Form a Community of Interest

We further suggest that Senate District 20 be modified such that the Eastern Shore is joined with Norfolk, including just a small sliver of Virginia Beach where the Chesapeake Bay Bridge Tunnel makes landfall. This is superior to the Special Masters' configuration, in which the Eastern Shore is joined primarily with Virginia Beach, taking just a small sliver of Norfolk.

With this amendment, the map would preserve the strong community of interest that exists between the Eastern Shore and Norfolk. This community is reflected in the myriad economic and cultural ties that connect these two areas. For example, as amended, District 20 would follow the "Eastern Shore Corridor," which was designated a "Corridor of Statewide Significance" and is centered on U.S. Highway 13. See "Eastern Shore Corridor," VTrans2040 Multimodal Transportation Plan (2012). ${ }^{7}$ The Corridor centers on Norfolk as the "primary population center" and connects it with "the sparsely populated counties of Northampton and Accomack." Id. Norfolk serves as a major "employment center" for the Eastern Shore counties, as well as a transportation hub that is home to the region's airport. Id. And Norfolk's Old Dominion University has a special relationship with Eastern Shore Community College and with the Wallops Island Spaceport, both of which are important institutions on the Eastern Shore. See Old Dominion University Partnership, Eastern Shore Community College Official Website (accessed Dec. 14, 2021)"; "Wallops Spaceport partnership that includes ODU expected to have role in new space station resupply project," News@ODU (May 2008).. ${ }^{9}$

Norfolk and the Eastern Shore also share significant political interests. Both areas of the Commonwealth unfortunately have median incomes significantly below Virginia's statewide median. See Virginia Dep't of Health, "Income and Poverty" (accessed Dec. 14, 2021) (Statewide - \$74,222; Accomack - \$46,073; Northampton \$47,227; Norfolk - \$51,590). In contrast, Virginia Beach's median income is above the statewide median. Id. The poverty rates tell the same story: Accomack, Northampton, and Norfolk all have poverty rates in excess of $20 \%$ while Virginia Beach's poverty rate is less than $10 \%$. See Virginia Dep't of Health,

[^27]"Poverty" (accessed Dec. 14, 2021). Norfolk and the Eastern Shore also share similar challenges with respect to education, with high percentages of students receiving free and reduced-price school meals. See Virginia Public School Free/Reduced Lunch Participation Rate by County, ZipDataMaps (accessed Dec. 14, 2021). ${ }^{10}$ These communities would be best served by a representative in the Senate who can focus on their shared challenges, in particular on advocating for measures that will help bring residents out of poverty.

The historical connections between the Eastern Shore and Norfolk further support joining those communities rather than splitting them. For example, in the late $19^{\text {th }}$ century, Cape Charles, Northampton County's largest town, was "planned as a hub for traffic flowing via steamboat and barge to and from Norfolk." W. Thomas, B.M. Barnes, T. Szuba, The Countryside Transformed: The Eastern Shore of Virginia, the Pennsylvania Railroad, and the Creation of a Modern Landscape, Southern Spaces (July 31, 2007). ${ }^{11}$ Before the service was shut down, the Eastern Shore was connected to Norfolk by twice-daily ferry trips carrying "mail, freight, cars, and passengers." Clarence Lee Beebe, A History of the Chesapeake Bay Ferries to Virginia's Eastern Shore Prior to the Civil War (August 1954). ${ }^{12}$

For all these reasons, for the last 20 years, the Eastern Shore has been drawn with Norfolk in Virginia's Senate maps by caucuses controlled by both Democrats and Republicans, and we urge the Court to continue that practice today.

Finally, with this amendment District 20 would include the entirety of the Special Master's proposed House District 94 without changes, advancing the Special Masters' interest in "nesting" state legislative districts. Special Masters Memo at 9.

## D. Virginia Beach's Suburban Community of Interest Should be Preserved

The suburban portion of Virginia Beach is a community of interest that should be preserved in the Senate map. Our amended District 21 encompasses the entirely of Virginia Beach's more densely populated suburban zone. See Virginia Beach Comprehensive Plan, Planning Area 1-1 (Nov. 20, 2018). ${ }^{13}$ This is superior to the Special Masters' configuration, which splits the suburban zone, pairing the northern part with the rural Eastern Shore and the southern part of the suburban zone with the rural and undeveloped parts of Virginia Beach and southern Chesapeake.

In order to equalize population, our amended District 19 picks up the majority of the City of Suffolk, other than the Route 17 Corridor. This amendment preserves a community of

[^28]interest, as Suffolk is largely rural, and therefore a good match for District 19. See City of Suffolk 2026 Comprehensive Plan at Figure 3-1 (2018 ed.). ${ }^{14}$

## II. Greater Richmond

We commend the Special Masters for creating an additional minority opportunity district in the greater Richmond area. As we explain below, it was demonstrated during the Redistricting Commission proceedings that the Voting Rights Act of 1965 ("VRA") requires the creation of such a district. We respectfully urge the Court to recognize that the VRA requires the drawing in this region of an additional district in which African Americans have the opportunity to elect their candidate of choice, which the Special Masters have already done. ${ }^{15}$ And we suggest only modest amendments to the Special Masters' draft districts, namely minor adjustments to the border between Districts 14 and 16 to better reflect communities of interest, as shown in Figure 2 below.

Figure 2. Proposed Amendments to Greater Richmond Districts


## A. The Voting Rights Act of 1965 Requires the Creation of an Additional Minority Opportunity District in the Greater Richmond area

We commend the Special Masters for drawing an additional district in greater Richmond that will allow the region's African American citizens the opportunity to elect a candidate of their choice ("minority opportunity district"), increasing the number of minority opportunity

[^29]districts in this area from two to three. We write to emphasize that this feature of the Special Masters' draft map is in fact required by federal law.

The Supreme Court's landmark opinion, Thornburg v. Gingles, sets out the criteria that, if met, require the drawing of a district in which a minority population has the opportunity to elect a candidate of that population's choice. 478 U.S. 30 (1986). In particular, Section 2 of the VRA requires the drawing of a minority opportunity district " [1] where the minority group is sufficiently large and geographically compact to constitute a majority in a single-member district and [2] is politically cohesive, and [3] where the majority votes sufficiently as a bloc to enable it ... to defeat the minority's preferred candidate." Personhuballah v. Alcorn, 155 F. Supp. 3d 552, 565 (E.D. Va. 2016) (citing VRA and Gingles, 478 U.S. at 50-51).

Those criteria are met here. The Redistricting Commission received as part of public submissions a map demonstrating that greater Richmond's African American population is "sufficiently large and geographically compact to constitute a majority" in an additional singlemember district. Personhuballah, 155 F. Supp. 3d at 565 . We incorporate that map by reference here. Record of the Virginia Redistricting Commission (accessed Dec. 14, 2021). ${ }^{16}$ This evidence satisfies the first Gingles criterion. See, e.g., Wright v. Sumter Cty. Bd. of Elections \& Registration, 979 F.3d 1282, 1304 (11th Cir. 2020) ("The undisputed evidence presented showed that Sumter County's black residents could form a majority in at least one additional, singlemember district.").

The second and third Gingles criteria are also met because there is at least some measure of "racially polarized voting" within the Senate districts surrounding Richmond. See, e.g., Alabama State Conf. of Nat'l Ass'n for Advancement of Colored People v. Alabama, 2020 WL 583803, at *26 (M.D. Ala. Feb. 5, 2020) ("Racial bloc voting, also termed racially polarized voting, is the linchpin of a $\S 2$ vote dilution claim and the embodiment of the second and third Gingles preconditions."). The Redistricting Commission received evidence that racially polarized voting exists in parts of this region of the Commonwealth. M. Palmer \& B. Schneer, "Racially Polarized Voting Analysis for the Virginia Redistricting Commission," Record of the Virginia Redistricting Commission (Aug. 31, 2021) (accessed Dec. 14, 2021). ${ }^{17}$ The report on racially polarized voting submitted to the Commission found as much as a $20 \%$ gap between the voting of patterns of whites and racial minorities in parts of this region. Id. at 5.

Because the three factors are met, Section 2 of the VRA requires the drawing of an additional minority opportunity district in greater Richmond. We appreciate that the Special Masters' draft Senate map already satisfies this requirement, and we respectfully urge the Court to confirm their work in this regard.

[^30]
## B. The Boundary Between Districts 14 and 16 Should Be Amended to Better Reflect Communities of Interest

We propose adjusting the boundary between Districts 14 and 16 to keep the Hermitage High School attendance zone together in the north, and to keep whole the community of interest anchored on the University of Richmond in the south.

In the Special Masters' draft map, the Hermitage High School attendance zone is split between District 14 and 16. See Henrico School Locator, HCPS Official Website (accessed Dec. $14,2021) .{ }^{18}$ The southeastern portions of the attendance zone are in District 14, while the school itself and the attendance zone north of Parham Road are in District 16. Our amendment would move the southeastern portion of the attendance zone into District 16, with the exception of one precinct that is kept with District 14 in order to preserve the Chamberlayne community of interest. See "Chamberlayne," UVA Data, Map of Virginia Census Designated Places (accessed Dec. 14, 2017). ${ }^{19}$ Chamberlayne has been recognized by the federal government as a "closely settled, unincorporated community[y] that [is] locally recognized and identified by name." "Census Designated Places (CDPs) for the 2020 Census-Final Criteria," 83 Fed. Reg 56290 (Nov. 13, 2018). Keeping this attendance area is important, as in suburban environments, high schools are often the primary organizing and rallying point for community activity and a center of community organization, and significant research has validated that unified community schools build unified communities. See generally S. Bingler, et al., "Schools as Centers of Community," National Clearinghouse for Educational Facilities (2003). ${ }^{20}$ Hermitage High School in particular plays a central cultural role as one of the oldest high schools in greater Richmond, dating to 1936 when Virginia began to modernize its education infrastructure during the New Deal. "Hermitage High School," Wikipedia (accessed Dec. 14, 2021). ${ }^{21}$

Our adjustments to the border on the northern bank of the James River are designed to preserve the community of interest centered on the University of Richmond. Located on the border between Henrico and Richmond, the University is an economic and cultural hub for Virginians residing in both localities. For instance, the University of Richmond has undertaken detailed historical studies of the land to its west-the former Westham Planation-reflecting the deep ties that connect the University to that part of Henrico, forming a single community of interest. See L. Lee \& S. Driskell, "Knowledge of This Cannot Be Hidden: A Report on the Westham Burying Ground at the University of Richmond" at 8 (Dec. 2019). ${ }^{22}$ And the connections between the University and the Westham neighborhood directly north of it are well established. See, e.g., Westham Garden Club ("The Westham Garden Club was established on May 25,1943 , to preserve and enhance the natural beauty of Westham, a neighborhood adjacent to the University of Richmond and nestled in mature woodlands a short distance from the historic James River."). ${ }^{23}$ In this letter, the Senate Democratic Caucus is also requesting similar

[^31]changes that seek to consolidate communities of interest around Virginia's major universities in Blacksburg (Virginia Tech; Senate District 4) and Fairfax (George Mason; Senate District 37). The Special Masters appear to have recognized the significance of university communities by consolidating legislative districts around other major Virginia university communities such as the University of Virginia (Senate District 11; House District 54), The College of William and Mary (Senate District 24; House District 71), James Madison University (Senate District 2; House District 34), Radford University (Senate District 5, House District 42), Virginia Commonwealth University (Senate District 4; House District 78), Old Dominion University (Senate District 21; House District 92), and Washington \& Lee University (Senate District 3, House District 37).

## III. West Central Region

We appreciate the Special Masters' "attempt[] to place Roanoke, Salem and Blacksburg in the same district, to reflect what some have reported as a community of interest." Special Masters Memo at 21. In particular, there is a strong community of interest anchored on Roanoke/Salem at the eastern end and the Blacksburg suburbs on the western end. While the Special Masters reported that they were unable to preserve this community in a single Senate district "given equal population constraints," id., it is in fact feasible to do so by moving the Town of Blacksburg into District 4. As shown in Figure 4 below, our proposed amendments to Senate Districts 4, 5, and 7 preserve this community of interest while staying within equal population constraints. Our amendments also improve the compactness of these districts.

Figure 3. Proposed Amendments to West Central Virginia Districts


The single community of interest formed by the union of Roanoke/Salem and Blacksburg is long established and well recognized. The two communities are joined by I-81, and many residents commute between them each day. The region's airport recognizes the community of interest in its name: Roanoke-Blacksburg Regional Airport. See FlyROA.com (accessed Dec. 14, 2021). Virginia Tech has campuses in both Roanoke and Blacksburg, which are linked by Smart Way Express, a dedicated bus service run by Valley Metro, free for Virginia Tech students and staff. See Blacksburg-Roanoke Smart Way Shuttle, Virginia Tech Website (accessed Dec.

14, 2021). ${ }^{24}$ Virginia Tech's facilities in Roanoke include the Fralin Biomedical Research Institute at Virginia Tech, a Carilion partnership. And Virginia's 2021 state budget provided for $\$ 83.5$ million to extend intercity rail service from Roanoke to Montgomery County, where it will be used by many Virginia Tech students and staff. See E. Jones, "NRV to get Amtrak service; Roanoke to get 2nd daily train," WFIR News Talk Radio (May 5, 2021). ${ }^{25}$ In order to equalize population in our proposed configuration, Christiansburg, a town with far fewer connections to Virginia Tech than Roanoke, was moved into District 5.

Additionally, many of the region's citizens testified eloquently before the Redistricting Commission as to the web of connections that bind together these communities. See, e.g., Ex. Public Comment West Central Region at 24, Records of the Virginia Redistricting Commission (accessed Dec. 14, 2021), ${ }^{26}$ Testimony of Austin Pryor ("I am a resident of Roanoke City and work for Virginia Tech and commute almost daily to Blacksburg down in the New River Valley. I find great connection between the two areas of the Roanoke Valley and New River Valley ... These interest would be best represented by one State Senator to jointly represent both communities."); id. at 25, Testimony of James. B. McCloskey ("The Roanoke and New River Valleys shar[e] multiple shared resources and values. In addition to the colleges and universities, there [is] the huge medical community that blankets our region. Not just the Carilion and Lewis Gale health systems but the joint efforts of Radford University Carilion and Virginia Tech Carilion School of Medicine and Research Center the latter of which includes multi-disciplinary project active on both the Riverside and Blacksburg campuses. This proposed change also consolidates the entire Virginia Tech Community into one senate district similar to other universities as described above. And, don't forget the Roanoke-Blacksburg Regional Airport!").

Our proposed amendments in this region have the added benefit of eliminating the part of the Special Masters' draft District 7 that crosses the Blue Ridge. The Special Masters were correct to identify the Blue Ridge Mountains as "a natural dividing line for communities of interest." Special Masters Memo at 12. But in their draft Senate map, District 7 crosses the Blue Ridge by traversing the border from Carroll and Grayson Counties and splitting Wythe County. See "Wythe County," Geology Mineral Resources Webmap, Virginia Energy (accessed Dec. 14, 2021). ${ }^{27}$ Our proposed amendments eliminate the split of Wythe County and preserve the Blue Ridge Mountains as a dividing line, crossing them only at the Roanoke River Valley, one of the range's few "easy crossings." Special Masters Memo at 12.

## IV. Loudoun and Fauquier Counties

Districts 28,31 , and 32 should be modified to better reflect the region's communities of interest. As shown in Figure 4 below, we have adjusted the boundary between Districts 31 and 32 in two places to keep HOAs and school attendance zones together and to better reflect the divergent political interests of the eastern and western portions of Loudoun County. And we have adjusted the boundary between Districts 31 and 28 to keep Warrenton together with the

[^32]area directly to its south and to divide Fauquier County on a more intuitive line than the split suggested by the Special Masters.

Figure 4. Proposed Amendments to Loudoun and Fauquier County Districts


The first amendment to the north is aimed at preserving the Belmont Greene community of interest in a single district (District 31). Belmont Greene is a fast-growing and tightknit community of homeowners, anchored on Belmont Country Club to the north and walking distance to Stone Bridge High School to the south. It is part of the Stonebridge High School attendance zone. See Stone Bridge High School 2021-2022 Attendance Zone. ${ }^{28}$ It is also a Census Designated Place, meaning it is a "closely settled, unincorporated community[y] that [is] locally recognized and identified by name." "Census Designated Places (CDPs) for the 2020 Census-Final Criteria," 83 Fed. Reg 56290 (Nov. 13, 2018); see also "Belmont," UVA Data, Map of Virginia Census Designated Places (accessed Dec. 14, 2021). ${ }^{29}$

The Special Masters' draft Senate map divides this community in two: the bulk of the homes are in District 31, with Stonebridge High School, the Belmont Greene Community Pool, and the rest of the community in District 32. Our proposed amendment would keep Belmont Greene together in District 31, and generally better preserve the Stone Bridge High School attendance zone in a single district. Id.

Moving south, our second amendment is aimed at preserving the Brambleton community of interest by keeping it entirely within District 32. Numerous public comments submitted to the Court have requested this change. See, e.g., Comment of Ravi Balam, Interactive Proposed Map (accessed Dec. 14, 2021) ("Brambleton should not be divided. It makes most sense for all of it to be in 32 nd as it is most like its northern, southern and eastern neighbors like Ashburn, Sterling and S. Riding."). ${ }^{30}$

[^33]This amendment would better reflect the east-west division of Loudoun County, with eastern Loudoun being more suburban and western Loudoun being more rural. See Loudoun County Comprehensive Plan at 170 (2019). ${ }^{31}$ This rural-suburban division represents more than just a change in zoning policy-the two areas of the county have many divergent political interests. See, e.g., T. Baratko, "Chair Randall says people in eastern Loudon don't understand the west," Loudoun Times (Oct. 19, 2016) ${ }^{32}$; R. Nelson, "A Tale of Two Counties," Virginia Living (Feb 2017). ${ }^{33}$ In the Special Masters' draft map, District 31 is primary rural, except for where it crosses Northstar Boulevard, the dividing line in Loudoun's comprehensive plan between rural and suburban areas of the County. See Comprehensive Plan at 170. Our amendment would move the suburban precinct out of rural District 31 and unify it with District 32 , which shares its suburban character.

Our final proposed amendment in this region joins the area of Fauquier County south of the town of Warrenton with Warrenton proper in District 28. In addition to keeping Warrenton together with its immediate surroundings, this amendment uses Route 211 as the boundary of the jurisdiction split of Fauquier County. This "travel artery," linking Warrenton and New Market, is a more intuitive way to split Fauquier than the Special Masters' configuration, which followed Route 15 south and then Route 621 back north. See Special Master Memo at 7.

## V. Greater Fredericksburg

District 27 should be modified, as shown in Figure 5 below, so that it picks up the fast urbanizing areas around I-95 south of the City of Fredericksburg and gives up the rural areas in the southwest of the district around Chancellor.

[^34]Figure 5. Proposed Amendments to Greater Fredericksburg Districts


The area south of Fredericksburg along I-95 lies between I-95, U.S. 17, and a VRE Station, and has been zoned as "mixed use," meaning that it is a "compact, walkable community with a more dense development pattern." Spotsylvania Comprehensive Plan at 6 (mixed used definition), 19-20 (map) (amended 2018). ${ }^{34}$ This part of Spotsylvania, connected to the city by U.S. 17, is also similar to Fredericksburg in that its development is served and anchored by a VRE station that opened in November, 2015. K. Weir, "VRE to expand into Spotsylvania County," Washington Examiner (July 4, 2012). ${ }^{35}$ Before the opening of that station, 1,000 residents traveled from this area of Spotsylvania to Fredericksburg every day. Id. This station attracts a similar type of employment and development pattern as Fredericksburg, as it serves "commuters who [formerly] travel[ed] to Fredericksburg to catch the Washington-bound train." L. Lazo, "VRE Spotsylvania station to open Monday," Washington Post (Nov. 15, 2015) ${ }^{36}$

This section of Spotsylvania County is therefore more similar in character and in political interests to the City of Fredericksburg, and forms a community of interest, often referred to as "Greater Fredericksburg." But in the Special Masters' draft map, Districts 25 and 27 divide up this community of interest, with the urbanizing portion of Spotsylvania County included in District 25, a predominantly rural district. The parts of District 25 making up the southern portion of Greater Fredericksburg should instead be drawn into District 27 and included with Fredericksburg proper.

To offset the increase in population, District 27 should give up the sections of Spotsylvania County around Chancellor and the Chancellorsville Battlefield. These areas have been zoned "low density residential," "rural residential," and "agricultural and forestall," Spotsylvania Comprehensive Plan, supra, at 19, and are likely to remain so given the presence of the Chancellorsville National Battlefield and large sections of private land inside the battlefield

[^35]with development restrictions. They thus form a community of interest with the other rural areas included in District 25. The entire proposed District 25 has no VRE Stations, as VRE service ends at the Spotsylvania Station.

We note that many Virginians testified in favor of a district substantially similar to our amended District 27. See, e.g., Public Comment Northern Region at 39, Records of the Redistricting Commission (accessed Dec. 14, 2021) ${ }^{37}$; id. 43; id. at 58; id. at 60 ("I share similar concerns with the residents of the more developed Fredericksburg area, rather than those in rural Spotsylvania."); id. at 78.

## VI. Virginia Peninsula

On the Virginia Peninsula, District 23 should be redrawn to include the entirety of both Poquoson and Hampton, giving up portions of Newport News to District 24 to equalize population and reduce the split of that locality.

Figure 6. Proposed Amendments to Virginia Peninsula Districts


Drawing District 23 in this way would preserve the community of interest that exists between Hampton and Poquoson. This community is demonstrated by a shared geography, as Poquoson and Hampton are the Peninsula's two Atlantic facing localities. The two localities also sit on opposite banks of the Back River, an estuarine inlet of the Chesapeake Bay. The U.S. District Court for the Eastern District of Virginia recognized and validated this community of interest in 2019 by adopting a special master-recommended remedial House of Delegates district consolidating parts of Hampton and Poquoson together into one district. See Bethune-Hill v. Virginia State Bd. of Elections, 368 F. Supp. 3d 872, 889 (E.D. Va. 2019) (adopting Remedial Plan, Dkt. 355-3).

[^36]There are also economic similarities between Hampton and Poquoson. Because of their shared distinctive geography, for example, the two localities "developed as hubs for waterman fishing and shellfishing in the Atlantic Ocean, Chesapeake Bay, and tidal rivers," while other regional localities developed into a commercial waterfronts. Virginia Working Waterfront Master Plan at 71 (Sept. 2016). ${ }^{38}$ Today, in both localities, recreational boating plays a large economic role. See M. Pizer, "Study values annual impact of Hampton boaters at \$55M," Virginia Institute of Marine Science (Mar. 12, 2009); "Kayaking \& Boating in Poquoson," Poquoson Official Website (accessed Dec. 14, 2021).

Redrawing Districts 23 and 24 as we suggest would keep this community of interest together, and would allow more of Newport News to be in the same district, vindicating the interest in "minimizing splits in counties and cities." Special Masters Memo at 5. It would also allow for the District 23 to contain the entirely of proposed House District 86, advancing the Special Masters' interest in "nesting." Id. at 9 (Dec. 7, 2021). And, with this amendment, the Newport News/Williamsburg Airport would be, as its name suggests, in the same district as both Newport News and Williamsburg.

## VII. Fairfax County

Consistent with other amendments we have proposed, Districts 36 and 37 should be amended to preserve George Mason University as a community of interest, as shown in Figure 7 below and as advocated for other university communities above.

Figure 7. Proposed Amendment to Fairfax County


These minor change puts the entirety of George Mason University and its surrounding neighborhoods into District 37. To equalize population, the commercial area around Fair Oaks has been moved into District 36, which has the added benefit of keeping more of that Census

[^37]Designated Place together. See "Fair Oaks," UVA Data, Map of Virginia Census Designated Places (accessed Dec. 14, 2021); ${ }^{39}$ see also "Census Designated Places (CDPs) for the 2020 Census-Final Criteria," 83 Fed. Reg 56290 (Nov. 13, 2018) (a Census Designated Place is "closely settled, unincorporated community[y] that [is] locally recognized and identified by name.").


In closing, the Senate Democratic Caucus once again expresses our appreciation for the diligent efforts of the Special Masters to this point, the Court's adoption of a robust public comment process with public hearings, and the prompt publishing and indexing of public comments. Generally speaking, the Special Masters' draft Senate map presents compact districts that do a reasonable job reflecting the will of Virginia's voters. Inevitably, however, the Special Masters were not aware of certain local conditions unique to the Commonwealth, such as the importance of avoiding the pairing of two senior African American senators and civil rights icons, Senators Lucas and Spruill, in the same district. Nor were the Special Masters aware of every particular of Virginia's cultural geography. The Senate Democratic Caucus accordingly has proposed a modest number of targeted changes to ensure that the Senate map tracks Virginia's communities of interest to the greatest extent possible while still respecting the many other important factors that the Special Masters considered. We thank the Special Masters and the Court for giving due consideration to our comments and proposed amendments, and to the input of the public, following the release of the Special Masters' draft maps.

> Sincerely,
Rectand I Haslaw

Senate Majority Leader Richard L. Saslaw

CC: Speaker of the House of Delegates Eileen R. Filler-Corn
Senate Minority Leader Thomas K. Norment House of Delegates Minority Leader C. Todd Gilbert

[^38]| From: | cwgcdr@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting 69 and 71 |
| Date: | Wednesday, December 15, 2021 3:22:51 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your honors,

My husband and I have lived in James City County, 69th district, for fifty years. We know that despite being two different political entities, the city of Williamsburg and James City county are in many, if not most, ways a single community. The unusual joint school division, WJCC, and my home address are clear evidence of that community. We are best served by keeping the districts as much intact as is currently the case.

Clearly, Gloucester does not belong in the 69th, having its own clear identity as one of the several small communities identified by being on the opposite side of the river and having its own customs, culture, and institutions.

Please take this letter into consideration as you redistrict so that our representatives can be just that, ie. people who know our community and can communicate its needs to the General Assembly.

Thank you for your work on behalf of the Commonwealth and its residents.
Sincerely,
Corinne W. Garland
116 Crownpoint Rd
Williamsburg, VA 23185

| From: | S. CASNER |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Re: Redistricting |
| Date: | Wednesday, December 15, 2021 3:28:20 PM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY

 LINKS OR DOWNLOADING ANY ATTACHMENTSDear sirs,
I understand you are about to make decisions about changing the district lines here in Northern Virginia. You will violate a number of directives if you do this.

We have lived near Mount Vernon for a number of years and have a grave concern having heard that this area will be affected and drastically changed if your proceed with what I have heard your plan is. If this is put through it will effectively do away with the area we all have successfully and happily lived inmany many years. It will not be taken lightly. The community will
No longer exist. Is this what you are trying to accomplish?
The division of our community will be experienced in a number of ways. It will definitely have a most negative impact and will not bring forth good.

It is my hope that you will truly hear and respond appropriately by NOT CHANGING the district boundaries! Most sincerely,
(Mrs) Sue Casner

Sent from my iPhone

| From: | eve schwartz |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Albemarle County division |
| Date: | Wednesday, December 15, 2021 3:29:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Albemarle County should NOT be divided between two districts as indicated in the current proposal. Albemarle County/ Charlottesville City function as an entity-dividing that entity in half along a division as random as an interstate highway is illogical, if the purpose of the new map is to keep communities of interest together. We are currently divided up into separate districts for the purposes of gerrymandering-the new maps are supposed to rectify that.

Eve Schwartz
3308 Merrick Court
Keswick, VA. 22947

| From: | Loseph Baron |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Norfolk and CD2 |
| Date: | Wednesday, December 15, 2021 3:54:16 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Greetings. I write to oppose this current map outline which completely removes Norfolk from CD 2. As a lifelong resident of Norfolk from a military family and veteran, I do not believe splitting Norfolk and Virginia Beach ensures both communities are represented in a way that ensures our military and veterans maintain advocacy in Congress. Further, Norfolk and Virginia Beach are communities with mutual interests which become diluted by not having a member of Congress speaking for our communities with one voice. The communities of Suffolk and Isle of Wight have little in common with the cities of Virginia Beach and Norfolk. However, Norfolk and Virginia Beach have mutual interests of great importance. As previously stated, the military is deeply imbedded in both our communities. Our communities' economic interests are joined together with jobs, services, and workforces all entwined. Norfolk and Virginia Beach share the same shoreline of the Chesapeake Bay. In part, the Chesapeake Bay as an environmental resource is why the Eastern Shore, Virginia Beach, and Norfolk are communities who should have a single voice representing those concerns instead of any dilution of advocacy. As the map has been created, all of Norfolk would fall into the boundaries of 3rd Congressional District. While Hampton and Newport News are members of the Hampton Roads community, they make up most of the district and needs specific to Norfolk would be severely diluted. Previously, Norfolk was served by two Congressional representatives. It made sense since part of our community needs are closely aligned with those of parts of Virginia Beach and part of our community needs are akin to the needs in Hampton and Newport News. Norfolk has been well served by that model and I encourage you to seek to ensure we get the representation which makes sense to all of Norfolk and the region generally.

Joe
Joseph Baron
(757) 270-8205

| From: | Larkin Dudley |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on proposed maps |
| Date: | Wednesday, December 15, 2021 4:02:21 PM |



Separating Blacksburg from Radford and Christiansburg violates the common interest factor in redistricting. Please reconsider.

Thank you,
Larkin Dudley
902 Vista Terrace
Blacksburg, VA

| From: | Sarah Sussan |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Transcript of Testimony 12/15/21, Redistricting Map |
| Date: | Wednesday, December 15, 2021 4:07:40 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms, Abernathy,
Per our previous email,here is the transcript of my testimony today. Thanks for all of your help. Merry Christmas and good health to you and your staff.

To: The Supreme Court of Virginia
From: Sarah E. Sussan, Midlothian/Chesterfield
RE: Redistricting Maps released to the public for input
Format: Transcript of Testimony given before the Court Weds. December 15.
Good afternoon, Justices, Masters Grofman and Trende, Clerk of the Court, fellow residents of the Commonwealth. Thank you for this opportunity to address the Court. My name is Sarah Sussan. I reside in Midlothian in Chesterfield County.

To me, the first step in a successful plan is a strong foundation. In the case of a redistricting map that strong foundation should be built around existing county and city entities where residents are bound by government, and communities of interest where people are joined by social, economic and cultural interests.

On page 5 of their memo, the Masters say they began by, among other things 'MINIMIZING SPLITS IN COUNTIES AND CITIES," yet across the Commonwealth counties and cities have been ripped apart, not just tweaked to accommodate changes in our population. Specifically impacting my area, Chesterfield County is split East to West, adding
Chesterfield's western split to the vast rural areas of the $5^{\text {th }}$ district. Not only does this dilute the vote of our suburban population, it also wrests Chesterfield County away from its Community of Interest to the north.

Since we moved here 32 years ago the Huguenot Bridge has been rebuilt, and the Willey Bridge and Route 288 arteries have been added, connecting Chesterfield County northward to Henrico. The James River, while a significant natural feature, is not a boundary between these two areas but rather a connector, between communities that share interests and concerns. Our economic, educational, and cultural bonds have been strengthened by the REGIONAL COOPERATION in this RICHMOND METROPOLITAN AREA.

We share the same concerns about clean water and the environment, about urban sprawl and its impact on our economy, and about affordable housing for our burgeoning populations. Our hospitals and medical care are interdependent. We share the Governors schools, sports facilities and responsibility for our infrastructure. WE need to be able to elect representatives who will address the concerns of our suburban county as a whole, and our community of interest. The residents of the more rural or agricultural areas deserve to have their significant needs and concerns addressed by representatives THEY elect who can concentrate on issues directly impacting them.

To deny that Chesterfield and Henrico are a COMMUNITY OF INTEREST is folly; to sever Chesterfield County from Henrico in Congressional representation and link it with the more
rural southern and western areas is to deny BOTH COMMUNITIES the representation they deserve, and could get, if a new, fair map were drawn. I urge the Court to instruct the Masters to go back to the drawing board, to pay attention to the counties, cities and communities of interest and to develop a map that does not pack districts thereby muting minority voices, that does not dilute suburban votes, and does not totally BLOW UP a map that could have been tweaked! Thank you for listening.

Cindy Sussan
Cindy.Sussan@gmail.com
804-543-4409
Texting me is usually faster!

| From: | Mike Hatfield |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Map - 69th House District |
| Date: | Wednesday, December 15, 2021 4:11:09 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

District lines should be drawn to create boundaries that are "compact and contiguous" establishing common bonds within each district for the most effective representation of its citizens. But the proposed map separating the City of Williamsburg from Lower James City County would break longstanding associations of these areas in terms of history, transportation, education, business and communications. These two neighborhoods should NOT be separated in your final map. They should both be a part of the Hampton Roads delegation and be planted together in the new 69th District.

Thanks for your consideration,
Mike Hatfield
James City County

| From: | Maureen Kennedy |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, December 15, 2021 4:12:53 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a resident of Goochland County.
Thank you for being open to the views of the public.
I'm sure this is not an easy task but I am concerned that my community will be split according to the draft map presented.
Goochland County, for us, has been a part of the greater Richmond metro area. That is one of the reasons we love living in Goochland Co. The new CD map places us with communities that are not a part of the Richmond metro area. The Northern Neck is rather remote, with very different needs than our suburban/metro area. We commute via Route 288 to friends in Powhatan \& Chesterfield frequently. We all share the same economic \& social life of Richmond.
Is there a way to keep us united?
Thank you,
Maureen Kennedy
Sent from my iPhone

| From: | $\underline{\text { Lynne Gassner }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep Stafford with counties to the east, south, or west |
| Date: | Wednesday, December 15, 2021 4:34:56 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because l-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Sincerely,
Lynne Gassner

Hello and good afternoon:

My name is Patricia Heidelmark and I live at 1216 Providence Knoll Drive in North Chesterfield. I am a retired public school administrator and currently serve as the HOA president in a community of 175 homeowners off of Reams Rd., which is snuggled between Courthouse Rd and Providence Rd. in North Chesterfield. I would say we are a typical suburban neighborhood, developed in 2005 and composed of villas, cottages and townhomes.

I am here today to address your draft map of the Congressional Districts, which has gutted my District, the 7th Congressional District and moved it to a completely new part of the state. The 7th District, or as we call it, the heart of Virginia, has literally disappeared! Why demolish the 7th as we now know it? What were the issues....problems that required, as they say, for you to "throw the baby out with the bath water"? As a constituent, I feel like we were just thrown one way or another haphazardly to meet some magic number close to 784,000 with NO thought as to who those 784,000 folks are and what their needs are. We as constituents need to understand, as none of this makes any sense! All we see is that you have decimated our "communities of interest".

It is interesting that when one types in my address and zip code when ordering on-line (23236) it comes up as Richmond. I bring this up because North Chesterfield is a suburb of the city of Richmond. As is Henrico, a suburb of the city of Richmond. I believe they are known as Metro Richmond and we have so much in common. The 288
corridor links us. We are your suburban voters, who have different needs than city and rural voters.

Your map seems to ignore such "communities of interest" and instead splits Metro Richmond (Chesterfield and Henrico) into 3 districts,.,,splitting up the suburbs. By doing such you have diluted our voters' voices and power, especially those individuals of color. Are you trying to silence the suburban voters?

Your memo stated you were going to try to keep "communities of interest" together. You have not! What happened?

In the proposed map, the current 7th district is cut up into four new districts. Why? For instance, some folks who reside in Goochland are now in the same District as the Northern Neck? Is that their communities of interest? NO!

In my case, my communities of interest are NOT Emporia or Petersburg. Do I ever travel to those cities for work, shopping, cultural events or recreation? NO! My communities of interest, living in North Chesterfield, remain Henrico, Short Pump, the city of Richmond, Carytown, Midlothian and Chesterfield. The social circle with whom I volunteer and work with is now in the 5th district. I am now in the 4th.

Central Virginia has had its own Congressional District for decades for a reason. It has its own identity, its own needs, its own strengths. We are a suburban community who will now be thrown into
districts that are largely rural and our voices will be lost. You are proposing to take away our identity.....the heart of Virginia. We deserve to have someone representing us who understands our needs. Please keep North Chesterfield and Henrico, as communities of interest together. Please re-examine your decision as to why it was necessary for the 7th to be cut up and thrown away.

One last comment and observation:

I find it interesting that the male incumbents seem to have been protected in this proposed map, while all female incumbents were negatively affected by this process. An observation that is unsettling for many reasons. I encourage you to re-examine such glaring mis-steps, so as to not be misconstrued as misogynistic.

Thank you for the opportunity to comment.

| From: | Vlad Ovchynnikov |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Copy of the comments on the proposed Congressional map |
| Date: | Wednesday, December 15, 2021 4:48:01 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thanks again for the opportunity to speak. Please find the copy of my remarks below.
Regards,
Vladyslav Valeriyovich Ovchynnikov
Sterling, VA

Honorable Justices,

Thank you for the opportunity to comment. My name is Vladyslav Ovchynnikov, I live in Loudoun County, have lived here for 20 years, and I'm serving on the county's Transit Advisory Board. I'm a first generation American, and I feel very at home here. Immigrants like me constitute almost a quarter of the population of the county. It is very diverse: $20 \%$ Asian, 14\% Latino, 8\% Black.

We are a part of the Northern Virginia region. Contrary to the masters' memo, the main direction of commute is West to East, towards Fairfax and District of Columbia. Many of my friends and coworkers live in Fairfax, Prince William Counties, or Arlington. I've commuted to Fairfax for years. We are in Prince William at least monthly. My dentist is in Reston. Our Russian grocery store is in Herndon. Our swimming league spans Loudoun, Prince William, and Fairfax Counties.

The way the map is drawn separates us from the rest of Northern Virginia, and joins us with counties all the way to Central Virginia. It's wrong. There is no community of interest that encompasses the district as drawn. I'm not proud of my ignorance, and I'm working to rectify it - but I couldn't name counties in the proposed district when I first saw the map. I have never been to Rappahanock, Madison, Greene or Orange Counties. I've only been to Albemarle once - as a tourist. I struggle to understand what logic puts us in one district. I don't know or understand the needs and concerns of people in these counties, and I doubt that they know or understand my needs and concerns. If we are represented by a single Congressperson, she or he will struggle to balance our interests, and one part will always feel unheard and ignored.

Also, why is Albemarle split and separated from Charlottesville? I'm certain they would
much rather stay a part of their region than be joined with Northern Virginia.
In closing, I strongly oppose the shape of the district as proposed. It spans regions, splits communities of interest, it dilutes the power of Asian and Latino vote. It dilutes the power of foreign-born voters. Loudoun county should be in a district that is entirely or mostly in Northern Virginia.

| From: | $\underline{\text { Lisa Richard }}$ |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting maps - reconsider plans for Mount Vernon |
| Date: | Wednesday, December 15, 2021 4:53:40 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of the 22308 zip code in the Alexandria/Mount Vernon portion of Fairfax County, I urge you to reconsider the way the proposed redistricting maps have been drawn for the Mount Vernon area. This area is a long-standing area of interest whose communities are split in illogical ways on the proposed maps, dividing communities, school pyramids, and supervisory districts that share infrastructure and institutions. Mount Vernon is not named as a community of interest and stands to suffer substantially from redrawn maps that do not take into account our shared interests and needs. Please take the time to become informed about this community before making decisions that can work to our detriment.

Please heed the input you are receiving from us and make adjustments to preserve the integrity of this vibrant community.

Sincerely,
Lisa Richard

| From: | Ernie Wittich |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting - District 34 |
| Date: | Wednesday, December 15, 2021 5:16:36 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ladies and Gentlemen:
It is my view that someone without any practical understanding of the geography or neighborhoods in my area placed my home in District 34. While my neighbor LITERALLY across the street from my home was place in District 35. If you look at my home (Carrleigh Parkway) on the map you can simply see a contrived carved out area. I request you put my home in the District that is most commonly aligned with Burke and West Springfield - NOT Mt. Vernon.

Here is a link to the map. Go to "District 34"

## https://www.virginiaredistricting.org/legdistricting/comments/plan/514/1

Please let me know if you have questions.
Thanks, Ernest S. Wittich
erniewittich@verizon.net
703-963-8218 cell

| From: | $\frac{\text { Matt Lawless }}{\text { Redistricting }}$ |
| :--- | :--- |
| To: | $\underline{\text { Town Council }}$ |
| Cc: | RE: Public Comment on 12/17 public hearing |
| Subject: | Wednesday, December 15, 2021 5:33:41 PM |
| Date: | image001.png <br> Attachments: <br>  <br>  |
|  |  |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good afternoon Clerk and Special Masters,

Please accept this written comment from the Town of Scottsville, town staff writing on behalf of Mayor Ronald Smith and Vice Mayor R. Daniel Gritsko, with our apologies for delay and regret that the public hearing on Friday is fully booked. I am Matthew Lawless, town administrator.

Our comment concerns Congressional Districts 1 and 5, Senate Districts 10 and 11, and House Districts 55 and 56. The mapping and demographic concern is the same: that the Town of Scottsville not be divided, but rather preserved in one district as a community of interest.

The town limits are about 1.5 square miles, with a 2020 Census population of 524. Originally Monacan land and first called Scott's Landing by settlers, our town served as the first courthouse and seat of Albemarle County. The Town was chartered in 1818 and grew with the commerce along the James River. In 1830, a boundary adjustment took in 32 acres of Fluvanna County, but Fluvanna did not cede the land to Albemarle. Scottsville remains one of several Virginia towns with territory in multiple counties.

In the present district maps, the entire town is in CD-5 and HD-58, but the Fluvanna County line splits Senate districts.

The Fluvanna County portion of the town has only about 15 houses and perhaps 30 residents, negligible for the math of population deviation. The community of interest principle is most important here.

We claim a small point of privilege, that towns should be preserved in the same district and not split. The Special Masters' memo to the Court highlights one of the guiding principles of the work, that cities and counties ought not to be broken up by districts. The memo is silent on the subject of towns. A town is a community of interest, and we believe this interest justifies a small deviation of districts across the Albemarle/Fluvanna line.

In the proposed Congressional map, District 5 contains the larger part of Scottsville, and we urge the inclusion of the small Fluvanna portion into District 5, not District 1 as currently shown.

In the proposed Senate map, District 11 contains the larger part of Scottsville, and we urge the
inclusion of the small Fluvanna portion into District 11, not District 10 as currently shown.

In the proposed House map, District 55 contains the larger part of Scottsville, and we urge the inclusion of the small Fluvanna portion into District 55, not District 56 as currently shown.

We claim that the law supports maintaining the entire town in one district. Please consider assigning the small Fluvanna portion of Scottsville to the same district as the larger Albemarle portion.

Thank you for all of your diligent efforts on this special project.

Very respectfully,

Matt Lawless
Scottsville Town Administrator
Office: 434-286-9267
Web, Facebook, Twitter



From: Matt Lawless
Sent: Wednesday, December 15, 2021 4:49 PM
To: redistricting@vacourts.gov
Cc: Town Council [TownCouncil@scottsville.org](mailto:TownCouncil@scottsville.org)
Subject: Public Comment on 12/17 public hearing

Good afternoon Clerk of Court,

Please add me to your list for public comment on the Dec. 17 public hearing for legislative district maps. The Mayor of Scottsville asked me to enter a comment.

My name is Matthew Lawless, town administrator of Scottsville, 401 Valley Street.

The comment concerns HD $55 \& 56$, and Senate District $10 \& 11$. Our request is that the entire town be in the same district, rather than be split along the Albemarle/Fluvanna County line.

Respectfully,

Matt Lawless
Scottsville Town Administrator
Office: 434-286-9267
Web, Facebook, Twitter


## Legend

| Rural Areas (RA) | Entrance Comidor Overiay District |
| :---: | :---: |
| Vilage Residentlal (VR) | $\square$ Hstoric Overiay District |
| Dountown Residental (DR) | AMM 100 Year Floodplan |
| Putic (P) |  |
| Commerda (C) |  |
| Light Industiral (L) |  |



| From: | The McGugans |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting input |
| Date: | Wednesday, December 15, 2021 5:48:51 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Moving the 7 th congressional district 50 miles north seems like the definition of gerrymandering.
We urge you to not approve this change.
Sincerely,
Ray and Margaret McGugan
11424 Poplar Ridge Rd.
N. Chesterfield, VA 23236
(7th congressional district)

| From: | Lack Thomas |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA Redistricting Comments |
| Date: | Wednesday, December 15, 2021 7:13:24 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
My name is Jackson Thomas, I live at 206 Nelson Avenue, Williamsburg, VA 23185, and I have comments on the proposed legislative districts for the state legislature, specifically house districts 69 and 71.

As a current and continuing resident of Williamsburg, this proposed map is directly opposed to the shared interests of Williamsburg and lower James City County. These two communities rely on each other for coordination among many government initiatives and agencies, and they share many of the same resources like Transportation and Health Care. Additionally, by splitting Williamsburg from Hampton Roads, the map takes a longstanding history of these two vital areas sharing the same district, and instead splits them apart to what will almost surely be negative repercussions across the communities. These two areas are far more alike than Williamsburg and the proposed addition of Gloucester. Therefore, I ask that Williamsburg be added back to the 69th district and that Gloucester be removed from the district.

Sincerely, Jackson Thomas

| From: | Elaine Braverman |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on the proposed Special Masters maps |
| Date: | Wednesday, December 15, 2021 7:21:57 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

In the December 15 public hearing a number of those providing comments requested that lines be redrawn to ensure their elected representative could be reelected. I have followed Virginia's redistricting reform efforts for about 5 years, including virtual attendance at most of the proceedings of the Virginia Redistricting Commission. I have provided comments myself during this time.

One of the most potent arguments for an independent Redistricting Commission was to end the process of politicians choosing their voters by manipulating districts. Politicians are not entitled to "their" districts. They are not entitled to reelection by a minority of the electorate. Let them fight harder and fairer for the privilege of representing Virginians.

I ask that incumbency not be a consideration in creating maps, and that the requests to redraw maps for this purpose not be taken into account in any revisions the Court may undertake.

Thank you for the Court's efforts in this important matter,

Elaine Braverman
Arlington, VA

| From: | Elly Tucker |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting |
| Date: | Wednesday, December 15, 2021 7:58:00 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you for taking comments regarding maps in Virginia. I am disappointed that the Map Masters have decided to split Albemarle into 2 parts. It is important to keep Communities of Interest together. Albemarle is a community of interest. We share history, geography, traditions, celebrations, and tragedies.
Please keep Albemarle together.
Thank you,
Elly Tucker
111 Reynard Dr.
Charlottesville VA. 22901

| From: | Cheryl Saggers |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Prince William County Plan for Redistricting |
| Date: | Wednesday, December 15, 2021 8:50:30 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like the Prince William County plan to be more fair to Republicans. I recommend the 3 Fairfax County precincts be removed and the 3 northern Spotsylvania counties added( Riverbend, Elis Ford, and Wilderness)


Do not split the Mount Vernon community. . You are destroying our family. Leave it the way it is and has always been... a proud, congenial, intelligent, caring and patriotic neighborhood!

| From: | Tom Kotula |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Stafford redistricting |
| Date: | Wednesday, December 15, 2021 9:43:58 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello-
I am writing in regards to the proposed redistricting of Stafford County; I disagree with this proposal!
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia.
Please take my concern into your consideration.
Thank you,
Stafford County Resident
Tom Kotula
Wood Landing Rd, Fredericksburg VA, 22405

| From: | R.W. Palmer |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting of Stafford County |
| Date: | Thursday, December 16, 2021 3:42:00 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

--<br>Rohn Palmer

| From: | cherylsterry@aol.com |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Concerned about redistricting proposals |
| Date: | Wednesday, December 15, 2021 9:47:17 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in the community called Mount Vernon Hills, just a mile from the Mount Vernon Estate. As you may know, there are Five Farms that are part of Historic Mount Vernon. My home is on the Muddy Hole Farm, and the street is called Vernon Avenue. Vernon Avenue is off of Maryland St. which joins Mount Vernon Highway (235) and Old Mount Vernon Road. The Mount Vernon High School also borders on Maryland Street. I have lived in the Mount Vernon area for over 35 years. It is with great pride that I can say I am from Mount Vernon. The properties on George Washington's Five Farms most definitely need to be together, we share educational institutions, shopping, parks, churches, recreation centers, etc. People on the Five Farms share none of these with other communities that are being contemplated to join with parts of Mount Vernon. I have much in common with my neighbors in Mount Vernon and no commonality with residents of other communities in Northern Virginia, such as Springfield. There was an attempt in the past to clarify our postal address by changing it from Alexandria to Mount Vernon. Please don't sever our historic community: one of the oldest if not the very oldest in Fairfax County. After all, we have historic roots to our first President dating back hundreds of years.

Please correct your inadvertent error by reuniting Mount Vernon.
Cheryl Terry
8619 Vernon Avenue
Alexandria [Fairfax County]
Virginia 22309
Sent from the all new AOL app for iOS
=============================

| From: | Hkf Fkh |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Keep Mount Vernon in Mount Vernon. |
| Date: | Wednesday, December 15, 2021 9:48:44 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Mount Vernon. It has been our pride and joy to be a part of the Mount Vernon community. This redistricting move that severs our community and merges us with a completely different community is totally devastating to me and my community. Please keep all of Mount Vernon in Mount Vernon. Our best interests are served by keeping the Mount vernon community together.
Hardeep Francis
9317 Boothe St
Alexandria va 22309
7033608740

| From: | Lawrence Alpern |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Louisa County |
| Date: | Wednesday, December 15, 2021 9:50:05 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This is an absurd change in districts. We lose every representative that we currently have now in Louisa County.
Abigail Spanberger was terrific and she loses her job because of residency rules. Put Louisa County district lines back to where they currently are.
Lawrence Alpern!

| From: | c francis |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting at Mount Vernon |
| Date: | Wednesday, December 15, 2021 10:07:52 PM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The new proposed redistricting proposal disrupts stable communities. I am opposed to splitting the historic Mount Vernon community.

Cleveland Francis, Jr
7033608740

```
From:
To:
Subject:
Date:

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

December 15, 2021

\section*{Muriel-Theresa Pitney}

Clerk of Court
Supreme Court of Virginia
100 North Ninth Street, 5th Floor
Richmond, Virginia 23219-1315

\section*{Dear Madam Clerk:}

My name is Roy L. Perry-Bey, and I have been a resident of Virginia, for most of my life. During this time, I have served as a civil-right activist throughout Virginia, primarily with the Coalition for Equal Justice, Citizens of Hampton Roads March Against Poverty Campaign and the United Front for Justice. I have been on the front lines of issues like treatment of veterans, confederate statutes, housing discrimination, police brutality and voting rights throughout the Commonwealth.

I write to urge this Court to reject the voting mapssubmitted by the Special Masters because they sharply limit the number of majority-Black Senate and House Districts throughout Virginia. Since 2010, Virginia has had five majority-Black Senate Districts (out of forty) and ten majority-African American House Districts (out of ninety-eight). If approved, the Special Master's maps will reduce the number of Senate Districts to two, and the number of House Districts to five.

The harm to Virginia's African American communities that results from reducing majority-African American voting districts by more than half should be obvious. As those majority-minority Districts disappear, so too does the political power of Virginia's minority communities. And as someone who has devoted his life to ensuring equal justice for all, I must object to proposed maps that needlessly reduce these critical districts by greater-than fifty percent.

Virginia not only has a moral imperative to protect minority political power; it has a legal one as well. Section 2 of the Voting Rights Act prevents "a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). Such a "denial or abridgment" occurs if "the
political processes leading to nomination or election in the State or political subdivision are not equally open to participation" by members of a protected class "in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b).

Virginia's African American communities almost certainly satisfy the criteria necessary to trigger Section 2. They are "sufficiently large and geographically compact to constitute a majority" in several of the non-majorityminority districts. See Thornburg v. Gingles, 478 U.S. 30, 50 (1986). They are "politically cohesive." Id. at 51. And the "the white majorit[ies]" in these non-majority-minority districts "vote sufficiently as a bloc to enable" them "to defeat the minority’s preferred candidate." Id. Because this is the case, Virginia must include majority-minority districts.

In other words, there are great "reasons to believe" that more voting districts must have a greater percentage of minority population. See BethuneHill v. Va. State Bd. of Elections, 137 S. Ct. 788, 801-02 (2017). Compliance with the Voting Rights Act is a compelling interest. Id. at 801. To satisfy this compelling interest, the Court should reject the Special Master's proposed maps, thereby avoiding a likely Voting Rights Act violation.

\author{
Mr. Roy L. Perry-Bey Political \& Civil Rights Activist \\ United Front For Justice
}
(202) 798-9756

\section*{PRIVILEGED AND CONFIDENTIAL}

This communication, and any accompanying documents are confidential and privileged. They are intended for the sole use of the addressee. If you receive this transmission in error, you are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon this communication is strictly prohibited. Moreover, any such disclosure shall not compromise or waive the attorney-client, accountant-client, or other privileges as to this communication or otherwise. If you have received this communication in error, please contact me at the above email address. Thank you.
\begin{tabular}{ll} 
From: & Hampton Roads \\
To: & Redistricting \\
Subject: & HRBC input to Virginia Redistricting \\
Date: & Wednesday, December 15, 2021 10:29:55 PM \\
Attachments: & HRBClettercourt-ordered redistricting. docx \\
\hline
\end{tabular}

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello

Respect forwarding Hampton Roads Black Caucus written input with maps attached (see links below) and please post. Thank you for your support in advance.

God bless

Ronald Taylor
HRBC/President

Here are the links to the HRBC maps in DavesRedistricting.org, a site commonly used by the public to draw maps:
- Congressional: https://davesredistricting.org/join/94bc2da8-ac8e-4bc0-ba56-a89f1a8590a7
- State Senate: https://davesredistricting.org/join/4b63646b-595c-4f5f-94fc-98c2b2bfa899
- House of Delegates: https://davesredistricting.org/join/3b8f1c6b-3d81-4028-8b18-a52692b03de5


PO Box 2692Virginia Beach, VA 23450

December15, 2021

\author{
Muriel-Theresa Pitney \\ Clerk of Court \\ Supreme Court of Virginia \\ 100 North Ninth Street, \(5^{\text {th }}\) Floor \\ Richmond, Virginia 23219-1315
}

Dear Madame Clerk:
My name is Ronald Taylor, and I am the current President of the Hampton Roads Black Caucus. I write on behalf of our membership to comment on the state legislative maps proposed by the Supreme Court's special masters on December 8, 2021.We believe that these maps, if adopted in their current form, would represent a step backwards for Black representation in the Commonwealth of Virginia, which has already declined in recent elections after previous rounds of court-ordered redistricting. In the interest of offering constructive criticism rather than empty complaints, we have included with this letter proposed maps that do a better job of meeting our representational goals (see attached).

First, some recent history might be in order. In the 2011 redistricting cycle, Virginia's Third Congressional District was drawn to include a Black voting-age population (BVAP) of \(56.3 \%\); after court-ordered redistricting in 2016, the Third District's BVAP was deliberately dropped to \(47.27 \%\) with the portions of the district containing the heavily Black cities of Richmond and Petersburg reallocated to the adjacent Fourth District (which increased to BVAP \(39.68 \%\), still well short of a majority). In other words, a congressional map that originally featured one Black-majority district after legislative redistricting became a map with zero Black-majority districts after the federal court intervened. Thankfully, this has not affected Virginia's Black representation in the U.S. Congress where Congressmen Bobby Scott and Donald McEachin still proudly serve. Nonetheless, we provide our map that shows it is eminently possible to have a majority black Congressional district in the Commonwealth. Representative Scott is 75 years old, and while we'd be really happy if he remained in Congress for many years to come, we know the reality is that someone other than Representative Scott may very well serve the people of that district during this coming decade. Without him seeking that seat, we have serious doubts about whether his district as configured would still elect a Black member.

Unfortunately, court-ordered redistricting had a more deleterious effect in the General Assembly. The General Assembly in 2011 adopted a redistricting plan featuring twelve Black majority House of Delegates districts, a portion that came remarkably close to matching the proportion of Virginia's population that is Black. After years of litigation, however, those twelve districts-all of which featured BVAPsover 50\%-were ordered redrawn by the same federal court that previously ordered a redo of the
congressional map. Under a plan developed by one of the same special masters this Court is using now, BVAP was deliberately lowered in each of the challenged districts-districts originally drawn with a BVAP high enough to preserve the ability of the Black communities in each to elect their favored representatives. What was publicized as an effort to help the Black community only made it harder to elect Black representatives.

At the time, "experts" reassured us districts didn't need a BVAP over \(50 \%\) to elect Black representatives. Any Black person who grew up in the American South could have told you that was a laughable claim then, but it is no laughing matter anymore. The 2019 redistricting plan designed by special master Dr. Bernard Grofman has had a predictable effect: Black delegates have lost elections in districts that were deliberately made less Black.

In the most recent state elections, four Black Members of the House of Delegates were defeated in their campaigns for reelection, three of them in districts that were redrawn in 2019. In this most recent election, four incumbent Black legislators, comprising nearly a quarter of the Black Caucus in the House, were defeated for reelection. Two of those legislators were in districts that the federal court specifically asserted would retain Black representatives, writing, "Based on the data in the record, we further conclude that black voters in Districts 63 and 75 will continue to have a reasonable opportunity to elect candidates of their choice." The Black legislators representing Districts 63 and 75 lost reelection in November. Is this what progress looks like?

It should be clear by now that the state of Black representation in Virginia in 2021 is not good, but the special masters' maps would make the problem even worse. Currently, only five State Senate districts are home to voting-age populations that are more than \(50 \%\) Black. Perhaps unsurprisingly, four of these five districts align almost perfectly with the four represented by Black Senators (District 16 is the only Black-majority district represented by a white Senator). The connection is clear for anyone willing to see it: Black candidates have a better chance of getting elected in Black-majority districts, thereby enabling them to better represent the interests of Black communities in the state legislature. The pathway to greater Black representation is through the creation of more Black-majority districts.

The special masters' proposed State Senate map, however, takes us backwards. It only has twoBlack-majority districts, Districts 13 and 23. That's right-two out of forty, a mere \(5 \%\), in a state that is nearly \(19 \%\) Black according to the 2020 Census. \({ }^{1}\) It is entirely possible that if the special masters' map is adopted by this Court, there would be no Black members left representing residents of this Commonwealth in the Virginia State Senate. Back when Section 5 of the Voting Rights Act was still enforced, a plan like this would have been illegal; now, it is merely disrespectful. We have fought so hard for a seat at the table, and this plan would callously show us the door.

The special masters' proposed House of Delegates map fares no better. It features only five Black-majority districts out of 100 , matching the proposed Senate map's embarrassing \(5 \%\). The congressional map might be the worst of all, preserving the current post-redistricting status quo of zero Black-majority districts. So, to reiterate, under the 2011 legislative maps, there existed twelve Blackmajority House of Delegates districts, five State Senate districts, and one Congressional district for a total of eighteen. After successive rounds of court-ordered redistricting and the special masters' newest

\footnotetext{
\({ }^{1}\) U.S. Census Bureau, Virginia Adds More Than 600,000 People Since 2010, (Aug. 25, 2021), https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-censusdecade.html\#:~:text=Population\%20(up\%207.4\%25\%20to\%20331.4,or\%20More\%20Races\%2010.2\%25).
}
proposal, there would be five Black-majority House of Delegates districts, two State Senate districts, and zero congressional districts for a total of seven. From 18 districts with BVAPs sufficient to elect Black representatives to 7 in only five years!

Our maps actually move the ball forward in terms of Black representation. Our Senate map takes the number of Black-majority districts from four to five, none of which have a BVAP higher than \(53 \%\). Our House plan restores the same number of Black-majority districts, twelve, that we had after the 2011 redistricting cycle. Our plans demonstrate that it is possible to create up to seventeen Black-majority districts in the General Assembly, matching our previous peak. When better Black representation is possible, I don't know why we should have to settle for less.

The special masters apparently think that "opportunity districts," in which different minority group's aggregate to an outright majority of a district's voting population, are sufficient to protect Black representation. Their map does a pretty good job of creating such districts, but we know from history, both distant and recent, that the best way to protect Black representational gains is to create Blackmajority districts. The "opportunity district" experiment of the last decade has only resulted in backsliding. The current abysmal numbers in the General Assembly indicate we need to do more in our efforts to create districts where Black voters can elect people who will represent their interests, not less. The special masters' plans seem to see minority groups as interchangeable; we are not. Anyone who has paid the slightest attention to American politics knows that Black voters tend to vote more cohesively than Hispanics or Asians and often for different candidates, and yet these maps treat us as if we're all the same. There is sadly no guarantee that opportunity districts will result in the election of any Black representatives. This Court should revise the proposed plans to give Black voters representation commensurate with our voting strength.

To be clear, we are not asking the Court to create "safe" districts where Black voters constitute seventy or eighty percent of voters. We simply ask the Court to create more than five House of Delegates districts, more than two State Senate districts, and any congressional districts where Black voters constitute more than \(50 \%\) of the voting-age population (and ideally with BVAPs even higher than that, given the disappointing results of the most recent election indicate a bare majority is not always enough).We think a good target for the number of Black-majority districts would be 18 across all three maps, the highest number we had previously achieved in a state that has only grown more diverse in the years since.

Thank you for reviewing our proposed maps and taking our concerns seriously.

\author{
Sincerely,
}

Ronald Taylor
Hampton Roads Black Caucus/President
\begin{tabular}{ll} 
From: & Amanda Hardgrave \\
To: & Redistricting \\
Subject: & Mount Vernon Redistricting \\
Date: & Wednesday, December 15, 2021 10:43:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Special Masters,}

Good evening. I live in the Stratford Landing Community and object to the decision to redistrict my community with the distant communities of Woodbridge and Springfield. These are urban communities, closely situated to I-95 with both small and large business interests. Mount Vernon is a quiet bedroom community with hardly any major businesses, industrialization, or heavy commerce. We are a quaint and diverse middle class community that will become voiceless if parceled with our southern neighbors.
Please reconsider your decision and keep us within the 34th Senate district.

Regards,

Amanda Hardgrave
Waterford Rd, Alexandria Va 22308
Sent from my iPhone
\begin{tabular}{ll} 
From: & Leanne Kasai \\
To: & Redistricting \\
Subject: & Public comment \\
Date: & Wednesday, December 15, 2021 11:17:32 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am against the redistricting proposal. The Fort Hunt and Stratford Landing communities and all in zip code 22308 need to stay together. I am against the proposal to split the Mt Vernon area, connecting the Mt Vernon estate with Quantico and Fredericksburg, and splitting school districts for Hayfield and Mt. Vernon.
I am against the proposal to make Springfield and Franconia the hubs.
I am 100\% AGAINST this proposal.
Sincerely-
Jeanne Kasai, Bradgate Road, 22308

Sent from my iPhone

\author{
Christopher B. Seaman \\ 7325 Millburn Court \\ Crozet, VA 22932 \\ cbseaman@gmail.com
}

December 16, 2021
Supreme Court of Virginia
c/o Muriel-Theresa Pitney, Clerk of Court
100 North Ninth Street, 5th Floor
Richmond, Virginia 23219-1315
Redistricting@vacourts.gov
Dear Chief Justice Lemons and Justices of the Supreme Court of Virginia:
My name is Christopher B. Seaman, and I am a resident of Albemarle County, Virginia. I am also a Professor of Law and Director of the Frances Lewis Law Center at Washington and Lee University School of Law in Lexington, Virginia, where one of my areas of teaching and scholarship is Election Law and Voting Rights. However, this letter reflects solely my own views.

Pursuant to Rule 4(b) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Virginia Constitution, I hereby offer the following public comments on the proposed redistricting map for Virginia's representatives to the United States House of Representatives prepared by Special Masters Bernard N. Grofman, Ph.D. and Sean Trende.

On balance, the Special Masters' proposed Congressional redistricting plan ("the Plan") appears to comply with relevant federal and state law, including Article I, § 2 and the Fourteenth and Fifteenth Amendments to the U.S. Constitution; the federal Voting Rights Act of 1965 ("VRA"), as amended, 52 U.S.C. \(\S 10101\) et seq.; Article II \(\S \S 6\) to 6 -A of the Constitution of Virginia; Virginia Code §§ 24.2-302.2 to 304.04 and § 30-399(E); and relevant court decisions interpreting these provisions. Regarding population equality, \({ }^{1}\) the Plan has a maximum population deviation of less than \(0.4 \%\) between districts, which seems acceptable in light of the Plan's compliance with statutory requirements and other legitimate objectives, including compactness, contiguity, preserving communities of interest, and consideration of political boundaries. \({ }^{2}\)

Considering racial and ethnic fairness and compliance with the federal Voting Rights Act, \({ }^{3}\) the Plan preserves two majority-minority districts (District 3 and District 4), which have a black

\footnotetext{
\({ }^{1}\) See Va. Code § 24.2-304.04(1) ("Districts shall be so constituted as to give, as nearly as practicable, representation in proportion to the population of the district."); see also Wesberry v. Sanders, 376 U.S. 1, 8, 18 (1964) (holding that "while it may not be possible to draw congressional districts with mathematical precision," the equal representation standard in Article I, \(\S 2\) of the U.S. Constitution requires district to be as equal in population "as nearly as is practicable"); Kirkpatrick v. Preisler, 394 U.S. 526 (1969) ("[T]he command of Art. I, § 2, that States create congressional districts which provide equal representation for equal numbers of people permits only the limited population variances which are unavoidable despite a good-faith effort to achieve absolute equality, or for which justification is shown.").
\({ }^{2}\) See Karcher v. Daggett, 462 U.S. 725, 740-41 ("We are willing to defer to state legislative policies, so long as they are consistent with constitutional norms, even if they require small differences in the population of congressional districts. Any number of consistently applied legislative policies might justify some variance, including, for instance, making districts compact [and] respecting municipal boundaries.... (citations omitted)).
\({ }^{3}\) See Voting Rights Act § 2, 52 U.S.C. § 10301; see also Va. Code § 24.2-304.04(3) ("No district shall be drawn that results in a denial or abridgement of the right of any citizen to vote on account of race or color or membership in
}
voting age population of \(44.5 \%\) and \(45.3 \%\), respectively. \({ }^{4}\) These districts are very similar to those adopted by a three-judge federal court in 2016 as a remedy to racial gerrymandering in the previously-drawn Congressional redistricting plan, \({ }^{5}\) and thus are likely to pass muster under any new challenge under the Equal Protection Clause of the Fourteenth Amendment and/or Section 2 of the Voting Rights Act. \({ }^{6}\)

On partisan fairness, the Plan, "when considered on a statewide basis," does not "unduly favor or disfavor any particular party." \("\) According to the nonpartisan Princeton Gerrymandering Project, the Plan receives a grade of A for Partisan Fairness. \({ }^{8}\) It projects that 5 districts are likely Democratic (Districts 3, 4, 7, 10 and 11); 4 districts are likely Republican (Districts 1, 5, 6, and 9), and two districts are in the competitive range of between \(46.5 \%\) and \(53.5 \%\) of the two-party vote share (Districts 2 and 10). This accurately reflects the overall statewide partisan balance from 2016 through 2020, where the Democratic Party's candidates have had an approximately \(10 \%\) advantage in statewide races compared to the Republican Party's candidates. \({ }^{9}\) Similarly, the nonpartisan Virginia Public Access Project (VPAP) organization finds that the Special Masters' Plan has 4 districts than are "strong Democratic," 1 district that is "lean Democratic," 1 district that is a "Tossup," 3 districts that are "lean Republican," and 2 districts that are "strong Republican." \({ }^{10}\) Again, this accurately reflects Virginia's status as Democratic-leaning but competitive between the two major political parties on a statewide basis.
a language minority group. No district shall be drawn that results in a denial or abridgement of the rights of any racial or language minority group to participate in the political process and to elect representatives of their choice. A violation of this subdivision is established if, on the basis of the totality of the circumstances, it is shown that districts were drawn in such a way that members of a racial or language minority group are dispersed into districts in which they constitute an ineffective minority of voters or are concentrated into districts where they constitute an excessive majority. The extent to which members of a racial or language minority group have been elected to office in the state or the political subdivision is one circumstance that may be considered. Nothing in this subdivision shall establish a right to have members of a racial or language minority group elected in numbers equal to their proportion in the population.").
\({ }^{4}\) Report of Special Masters Bernard Grofman, Ph.D. and Sean Trende to the Chief Justice and Justices of the Supreme Court of Virginia, at 17 (Dec. 7, 2021), available at https://www.vacourts.gov/courts/scv/ districting/memorandum_re_va_redistricting_2021.pdf (hereinafter "Special Masters' Report").
\({ }^{5}\) See Personhuballāh v. Alcorn, 155 F. Supp. 3d 552, 556 (E.D. Va. 2016) (adopting a plan drawn by Dr. Grofman that resulted in a black voting age population of \(45.3 \%\) in District 3 and \(40.9 \%\) in District 4).
\({ }^{6}\) I agree with the Special Masters' assessment that, given the supermajority of Democratic voters in both Districts 3 and 4 and that Black voters will likely comprise a majority of voters in the Democratic primaries, both of these districts will continue to offer Black voters the opportunity to elect the representatives of their choice to Congress and thus comply with Section 2 of the Voting Rights Act. See Special Masters' Report, supra note 4, at 14-15.
\({ }^{7}\) Va. Code § 24.2-304.04(8).
\({ }^{8}\) Princeton Gerrymandering Project, Redistricting Report Card - Virginia 2021 Special Masters’ Draft Congressional Map, https://gerrymander.princeton.edu/redistricting-report-card?planId=recOUnE4ZKjEyaVyJ (last modified Dec. 9, 2021).
\({ }^{9}\) Special Masters' Report, supra note 4, at 19. However, this figure is somewhat skewed by the 2018 U.S. Senate Race, where the Democratic candidate won by a historically large margin of \(16 \%\). See Va. Dep't of Elections, 2018 November General Official Results - United States Senate, https://results.elections.virginia.gov/vaelections/2018\%20November\%20General/Site/Congress.html (last visited Dec. 15, 2021) Excluding this result, the statewide margin of victory for Democratic Party candidates ranges from 10\% (2020 Presidential race) to less than 1\% (2013 Attorney General race).
\({ }^{10}\) Virginia Public Access Project, Latest Statewide - Special Masters, https://www.vpap.org/redistricting/ plan/2021-uscong-vasupremecourt-statewide-1/ (last visited Dec. 16, 2021). VPAP classifies a district as "strong" if the party had a greater than \(20 \%\) point margin in the 2016 Presidential vote, "lean" if the party had between a \(5 \%\) and

The Special Masters' proposed congressional map also largely preserves communities of interest, \({ }^{11}\) with one prominent exception that I discuss in detail below. Notably, the Plan recognizes the historical, geographical, and cultural divide of the Blue Ridge Mountains by keeping District 6 in the Shenandoah Valley, and the core of District 9 remains in Southwest Virginia. It also keeps Districts 2 and 3 in the Tidewater region, Districts 8 and 11 in the urban ring of Northern Virginia, and District 4 in the Richmond area. District 7 is a newly-created district in the outer suburbs/exurbs of Northern Virginia. Districts 1, 5, and 10 are less confined geographically, as each takes in multiple different regions of Virginia. \({ }^{12}\)

My major objection is the Plan's proposed division of a clear community of interest in the Charlottesville/Albemarle area, where I live. Specifically, the proposed Plan bisects Albemarle County-which surrounds the City of Charlottesville-into two districts, placing voting precincts to the north of Charlottesville into District 10, which runs up to Loudon County and the Maryland border, while Charlottesville and the rest of Albemarle County are in District 5, which travels down to Danville and the North Carolina border. "Communities that are split between districts often view their voice as diminished." \({ }^{13}\) In short, the Special Masters' Plan dilutes our community's voice by ripping it in half, with one joined to a Northern Virginia-centric district, while the other is lumped in with Southside Virginia-a region that has no economic, geographic, or cultural connections with our community.

The Special Masters' Report identifies factors such as "'shared broadcast and print media, public transport infrastructure, and institutions such as schools and churches' as part of its definition of a community of interest." \({ }^{14}\) Other courts have found "the existence of a community of interest where residents share substantial cultural, economic, and political ties." \({ }^{15}\) In contrast, the U.S. Supreme Court declined to find a community of interest in a Georgia congressional district that consisted of four discrete urban centers, connected only by hundreds of miles of rural counties and swamps. \({ }^{16}\)

By any and all of these measures, Charlottesville and Albemarle represent a community of interest. Notably, the University of Virginia ("UVA") plays a major role in both economic and cultural life within our community. UVA and its Health System is the largest employer in the

\footnotetext{
\(20 \%\) margin in the 2016 Presidential vote, and "tossup" if the margin was within \(5 \%\) in the 2016 Presidential vote. Id.
\({ }^{11}\) See Va. Code § 24.2-304.04(5) ("Districts shall be drawn to preserve communities of interest. For purposes of this subdivision, a 'community of interest' means a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests. A 'community of interest' does not include a community based upon political affiliation or relationship with a political party, elected official, or candidate for office.").
\({ }^{12}\) By "regions of Virginia," I refer to the demographic regions identified by the Weldon Cooper Center for Public Service at the University of Virginia. See Weldon Cooper Ctr., Virginia's Demographic Regions, https://demographics.coopercenter.org/virginia-regions (last visited Dec. 16, 2021).
\({ }^{13}\) Favors v. Cuomo, No. 11-CV-5632 DLI RR, 2012 WL 928216, at *12 n. 12 (E.D.N.Y. Mar. 12, 2012), report and recommendation adopted as modified, 2012 WL 928223 (E.D.N.Y. Mar. 19, 2012) (quoting affidavit of Dr. Nathaniel Persily).
\({ }^{14}\) Special Masters' Report, supra note 4, at 6 (quoting Bush v. Vera, 517 U.S. 952 (1996)).
\({ }^{15}\) Diaz v. Silver, 978 F. Supp. 96, 123 (E.D.N.Y. 1997), aff'd sub nom. Acosta v. Diaz, 522 U.S. 801 (1997) (citing Wilson v. Eu, 823 P.2d 535 (Cal. 1992)).
\({ }^{16}\) Miller v. Johnson, 515 U.S. 900 (1995).
}
area. \({ }^{17}\) Faculty, staff, and students who work or go to school at UVA live in both Charlottesville and Albemarle. In fact, the Plan would physically separate UVA itself by placing the UVA Research Park into the 10th District, \({ }^{18}\) while the Grounds and Medical Center would be located in the 5th District. On game days for football and basketball, it would be possible to park and tailgate in the 10th District, then walk to Scott Stadium or John Paul Jones Arena and cheer on the Wahoos in the 5th District.

There is also shared broadcast and print media in Charlottesville and Albemarle. The Charlottesville Nielsen DMA (Designated Market Area) consists of NBC (WVIR-TV), CBS and Fox (WCAV), ABC (WVAW), and PBS (WHTJ) affiliates that broadcast to Charlottesville and Albemarle, as well as two other nearby counties. \({ }^{19}\) The Daily Progress is the sole daily newspaper for Charlottesville and Albemarle and covers local news, politics, and events in the community. \({ }^{20}\) C-VILLE Weekly is a weekly newspaper that covers news, arts, politics, and cultural events, with over 23,000 copies delivered weekly in high-traffic areas all over Charlottesville and Albemarle. \({ }^{21}\)

Transportation and infrastructure also help create a community of interest in Charlottesville and Albemarle. Charlottesville Area Transit (CAT) runs numerous bus routes that connect Charlottesville and UVA with locations in Albemarle County, including shopping and employment centers like Stonefield, Fashion Square Mall, Albemarle Square, Rio Hill and 5th Street Station. \({ }^{22}\) Jaunt provides transit service from Albemarle communities like Earlysville, Crozet, Keswick, Scottsville, and 29 North to Charlottesville. \({ }^{23}\) The Charlottesville Albemarle Airport (CHO) is located in Albemarle County in the proposed 10th District, while the Charlottesville Amtrak Station (CVS) and Charlottesville Greyhound bus terminal are located in the City of Charlottesville in what would be the 5th District.

On an even more local level, the rapidly-growing bedroom community of Crozet, \({ }^{24}\) located in western Albemarle County just north of Interstate 64, is severed in two by the proposed Plan by placing the Crozet Precinct into the 10th District and the Brownsville and Mechums River Precincts into the 5th District. Crozet is a census-designated place that has been designated as a "growth area" by Albemarle County and has dramatically increased in population over the past two decades, from 2,820 in 2000 to 9,224 as of 2020. \({ }^{25}\) The Crozet Community Advisory Committee has promulgated a Master Plan that represents the community's 20-year vision for land

\footnotetext{
\({ }^{17}\) C-VILLE Weekly, The Big Fifty: 50 Largest Employers in Charlottesville and Nearby Counties, https://www.c-ville.com/big-fifty-50-largest-employers-charlottesville-nearby-counties (June 1, 2018). Another large hospital system, Martha Jefferson, is also located in Charlottesville. Id.
\({ }^{18}\) The UVA Research Park is located at 4040 Lewis and Clark Drive, Charlottesville, VA 22911.
19 Wikipedia, List of United States Television Markets, https://en.wikipedia.org/wiki/ List of United States television markets (last visited Dec. 16, 2021).
\({ }^{20}\) The Daily Progress, About Us, https://dailyprogress.com/site/about.html (last visited Dec. 16, 2021).
\({ }^{21}\) C-VILLE Weekly, FAQ, https://www.c-ville.com/faq/ (last visited Dec. 16, 2021).
\({ }^{22}\) City of Charlottesville, Transit, https://www.charlottesville.gov/470/Transit (last visited Dec. 16, 2021).
\({ }^{23}\) Jaunt, Albemarle County, https://ridejaunt.org/services/?from-location=albemarle\&to-location (last visited Dec. 16, 2021).
\({ }^{24}\) Crozet is named in honor of Claudius Crozet, a French-born civil engineer who directed construction of the Blue Ridge Tunnel in the 1850s. Phil James, Secrets of the Blue Ridge: Crozet History 101, Crozet Gazette, https:// www.crozetgazette.com/2018/10/05/secrets-of-the-blue-ridge-pleasant-green-crozet-history-101/ (Oct. 5, 2018)
\({ }^{25}\) U.S. Census Bureau, Crozet CDP, Virginia, https://www.census.gov/quickfacts/crozetcdpvirginia (last visited Dec. 16, 2021).
}
use, transportation, recreation, environmental protection, and capital improvement projects. \({ }^{26}\) Crozet has two elementary schools (Brownsville and Crozet), one middle school (Henley), and a high school (Western Albemarle) located within its boundaries. \({ }^{27}\) Crozet even has a free monthly community newspaper, the Crozet Gazette. \({ }^{28}\) But Crozet's community of interest is completely disregarded by the Special Masters' Plan, which cleaves it in half along State Route 240 (Three Notched Road), Crozet Avenue, and Jarman's Gap Road. \({ }^{29}\)

Fortunately, there is a straightforward solution that can unify Charlottesville and Albemarle into a single congressional district without making major changes to the rest of the Special Masters' Plan. First, I propose that the 10th District be extended southward to include Charlottesville and Albemarle County, with whom it shares closer ties than the 5th District. Notably, this would unify the U.S. 29 corridor between Charlottesville and Northern Virginia, which is the largest and most-used north-south route between Interstate 81 in the Shenandoah Valley and Interstate 95. In particular, a significant number of residents of Charlottesville and Albemarle travel at least periodically to Northern Virginia for work, to take advantage of cultural and other opportunities in the D.C. area, or to travel via Dulles International Airport. \({ }^{30}\) In contrast, Charlottesville and Albemarle have little economic or cultural connection with the rest of the 5th District, which is largely rural and agricultural. Second, to make up for the population loss to the 5th District caused by this change, \({ }^{31}\) Louisa County, Fluvanna County, Goochland County, and nine precincts in rural western Hanover County would be moved from the 1st District into the 5th District. \({ }^{32}\) These are all rural areas that have a good cultural and economic fit with the rest of the 5th District. Finally, to balance out the population, the portion of Spotsylvania County that is in the 10 th District under the Special Masters' Plan would be moved into the 1st District. \({ }^{33}\)

Thank you for your consideration of these comments.
Sincerely yours,


Christopher B. Seaman

\footnotetext{
26 Albemarle County, Crozet Master Plan Update, https://www.albemarle.org/government/community-development/planning-codes/master-planning/crozet-master-plan-update/crozet-master-plan (last visited Dec. 16, 2021).
\({ }^{27}\) Albemarle County Public Schools, Our Schools, https://www.k12albemarle.org/our-schools (last visited Dec. 16, 2021).
\({ }^{28}\) Crozet Gazette, About the Gazette, https://www.crozetgazette.com/about-the-gazette/ (last visited Dec. 16, 2021).
\({ }^{29}\) Indeed, the Plan boundary literally runs along my backyard, so that my neighbors across Jarman's Gap Road are in the 10th District, while my house is in the 5th District.
\({ }^{30}\) Notably, the UVA Health System has recently expanded into Northern Virginia with locations in Culpeper and Haymarket, which are also in the 10th District.
\({ }^{31}\) This is a nearly equal population switch, as it would transfer 100,258 people in Albemarle County from the 5th District into the 10th District, and 100,948 people from the 1st District into the 5th District.
\({ }^{32}\) The precincts in Hanover County that would be transferred to the 5th District are: Beaverdam, West Hanover, Montpelier, South Anna, Rockville, Shallow Well, Centerville, Manakin, and Blair Road.
\({ }^{33}\) This would result in moving 98,568 people from the 10th District-which would otherwise be overpopulatedto the 1st District.
}
\begin{tabular}{ll} 
From: & Paul Prebilic \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Thursday, December 16, 2021 6:43:44 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Thank you,
Paul Prebilic
152 Revell Road
Fredericksburg VA 22405
\begin{tabular}{ll} 
From: & Bruce C Keener \\
To: & Redistricting \\
Subject: & Redistricitng maps \\
Date: & Thursday, December 16, 2021 7:37:56 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning, Honorable Supreme Court Justices,
I have reviewed the suggested maps created by your appointed special map makers and support their efforts. I believe they have created balanced maps and respected communities as best as possible.

As a school board member in the past, I know how difficult it was to create a fair and respectful school district map. It is a supreme challenge and process.

I support these maps based on their design and see them as a strong fair basis for the political future. Sometimes, after years of tinkering, maps can become restrictive and very contrived. I believe this is what has happened to the existing election districts in Virginia. The opportunity presented today is to restart the process and provide a solid basis for fair and equitable representation.

I commend the work produced to date and look forward to the issuance of the official redistricting.

Sincerely,
Bruce C Keener
152 West Queens Drive
Williamsburg, Virginia 23185
bckeener3@gmail.com
cell: 757-790-0983
\begin{tabular}{ll} 
From: & LOAnn Gannon \\
To: & Redistricting \\
Subject: & I oppose redistricting Stafford with No. Virginia \\
Date: & Thursday, December 16, 2021 7:43:19 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
*The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. * Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford
County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Thank you,
Concerned citizen
```

From: Lerry Ford
To: Redistricting
Subject: REDISTRICTING - HD41 \& HD42
Date: Thursday, December 16, 2021 7:57:44 AM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Supreme Court of Virginia:
I am writing to the Court today to request the Court place the Town of Blacksburg, the Town of Christiansburg and the City of Radford in one House of Delegates district. Currently these localities have been split between HD41 and HD42 and this should not come to pass in the final redistricting.

These three urban/suburban areas constitute one community in the New River Valley and conveniently their combined populations fit within the target district size of 86,314. The similar level of land use intensity creates unique problems (and opportunities) that are not shared with the more rural areas added to the two proposed districts. Simply put, the community needs of suburban/urban areas are different from more rural areas and although there is some overlap in needs, the differences outweigh the commonalities.

In the case of the two Towns, they are members in a shared, consolidated drinking water system and a shared consolidated solid waste management facility. These are important local services provided to our community.

The two Towns are also members in a shared, consolidated 911 Emergency center created to serve the community and facilitate timely and efficient emergency response. The two Towns also have "mutual aid" agreements for response to emergencies. Public safety is an essential service to our community.

Blacksburg Transit provides essential and necessary transit service in the two Towns and the operational cost of this essential community service is shared between the Towns. The City operates its own transit service that runs between the two Towns as well. The fact that transit is needed, provided and supported indicates to me the strong link between these "communities of interest" to use an official term.

The two Towns and the City share the same regional employment centers of Virginia Tech and Radford University. As the primary economic drivers, the two Universities support many ancillary businesses as well. Because of the two universities, the two Towns and City share a large population of college age residents, a similar community demographic.

Please revise the redistricting maps to consolidate in a compact manner the Town of Blacksburg, the Town of Christiansburg and the City of Radford into one House of Delegate district.

Blacksburg, VA 24060
540-580-7832
jrford68@gmail.com
\begin{tabular}{ll} 
From: & Kate Flinn \\
To: & Redistricting \\
Subject: & No to the proposed redistricting of the 7th district \\
Date: & Thursday, December 16, 2021 9:34:44 AM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS \\ Hello,}

I currently live in the 7th VA district. The proposed redistricting map will change my district from 7 to 5 . My family moved to our current home in North Chesterfield/Bon Air from West Chesterfield several years ago because we felt the more urban area was a better fit to raise our children (both on the autism spectrum). The proximity to Richmond has indeed worked well for us, especially for our older, young adult son, who now has access to public transportation to get downtown to VCU where his doctors are located.

My concern with the proposed redistricting is that it would move us to a district that is much more rural and less in tune to the many health, educational, and therapy needs of our children. I ask that you take our concerns into account when making your final decision.

Thank you.
Sincerely,
Kate Flinn
\begin{tabular}{ll} 
From: & GLENN FATZINGER \\
To: & Redistricting \\
Subject: & Proposed Redistricting in the Mount Vernon Area of Fairfax County \\
Date: & Thursday, December 16, 2021 9:50:49 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Redistricting Officials:
The Mount Vernon area is a unified communited anchored by the historic Mount Vernon Estate and should not be broken up by political redistricting into areas that have nothing in common with the Mount Verno area. We have a pyramid school system that feeds the elementary and middle schools to the high schools, citizens shop and bank locally and provide continuing support to local churches and local historic sites like the Mount Vernon Estate, Washington's Grist Mill, Woodlawn Plantation, and Gunston Hall Estate. Citizens in our area have nothing in common with proposed political redistricting into the Fredericksburg or Manassas areas.

I live in Sulgrave Manor near the Mount Vernon Estate and my orientation since 1964 has been the Muunt Vernon Estate and Alexandria, not Fredericksburg or Manassas. I want to remain in the 8th Congressional District and in the same House of Delegates and State Senate Districts because our social and commercial activities are in the Mount Vernon-Alexandria areas, not in the FredericksburgManassas areas.

Dr. Glenn B. Fatzinger
\begin{tabular}{ll} 
From: & biotyir@aol.com \\
To: & Redistricting \\
Subject: & Mount Vernon Community s a Community of Interest \\
Date: & Thursday, December 16, 2021 9:55:44 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is John Bioty and I live at 8809 Stockton Parkway, Alexandria Va 22308 and have resided at this address for the past 30 years. I am also a 30 year Military Veteran (U S Marine Corps) who has served in Desert Storm.

I am writing today to oppose this redistricting initiative because if does not recognize the long-standing Mount Vernon Community as a Community of Interest. Moreover it appears to cut the existing Mount Vernon Community in half. We are more than satisfied with our Congressional Representation which is currently focused on Community needs. I join with a large number of neighbors who feel as strongly as I do regarding this redistricting initiative. Don't "fix" something that isn't broke (or you may break it).

Respectively submitted, John R. Bioty
8809 Stockton Pkwy
Alexandria VA 22308
(703) 360-7160
\begin{tabular}{ll} 
From: & Alison Kelly \\
To: & Redistricting \\
Subject: & Redistricting proposal \\
Date: & Thursday, December 16, 2021 10:00:04 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It Concerns:
I am opposed to the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north.
When I need goods or services outside of Stafford, I always drive towards Spotsylvania or southern Fauquier. My neighbors in Hartwood do NOT identify with NoVA. Please reflect our real world affiliations in the maps.

Thank you,
Alison Kelly
92 Heflin Rd.
Stafford VA 22556
540-842-8765
\begin{tabular}{ll} 
From: & ROBIN CHAMBERS \\
To: & Redistricting \\
Subject: & Mount Vernon District \\
Date: & Thursday, December 16, 2021 10:11:50 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Redistricting hearing,
I've been a resident of the Mount Vernon area for the past 20+ years and raised my children in the Fairfax county schools, redistricting our area with Manassas or Woodbridge is not acceptable, we have our own communities which are long standing and finally getting some of the funds to build prosperous communities and amenities for the area to thrive, most of the residents in the community are minorities, which history has showed always get the least amount of assistances and support. The Mount Vernon area is a multicultural area which holds its own in being a productive working environment and deserves to remain in its own district.

Thank you,
Robin Chambers
PO Box 89
Mount Vernon VA 22121

Sent from my iPhone
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Cindy Hiddemen } \\
To: & Redistricting \\
Subject: & Written Comment-Disapprove \\
Date: & Thursday, December 16, 2021 10:18:57 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I Disapprove of the map as drawn. Most of the Districts are tight sections in the same geographical area.

District 2 is a collection of stray cats and dogs. Northern Norfolk has much in common with Virginia Beach. Why not put Virginia Beach, north of Dam Neck and Oceana with northern Norfolk?

Portsmouth may have more in common with Franklin or Newport News. The minority representation was reduced in District 3.

\section*{Cindy Hiddemen}

525 Catalina Ave, Virginia Beach VA 23452
7577179723
cindyhiddemen@gmail.com
\begin{tabular}{ll} 
From: & Sean Tobin \\
To: & Redistricting \\
Subject: & New District Maps \\
Date: & Thursday, December 16, 2021 10:29:03 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Supreme Court,
I am commenting on the new Senate and Delegate districts because I care a lot about the gerrymandering issue. The new state districts are definitely contiguous and compact, a significant improvement. Many of the old districts were not that contiguous. One small issue is that the districts are mostly favoring Democrats, since many are centered around cities and towns. Many people in urban areas would like these maps. They are very good overall because they are contiguous and very compact. After a few amendments to make the districts more fair, you should vote in favor of these districts, and it will make Virginia better by having gerrymander-free voting districts for the next 10 years.

Sincerely,
Sean Tobin
6th grade
Tandem Friends School
Charlottesville, VA

Members of the court

My name is Jon Taylor, and I've been a resident of Louisa County for 20 years. The ties which bind the people of this County into a community of interest are; farming, agriculture, small family owned businesses and a rural lifestyle, ties which they share with adjacent counties in the Central Virginia region (Goochland, Orange, Fluvanna, Madison, Albermarle and Louisa Counties)

I am asking this court to do everything they can to keep these communities of interest together and not toss them into a mixing bowl of Congressional and state districts.

The proposed congressional map moves all of Louisa County from the Seventh Congressional District into a redrawn First Congressional District, which stretches from the Eastern Shore all the way to Fluvanna County, hardly the definition of compact. Or connecting communities, which have no historical or cultural ties with each other.

While incumbent protection should never be the focus of any redistricting, the proposed maps for House of Delegates (59th, and 55th districts) and Senate (10th, and 11 th districts) severs Louisa County from their current representatives, and puts it's residents into districts where they have no meaningful connection with their new representatives.

Compounded by the fact only one of these four current state representatives for these new districts resides in the districts they were previously representing. A peculiar set of circumstances, which affects Nine Senate and twenty-four House of Delegates through out the Commonwealth.

When it comes to voting rights, political participation and neutrality; drawing Louisa's heaviest African American precinct into Virginia's \(11^{\mathrm{h}}\) Senate district will dilute their votes in a sea of partisanship.

For me, the biggest issue with these "nested districts," where state Senate districts were drawn to largely fit inside congressional districts, and House districts were drawn to fit within state Senate boundaries. Is that most House of Delegates and state Senate elections will be largely uncompetitive for one party or the other. https://bit.ly/3DXYF3H

While it's true, that drawing districts which are compact, contiguous and coherent and that are competitive are often conflicting goals, there are many districts where this is practical and achievable. https://bit.ly/33tWvfD

I don't believe that the people of Virginia voted twice for a constitutional amendment for fairness in the redistricting process, with the intent of seeing a handful of districts actually be competitive.

In closing, I am asking this court to do everything they can to keep communities of interest together and to make our state districts as competitive as possible.

Thank you for taking the time to listen to my testimony
Jon Taylor
182 Jacoby Road Louisa VA 23093
540 967-4555
Frisbeejon@hotmail.com
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ steve kinnett } \\
To: & Redistricting \\
Date: & Thursday, December 16, 2021 10:53:32 AM
\end{tabular}

\title{
EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Representation in Prince William County
To whom it may concern,
I am a resident of Prince William County and am very concerned the the current proposed redistricting map will leave Prince William County without representation in Congress. Please do the right thing and give the County the representation it deserves.
Thank you,
Stephen Kinnett
12707 Knightsbridge Drive
Woodbridge,VA 23192
703-881-1076
skinnett48@gmail.com
\begin{tabular}{|c|c|}
\hline From: & Susan Rorrer \\
\hline To: & Redistriting \\
\hline cc: & Dell Avoliahouse.virainia.gov: district25@senate virginia.gov: DelMFarissahouse.virginia.gov: Steve Cater: Amanda Spivev \\
\hline Subject: & County of Nelson Public Comment \\
\hline Date: & Thursday, December 16, 2021 10:58:13 AM \\
\hline Attachments: & Letter Supreme Court of VA re Redistricting 20211215.pdf \\
\hline
\end{tabular}

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
December 15, 2021

The Honorable Donald W. Lemons
Chief Justice, Supreme Court of Virginia
Supreme Court Building
00 North Ninth Street
Richmond, VA 23219
Chief Justice Lemons,
The County of Nelson has completed it's 2021 Redistricting Plan and a public hearing on the subject was held on December 14, 2021. It is the intent of the Board of Supervisors to approve an amendment to he Code of Nelson County regarding voting district lines on January 11, 2021 following the close of the required 45 -day public comment period which concludes on December 31 , 2021. This amendment East Districts to provide for moving 119 individuals from the Central District into the East District in order to comply with Article VII, Section 5 of the Constitution of Virginia. This change will result in a deviation from the boundary shown in the Virginia Supreme Court's "SCV Draft 1 HOD" map that delineates the boundary between
Virginia's \(53^{\text {rd }}\) and \(55^{\text {th }}\) House of Delegates Districts. Nelson County respectfully requests that the final Supreme Court of Virginia House of Delegates map be adjusted to reflect this change.
The census blocks to be moved include the following:
911259501021018
911259501021011
911259501021012
911259501021073
A map of the area is shown below and results in this section of the boundary being shifted to State Route 29 and the Rockfish River.


Respectfully,
Stephen A. Carter
County Administrator
\begin{tabular}{ll} 
From: & Emily Knight \\
To: & Redistricting \\
Subject: & Congressional maps \\
Date: & Thursday, December 16, 2021 11:04:28 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Emily Knight. I live in Bon Air, North Chesterfield and have lived here for 20 years. I grew up in a home in Henrico county where my parents still live.

I am extremely upset to see Henrico and Chesterfield counties separated on the proposed map. Henrico and Chesterfield counties are a community of interest which share economic, social and cultural ties. On the proposed map Chesterfield is joined with very rural communities that have very different needs and interests for representation.

I have also noticed that these maps damage Virginia's only 3 Congress women and will benefit male incumbents. It appears that people drawing the maps want to remove women from Congress where they are not even fairly represented at \(50 \%\).

I am asking the court to reject these maps and to keep Chesterfield and Henrico counties together as a community of interest.

Thank you for making sure these maps represent central Virginia fairly.
Emily Knight
8353 McCaw Dr, Richmond, VA 23235
804-357-5848
P.O. Box 925

Warrenton, VA 20188
16 December 2021

\author{
Virginia State Supreme Court \\ ATTN: Redistricting Decision \\ Members of the Supreme Court:
}

I am Greg Schumacher, Chairman of the Fauquier County Republican Committee. Thank you for the opportunity to comment on the proposed redistricting maps developed by the Special Masters.

As a general comment, the process is made overly complex and logic-defying on paper due to trying to accommodate multiple criteria that bear no relevance to county boundaries. The process would be much cleaner by working to meet the population parities while maintaining full county boundaries as much as possible. Split counties and split cities confuse citizens and complicate election processes.

That said, I want to register the following concerns and suggestions:
- The proposed congressional map has all of Fauquier County and other counties in the Piedmont sharing the Tenth District with all of Loudon County. The Loudon piece would make up more than half of the new Tenth District population wise and is overall more Northern Virginia centric than rural and Piedmont centric. This dilutes the voice of the more culturally distinct rural Piedmont area and gives more weight, along with three other Northern Virginia districts, to the more urbanized and culturally distinct Northern Virginia area. Please consider putting Loudon in a district with western Fairfax County, and putting an intact Fauquier in a District shared with western Prince William, Stafford and Fredericksburg, all areas with more cultural similarity to Fauquier.
- I share similar concerns with proposed Senate District 31. It splits Fauquier in half and combines it with the western two-thirds of Loudon County. Rural Fauquier shares much more culturally with Warren and Clarke Counties to the west. Grabbing the little hook with voters in the Potomac Falls area looks peculiarly out of place.
- As the Senate and House of Delegate maps are quite similar, my concern with the currently drawn HoD \(30^{\text {th }}\) and \(61^{\text {st }}\) Districts are as above. They represent quite a shift in cultural similarity and are confusing to citizens and the electoral process.

Sincerely,
Gregory Schumacher
Chairman, Fauquier County Republican Committee
\begin{tabular}{ll} 
From: & mtsmdltd \\
To: & Redistricting \\
Subject: & 7 th Congressional District \\
Date: & Thursday, December 16, 2021 12:01:47 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I moved to Richmond in 1974 to start a Residency in Internal Medicine at VCU.
I practiced Nephrology in Henrico County
for 40 years. In the 1980's I had a satellite
Office in Chesterfield. I have lived in both
Chesterfield \& Henrico for multiple decades.
I am currently a 21 year Midlothian resident.
Chesterfield \& Henrico are Sister Counties.
They share Demographics,Economic Issues.
Growth Patterns, Quality of Life, Educational
Needs \& Roads. Two of the areas major
Hospital systems are located in these two
Counties.
It would be illogical to separate the 2
Counties Congressional District.
I very much appreciate your consideration .
Martin T. Starkman MD
Midlothian, Va .
December 16, 2021

Sent from the all new AOL app for iOS
\begin{tabular}{ll} 
From: & Lonathan Hall \\
To: & Redistricting \\
Subject: & Proposed redistricting plan for Elaine District 2 \\
Date: & Thursday, December 16, 2021 12:52:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of Chincoteague Island since 1988, I am saddened to see Virginia choosing to gerrymander my district via the proposed redistricting plan for District 2; but remain hopeful that the court will view this as strictly a political maneuver by the majority party and as an attack on the democratic process.

Thank you for viewing my comment.
Jonathan Hall
4282 Main Street
Chincoteague Island, VA
\begin{tabular}{ll} 
From: & tim hess \\
To: & Redistricting \\
Subject: & redistricting \\
Date: & Thursday, December 16, 2021 12:53:16 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
My name is Tim Hess with the Buchanan County Board of Supervisors, Hurricane District. I feel like Buchanan County should stay in District 5 . We have a lot in common with our neighboring county Tazewell. We work very well together for the betterment of our district. Please consider leaving Buchanan County in the 5th district.
Thank you,
Tim Hess
\begin{tabular}{ll} 
From: & Susan Hall \\
To: & Redistricting \\
Subject: & Redistricting comments \\
Date: & Thursday, December 16, 2021 12:57:07 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hi there,

Few notes on the redistricting. Not sure why these changes were made:

The district cuts off at Mt. Vernon Memorial Highway. Voters in 22308 will be grouped with voters on Rolling Road in Springfield instead of with their neighbors on Ferry Landing Road. The 8th Congressional District cuts off in approximately the same spot and puts George Washington's Mt. Vernon Estate in the same district as Quantico, Manassas, and Fredericksburg!

These maps effectively split the Mt. Vernon High School Pyramid in half and split the Hayfield Secondary School District so if you live in that area, you will not be voting with parents of other students in the same schools. It splits Fort Belvoir in half. The Congressional map splits Kingstowne between two different congressional districts.
- Living along Mount Vernon Memorial Highway into a new Congressional District centered on Fredericksburg and Manassas instead of the existing 8th Congressional District and the rest of Mt. Vernon; and
- Living in Mason Neck or East of I-95 into a Virginia Senate District with people in Lake Ridge, Woodbridge, and Crosspointe, instead of with everyone else who lives in 22303, 22306, 22307, 22308, 22309, and 22315.

Both proposals basically split the Mount Vernon High School Pyramid and Mount Vernon Supervisor District in half. They've also drawn the renumbered 34th Senate District (formerly 36th) from Mount Vernon and Lee Districts over I-95 and into Springfield by Rolling Road. They've also redrawn a renumbered 16th House of Delegates District (formerly 44th) into Wilton Woods and Burgundy Farm instead of including the Mount Vernon Estate and the neighborhoods along Mount Vernon Highway. On the positive side, Belle View/ New Alexandria has been included in the \(16^{\text {th }}\) House of Delegates District.

Thank you,
Susan Hall
6731 Newington Rd. Lorton, VA 22079
\begin{tabular}{ll} 
From: & \(\underline{\text { Ann Mallek }}\) \\
To: & \(\underline{\text { Redistricting }}\) \\
Cc: & Ann Mallek; Greg Kamptner; Board of Supervisors members \\
Subject: & Albemarle County is divided again \\
Date: & Thursday, December 16, 2021 1:31:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you for receiving comment on the proposed masters' maps.

I am very discouraged that Albemarle County and particularly the White Hall district which I represent on the Board of Supervisors, is divided between two congressional districts which proceed to the northern and southern boundaries of the commonwealth.

The dividing line goes through the middle of the unincorporated town of Crozet, population c. 8000, with two of its four precincts assigned to each of the Congressional districts.

This is grossly unfair to the citizenry and removes the possibility that community of concern and common interest will be protected. Our community will have no one who really cares about it. We will not belong to anyone.

I ask you to direct the masters to remove this division in Albemarle County and assign our County to our much more frequent community of interest, the northern congressional district. Our economic development districts, highway planning districts, commuter districts are all partners north of Albemarle. Our citizenry travels to DC much more for work and for recreation than to Lynchburg.

I appreciate your effort on our behalf.

Ann Mallek
4826 Advance Mills Road
P O Box 207
Earlysville VA 22936
434-996-6159

Sent from Mail for Windows

\section*{The Supreme Court of Virginia}

I am writing to you to protest the redistricting plan developed for you by the special masters. It appears the designers of this plan tried to paint a patina of bipartisanship on this plan by setting it up to appear as if each party was left with four districts the plan protected while opening three districts up to a fair competition. However, the facts show a totally partisan nature to this redistricting. Every 10 years we go through redistricting which is driven by the census numbers showing which districts have too many residents for the new target number and which have too few. In Virginia the tenth had to many and the ninth for example had to few requiring adjustments. This should be driven by a sense of fairness which was not displayed in their plan.

First, I believe it is important to point that the criteria for districts in Virginia are that they should be to the extent possible compact, contiguous, and share a common community of interests. The re-drawn tenth district is not compact and there is little common community of interests between the new additions and the northern Virginia area of the former tenth which remains.

Second let us examine the facts about the claim of equity because each party has four districts which were protected. The two democratic districts in northern Virginia are driven by the geography of the area. Alexandria, Arlington, Falls Church and Fairfax City are all totally surrounded by Fairfax County and since their combined populations are 1.6 million it would be impossible not to end up with two districts that are democratic. The other two democratic districts are represented by African Americans and to meet the civil rights requirements they are protected. Thus these four districts are protected not by the special masters plan but rather by geography and the law.

In looking at how to redistrict it was clear Fairfax and the jurisdictions it includes have over 1.6 million residents which meant it would make up two districts and some residents would have to go to another district logically the tenth. In turn the tenth included all of Loudoun county with over four hundred thousand residents and by joining those with residents of Prince William a compact and contiguous district with strong communities of interest would be created. In turn since the ninth was too small it would need to gain residents from the other republican districts next to the ninth. Those districts would in turn pick up some of those from northern Virginia. Since the second and seventh districts were already competitive and close to the correct number their changes needed to be small. This plan would have created five democratic districts three republican districts and three competitive districts and would best reflect the population changes.

Instead the masters made the tenth, the second and the seventh more likely to be competitive but leaning republican and all four republican districts were protected by your plan. This is clearly a biased suggestion. Stretching the tenth down the valley away from northern Virginia makes no sense just as pulling democratic areas out of the second makes no sense. Anyone looking at the map of Virginia should have seen the bias of the masters plan. It is also important to note that the proposed seventh district is described as leaning democratic. This is only true if you look only at the most recent elections for President when the state went democratic. Looking at other elections and the elected representatives in this area it is clear the area is more likely to lean republican particularly in nonpresidential years like 2022. Larry E. Byrne 6442 Queen Anne Ter. Falls Church,VA. 22044
\begin{tabular}{ll} 
From: & Leanine Martin \\
To: & Redistricting \\
Subject: & 10th Congressional district \\
Date: & Thursday, December 16, 2021 2:32:45 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The 10th Congressional district should not include eastern Loudoun county. The district is rural except for that part. Eastern Loudoun has more in common with the 11th district than the 10th district.
\begin{tabular}{ll} 
From: & Donna Lawson \\
To: & Redistricting \\
Subject: & Salem \\
Date: & Thursday, December 16, 2021 2:53:25 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please accept this public comment on the proposed redistricting map. As a lifelong resident of Southwest Virginia, I want to continue to see Salem included in my congressional district. With all due respect, expanding the district east into Bedford, but excluding Salem from the 9th district makes no sense. I live in Wise County where we have far more in common with Salem than we do Bedford or Martinsville. So, please reconsider the map and please include Salem within the 9th district.

Sincerely,
Donna Lawson
Coeburn, Virginia 24230
276-393-7201

Remember to believe on the Lord Jesus Christ and thou shalt be saved. Donna
\begin{tabular}{ll} 
From: & Barbara Smith \\
To: & Redistricting \\
Subject: & Rules and Procedures for Implementing the Requirements of Article II, Section 6-A \\
Date: & Thursday, December 16, 2021 2:43:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Clerk of the Supreme Court of Virginia,
I am writing to you today about the proposed maps that are before the court this week. I am a resident of Chesterfield county and work in Henrico county. I shop, work, and visit friends in both communities. They are both fast growing, busy communities that have much in common. The proposed map would split them up and pair them with rural communities which have few needs in common.
Western Chesterfield and Western Henrico face a growing and diversifying population in which education and transportation infrastructure is very important while the rural counties are more concerned with broadband access and agricultural issues. It would not be fair to either community to have a representative trying to advocate for all of those things.
The court could tweak the map by moving Goochland, Fluvanna, Caroline, Louisa, King George and Hanover west of Ashland onto VA-05 while taking western Chesterfield that's currently in VA-05 and move it to VA-01. The eastern part of Hanover would stay in VA-01. That part of Hanover is more suburban and shares common interests with Western Chesterfield and W. Henrico. All of the communities would benefit from a representative that could focus on their communities unique interests and needs.
Please consider changing the proposed map to more fairly represent the citizens of our great state.
Thank you,
Barbara Jean Smith
11912 Hardwood Drive
Chesterfield VA 23114
\begin{tabular}{ll} 
From: & Harold Barnett \\
To: & Redistricting \\
Subject: & Mt. Vernon Community representation impact \\
Date: & Thursday, December 16, 2021 3:20:36 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The proposed redistricting maps have a negative impact on our Mt. Vernon community regarding selection of delegates, Fairfax County Supervisor and Fairfax County School Board members. The Mount Vernon Community in my view includes. the Sherwood Hall Library, Whitman Middle School, Mt. Vernon Hospital, Mt. Vernon High School, George Washington's Mount Vernon, the Woodlawn Fire Station and the Route One transportation corridor from the Fairfax County Parkway to the Huntington Metro Station.

The proposed maps chop up this area so we no longer can select a delegate, senator and local elected officials (suupervisor, school board member, etc.) to represent our community.

It would be very helpful to see proposed maps with a link to an overlay that shows our current representation at all levels and any changes that the proposed map would make.
This may be challenging however current mapping software should make supervision of impact relatively simple to implement.

Thank you in advance for soliciting my view of the proposed redistricting. More needs to be done to achieve fairness in elections for the Mount Vernon Community.

Respectfully,
Harold (Hal) Barnett
703-360-7152
703-328-9968 Mobile
\begin{tabular}{ll} 
From: & Mary Barnett \\
To: & Redistricting \\
Subject: & Mt. Vernon redistricting \\
Date: & Thursday, December 16, 2021 3:32:34 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Comment: I am horrified with the proposed redistricting maps which do not even mention and fail to recognize my community......Mt. Vernon...home of our first President. Mt Vernon is a long-standing community of neighborhoods sharing print media, public transport infrastructure, schools, churches, a hospital, library and many viable businesses. I believe these redistricting proposals are unfair, unjust, and inherently designed to weaken the strength of our vote by essentially chopping up our community.

Sincerely,
Mary A. Barnett
703-360-7152
\begin{tabular}{ll} 
From: & Suzy Mullins \\
To: & Redistricting \\
Subject: & Public Comment on proposed redistricting \\
Date: & Thursday, December 16, 2021 3:37:04 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
My name is Suzy Mullins and I live in Roanoke, Virginia. I recently moved to Roanoke for my husband's job, but grew up in Wise County in the far southwest corner of the Commonwealth and - before moving - I spent my entire life living in the 9th congressional district.

When I moved to Roanoke, I was fearful of moving to the "big city." But I was shocked at how many of my friends and neighbors were either from the coalfields or had family in my corner of Virginia. I learned quickly that Roanoke to some degree and Salem to an even larger degree has a lot in common with my rural hometown of Coeburn. The values, the economic ties, the regional identity, and the cultural identity of the 9th district are unique. That is why I, as a resident of Roanoke, and as a lifelong resident of the 9th district, respectfully request that the maps be adjusted by the Court in order for the 9th district to include Salem.

It is illogical for Salem to be removed from the 9th district. Likewise, it is illogical for the district lines of the 9th to bypass Salem entirely and, instead, expand easternward to Bedford or Lynchburg. It is possible to draw maps that are fair to everyone based on commonsense principles of keeping communities of interest together. Southwest Virginia, as a whole, is a community of interest that spans from Salem to the Cumberland Gap. Salem is a community that has far more in common with Wise than Bedford has with Salem or Wise. I hope that you would redraw the map accordingly.

Thank you for your time in considering this request. Keep Salem in the 9th!
Very truly yours, Suzy Mullins
Roanoke, VA 24012
\begin{tabular}{ll} 
From: & Sophie Mullins \\
To: & Redistricting \\
Subject: & Public Comment on proposed redistricting \\
Date: & Thursday, December 16, 2021 3:43:08 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello. My name is Sophie Mullins I am an 8th-grade student. I do not comprehend why the proposed 9th district would skip Salem, but it would include Bedford. This makes no sense to me.
Sincerely,
Sophie Mullins
\begin{tabular}{ll} 
From: & Lara Larson \\
To: & Redistricting \\
Subject: & Feedback on VA CD-10 \\
Date: & Thursday, December 16, 2021 4:08:38 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Hello, I'm writing with feedback on the proposed new boundaries for VA CD-10. I have several areas of concern about the proposal submitted by the special masters.

Loudoun County, whose residents make up a large portion of the current and proposed district, is an exurb of DC and should continue to be a Northern Virginia district. Loudoun's interests are not that well aligned to the rural counties being proposed to be included in the new district. It makes much more sense to center VA CD-10 with an anchor in Loudoun (a fast-growing county) and branching into Prince William County, which is a much more similar county to Loudoun. "Communities of interest" don't seem to be well-reflected in the new map, since the issues faced by voters in Sterling would be quite different from the voters in Orange. Loudoun residents don't regularly travel to do business into Madison or Culpeper counties, but we do travel into Prince William County regularly.

Thank you for your consideration.
Lara Larson
25997 Talamore Drive
South Riding, VA 20152
703-624-0946

December 16, 2021
Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. 9th St, \(5^{\text {th }}\) Floor
Richmond, VA 23219
Dear Ms. Pitney:
On November 13, 2020, Sean Trende declared that application of "modest redistricting, combined with the demands of reapportionment, are likely to lead" Virginia to "no change" in its 7-4 party affiliation split among its congressional delegation, absent "aggressive gerrymander[ing]." One year later, this Court tasked Mr. Trende with redrawing Virginia's congressional map upon his promise to apply fair and neutral redistricting principles. \({ }^{2}\) This Court now has before it a map that the Special Masters claim produces a " \(6-5\) " party affiliation split, in which "Republicans could win a majority of the seats in Virginia's delegation" some years. \({ }^{3}\) Thus, upon the advice of Mr. Trende himself, this Court should view this map with some skepticism. By employing strict adherence to modest, traditional redistricting principles, this Court should reject the Special Masters' congressional map-and any aggressive gerrymander-that causes this unpredictable shift.

The memorandum accompanying the court-appointed Special Masters' congressional map released on December 8 (the "December 8 Map") is confounding. Over 55 pages, the Special Masters endeavor to paint a picture of maps drawn in a mindful and rigorous manner. Yet, upon engaging with the content, the vague reference to the constitutional principles that should dominate this court-ordered redistricting process gives way to a haphazard, unprincipled process that is unmoored from the history, tradition, and communities that form the Commonwealth. Indeed, the Special Masters' first point of order as they write to assure this Court and Virginians that they have performed their duty well is to declare that their "prime directive for drawing these maps comes not from the constitutional or statutory provisions described by this Court," but from the need to "behave in an apolitical and nonpartisan manner. \({ }^{, 4}\) It seems the Special Masters have misunderstood the purpose of their work, as appearances of bipartisanship are not a defense to unconstitutional maps.

The December 8 Map falls short on numerous traditional redistricting principles, even failing to achieve the population equality that is the singular driving force behind this entire decennial process.

\footnotetext{
\({ }^{1}\) Sean Trende, Part 2: What Redrawn House Maps Could Mean in 2023, Real Clear Politics (Nov. 13, 2020), https://www.realclearpolitics.com/articles/2020/11/13/part_2_what_redrawn_house_maps_could_mean_in_202 3_144651.html.
\({ }^{2}\) See Nov. 19, 2021 Redistricting Appointment Order at 1.
\({ }^{3}\) December 7, 2021 Memo from Bernard Grofman, Ph.D. and Sean Trende to the Chief Justice and Justices of the Supreme Court of Virginia re Redistricting Maps ("Memo") at 18-19.
\({ }^{4}\) Memo at 2 (emphasis added).
}

Worse, it does so to the detriment of minority populations, which constituted the whole of Virginia's population growth over the last decade, and to the detriment of Virginia's close-knit communities, which it dices and divides with a complete lack of precision. As the Special Masters are no doubt aware, the currently existing congressional map is the result of a years-long litigation dedicated to ensuring fair representation for certain of Virginia's minority communities while adhering to federal and state legal requirements. Rather than use this court-approved map as a starting point and building upon the redistricting principles it embodied, the Special Masters chose to start from scratch. While the December 8 Map may be, in the Special Masters' words, a "true joint effort," it departs significantly from the lessons learned by the Commonwealth and its leaders in the last decade. If adopted, the December 8 Map would likely suffer from the same fate as its 2011 predecessor-years of tumult in the courts.

Our client has a vested interest in avoiding such an outcome. We represent James Farkas, a Virginia voter who successfully challenged the General Assembly's unconstitutional racial gerrymander of the congressional map following the last census. The federal court reviewing Mr. Farkas's challenge found that the Virginia General Assembly unjustifiably packed Black voters in Congressional District 3, thereby diluting their voting strength elsewhere in the Commonwealth. As a plaintiff to that litigation, Mr. Farkas now seeks to ensure that the principles behind the federal court's ruling are preserved-and the errors underlying the General Assembly's 2011 congressional plan are not replicated-in the redistricting that is now taking place before this Court.

In light of the December 8 Map's failures, and pursuant to Virginia law and this Court's rules inviting public participation in the Court's redistricting deliberations, \({ }^{5}\) we submit the attached congressional map (the "Farkas Map") on behalf of our client for consideration by the Supreme Court of Virginia and its Special Masters. \({ }^{6}\) The Farkas Map satisfies all applicable provisions of federal and Virginia law. Importantly, it achieves strict population equality, preserves communities of interest, and ensures that the voting strength of Virginia's growing racial and ethnic minority population is not diluted. We strongly encourage the Special Masters and this Court to adopt the Farkas Map for Virginia's congressional districts.

\section*{I. Background}

\section*{A. The Virginia General Assembly enacted an unlawful congressional plan in 2011.}

During the one hundred years following Reconstruction, Virginia did not elect a single Black representative to Congress. \({ }^{7}\) That changed in 1992, when the U.S. Department of Justice, acting under the power of the federal Voting Rights Act, directed the Virginia General Assembly to draw a

\footnotetext{
\({ }^{5}\) Va. Code Ann. § 30-399(C) (2020); Sup. Ct. of Va., Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, R4(a) (Feb. 23, 2021), https://www.vacourts.gov/courts/scv/article_2_section_6a_rules_procedures.pdf.
\({ }^{6}\) Images of the Farkas Map are included in-line in this submission as well as in the attached Appendix. Several mapping files for the Farkas Map have been submitted to the Court alongside this submission, in a .zip file labeled "Farkas Map Mapping Files."
\({ }^{7}\) David Wasserman, Is it Time to Rethink Hyper-Minority Districts?, The Atlantic (Sept. 20, 2021), https://www.theatlantic.com/politics/archive/2021/09/it-time-rethink-hyper-minority-districts/620118/.
}
congressional district that provided Black voters an opportunity to elect a representative of their choice. \({ }^{8}\) As a result, District 3 was drawn as a majority-Black district in 1992 and voters in that district elected Representative Bobby Scott to Congress that same year. Representative Scott has represented District 3 continuously since then. He was the only Black member in Virginia's congressional delegation from 1992 through 2016.

Over time, what began with the Department of Justice's important effort to ensure that Black voters in Virginia were represented in Congress turned into the Virginia General Assembly packing Black voters into one congressional district, diluting their voting strength elsewhere in the Commonwealth. Although Black voters in District 3 had consistently elected their representative of choice by significant margins, ranging from 69 percent to 97 percent of the vote, the Republican-controlled General Assembly raised the Black voting age population ("BVAP") of District 3-from 53.1 percent to 56.3 percentfollowing the 2010 Census. \({ }^{9}\) To do so, the General Assembly moved "predominantly white" populations out of District 3 and moved "predominantly African-American" voters into the district. \({ }^{10}\)

Along with other residents of District 3, Mr. Farkas brought a lawsuit in federal court, arguing that the district was an unconstitutional racial gerrymander. In 2014, the majority of a three-judge panel agreed, finding that the General Assembly had violated the U.S. Constitution by unjustifiably packing Black voters into District 3. \({ }^{11}\) The court concluded, based on direct and circumstantial evidence, that "race was the predominant factor" in drawing District 3, as mapdrawers sought to ensure the district's BVAP exceeded 55 percent. \({ }^{12}\) Upon reconsideration, the court again declared the General Assembly's plan unconstitutional \({ }^{13}\) and appointed Dr. Bernard Grofman as a special master to advise the court on the appropriate redistricting remedy. \({ }^{14}\) In 66 pages analyzing two map configurations, Dr. Grofman explained the considerations that went into his map-drawing and why his proposed maps addressed the court's concerns, \({ }^{15}\) including that his "concern[] for contiguity and the avoidance of unnecessary splitting of existing political subunit boundaries, and [his] attention to compactness" led to a heavily minority District

\footnotetext{
\({ }^{8}\) Va. Pub. Access Project, 3rd District, A Brief History (Sept. 1, 2015), https://www.vpap.org/updates/1996-3rd-district-brief-history/.
\({ }^{9}\) Page v. Va. State Bd. of Elections, 58 F. Supp. 3d 533, 539 (E.D. Va. 2014), vacated sub nom. Cantor v. Personhuballah, 575 U.S. 931 (2015) (vacating for reconsideration in light of Ala. Legis. Black Caucus v. Alabama, 575 U.S. 254 (2015)); Ballotpedia, Virginia's 3rd Congressional District, (last visited Nov. 6, 2021), https://ballotpedia.org/Virginia\%27s_3rd_Congressional_District; Ballotpedia, Bobby Scott (Virginia), (last visited Nov. 6, 2021), https://ballotpedia.org/Bobby_Scott_(Virginia).
\({ }^{10}\) Page, 58 F. Supp. 3d at 547.
\({ }^{11}\) Id. at 536 .
\({ }^{12}\) Id. at 541-50. The General Assembly used this same 55 percent target when drawing districts for Virginia's House of Delegates following the 2010 census. A different panel of three federal judges struck down several of those districts as unconstitutional racial gerrymanders in 2018. See Bethune-Hill v. Va. State Bd. of Elections, 326 F. Supp. 3d 128, 180-81 (E.D. Va. 2018). The U.S. Supreme Court later dismissed an appeal of this decision, leaving the panel's ruling intact. Va. H.D. v. Bethune-Hill, 139 S. Ct. 1945, 1956 (2019).
\({ }^{13}\) Page v. Va. State Bd. of Elections, No. 3:13cv678, 2015 WL 3604029, at *18 (E.D. Va. June 5, 2015). Republican members of the Virginia congressional delegation appealed the decision to the U.S. Supreme Court, but the Court rejected the appeal and left the panel's decision intact. Wittman v. Personhuballah, 136 S . Ct. 1732, 1736-37 (2016).
\({ }^{14}\) See Letter to Couns. of R. from the Ct., Personhuballah v. Alcorn, 155 F. Supp. 3d 552 (E.D. Va. 2016) (No. 3:13-cv-00678-REP-LO-AD), ECF No. 236 ("Personhuballah Letter").
\({ }^{15}\) See Rep. of the Spec. Master, Personhuballah, 155 F. Supp. 3d 552, ECF No. 272 ("Personhuballah Rep.").
}

3 that did not reflect "in any way a predominant concern for race," but rather "naturally reflect[ed] the underlying demography of the state . . . ." \({ }^{16}\) Critically, Dr. Grofman explained that when the new District 3 was drawn in accordance with traditional districting principles alone, rather than predominantly focusing on race, a substantial minority population in District 4 arose "virtually automatically." \({ }^{17}\)

In adopting one of Dr. Grofman's maps, the court credited his approach to drawing the districts, concluding that Dr. Grofman was "guided by the neutral goals of compactness, contiguity, and avoiding unnecessary city or county splits, rather than any racial considerations." \({ }^{18}\) The court explained that Dr. Grofman's plan accorded with the principles of Section 2 of the federal Voting Rights Act because Black voters would not be deprived of the opportunity to elect their candidates of choice in either District 3 or District 4. \({ }^{19}\) The final, court-adopted plan lowered District 3's BVAP to approximately 45 percent and increased District 4's BVAP to about 41 percent. \({ }^{20}\) Each of these BVAP percentages has proven more than sufficient for the Black communities in those districts to elect the candidates of their choice, in coalition with others. Indeed, during the 2016 election, the newly redrawn District 4 elected its first Black member, Representative Donald McEachin, while the newly redrawn District 3 reelected Representative Scott. Both representatives were subsequently reelected in 2018 and 2020.

\section*{B. Virginia's voters demand an end to gerrymandering with the 2020 constitutional amendment.}

Following the unlawful and tumultuous redistricting process of the 2010 cycle, voters successfully placed a proposed amendment to the Virginia Constitution on the 2020 general election ballot, known as the Virginia Redistricting Commission Amendment (the "Amendment"). The Amendment sought to establish a new redistricting commission comprised of 16 members from across the political spectrum, including non-partisan citizens. The Amendment garnered overwhelming support, with almost 66 percent of the electorate voting in favor of adoption. \({ }^{21}\) Nearly every Virginia county showed majority support for the Amendment. \({ }^{22}\) The results demonstrated the intent of the majority of Virginians to ensure that the General Assembly's mapping manipulations that resulted in two unconstitutional redistricting maps last cycle would not be repeated.

\section*{C. The 2020 Census results reveal significant minority population growth.}

The 2020 Census results reveal that Virginia's population has grown significantly in both number and diversity. Virginia has experienced a nearly 8 percent increase in population over the past decade, adding more than 630,000 people. The majority of these gains are attributable to Virginia's racial and ethnic minority populations: the minority population increased by more than 7 percent since 2010, while

\footnotetext{
\({ }^{16}\) Id. at 15.
\({ }^{17}\) Id. at 15-16.
\({ }^{18}\) Personhuballah v. Alcorn, 155 F. Supp. 3d 552, 562 (E.D. Va. 2016).
\({ }^{19} \mathrm{Id}\). at 565.
\({ }^{20} I d\).
\({ }^{21}\) Daniella Cheslow, Virginia Voters Approve Redistricting Amendment Against Pleas From Democratic Leadership, WAMU 88.5 (Nov. 4, 2020), https://wamu.org/story/20/11/04/virginia-voters-approve-redistricting-amendment-against-please-from-democratic-leadership/.
\({ }^{22}\) Virginia Dep't of Elections, 2020 November General Election Referendum Results (Jan. 21, 2021, 3:02 PM), https://results.elections.virginia.gov/vaelections/2020\%20November\%20General/Site/Referendums.html (last visited Nov. 24, 2021).
}
the Commonwealth's white population decreased by 5.1 percent during that same time period. \({ }^{23}\) Notably, Virginia's Black population, which is largely concentrated in the southeastern and northern portions of the Commonwealth, outpaced the general population growth rate, increasing by 8.9 percent to now account for 20.9 percent of the Commonwealth's population. \({ }^{24}\)

\section*{D. The Commission fails to adopt a map, triggering this Court's duty to redistrict.}

After the selection of members in the fall of 2020, the Virginia Redistricting Commission began meeting in early 2021. It held 38 meetings in Richmond and 16 public hearings across the state during which it considered public comment and proposed maps. \({ }^{25}\) Unfortunately, however, the Commission deadlocked during its final meetings in September and October and found itself unable to agree on either the process of drawing new redistricting plans or the substance of those plans. \({ }^{26}\) Without hope of bridging the impasse, the Commission disbanded without proposing maps for the General Assembly's consideration. The Commission's inaction triggered a constitutional failsafe by sending the task of drawing maps directly to this Court. \({ }^{27}\)

\section*{E. The Court's Special Masters produce a map that fails to comply with the law.}

On November 19, 2021, this Court selected two Special Masters, Dr. Bernard Grofman and Sean Trende, to assist in its mapdrawing duty, directing the Special Masters to work together to produce legally compliant maps within 30 days. \({ }^{28}\) Less than three weeks later, the Special Masters produced a draft congressional map-the December 8 Map-for the Court's and the public's consideration. Unfortunately, the December 8 Map violates governing legal and traditional redistricting principles.

\section*{i. The December 8 Map fails to achieve population equality while fully abandoning a modest change approach.}

The most apparent-and entirely unnecessary-violation is the December 8 Map's failure to equally apportion Virginia's population across the 11 congressional districts. Remarkably, it misses this baseline mark while not making any attempt to preserve current districts through modest adjustments.

\footnotetext{
\({ }^{23}\) Adriana Rezal, States With the Biggest Increases in Racial Diversity, U.S. News \& World Report (Nov. 8, 2021), https://www.usnews.com/news/best-states/articles/2021-11-08/these-states-saw-the-biggest-shifts-in-racial-diversity.
\({ }^{24}\) Staff of America Counts: Stories Behind the Numbers, Virginia Adds More Than 600,000 People Since 2010, U.S. Census Bureau: Va.: 2020 Census (Aug. 25, 2021), https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-census-decade.html.
25 MyDistricting Virginia, Meetings and Public Hearings, Va. Redistricting Comm'n, https://www.virginiaredistricting.org/PageReader.aspx?page=Hearings (last visited Nov. 23, 2021).
\({ }^{26}\) Andrew Cain, 'This isn't working': Virginia's redistricting commission near failure on congressional map, Richmond Times-Dispatch (Oct. 20, 2021), https://richmond.com/news/state-and-regional/govt-and-politics/this-isnt-working-virginias-redistricting-commission-near-failure-on-congressional-map/article_fb041792-94d9-57ea-bee3-a057e85d49be.html.
\({ }^{27}\) Va. Const., art. II, § 6-A(g) ("If the Commission fails to submit a plan for districts by the deadline set forth in subsection (d), the Commission shall have fourteen days following its initial failure to submit a plan to the General Assembly. If the Commission fails to submit a plan for districts to the General Assembly by this deadline, the districts shall be established by the Supreme Court of Virginia.").
\({ }^{28}\) See Nov. 19, 2021 Redistricting Appointment Order, at 2.
}

When tasked with drawing maps, courts often employ a "least-change" approach, minimizing their impact on the lines drawn by concordant branches of government or affirmed by previous courts. \({ }^{29}\) The preparation of new maps, then, typically begins with an analysis of how the previous map can be updated to best reflect traditional redistricting principles and population equality. \({ }^{30}\) This is particularly important when the previous map-or some portion thereof-has gone through judicial review, as is the case here. \({ }^{31}\) Eschewing this principle entirely, the December 8 Map abandons the meticulous review of courts past in favor of a brazen reimagination that is both unfamiliar with and detached from the communities that will live under this congressional plan for a decade to come.

\section*{ii. The December 8 Map appears to impermissibly use race as a predominant factor.}

In disregarding the judicial history of Virginia's maps, the Special Masters fail to integrate the lessons learned with respect to constructing legally compliant districts that do not use race as a predominant factor and still permit Virginia's heavily minority districts to elect candidates of their choice in coalition with others. The Special Masters strenuously insist in their memorandum that they "simply drew districts without race as the predominant interest . . . by drawing districts that comply with traditional good government districting criteria . . . and considered race only after we had drawn a map fully subject to the constraints of those factors." \({ }^{\prime 32}\) But when explaining the process that the Special Masters followed to draw historically Black Districts 3 and 4, a different picture emerges.

The Special Masters report their process for drawing District 3 by starting with an overarching assertion that the "Hampton Roads area presently contains one district that consistently elects the candidate of choice of the African-American population." \({ }^{33}\) The Special Masters then assert that they drew the new district lines specifically to comprise "the four major cities in the Hampton Roads area," without regard for the surrounding communities of interest. \({ }^{34}\) Next, the Special Masters report that the new urban-concentrated District 3 that they have created "left few options for the \(2^{\text {nd }}\) District," which now creates an odd ' \(J\) ' shape to include portions of the military community, the Eastern Shore, and then clumsily wraps inland. Nonetheless, the Special Masters did not then re-examine their District 3 lines or

\footnotetext{
\({ }^{29}\) E.g., Johnson v. Wis. Elections Comm'n, -- N.W. 2.d --, 2021 WL 5578395 at *14-16 (Nov. 30, 2021); Wright v. City of Albany, 306 F. Supp. 2d 1228, 1237 (M.D. Ga. 2003).
\({ }^{30}\) Stenger v. Kellett, No. 4:11CV2230 TIA, 2012 WL 601017, at *3 (E.D. Mo. Feb. 23, 2012) ("A frequently used model in reapportioning districts is to begin with the current boundaries and change them as little as possible while making equal the population of the districts. This is called the 'least change' or 'minimal change' method, which assumes that if the current district map complied with the redistricting criteria during the previous census, then a new map will likely comply with only limited changes."). Martin v. Augusta-Richmond Cty., Ga., Comm'n, No. CV 112-058, 2012 WL 2339499, at *3 (S.D. Ga. June 19, 2012) ("Keeping the minimum change doctrine in mind, the Court only made the changes it deemed necessary to guarantee substantial equality and to honor traditional redistricting concerns."); Below v. Gardner, 148 N.H. 1, 963 A.2d 785, 794 (2002) ("[B]y using the existing senate districts, we are able to ensure, to the greatest extent practicable, that each senatorial district contains roughly the same constituents as the last validly enacted plan.").
\({ }^{31}\) Crumly v. Cobb Cty. Bd. of Elections \& Voter Registration, 892 F. Supp. 2d 1333, 1345 (N.D. Ga. 2012) ("In preparing the draft map, the Court began with the existing map drawn by Judge Carnes in 2002.").
\({ }^{32}\) Memo at 5 (emphases added).
\({ }^{33}\) Id. at 14.
\({ }^{34} \mathrm{Id}\).
}
look to the prior court-approved map for guidance; rather they remained committed to a District 3 that pulled in as much urban population as possible.

Next, and more overtly, the Special Masters report that they proceeded to draw District 4 to purposefully increase the BVAP. Dr. Grofman found in 2016 that a constitutionally drawn District 3 would result "virtually automatically" in a substantial minority population in District \(4 .{ }^{35}\) And yet, the Special Masters now report that their initial lines for District 4, which aimed to create a "compact district that included only Richmond City and Henrico/Chesterfield counties," left Black voters comprising "a little more than a third of the population. \({ }^{, 36}\) Without any further examination or explanation of voting trends across coalitions, and without regard to the court-approved existing District 4, the Special Masters simply drew the District anew, employing their own standard of "reasonably compact," to divide Henrico and Chesterfield counties in a manner that inflated the BVAP by 15 percentage points to 45.3 percent. \({ }^{37}\)

The result of the Special Masters' approach to Districts 3 and 4 leaves each with BVAP populations that exceed the percentages that have proved more than sufficient for Black voters to have an opportunity to elect their preferred candidates. Notably, the Special Masters' approach to these minority-opportunity districts stands in sharp contrast to their deference to "Virginia's lengthy tradition of placing a district in Southside Virginia" \({ }^{38}\) to create the \(73 \%\) white District \(5,{ }^{39}\) and the lamenting concern of the pre- and post-Civil War deference to the Blue Ridge and Appalachian communities of Districts 6 and \(9,{ }^{40}\) which are over \(86 \%\) and \(90 \%\) white, respectively. Such racially disparate mapdrawing cannot stand.

\section*{iii. The December 8 Map fails to respect communities of interest.}

Finally, the December 8 Map sharply divides communities of interest across the state, with the notable exception of providing special care to keep Virginia's Appalachian communities united. \({ }^{41}\) From Northern Virginia's metropolitan D.C. communities, to the military communities on the Eastern Shore, to the affinity between the Albemarle and Richmond's Western exurbs, the December 8 Map does little to unite Virginians of common interest under common representation. The overwhelming commentary from Virginians during the public hearing on December 15 before this Court supports the fact that Virginians want to keep their communities together, and the December 8 Map fails to do so. Citizen after citizen informed this Court that the western exurb communities of Richmond are inextricably linked by social, educational, environmental, and economic common interests. Others pleaded for central Virginia to retain its representation and identity in District 7. And several Virginians highlighted the stark disparities in interest between Loudoun County and counties to the south. This failure to keep together the communities in which Virginians live their lives and find their common voice is nonsensical, as well as noncompliant. This Court and the Special Masters can and must do better.

\footnotetext{
\({ }^{35}\) Personhuballah Rep. at 15-16.
\({ }^{36}\) Memo at 14.
\({ }^{37}\) Id. at 15.
\({ }^{38}\) Id. at 15.
\({ }^{39}\) Id. at 18.
\({ }^{40} \mathrm{Id}\). at 12-13.
\({ }^{41}\) See id. at 6, 12-14.
}

\section*{F. The Farkas Map accounts for Virginia's population changes while ensuring compliance with federal and Virginia law.}

Mr. Farkas submits the Farkas Map for consideration by the Special Masters and the Court. For the reasons explained below, the Farkas Map provides equally apportioned districts that are compact, share common community interests, and protect the voting power of Virginia's increasing racial and ethnic minority populations, consistent with all applicable laws and legal precedent. We submit that the Farkas Map achieves these goals more fully and consistently than the Special Masters' December 8 Map.

\section*{II. Legal Standards}

\section*{A. Population equality}

To ensure every voter has an equal voice in government, districts must be evenly apportioned by population. " \([A]\) bsolute population equality is the paramount objective," \({ }^{42}\) as the Constitution unequivocally requires that elections for the U.S. House of Representatives must be based upon population, first and foremost, such that "one man's vote in a congressional election is to be worth as much as another's." \({ }^{43}\) Under federal law, therefore, U.S. congressional districts must be as nearly equal in population as is practicable. \({ }^{44}\) Moreover, a court-ordered redistricting plan must conform to a higher standard of population equality than a redistricting plan created by a legislature, permitting only negligible variance. \({ }^{45}\) Likewise, the Virginia Constitution requires that redistricting maps "be so constituted as to give, as nearly as is practicable, representation in proportion to the population of the district." \({ }^{36}\)

\section*{B. Contiguity and Compactness}

The Virginia Constitution requires that every "electoral district shall be composed of contiguous and compact territory." \({ }^{47}\) A district is not contiguous if it is connected only by "water running downstream or upriver . . .." \({ }^{48}\) "[L]and masses separated by water may[] satisfy the contiguity requirement in certain circumstances. \({ }^{,{ }^{49} \text { To comply with the compactness requirement, districts must be }}\) drawn "employing one or more standard numerical measures of individual and average district compactness, both statewide and district by district. \({ }^{, 50}\) While ease of travel within a district may be considered when evaluating its compactness, it should not be the controlling factor. \({ }^{51}\)

\footnotetext{
\({ }^{42}\) Abrams v. Johnson, 521 U.S. 74, 98 (1997) (citation and internal quotation marks omitted).
\({ }^{43}\) Wesberry v. Sanders, 376 U.S. 1, 7-8 (1964).
\({ }^{44}\) Id.; see also Roman v. Sincock, 377 U.S. 695, 710 (1964) (same for state legislature districts).
\({ }^{45}\) Abrams, 521 U.S. at 98; see also Connor v. Finch, 431 U.S. 407, 414 (1977) (same for state legislature districts); Chapman v. Meier, 420 U.S. 1, 26-27 (1975) (same).
\({ }^{46} \mathrm{Va}\). Const. art. II, § 6.
\({ }^{47} \mathrm{Id}\).
\({ }^{48}\) Va. Code Ann. § 24.2-304.04(6) (2020).
\({ }^{49}\) Wilkins v. West, 571 S.E.2d 100, 109 (Va. 2002) (emphasis added).
\({ }^{50}\) Va. Code Ann. § 24.2-304.04(7) (2020).
\({ }^{51}\) Wilkins, 571 S.E.2d at 109.
}

\section*{C. Preservation of Communities of Interest}

Virginia law requires that districts "be drawn to preserve communities of interest," which are defined as "a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests." \({ }^{52}\) The U.S. Supreme Court has recognized that "maintaining communities of interest" constitutes a "traditional districting principle[]." \({ }^{53}\)

\section*{D. Protection of Racial and Ethnic Minority Groups}

Both federal and Virginia state law protect the political rights of racial and ethnic minorities in the map-drawing process.

\section*{i. Federal law}

The Equal Protection Clause of the Fourteenth Amendment protects against the drawing of districts that "rationally cannot be understood as anything other than an effort to segregate citizens into separate voting districts on the basis of race without sufficient justification.. \({ }^{54}\) Courts apply a two-step analysis to racial gerrymandering claims. First, courts ask whether "race was the predominant factor motivating the legislature's decision to place a significant number of voters within or without a particular district." 55 "Second, if racial considerations predominated over others, the design of the district must withstand strict scrutiny." \({ }^{56}\) The burden shifts to the map-drawer "to prove that its race-based sorting of voters serves a 'compelling interest' and is 'narrowly tailored' to that end." \({ }^{57}\)

Separately, Section 2 of the Voting Rights Act prohibits any "standard, practice, or procedure" that "results in a denial or abridgement of the right . . . to vote on account of race." \({ }^{58}\) Section 2 protects against "vote dilution" brought about by the "dispersal of [a group's members] into districts in which they constitute an ineffective minority of voters." \({ }^{59}\) If a map-drawer invokes the Voting Rights Act to justify race-based districting, "it must show that it had 'a strong basis in evidence' for concluding that the statute required its action." \({ }^{60}\)

An "effective minority district" is generally understood as one that "contains sufficient population to provide the minority community with an opportunity to elect a candidate of its choice." \({ }^{" 1}\)

\footnotetext{
\({ }^{52}\) Va. Code Ann. § 24.2-304.04(5) (2020).
\({ }^{53}\) See League of United Latin Am. Citizens v. Perry, 548 U.S. 399, 433 (2006); see also Miller v. Johnson, 515 U.S. 900, 916 (1995) (including respect for "communities defined by actual shared interests" in list of "traditional race-neutral districting principles").
\({ }^{54}\) Shaw v. Reno, 509 U.S. 630, 652 (1993).
\({ }^{55}\) Cooper v. Harris, 137 S. Ct. 1455, 1463 (2017) (quoting Miller v. Johnson, 515 U.S. 900, 916 (1995)).
\({ }^{56}\) Id at 1464. (citing Bethune-Hill v. Va. State Bd. of Elections, 137 S. Ct. 788, 800 (2017)).
\({ }^{57}\) Id.
\({ }^{58} 52\) U.S.C. § 10301(a); see also id. § 10303(f)(2).
\({ }^{59}\) Cooper, 137 S. Ct. at 1464 (quoting Thornburg v. Gingles, 478 U.S. 30, 46 n. 11 (1986)).
\({ }^{60}\) Id. at 1497 (citing Ala. Legis. Black Caucus v. Alabama, 135 S. Ct. 1257, 1274 (2015)).
\({ }^{61}\) Nat'l Conf. of State Leg., Redistricting Law 2010 at 68 (Dec. 1, 2009), https://www.ncsl.org/Portals/1/Documents/Redistricting/Redistricting_2010.pdf.
}

\section*{ii. State law}

The Virginia Constitution requires that redistricting occur "in accordance with the requirements of federal and state laws that address racial and ethnic fairness." \({ }^{.62}\) The Constitution further requires that "[d]istricts shall provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." \({ }^{, 63}\) Virginia also recently adopted a provision modeled after Section 2 of the federal Voting Rights Act, the Virginia Voting Rights Act, prohibiting maps containing districts that result in a denial or abridgment of "the right of any citizen to vote on account of race or color or membership in a language minority group" or "to elect representatives of their choice." \({ }^{64}\) A district map violates this provision if, "on the basis of the totality of the circumstances, it is shown that districts were drawn in such a way that members of a racial or language minority group are dispersed into districts in which they constitute an ineffective minority of voters or are concentrated into districts where they constitute an excessive majority." \({ }^{65}\) Furthermore, "[d]istricts shall be drawn to give racial and language minorities an equal opportunity to participate in the political process and shall not dilute or diminish their ability to elect candidates of choice either alone or in coalition with others." \({ }^{.66}\)

\section*{E. Political Fairness}

Virginia law prohibits maps that, "when considered on a statewide basis, unduly favor or disfavor any political party." \({ }^{67}\) This provision has not yet been interpreted by a Virginia court.

\section*{III. The Farkas Map Satisfies all Legal Requirements and Ensures Fair Representation for Virginians.}

\section*{A. Overview}

The Farkas Map takes the existing congressional map as its starting point but improves upon it in nearly all respects in a way that is more consistently compliant with the legal principles articulated above than the December 8 Map. It satisfies population equality requirements, increases district compactness, preserves communities of interest, and protects the voting strength of minority groups.

\footnotetext{
\({ }^{62}\) Va. Const. art. II, § 6.
\({ }^{63}\) Id.
\({ }^{64}\) Va. Code Ann. § 24.2-304.04(3) (2020).
\({ }^{65}\) Id.
\({ }^{66} I d\). § 24.2-304.04(4).
\({ }^{67} I d . \S 24.2-304.04(8)\).
}

Figure 1: Farkas Map


In the northern Virginia region, the Farkas Map places the entirety of District 11 within Fairfax County, thereby creating a more compact district with a cohesive community. The map also improves the compactness of District 10, which previously ran from the Capital Beltway to the West Virginia border, by instead anchoring it in the suburban Washington, D.C. area. In central and southwestern Virginia, the Farkas Map unites Charlottesville and the surrounding Albemarle County with the suburbs surrounding Richmond in District 7. This change unites communities of interest while also improving the compactness of District 5. The map also addresses population loss in District 9 by moving Roanoke into that district. And finally, in southeastern Virginia, the Farkas Map ensures that Black communities in Districts 3 and 4 maintain their voting strength, consistent with Dr. Grofman's remedial map and the findings of a Virginia federal court in our client's case, the Page litigation. The map also keeps the military community in District 2 whole by anchoring the district in Norfolk and including Virginia Beach City and Chesapeake City within it.

\section*{B. The Farkas Map satisfies traditional redistricting criteria, improving upon the current plan.}
i. The Farkas Map meets population equality requirements.

The Farkas Map creates districts of equal population. Six of the districts under the Farkas Map are exactly equal to the ideal population. The other five districts vary only by a single person. By stark contrast, the December 8 Map varies widely from district to district, assuring that the voice of voters in some districts, such as District 10, will carry less weight than voters in others, such as District 6.
\begin{tabular}{|l|l|l|l|l|}
\hline \multirow{2}{*}{\begin{tabular}{l} 
Proposed \\
District
\end{tabular}} & \multicolumn{3}{|l|}{ Farkas Map } & \multicolumn{2}{l|}{ December 8 Map } \\
\cline { 2 - 5 } & \begin{tabular}{l} 
Proposed \\
Population
\end{tabular} & \begin{tabular}{l} 
Deviation from \\
Ideal Population
\end{tabular} & \begin{tabular}{l} 
Proposed \\
Population
\end{tabular} & \begin{tabular}{l} 
Deviation \\
Ideal Population
\end{tabular} \\
\hline 1 & 784,673 & +1 person & 783,413 & \(-1,259(-0.16 \%)\) \\
\hline 2 & 784,673 & +1 person & 784,453 & \(-219(-0.03 \%)\) \\
\hline 3 & 784,673 & +1 person & 784,353 & \(-319(-0.04 \%)\) \\
\hline 4 & 784,672 & 0 & 784,366 & \(-306(-0.04 \%)\) \\
\hline 5 & 784,672 & 0 & 785,740 & \(+1,068(+0.14 \%)\) \\
\hline 6 & 784,672 & 0 & 783,436 & \(-1,236(-0.16 \%)\) \\
\hline 7 & 784,672 & 0 & 783,613 & \(-1,059(-0.13 \%)\) \\
\hline 8 & 784,672 & 0 & 784,141 & \(-531(-0.07 \%)\) \\
\hline 9 & 784,671 & -1 person & 786,021 & \(+1,349(+0.17 \%)\) \\
\hline 10 & 784,672 & 0 & 786,469 & \(+1,797(+0.23 \%)\) \\
\hline 11 & 784,671 & -1 person & 785,388 & \(+716(+0.09 \%)\) \\
\hline \begin{tabular}{l} 
Overall \\
Deviation
\end{tabular} & 2 people (de minimis percentage) & 3,056 people \((0.39 \%)\) \\
\hline
\end{tabular}
U.S. congressional districts must be as nearly equal in population as is practicable. \({ }^{68}\) Indeed, the Supreme Court has declared that "[a] court-ordered plan should 'ordinarily achieve the goal of population equality with little more than de minimis variation." \({ }^{39}\) The federal court that approved remedial Virginia districts in the Page litigation strictly adhered to this requirement, as did Special Master Grofman when submitting his proposal to that court. \({ }^{70}\) Not only does the December 8 Map abandon Virginia's history of strict adherence to this principle, but, as is apparent from the near perfect equality achieved by the Farkas Map, the December 8 Map does not even achieve population equality as closely as is practicable. Far from it. This failure would subject the December 8 Map to an exacting standard upon review.
"With a court plan, any deviation from approximate population equality must be supported by enunciation of historically significant state policy or unique features." \({ }^{71}\) The Special Masters report that they "worked diligently to ensure that the congressional districts were reasonably close to equipopulous," \({ }^{72}\) but this is simply not the appropriate legal standard. The Special Masters make no mention of what, if any, historically significant state policy or unique features support these deviations in population.

Indeed, the December 8 Map cannot even survive the less exacting standard applied to districts drawn by state legislatures. The U.S. Supreme Court permits some flexibility to state legislatures to achieve exact population equity, requiring that a state "justify population differences between districts

\footnotetext{
\({ }^{68}\) Id.; see also Roman v. Sincock, 377 U.S. 695, 710 (1964) (same for state legislature districts).
\({ }^{69}\) Abrams, 521 U.S. at \(98-9\) (deeming a court-drawn map with a deviation of \(0.35 \%\) permissible due to the fact that the court-"in detail"-reviewed and accounted for specific historic preferences and unique features that demanded such a deviation).
\({ }^{70}\) Personhuballah Rep. at 11 ("Since the present map and all of the maps offered in briefs submitted . . . were either exactly at ideal district size . . or plus or minus one person, the illustrative maps I have offered to the Court also provide this level of strict population equality.").
\({ }^{71}\) Chapman, 420 U.S. at 26.
\({ }^{72}\) Memo at 3 (emphasis added).
}
that could have been avoided by a good-faith effort to achieve absolute equality. \({ }^{, 73}\) In such instances, courts should consider "the size of the deviations, the importance of the State's interests, the consistency with which the plan as a whole reflects those interests, and the availability of alternatives that might substantially vindicate those interests yet approximate population equality more closely." \({ }^{74}\) Here, there is an available alternative-the Farkas Map-that, as explained further below, substantially vindicates the other interests this Court must consider.

\section*{ii. The Farkas Map creates more compact, contiguous districts.}

The Farkas Map creates more contiguous and compact congressional districts than the current map provides. These improvements are evidenced by both improved mathematical compactness scores as well as comparison with the naked eye.

Virginia courts have relied upon two leading mathematical methodologies for measuring district compactness: the Reock method and the Polsby-Popper method. \({ }^{75}\) The Reock score "compares the area of a district to the area of the small circle that can be drawn around the district." \({ }^{76}\) The Polsby-Popper score "compares the area of a district to the area of a circle with the same perimeter." \({ }^{77}\) Both methods produce a score between 0 and 1 , with 1 being most compact. \({ }^{78}\) Thus, if a score increases from one map to another, that indicates an increase in compactness. The Farkas Map increases the statewide average Reock score over the current map-one that the federal district court already found adhered to principles of compactness \({ }^{79}\)-by over 20 percent and increases the statewide Polsby-Popper score by over 47 percent. The Farkas Map is thus even more compact on average than the current map adopted by a threejudge court.

\footnotetext{
\({ }^{73}\) Tennant v. Jefferson Cnty. Com'n, 567 U.S. 758, 759 (2012) (per curiam) (citations and internal quotation marks omitted).
\({ }^{74} \mathrm{Id}\). at 760 .
\({ }^{75}\) See, e.g., Bethune-Hill v. Va. State Bd. of Elections, 141 F. Supp. 3d 505, 535 (E.D. Va. 2015), aff'd in part, vacated in part, \(137 \mathrm{~S} . \mathrm{Ct} .788\) (2017) (discussing relative attributes of both the Reock and Polsby-Popper methods). The Special Masters report in their December 7 memorandum to the Court that they have utilized a third measure-"Dave's Redistricting App"-without explanation as to how this source calculates its scores or what the range of available scoring is. We are aware of no instance of a Virginia court, or any court for that matter, approving of "Dave's Redistricting App" as a reliable source with which to measure compactness. Quite the opposite: the Southern District of Ohio previously declined to credit maps that were drawn using Dave's Redistricting App, determining that "testimony that the application allows for the manipulation of districts [and] failure to establish the parameters . . . used to produce the maps is problematic" and ultimately that the evidence "is insufficient to establish the reliability of the methodology used to create the maps." Ohio Org. Collaborative v. Husted, No. 2:15-CV-1802, 2016 WL 8201848, at *8 (S.D. Ohio May 24, 2016).
\({ }^{76}\) Vesilind v. Va. State Bd. of Elections, 813 S.E.2d 739, 743 n .3 (Va. 2018) (quoting an explanation provided by an expert witness).
\({ }^{77}\) Id.
\({ }^{78}\) Id.
\({ }^{79}\) Personhuballah, 155 F. Supp. 3d at 562, ("[Dr. Grofman's map] also vastly improves the Third District's compactness score and meaningfully improves the Plan's average compactness scores across all the affected districts.").
}

The same is true when evaluating compactness of the individual districts. In the vast majority of instances, the Farkas districts are more compact than the existing map whether measured by the Reock or Polsby-Popper methods.
\begin{tabular}{|l|l|l|l|l|}
\hline \multirow{2}{*}{\begin{tabular}{l} 
Proposed \\
District
\end{tabular}} & \multicolumn{2}{|c|}{ Reock } & \multicolumn{2}{c|}{ Polsby-Popper } \\
\cline { 2 - 5 } & Existing & Farkas & Existing & Farkas \\
\hline 1 & 0.341 & 0.346 & 0.228 & 0.259 \\
\hline 2 & 0.28 & 0.245 & 0.215 & 0.314 \\
\hline 3 & 0.428 & 0.472 & 0.227 & 0.324 \\
\hline 4 & 0.415 & 0.565 & 0.213 & 0.293 \\
\hline 5 & 0.294 & 0.435 & 0.154 & 0.322 \\
\hline 6 & 0.259 & 0.3 & 0.162 & 0.155 \\
\hline 7 & 0.257 & 0.353 & 0.194 & 0.201 \\
\hline 8 & 0.331 & 0.321 & 0.256 & 0.348 \\
\hline 9 & 0.22 & 0.178 & 0.188 & 0.167 \\
\hline 10 & 0.29 & 0.35 & 0.126 & 0.3 \\
\hline 11 & 0.203 & 0.423 & 0.093 & 0.34 \\
\hline \begin{tabular}{l} 
Statewide \\
Average
\end{tabular} & 0.302 & 0.363 & 0.187 & 0.275 \\
\hline
\end{tabular}

These metrics confirm what is observable with the naked eye, particularly with respect to the northern Virginia region. Between Districts 8,10 , and 11 alone, the population increased by nearly 300,000 Virginians, which accounts for almost 50 percent of Virginia's overall growth since 2010. This growth necessitates more compact boundaries. The existing Districts 8,10 , and 11 -intentionally left untouched in Dr. Grofman's 2016 remedial map-currently sprawl across seven counties and five independent cities, collectively. The Farkas Map, by contrast, reduces this spread to just four counties and four independent cities. \({ }^{80}\) Specifically, while the existing District 11 winds from northern Fairfax County down to southeastern Prince William County, the Farkas Map keeps all of District 11 within Fairfax County's borders, giving it a much more compact shape with sensible boundaries. Similarly, while the existing District 10 runs from the Capital Beltway to the West Virginia border, across five counties and three independent cities, the Farkas Map reduces District 10 to three counties and two independent cities, concentrated in the suburban Washington, D.C. area. \({ }^{81}\) These changes improve upon traditional districting criteria to provide less sprawling and more sensible districts.

\footnotetext{
\({ }^{80}\) See App., fig. 2.
\({ }^{81}\) The Farkas Map leaves District 8 largely the same, with a nearly 90 percent overlap with the current District boundaries, given that District 8 saw only modest population gains. The Farkas Map does, however, significantly reduce the jigsaw nature of the current boundary line District 8 shares with District 11. See id.
}

Figure 2: Northern Virginia


Unlike the December 8 Map, the Farkas Map achieves increased compactness without sacrificing other critical considerations like population equality and preservation of communities of interest. Indeed, the Farkas Map and December 8 Map achieve comparable average Reock scores that are just 0.02 points apart. \({ }^{82}\) District-by-district, the Farkas Map outperforms the December 8 Map on Reock scores in six of the eleven districts. \({ }^{83}\)

\section*{iii. The Farkas Map reunites and preserves communities of interest.}

The Farkas Map reunites communities of interest that were torn apart by the General Assembly in the previous congressional map and which are similarly divided in the December 8 Map. The current map, using 2010 Census geographies, split 14 counties, 37 census-designated places, and 22 voter tabulation districts. The Farkas Map, using 2020 Census geographies, splits only ten counties, 25 censusdesignated places, and 14 voter tabulation districts. These political subdivisions represent common interests and ought to be kept whole to the extent possible. \({ }^{84}\)

\footnotetext{
\({ }^{82}\) The December 8 Map has an average Reock score of 0.383 , according to Princeton University's Gerrymandering Project. Princeton Gerrymandering Project, https://gerrymander.princeton.edu/redistricting-report-card?planId=recOUnE4ZKjEyaVyJ (last visited December 11, 2021).
\({ }^{83}\) Compare supra p. 13 with Memo at 18.
\({ }^{84}\) Miller, 515 U.S. at 916, 919-20.
}

Region by region, the Farkas Map responds to concerns raised by Virginians during both the Virginia Redistricting Commission's tenure \({ }^{85}\) and this Court's process. \({ }^{86}\) For example, numerous commenters emphasized that Charlottesville, home to the University of Virginia, and its surrounding Albemarle County have more in common with suburban Richmond County than the rural mountain areas in District 5. One Charlottesville resident urged this Court to "consider the cohesion of metropolitan areas" and to not "combine Albemarle County with a Congressional district in the Shenandoah Valley." 87 Another explained that the current District 5 "lumps [voters] into a New Jersey-sized monolith, meaning we have no common interests . . . with other parts of the district . . . ." \({ }^{88}\) Yet another commented that Albemarle has "no cultural, economic, or community connections" with the western portion of the state, but instead is "closely intertwined" with Richmond to the east. \({ }^{89}\) Numerous government metrics affirm this point. For example, the Metropolitan Planning Organization for Richmond-a regional divide utilized by both the Virginia Department of Transportation and the U.S. Department of Transportationincludes the regions to the West of Richmond stretching toward Charlottesville, including Goochland and Powhatan. \({ }^{90}\) The regions are also clearly linked by the I-64 corridor running East-West between the two metropolitan areas.

The December 8 Map, in contrast, exacerbates the splits problem by even further breaking up the Charlottesville and Albemarle County community of interest. The December 8 Map cleaves Albemarle County in half, splitting it between the Fifth District (extending all the way to Virginia's Southern border) and Tenth District (extending all the way to Virginia's Northern border). This does not improve on the currently existing map; it makes it worse. Indeed, in the days following the release of the December 8 Map, several Virginians have expressed concern about the split representation of Charlottesville and Albemarle County. \({ }^{91}\)

The Farkas Map addresses this issue, moving Charlottesville and Albemarle County to District 7 in order to unite it with the Richmond suburbs. This change also improves the compactness of District 5, which in its current form stretches all the way from Virginia's southern border, through Charlottesville, up to the edge of the Washington, D.C. metro area. In the Farkas Map, District 5 is anchored in the southcentral region of the state. It unites Martinsville and its suburbs, which are currently separated across two districts, and it also includes Lynchburg and its surrounding counties. Further west, the map addresses population loss in District 9 by moving Roanoke into the district. This change unites Roanoke and Salem, neighboring cities that were previously placed in separate districts.

\footnotetext{
\({ }^{85}\) See Public Comments Submitted to VRC - Organized by Region, Va. Redistricting Comm'n (Nov. 19, 2021), \(\mathrm{https}: / / v i r g i n i a r e d i s t r i c t i n g . o r g / P a g e R e a d e r . a s p x\) ?page=SubmittedPublicComments (hereinafter "VRC Comments").
\({ }^{86}\) Public Comments as of 11-23-21 (10:00am), Va. Jud. System, https://www.vacourts.gov/courts/scv/districting/public_comments.pdf (hereinafter "Va. Sup. Ct. Comments").
\({ }^{87}\) Va. Sup. Ct. Comments at 73 (comment of Barbara Gehrung, Nov. 10, 2021).
\({ }^{88}\) Id. at 200 (comment of Robert E. Beard, Nov. 10, 2021).
\({ }^{89}\) VRC Comments, Central Region at 20-21 (comment of CMS, Oct. 18, 2021).
\({ }^{90}\) PlanRVA, https://planrva.org/ (last visited Dec. 14, 2021).
\({ }^{91}\) See MyDistricting Virginia, https://www.virginiaredistricting.org/legdistricting/comments/plan/513/1 (last visited December 11, 2021) (comments placed near Charlottesville).
}

Figure 3: Central Virginia


In the northern Virginia region, the Farkas Map unites communities in the Washington, D.C. metropolitan and suburban areas. These communities share similar social, cultural, and economic interests, as they house the metropolitan D.C. workforce. The Farkas Map recognizes this reality and ensures that Districts 8, 10, and 11 are focused in metropolitan and suburban Northern Virginia. This greatly improves upon the current map, which, for example, currently includes a northern district (District 10) that stretches all the way to the West Virginia border, tying the D.C. suburbs with rural communities that do not share common interests. The Farkas Map reduces District 10 to predominantly Loudon and Prince William counties, tracing the expanding D.C. suburban area and reducing county splits. By contrast, the December 8 Map carves Loudoun County out of the metropolitan D.C. districts, separating it from neighboring Fairfax County communities along Route 7 as well as from neighboring Prince William County. The splitting of communities that serve the Dulles Technology Corridor defies logic because they are all inextricably tied by common interests to the greater D.C. area. Indeed, recognizing the links of these communities to each other and D.C., the U.S. Department of Transportation has worked with local authorities to expand Metrorail service on the new Silver Line to Washington Dulles

International Airport and further west into Loudoun County in a project dubbed the "Dulles Corridor Metrorail Project. \({ }^{92}\)

In southeastern Virginia, the Farkas Map ensures that the community of veterans and active-duty military in and around Norfolk is kept whole by anchoring District 2 in that county and by including Virginia Beach City and Chesapeake City in the same district. This is not the case with the December 8 Map, which unnecessarily divides these closely linked military communities between Districts 2 and 3 . The populations of Norfolk and Virginia Beach share common federal and environmental concerns, and together form the socio-economic backbone of the Hampton Roads region; they should not be divided. As one commenter to this Court explained, "Norfolk and Virginia Beach are tied to the Norfolk Naval Base with all the active duty and veterans who reside here. . . . Please consider a Norfolk/VB district for [District 2]." \({ }^{93}\) Instead, the December 8 Map lumps Virginia Beach with Isle of Wight and Suffolk, despite those communities having more in common with Portsmouth than Virginia Beach.

Figure 4: Hampton Roads


For all these reasons, the Farkas Map thus reflects and significantly improves upon the preservation of communities of interest across the Commonwealth. The memorandum accompanying the December 8 Map expressed great solicitude for defining and maintaining communities of interest along
92 See U.S. Dep't of Transp., Dulles Corridor Metrorail Project, https://www.transportation.gov/buildamerica/projects/dulles-corridor-metrorail-project (last visited Dec. 11, 2021); see also Dulles Corridor Metrorail Project, Silver Line Stations, https://www.dullesmetro.com/silver-line\({ }_{93}\) stations/ (last visited Dec. 11, 2021).
\({ }^{93}\) Va. Sup. Ct. Comments at 166 (comment of Charles F. Stanton, Nov. 10, 2021).
the Blue Ridge and in Appalachia, which are predominantly white, rural communities. \({ }^{94}\) Similar care ought to be applied to preserving the communities described above, which are in many instances more diverse, urban and suburban communities. The Farkas Map fully accounts for those communities that the December 8 Map neglects.

\section*{iv. The Farkas Map protects racial and ethnic minority groups.}

The Court should ensure that the failures of the General Assembly, which required years of federal litigation to remedy, are not repeated this redistricting cycle. The Court should be guided by race-neutral districting principles and reject any map that unjustifiably overpacks Black voters within districts. This approach does not require significantly altering the Black voting age population in either of Virginia's effective minority districts, Districts 3 and 4, where Black voters have been able to elect their candidates of choice under the current congressional map. \({ }^{95}\)

The Special Masters' memorandum suggests that their first and predominant consideration in the Greater Richmond and Hampton Roads areas was race, resulting in an unjustifiable increase of the BVAP percentages in the effective minority districts in those areas. The Special Masters claim that they "considered race only after [they] had drawn a map fully subject to the constraints of [the] traditional" redistricting principles. \({ }^{96}\) But the district-specific descriptions tell another story. In discussing the Richmond and Southside regions, the Special Masters explain that they initially created "a compact district that included only Richmond City and Henrico/Chesterfield counties. \({ }^{997}\) However, the mapdrawers then observed that Black Virginians "would total a little more than a third of the population" of the district, and so altered the map. \({ }^{98}\) The map-drawers split both Henrico and Chesterfield Counties, in order to construct a district with a Black CVAP of \(45.3 \%\), higher than the \(40 \%\) Black CVAP in the current District \(4 .{ }^{99}\) The only justification they gave was that the high-BVAP district would "likely continue to elect the African-American population's candidate of choice. \({ }^{100}\) The Special Masters provided no analysis that would justify this assumption. Similarly, the Special Masters' rationale for drawing District 3 in the Hampton Roads area appears limited to ensure ability-to-elect by including as many urban areas as possible, without providing any justification that such an approach was necessary. \({ }^{101}\)

\footnotetext{
\({ }^{94}\) See Memo at 13.
\({ }^{95}\) Personhuballah, 155 F. Supp. 3d at 562.
\({ }^{96}\) See Memo at 5.
\({ }^{97}\) Id. at 15.
\({ }^{98}\) Id.
\({ }^{99}\) Id.
\({ }^{100} \mathrm{Id}\).
\({ }^{101} I d\).
}

Figure 5: Greater Richmond


The Farkas Map, in contrast, was drawn in accordance with race-neutral districting principles and still maintains the voting strength of Virginia's Black communities. As explained above, the Farkas Map ensures population equality, creates compact districts, and preserves communities of interest. Doing so results in a map that includes two effective minority districts and does not dilute minority voting strength.

The Farkas Map unites all of Norfolk and Virginia Beach into District 2 and all of Hampton in District 3. In so doing, the Farkas Map decreases the BVAP in District 3 from 47 percent to 41.9 percent, resembling the demographics and configuration of the remedial map proposed by Dr. Grofman in 2016 and adopted by a federal court while retaining the same general configuration and location. \({ }^{102}\) District 3 thus remains an effective minority district in which Black voters may continue to influence election outcomes in coalition with others. \({ }^{103}\) In the current configuration of District 3, Representative Scott won over 66 percent of the vote in 2016, over 91 percent in 2018, and over 68 percent in 2020. \({ }^{104}\)

The BVAP of District 4 rises only nominally to 40.1 percent in the Farkas Map from 39.7 percent in the current map while better adhering to traditional districting principles. Specifically, the Farkas Map removes the irregular arm of Suffolk and Chesapeake counties from District 4 and places them in a more

\footnotetext{
\({ }^{102}\) Personhuballah, 155 F. Supp. 3d at 565 (noting BVAP of 45.3 percent in District 3 and 40.9 percent in District 4 at time of adoption of existing maps in 2016).
\({ }^{103}\) See Bartlett v. Strickland, 556 U.S. 1, 13 (2009) (describing an effective minority district as one in which the minority population does not make up a majority of the voting-age population but "at least potentially . . . is large enough to elect the candidate of its choice with help from voters who are members of the majority and who cross over to support the minority's preferred candidate.") (plurality opinion).
104 Ballotpedia, Virginia's 3rd Congressional District, (last visited Oct. 20, 2021), https://ballotpedia.org/Virginia\%27s_3rd_Congressional_District.
}
contiguous and compact manner in District 3. District 4 of the Farkas Map also keeps Franklin City with neighboring Southampton.

While the Farkas Map hews closely to the versions of these minority-opportunity districts approved by the federal court in 2016, the Special Masters' December 8 map packs a greater percentage of Black voters into each district, particularly District 4.
\begin{tabular}{|l|c|c|c|c|}
\hline & \begin{tabular}{c} 
Enacted Map \\
BVAP (At \\
Adoption)
\end{tabular} & \begin{tabular}{c} 
Enacted Map \\
BVAP (Current)
\end{tabular} & \begin{tabular}{c} 
Farkas Map \\
BVAP
\end{tabular} & \begin{tabular}{c} 
December 8 \\
Map BVAP
\end{tabular} \\
\hline District 3 & \(45.3 \%\) & \(47.2 \%\) & \(41.9 \%\) & \(44.5 \%\) \\
\hline District 4 & \(40.9 \%\) & \(39.7 \%\) & \(40.1 \%\) & \(45.3 \%\) \\
\hline
\end{tabular}

Dr. Grofman's 2016 analysis of the maps he proposed to the district court demonstrate that the higher percentages are not necessary to achieve adherence to legal standards. The 2016 percentages created "a realistic opportunity [for a Democratic candidate of choice] to win election in CD3 due to cohesive voting from within the African-American community and cross-over voting from non-black Democrats." \({ }^{105}\) The changes to BVAP proposed in the December 8 Map-taken together with the failure to abide by other principles such as population equality and not dividing communities of interest-raises significant concern that Black voters are being improperly packed into these two districts.

The changes made in the Farkas Map abide by all federal and state law imperatives while having the effect of preserving the opportunity of minority voters to elect candidates of their choice in coalition with others. The Farkas Map thus comports with the principles of Dr. Grofman's 2016 maps that remedied the unconstitutional gerrymander of the Virginia legislature following the 2010 census.

\section*{v. The Farkas Map does not unduly favor any political party.}

The Farkas Map offers a blueprint for fair, representative redistricting that properly and fully accounts for all legal requirements without unduly favoring any one political party over another. The Farkas Map ameliorates the partisan bias of the December 8 Map and existing map-both with a score of approximately -9.7 percent-to just -0.6 percent based on the turnout from the 2020 presidential race. \({ }^{106}\)

\section*{vi. The December 8 Map ignores important impacts on incumbents.}

The U.S. Supreme Court has held that states have a legitimate interest in preserving the constituencies of congressional incumbents. \({ }^{107}\) The Special Masters have reported that they created the December 8 Map without any knowledge as to "which incumbents have been placed in [congressional]

\footnotetext{
\({ }^{105}\) Personhuballah Rep. at 47.
\({ }^{106}\) Partisan bias is the difference between each party's seat share and \(50 \%\) in a hypothetical, perfectly tied election. Thus, the closer the partisan bias is to 0 , the lower the map's skew toward one party or the other. A negative partisan bias score indicates bias in favor of the Republican Party, while a positive partisan bias score indicates bias in favor of the Democratic Party.
\({ }^{107}\) White v. Weiser, 412 U.S. 783, 797 (1973).
}
districts with other incumbents." \({ }^{108}\) But they and this Court should be aware that the three incumbents whom the December 8 Map most threatens are the only three women in Virginia's delegation. Indeed, some of the most problematic changes that the December 8 Map seeks to make are precisely the changes that could lead to Virginia not having a single female incumbent. The December 8 Map's complete uprooting of District 7 can have only one effect on Representative Abigail Spanberger's tenure in Congress, whether one knows the precise town in which she currently resides or not. Likewise, detaching District 10 from the Washington D.C. metropolitan area to incorporate rural communities to the south threatens Representative Jennifer Wexton's position, without solving the problem of District 10's sprawling geographic reach. Finally, splitting the military communities in Norfolk and Virginia Beach directly threatens the incumbency of Representative Elaine Luria, who is well-known for her military service and connection with that community. Representative Luria is also double-bunked with Representative Scott, one of the delegation's only two Black members and the longest serving incumbent in the state.

Thus, the threat that the December 8 Map poses to the female and minority members-and only those members-of Virginia's delegation is apparent without detailed knowledge of each incumbent's residential address. As many Virginians explained to this Court during the December 15 public hearing, to turn a blind eye to such a result is hardly in the interest of Virginians.

\section*{vii. Nesting is not applicable to congressional maps.}

The December 8 Map was drawn to "carve[] . . Senate districts out of U.S. House districts" "to the extent practicable." \({ }^{109}\) The accompanying report acknowledged that this practice, known as "nesting," is not required by Virginia law, nor is it required by federal law. \({ }^{110}\) Moreover, if nesting is applied in redistricting at all, it is typically used when drawing state legislative districts, rather than congressional districts, which are much larger and often to do not correspond neatly to the number of state legislative districts. \({ }^{111}\) It is unclear how application of this non-statutory principle served to constrain or guide the Special Masters' drawing of the congressional districts, specifically. It is clear, however, that the Special Masters report that they employed nesting to keep communities of interest together despite previously acknowledging that they are not fully apprised of the communities of interest that exist in Virginia. \({ }^{112}\) As discussed above, the December 8 Map unnecessarily fractures multiple important communities of interest across the Commonwealth at the congressional district level. The Special Masters' application of nesting thus serves only to replicate this noncompliance across all maps. Indeed, there does not appear to be a principled basis for the December 8 Map's adoption of certain non-statutory criteria, such as nesting, and rejection of others, such as incumbency.

\footnotetext{
\({ }^{108}\) Memo at 10.
\({ }^{109}\) Id.
\({ }^{110}\) See id.
\({ }^{111}\) See Ballotpedia, Nesting, https://ballotpedia.org/Nesting (last visited December 11, 2021) (discussing nesting in the context of state legislative districts only); see also Bethune-Hill v. Va. State Bd. of Elections, 141 F. Supp. 3d 505, 538 (E.D. Va. 2015), aff'd in part and vacated in part, 137 S. Ct. 788 (2017) (discussing nesting in the context of state legislative districts); Davis v. Bandemer, 478 U.S. 109, 179 n. 18 (1986), abrogated in part on other grounds by Rucho v. Common Cause, 139 S. Ct. 2484 (2019) (J. Powell, concurring in part) (same).
\({ }^{112}\) Compare Memo at 7 (acknowledging lack of awareness of all applicable communities of interest) with Memo at 10 (reporting that nesting was used to align communities of interest under common representation).
}

\section*{IV. Conclusion}

This Court, with the help of the Special Masters, now has the duty to draw congressional districts that will govern elections over the next ten years. The Farkas Map offers fair, representative congressional districts that are fully compliant with federal and Virginia law. It apportions Virginia's population equitably; improves upon traditional districting metrics of contiguity, compactness, and political subdivision splits; and preserves and reunites long-split communities of interest. In so doing, it ensures that Virginia's growing racial and ethnic minority communities, which have been the main drivers behind Virginia's population growth, retain their opportunity to elect candidates of their choice in coalition with others, without diluting their voting strength by packing them within certain districts

Any map adopted by the Court must contend with these important considerations and requirements in order to comply with the law and the will of Virginia voters. Accordingly, Mr. Farkas respectfully requests that the Special Masters and ultimately the Court adopt the Farkas Map for Virginia's congressional districts.

Respectfully submitted,
\(\frac{/ s / \text { Marc E. Elias }}{\text { Marc E. Elias* }}\)
Haley K. Costello Essig, Va. Bar \# 85541
Henry J. Brewster*
Harleen K. Gambhir*
ELIAS LAW GROUP LLP
10 G St NE, Suite 600
Washington, DC 20002
melias@elias.law
hessig@elias.law
hbrewster@elias.law
hgambhir@elias.law
T: (202) 968-4490
F: (202) 968-4498
Abha Khanna*
ELIAS LAW GROUP LLP
1700 Seventh Ave, Suite 2100
Seattle, WA 98101
akhanna@elias.law
T: (206) 656-0176
F: (206) 656-0180
Counsel for James Farkas
* Not admitted to practice in Virginia.

Mssrs. Elias and Brewer are admitted in

DC, Ms. Gambhir is admitted in CA, and Ms. Khanna is admitted in WA.

Enclosures:
Appendix, Figures 1-5
Farkas Map Mapping Files

\section*{APPENDIX}

\section*{FIGURE 1}

Farkas Map


\section*{FIGURE 2}

Northern Virginia


\section*{FIGURE 3}

Central Virginia


\section*{FIGURE 4}

\section*{Hampton Roads}


\section*{FIGURE 5}

Greater Richmond


Good Afternoon Honorable Chief Justice and Justices of the Supreme Court, Court Clerks and Special Masters, Dr. Grofman and Mr. Trende. My name is Tina Winkler and I reside in Goochland County. I am here to address the issue of the lack of Central VA representation in the Congressional Map.

Goochland is a community of interest in Central VA represented by the current VA 07 Congressional District. It is imperative that Goochland remain with Henrico and Chesterfield counties. We are inextricably linked by social, economic, cultural and regional ties. One of the things that the special masters noted in their summary was their point of using Virginia's regional geography in mapping the congressional districts. If that is indeed the case, then it should be apparent that the Capital region is in the Piedmont and not Coastal VA region. I would encourage the special masters to look at the VA Redistricting Commission Map B5 that has Central VA running along 1-64 from Henrico to Charlottesville. B-5 map fairly groups Goochland with its central Virginia neighbors, sharing cultural and economic ties to Richmond suburbs as well as the Rt 64 corridor to Charlottesville. In addition, these district jurisdictions share the middle James River watershed, an economic and ecological resource.

The way the new CD1 map is drawn is not compact and not represent Goochland's community of interest. We do not have anything in common with the Northern Neck or Coastal VA. If you look at VDOT's Map 9, it illustrates Central VA as Goochland, Henrico, Chesterfield, Powhatan, Amelia, Louisa. On the Virginia.org website, Central VA includes the Capital Region. We need a Congressional District that includes these localities. Goochland and the greater Richmond area does not even share the same media market as the rest of the new CD 1 . I urge the special masters to re-examine the greater Richmond area and make sure we have representation that meets our unique needs in the Capital region.

To further illustrate my point, Goochland is included in the metro Richmond/Henrico/Chesterfield area for several cooperatives: Capital Region Land Conservancy, Central Virginia Waste Management Authority (CVWMA), Commodity Agriculture Training and Research, Henrico Regional Water Reclamation Facility, Henrico Water Treatment Facility and Regional Utilities Committee amongst others.

Furthermore, the transportation infrastructure of Route 288 also links Goochland to Henrico, Powhatan and Chesterfield. People that live in Goochland, work and play in Henrico and Chesterfield.

To split the present VA07 into 4 new Congressional districts does not make sense with regards to communities of interest outlined above. Packing Goochland, Louisa, Fluvanna and Western Henrico into a district that stretches from the depths of the Piedmont all the way to the outskirts of Hampton Roads leaves all of these communities without an advocate in Congress. Richmond, a midsized metro area, more than deserves its own district and Goochland needs to be included.

Regarding the House of Delegates map, I am extremely disappointed that Goochland is once again split in two with the precinct that is predominantly Black in the larger HoD 56 that stretches down to Cumberland thereby diluting their voice. I am also confused by the way the dividing line was drawn and what criteria was used to make that line. Interstate 64 and Route 6 unites Goochland and Goochland should be kept together in the HoD District as a community of interest.
\begin{tabular}{ll} 
From: & Sara Marostica Meldrum \\
To: & Redistricting \\
Subject: & Comment on Williamsburg redistricting \\
Date: & Thursday, December 16, 2021 5:05:52 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
As a public employee who lives and works in Williamsburg and James City County, I'm concerned about the separation of Williamsburg from the communities it has historically and currently belongs to in the proposed redistricting maps. Williamsburg is part of Hampton Roads, and Williamsburg and lower James City County are functionally one community. Please return Williamsburg to the 69th district.

Sincerely,
Sara Meldrum


\section*{COMMONWEALTH OF VIRGINIA}

Commonwealth's Attorney for Wise County \& the City of Norton
C.H. "Chuck" Slemp, III

Commonwealth's Attorney
www.wisecwa.com

The Courthouse, Suite 123
P.O. Box 69, Wise, VA 24293

P: 276-328-9406 F: 276-328-5234

December 16, 2021
The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
Post Office Box 1315
Richmond, Virginia 23219-1315
SENT VIA EMAIL: Redistricting@vacourts.gov

\section*{RE: Public Comment on proposed redistricting}

To Whom It May Concern:
Please accept this letter as public comment for the consideration of the Court concerning the redistricting maps proposed by the Court's Special Masters. I write in my personal capacity and in my capacity as Commonwealth's Attorney for Wise County and the City of Norton.

The Senate and House maps for far Southwest Virginia have clean lines, keep localities and communities of interest together to the greatest extent possible, and overall are more representative of our regional identity.

I am especially glad to see my jurisdiction wholly contained in one Senate District (the 6th) and one House District (the 45th). Wise County and the City of Norton are a tight-knit community, with a combined population of less than 40,000 residents. Notwithstanding, we are currently split between two state senate districts and two house districts. We love all of our legislators and the opportunity to work with them, but it just makes sense to unite this community of interest as shown in the draft maps currently before the Court.

Beyond my immediate jurisdiction, I am pleased that the maps reflect important economic ties between certain localities for the 6th and 45 th districts. For example, consider that we recently had a regional economic development announcement in the City of Norton that will create hundreds of jobs for Southwest Virginia. The new project was made possible because of regional collaboration and, specifically, through the formation of the Lonesome Pine RIFA (which benefits Dickenson, Lee, Scott, Wise, and Norton).

To illustrate further, consider that Wise, Lee, Scott and Norton are part of one 30th judicial circuit. Each of these jurisdictions are served by the same 30th judicial circuit drug court. We share a 30th judicial circuit multijurisdictional grand jury. We share a regional jail facility. We have common economic ties. Further, these localities are each served by Mountain Empire Community College and the University of Virginia's College at Wise.

RE: Public Comment on proposed redistricting
December 16, 2021
Page two

While I am pleased that the state legislative districts in far Southwest Virginia keep localities and communities of interest together to the greatest extent possible, it is my hope that the proposed district map for the 9th congressional district is reconsidered. The citizens of far southwestern Virginia share a common regional identity and close economic ties. It is for that reason that I am concerned and disappointed that the City of Salem and Craig County were both removed from the 9th District under the new maps. It is my respectful request that the historic, economic, cultural, and geographic interests of central Appalachia be unified in the "fighting 9th" and that it extends west of the Blue Ridge from Salem to the Cumberland Gap.

Thank you for your time and attention to this matter.

\begin{tabular}{ll} 
From: & William Dishon \\
To: & Redistricting \\
Subject: & Public Comment on proposed redistricting \\
Date: & Thursday, December 16, 2021 5:44:08 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Willian Dishon and I am an Instrumentation Technician. I live in Snowville and I am writing to offer public comment on the proposed redistricting map of the 9th Congressional District. I respectfully urge you to consider redrawing the map to include Salem in the 9th district. I have family members who reside in almost every corner of Southwest Virginia, from Lee County to Roanoke. I have traveled interstate 81 extensively and contributed professionally and financially to the economy of southwest Virginia. It is with this in mind that I write to offer my firm belief that Salem should be part of the 9th district. It just makes sense for it to be included in the district that also includes my home of Pulaski.

Sincerely,
William Dishon
Snowville Va
Pulaski Co.
\begin{tabular}{ll} 
From: & Adrian Hall \\
To: & Redistricting \\
Subject: & 9th district redistricting \\
Date: & Thursday, December 16, 2021 5:53:36 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a lifelong resident of Southwest Virginia. As you know, the 9th congressional district covers a very large geographic area, but the region as a whole and its culture is unique. Covered by mountains and the history of settlement of Virginia's frontier, the people are strong and independent, hardworking and proud. We are a community of interest that spans from Roanoke west to the Cumberland Gap. For that reason, I urge the Supreme Court to consider keeping Salem in the 9th district and keeping the 9th district as small (geographically) as possible. Do not attempt to expand it to the east into areas that are not historically, demographically, geographically, and economically tied to far southwest.

Sincerely,
Adrian Hall
Pulaski County, Virginia
\begin{tabular}{ll} 
From: & Adrian Hall \\
To: & Redistricting \\
Subject: & 9th district redistricting \\
Date: & Thursday, December 16, 2021 5:53:36 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a lifelong resident of Southwest Virginia. As you know, the 9th congressional district covers a very large geographic area, but the region as a whole and its culture is unique. Covered by mountains and the history of settlement of Virginia's frontier, the people are strong and independent, hardworking and proud. We are a community of interest that spans from Roanoke west to the Cumberland Gap. For that reason, I urge the Supreme Court to consider keeping Salem in the 9th district and keeping the 9th district as small (geographically) as possible. Do not attempt to expand it to the east into areas that are not historically, demographically, geographically, and economically tied to far southwest.

Sincerely,
Adrian Hall
Pulaski County, Virginia
\begin{tabular}{ll} 
From: & Brady Walker \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Thursday, December 16, 2021 6:37:48 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Members of the Supreme Court and Special Masters,
I encourage you to consider drawing a House of Delegates district that encompasses both the cities of Danville and Martinsville. It is possible to create a district with both cities where the black vs white population is within single digits of each other. This would give minority voters a voice that they have not previously had. Danville and Martinsville are already intertwined via their economies and their residents. The district would be easily accessible to its delegate as the cities are linked by Route 58. As the two cities recover after decades of population loss and economic decline, it would be ideal for both to be represented by a single delegate who can deliver what is needed for their residents and help redefine southern Virginia.

Thank you, Brady Walker
Dry Fork, VA
\begin{tabular}{ll} 
From: & Colin Achilles \\
To: & Redistricting \\
Subject: & Thoughts on the redistricting maps \\
Date: & Thursday, December 16, 2021 6:42:24 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello Special Masters,
I write all this as a lifelong resident of Virginia, born and educated in Fauquier County (specifically Warrenton), raised in Rappahannock County, and currently living in Arlington. I also have family connections to Charlottesville and Southeastern Virginia (specifically Portsmouth). I say all this to explain my experience in the state (and my biases).

I first want to say thank you for the work you have done. I was a big supporter of Amendment One that created the bipartisan redistricting commission and was very disappointed when the group failed to do its task. After reviewing your maps and the memo you wrote to the Virginia Supreme Court, I am convinced that you created them to the best of your abilities in accordance with the laws and what works best for the communities involved. At the very least, they are far better than the current gerrymandered ones we have now. That being said, I have a few comments for each one:
- US Congressional Map
o You mentioned in your memo that you wanted to be mindful of drawing the \(6^{\text {th }}\) and \(9^{\text {th }}\) districts (along with their corresponding Senate and House districts) in accordance to where they were located along the Blue Ridge Mountains. This was very smart and I generally approve (others might object to the specifics, but there is a limit to what you can do with the population loss in those regions).
o While this was the low hanging fruit in the process, you did the right thing by splitting up the ridiculously gerrymandered \(5^{\text {th }}\) district (and I say that as someone whose childhood lay mostly in that district). Most of the controversy around this seems to lie in the splitting of Albemarle County. Perhaps this can be remedied by giving the rest of the county to the new \(5^{\text {th }}\) district, then making up the difference by taking a small piece of the liberal-leaning \(4^{\text {th }}\) district and giving it to the \(5^{\text {th }}\) to avoid making it too titled to the right politically (since northern Albemarle tends to be more conservative than Charlottesville).
o I understand other people's concerns about the \(10^{\text {th }}\) district being anchored in Loudoun County (where my late father grew up - specifically Middleburg). However, after reviewing the matter, I cannot come up with a viable alternative; they would involve non-compact districts, splitting up more counties and/or causing a negative ripple effect for the other neighboring districts (including giving over all of Albemarle). I would also say that, while Loudoun may have differences from its southern neighbors in terms of politics and culture, those differences are less stark than those neighbors may like to admit. In other words, much of the negativity around this proposal likely has
much to do with the fear of "NOVA creep". That may be valid, but given the low populations of these areas and the need to make things fair for the state as a whole, this may just be a new reality they have to confront. So hear what they have to say - perhaps they have a better solution - but be mindful of where it is coming from.
- State Senate Map
o On the whole, this seems good - again, much more compact and in line with how the areas are situated. Like others, I question cutting up Fauquier, though as my previous comments imply, I understand it from a logistical and substantive standpoint. I would like to think there is a better way to do it, but I will not be the one to provide it.
- State House Map
o More of the same. Good overall in terms of compactness. District 61 is a bit crooked, but again, not sure where to make the alternative cut.

If my comments haven't made it clear, there is a reason why you both are doing it instead of me! Everything I just said you probably already know, and is more about personal observation and does not take into account important things you have already considered like population density, racial composition, etc. If there is anything this process has taught me it is that details matter and it has forced me personally to think about hard choices about what I want in a "fair map." Still, I am writing this little manifesto because I - like others in Virginia and around the country- want at least some control in who represents me and to get to a better political system than what we have now. So, as a longtime cynic of the political process, thank you for giving me hope.

Happy Holidays.
Sincerely,
Colin Achilles
\begin{tabular}{ll} 
From: & \(\underline{\text { alix kauffman }}\) \\
To: & Redistricting \\
Subject: & Redistricting of Senate District from 36 to 34 and House of Delegates District from 44 to 16 \\
Date: & Thursday, December 16, 2021 7:11:31 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Redistricting Commission,
I am happy that Virginia voted for a nonpartisan Redistricting Commission. But now I am reminded of the saying "be careful what you wish for".

I would like to draw your attention to the following districts:
- Virginia's Senate District, old 36 new 34
- House of Delegates District, old 44 new 16

The maps as of December \(8^{\text {th }}, 2021\) show Senate and House of Delegates Districts that disregard our local life.

I live in the 22308 zip code. Our life is centered towards Mount Vernon; we have a postal address of Alexandria though we have nothing to do with Alexandria City. We would have preferred to have a postal address of "Mount Vernon", which was declined as the Mount Vernon Mansion holds the trade name.

Our Mount Vernon Community does not center toward Springfield or Franconia.
Our centers of life, including church, school and transportation are:

\section*{- Mount Vernon (including Woodlawn Estate),}
- the Route 1 Corridor as also highlighted in the current Multimodel Embark redevelopment supported by Federal, State and Local moneys,

\section*{- the Gerry Hyland South County Government center and Fort Belvoir.}

I am suggesting to include the Mount Vernon Mansion from our district and not to split the Mount Vernon High school district and its feeder Elementary school, Washington Mill, which are now moved into the Fredericksburg district.

The same goes for Fort Belvoir. Fort Belvoir should not be split and be in totality part of Mount Vernon district.

Sincerely,
Alix Kauffman

8323 Stockade Drive
Alexandria VA 22308
\begin{tabular}{ll} 
From: & Lohn Jeszenszky \\
To: & Redistricting \\
Subject: & Fort Hunt of Alexandria \\
Date: & Thursday, December 16, 2021 8:27:49 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I do not understand the benefit of redistricting which will cut us off from our neighbors by dividing the Mount Vernon area and dividing Fort Belvoir. Those of us who live in Fort Hunt, area code 22308, have neighbors, schools, groups in common and should be able to vote our concerns with neighbors. It is ludicrous to have us join Fredricksburg and Manassas, areas that are far from our neighborhood.
I strongly object to the plan for redistricting Fort Hunt with distant neighborhoods.
Arleen Jeszenszky
1901 Sword Lane
Alexandria, VA 22308
Sent from my iPad
\begin{tabular}{ll} 
From: & Erica Doyle \\
To: & Redistricting \\
Subject: & Stafford \\
Date: & Thursday, December 16, 2021 8:48:18 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I am very concerned about the proposed redistricting of Stafford and Fredericksburg.
The proposed New 7th District ignores the long-standing relationships that Stafford holds with the counties surrounding it in the Rappahannock Region. Almost all of Stafford's regional interests and affiliations are with communities to the east, south, or west rather than to the north. Stafford County should not be attached to Northern Virginia simply because I-95 runs through it. Stafford is more than just a couple of exits off the highway. Please reflect our real world affiliations in the maps.

Thank you, Mrs.Erica Doyle
\begin{tabular}{ll} 
From: & Sandra Harris \\
To: & Redistricting \\
Subject: & CD-02 \\
Date: & Thursday, December 16, 2021 9:23:46 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Sandra H. Harris
2617 South Kings Road
Virginia Beach, VA 23452
Comment type: disapprove
shanbyh@gmail.com
757-463-0513
Please rethink the redistricting proposal for Virginia's CD-02. This district is already challenging because it stretches from parts of Norfolk to the Eastern Shore. To add the western areas of Suffolk and Isle of Wight defies any pretense of compactness. Second, the proposed map will split our military and retired military interests with meat-packing interests, thereby diluting the focus of the CD-02 congressperson. Furthermore, this map decreases the minority population in CD-03. Is that even legal?
\begin{tabular}{ll} 
From: & elaine.fishman@comcast.net \\
To: & Redistricting \\
Subject: & Protect Communities of Interest \\
Date: & Thursday, December 16, 2021 9:27:41 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to express my concerns about the redistricting map which would splinter the Richmond Metropolitan area into at least three different congressional districts.

I have been a resident of Chesterfield County for over 20 years. During my working years, I traveled daily to my job in Henrico County. Since retiring, I continue to "cross the river" on an almost weekly basis to take advantage of the cultural events, shopping, restaurants and medical facilities that Richmond has to offer. This is easy to do because there are multiple highways and bridges that connect the north and south parts of the Richmond area. When people ask me where I am from, I say "Richmond, VA" because I consider my home to be in the Richmond Metropolitan area.

As I look at the proposed Congressional redistricting map, I am most concerned that the Communities of Interest in urban and suburban Richmond have been split apart with no thought for how its residents will be affected. Under the proposed map, I will be separated not only from the Richmond Metro area, but also from part of my own county. The new map will put me in the \(5^{\text {th }}\) Congressional District, with such places as Crewe, Danville and South Boston... areas where I have never been and with which I have nothing in common. As a resident in a small suburban portion of a predominantly rural district, my vote will be diluted, and I will essentially be unrepresented.

I urge that the map be reconsidered so that all of Chesterfield is in the 4 th Congressional District along with the City of Richmond.

Thank you for time and consideration.
Elaine Fishman
Chesterfield, VA 23832
```

From: Kate Mallek
To: Redistricting
Subject: SCV DRAFT 1 CD
Date: Thursday, December 16, 2021 9:29:05 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Regarding the draft map by the special masters:
Thank you to the special masters for doing a better job than the commission was able to do statewide, but the job is NOT DONE YET. Some areas are logically now in more condensed and reasonable districts, but a few are made worse by splitting communities of interest unnecessarily. I am sure there are others that must be dealt with also, but in Albemarle County, the map splits our community right down the middle. Northern and southern Albemarle do not function independently from each other, and people who live in Albemarle often travel in and out of Charlottesville, and Charlottesvillians to the County and back. Our community of interest is the entire County with Charlottesville surrounded within.
Across the state with this map, county lines have been respected in almost all locales, so why not for Albemarle? This work on this map is getting there but is simply not yet done. Its being better than a previous version is not an acceptable reason to stop work until it is the best it can be for all across the state. Splitting a jurisdiction, and in the case of Crozet, splitting a concise small community, in half devalues our citizens and adversely impacts our ability to advocate collectively for the needs of our community. I am sure that is not what you intend, so let's fix it. Please do not stop at this point and marginalize Albemarle and Charlottesville citizens unnecessarily.
This can be fixed. One alternative has already been drawn by another citizen and you can view it in the map submitted by Theodore Bloechle. Maybe other solutions exist also. Please keep the entirety of Albemarle, including the city of Charlottesville, together, and attach us to District 10. Thank you.
\begin{tabular}{ll} 
From: & Christine Eubanks \\
To: & Redistricting \\
Subject: & Comments on the redistricting maps proposed by the Court's Special Masters \\
Date: & Thursday, December 16, 2021 9:55:57 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Having read the comments submitted by the Elias Law group (below), I agree with their rationale and conclusions, and support the Farkas Map:
https://www.democracydocket.com/wp-content/uploads/2021/12/Farkas-Submission2021.12.16.pdf
"It apportions Virginia's population equitably; improves upon traditional districting metrics of contiguity, compactness, and political subdivision splits; and preserves and reunites long-split communities of interest. In so doing, it ensures that Virginia's growing racial and ethnic minority communities, which have been the main drivers behind Virginia's population growth, retain their opportunity to elect candidates of their choice in coalition with others, without diluting their voting strength by packing them within certain districts".

Sincerely,
Christine Eubanks
8738 Hambleton Way
Mechanicsville VA 23116
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Kemvia Adams-Bush } \\
To: & Redistricting \\
Date: & Thursday, December 16, 2021 10:06:03 PM
\end{tabular}


I am writing concerned that Salem has been removed from the Ninth District. Salem is in close proximity to Eastern Montgomery and the residents use many businesses and services in that area. I am requesting that you reconsider the latest map and add Salem back in the Ninth District.
\begin{tabular}{ll} 
From: & Andrea Mulla \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Thursday, December 16, 2021 10:20:04 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please review this carefully again. There is a community of people in Mount Vernon. Do not split us up.

Andrea Mulla
Mount Vernon/Tauxemont
US (+1) 703-625-0977
Sent from my iPhone
\begin{tabular}{ll} 
From: & Randy Rollins \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Thursday, December 16, 2021 10:43:40 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Dear Honorable Justices:

I am impressed with the work of the Special Masters and especially appreciate their explanatory memorandum.

In my view, legislative districts should primarily allow for "communities of interest" to vote for and be represented by the same congressional representative, senator or delegate, respectively. For this reason, I would give priority to the larger communities of interest represented by urban areas (perhaps defined by SMSA's, media coverage areas and similar factors which tend to bind these areas together) and give lesser importance to respecting political boundaries, such as county lines. The effect is to keep cities and their suburbs together, but to split counties in more rural areas, where there is less community of interest almost by definition due to distances between small communities and residences.

Areas of the proposed congressional maps that follow this principle would be the Roanoke area and the Lynchburg area. Those that are contrary to this principle are the Richmond area, represented by three representatives; the Chesapeake area, represented by two representatives; and the Charlottesville area; represented by two representatives.

I would hope the Court would make revisions of congressional lines to allow the greater Richmond area to have a single congressional representative, and for the greater Charlottesville area to be included in the same congressional district. The Chesapeake split might be as good as you can do, given the geographic issue of the Great Dismal Swamp.

While I have not looked at senate or house districts closely, I believe the same analysis should be applied.

I do not claim the level of expertise demonstrated by the Special Masters, but I have traveled the Commonwealth widely both as a Cabinet secretary for Governor Wilder and as a practicing attorney representing clients in probably 75 counties/cities and their courts across the Commonwealth. Also this is one of the first times in 50 years that my political science major actually helps.

Thank you for your service and your consideration of my comments.
O. Randolph Rollins, Esq.

4304 Monument Park
Richmond, VA 23230

Sent from Mail for Windows
\begin{tabular}{ll} 
From: & Terry Jones \\
To: & Redistricting \\
Subject: & Expected Taxation After Redistricting \\
Date: & Friday, December 17, 2021 12:18:40 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

To the Supreme Court of Virginia an redistricting Committee.
Sent from Mail for Windows

As a resident of Louisa County for over 60 years, I have resided here all my life. I reside in the Trevilian Battle Field District on Poindexter Road. The closest school is Trevilian Elementary, which is also in Patrick Henry District.
Remember the original purpose, (to end fracturing communities) and to (increase electorial competition).
We dare anticipate, new and increase tax variations thru force compliance after the new lines are drawn. I am against and for go the redistricting proposal in order to marginalize taxes.

Let's not forget our founding fathers who pen the boundaries of our great state, it was good for them then and its good enough now for me. I am sure we are not alone, having lived and own my home in Louisa , and after this redistricting proposal, will probably be paying taxes to Albemarle County..

\section*{SAVE MOUNT VERNON MAGISTERIAL DISTRICT!}

RESCUE MOUNT VERNON MAGISTERIAL DISTRICT!

The Mount Vernon magisterial district in Fairfax County, Virginia is a unique and very special place. It is the home of George Washington's Mount Vernon Estate and its Presidential Library that was added to the location during the past recent 15 years.

You may not be familiar with the geography of Fairfax County. The eastern part of Fairfax County which includes Mount Vernon magisterial district and Lee magisterial district has a mailing address that says Alexandria, Virginia. The eastern part of Fairfax County, however, is not in Alexandria City. The Mount Vernon Community AREA is south of the Beltway. Alexandria City is to the north of the dividing line which is the Beltway. This naming and location clarification is very important.

Why does the eastern part of Fairfax County have an Alexandria, Virginia mailing address? Easy answer! The Alexandria name probably goes back to the Colonial history period of time. Before there was a George Washington in the neighborhood. Or, even, a Mount Vernon Estate. Yes, the residents of the Mount Vernon Community area do a careful explaining to visitors.

There are other reasons that Mount Vernon magisterial district is special. This area is like a small town. The Supervisor is like a "Mayor." Our current "Mayor," Supervisor Daniel Stork, is in his second fouryear term. The previous "Mayor," Supervisor Gerald Hyland, had multiple terms, for a longevity of 25 plus years.

From 1971 to 2011 I resided in a lovely home (22309) that backed on Little Hunting Creek, just one and one-half miles from George Washington's Mount Vernon. Now I am residing in a nearby Independent Living Retirement Community called The Fairfax (22060). When my husband and I needed to make the residential change, we wanted to continue to reside in the Mount Vernon magisterial district, this amazing place of history, geography, cordiality, and caring.

Everyone knows everyone. Everyone looks out for everyone, and cares about the welfare of our neighbors, our special history, the beautiful environment with the Potomac River as our forever view.

There is a cohesiveness, a sense of belonging, like no other place.
Please do not destroy this unique blessing. Please save Mount Vernon Magisterial District.
Sincerely,
Lois M. Passman
9100 Belvoir Woods Parkway
Apartment 314
Fort Belvoir VA 22060
703-781-7626
LMPassman@hotmail.com

\section*{Introduction}

One of the criteria to be used in Virginia's redistricting initiative is to Incorporate the concept of communities of interest/communities of place when designing any new state election map. The National Conference of State Legislatures (NCSL) has also established this criterion for every state in the United States.

Time and again in yesterday's (12/15/2021) public hearing conducted by the Supreme Court of Virginia concerning the proposed election maps created by the Special Map Masters was the complaint that the Special Map Masters hadn't taken into consideration communities of interest. I believe this deficiency is due to the lack of a robust definition of communities of interest/communities of place.

\section*{Current Definition of Communities of Interest}

A community of place or place-based community is a community of people who are bound together because of where they reside, work, visit or otherwise spend a continuous portion of their time. Such a community can be a neighborhood, town, coffeehouse, workplace, gathering place, public space or any other geographically specific place that a number of people share, have in common or visit frequently.

Furthermore, Communities of interest share similar historical, cultural, or economic interests. However, they should not be defined by political affiliation.

\section*{Assessment of Current Definition of Communities of Interest/Place}

Among the deficiencies of the current definition are the following points:
1. Does not address preserving existing geographic boundaries of cities/towns and counties wherever possible.
2. Does not take into account religious affiliations and where people worship.
3. Does not address the concept of "socio-economic classes"; i.e. - people having the same social, economic, or educational status. For example, people engaged in the same profession.
4. Doesn't establish upper and lower boundaries in terms of size as regards a community of interest/place. Given the current definition the same deference or importance would be given to a HOA community with several hundred residents as opposed to a community of people working in a large factory employing thousands of people. Hence, an argument could be made that the current definition could potentially contribute to not having a state congressional district's population be within a 5\% +/- range of one-eleventh of Virginia's current population.
5. Doesn't address commuting patterns as regards to where people shop and are employed.
6. Does not address communities of race/ethnicity and/or minority voters as a community of interest.
7. Doesn't directly address the reality of state-defined school districts.

\section*{Proposed Expanded Definition of Community of Interest}

To help address the deficiencies of the current definition of communities of interest/place and to ensure well thought out and justifiable new state election maps the map drawers should incorporate the following concepts into the expanded definition:
1. Any existing Virginia city and county shall be considered a community of interest/place and a high priority should be given to not split these political entities among newly formed state election districts.
2. Places of worship in the aggregate can considered as candidates for communities of interest.
3. School districts should not be geographically divided among different state election districts.
4. Locales where a high large portion of residents work in the same industry or profession shall be considered a community of interest/place such a manufacturing factory employing thousands of people or a university/college town.
5. Distinctions should be made between urban population centers versus rural communities as to their placement in newly formed state election maps. It would seem that rural communities directly adjacent to an urban center or with-in a radius of 25 miles or less might be considered as candidates to link up as the same community of interest or place.
6. People of the same race or ethnicity living in the same geographic area should not be distributed geo-politically across multiple newly formed state election districts that significantly dilute their voting power as a bloc.
7. Commuting patterns as concerns driving to a place of employment or to major shopping centers should be taken into as a possible collection of residents comprising a community of interest.
\begin{tabular}{ll} 
From: & Manjula Ambur \\
To: & Redistricting \\
Subject: & Concerns about Redistricting Map of Congressional District 2 \\
Date: & Friday, December 17, 2021 9:26:13 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Concerns about Redistricting Map of CD 2}

I am Mrs. Manjula Ambur, resident of Hampton Roads over the past 32 years. I am writing this email to express my serious concerns about the newly drawn Virginia maps for Congressional District 2. My main concerns are regarding Norfolk and Yorktown not being part of CD 2 and the details are given below. I very much appreciate your consideration of these issues and consider including Norfolk and Yorktown in CD2.

Norfolk and Virginia Beach have many things in common and they being in the same District 2 is critical to Hampton Roads socio economic success.
- Naval station and Fleet Forces in Norfolk and Air station in Oceana in Virginia Beach work closely together and have service members that live in both localities. Them having the same federal representative is important to better advocate their interests.
- In addition, the ocean view and waterfront parts of Norfolk and Virginia Beach would benefit environmentally being together having same federal representation to address the impacts from the impending sea level rise.
- Also Isle of Wight and Suffolk share more economically and culturally with Portsmouth in the 3rd District than with Virginia Beach which is in the 2nd District.

York County and Williamsburg are key communities in the Hampton

Roads area and all communities being together as part of CD 2 is critical to this area's socio economic success.
- York County is home to Naval Weapons Station and Fort Eustis, significant military facilities. Having Yorktown in the same district as Virginia Beach and having common Federal representation is very beneficial to both cities' constituents
- Being together with Virginia Beach and Chesapeake is beneficial for York County and Williamsburg residents since all have similar socio-economic interests.

Thank you for your consideration.
Mrs. Manjula Ambur
myambur@gmail.com
756-869-0251
--
Manjula Ambur, M.S
Associate CIO for AI and Data Science (Retired)
NASA Langley Research Center
Hampton, VA
CURRENT INTERESTS: Democracy, Climate, Education, and Food Bank
\begin{tabular}{ll} 
From: & Sylvia Rogers \\
To: & Redistricting \\
Subject: & Farkas Map \\
Date: & Friday, December 17, 2021 9:28:40 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of Rockingham County, VA, I am writing to you to state my opposition to the map proposed by the map masters. Please instate the Farkas map. It is a more equitable plan for all voters.

Thank you,

Sylvia Rogers
\begin{tabular}{ll} 
From: & Barbara \\
To: & Redistricting \\
Subject: & Congressional maps for Virginia \\
Date: & Friday, December 17, 2021 9:40:08 AM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS \\ Hello}

Please consider the Farkas Map. It vastly improves these maps - it does not cut Albemarle/Charlottesville area in half.

We in Charlottesville have been gerrymandered out of relevance for a decade. It's undemocratic and unconstitutional. We will not accept the current proposed maps, much of an improvement as they are. Charlottesville/Albemarle has precious little in common with Southside.

Thank you for all the work you do on this crucial issue.

Barbara Shenefield
www.shenefielddesign.com
Follow my blog on the website to see latest work.

\title{
IN THE \\ SUPREME COURT OF VIRGINIA
}

\title{
In Re: Decennial Redistricting Pursuant to The Constitution of Virginia, art. II, §§ 6 to 6-A, and Virginia Code § 30-399
}

\section*{WRITTEN COMMENT ON BEHALF OF} THE VIRGINIA STATE CONFERENCE OF THE NAACP

December 17, 2021
Respectfully submitted,
Robert N. Barnette Jr.
President
Virginia State Conference of the NAACP
PO Box 27212
Richmond, Virginia 23261

\section*{TABLE OF CONTENTS \\ (contents)}
Page
INTRODUCTION ..... 1
SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS ..... 3
I. HISTORY OF RACIAL DISCRIMINATION ..... 6
A. Virginia Has Long Used Discriminatory Voting Laws to Disenfranchise Black Voters ..... 7
B. Virginia Continues to Disenfranchise Black Voters Using District Maps that Dilute the Black Vote ..... 12
1. A Federal Court Held that Virginia's 2011 Congressional Maps Violated the United States Constitution by Packing Black Voters to Dilute Their Electoral Power. ..... 13
2. A Federal Court Held that Virginia's 2011 General Assembly Maps Violated the United States Constitution by Packing Black Voters to Dilute Their Electoral Power ..... 16
3. Federal Courts Have Held that Recent Local Redistricting Plans in Virginia Violated the Voting Rights Act. ..... 18
C. Racial Inequality Persists in Virginia, and the Commonwealth's Politicians Continue to Win Elections Through Appeals to Racial Prejudice ..... 18
II. LEGAL STANDARDS ..... 22
A. Under Section 2 of the Voting Rights Act, Virginia Must Not Dilute the Voting Power of Black Voters in Regions of the State That Exhibit Racially Polarized Voting ..... 23
B. Virginia State Law Provides Even Greater Protection for Black Voters than the Voting Rights Act. ..... 28
1. The Voting Rights Act of Virginia Reaffirms and Extends theProtections Guaranteed Under Federal Law28
2. The Statutory Criteria Expand the Federal Voting Rights Act's Already-Robust Protections by Explicitly Barring the Packing

\section*{TABLE OF CONTENTS (contents)}
Page
and Cracking of Minority Voters, and by Securing Black Voters'Right to Form Coalitional Districts.29
C. The Special Masters' Use of Race to Ensure Compliance with the Voting Rights Act After Drawing Their Initial Maps Is Constitutional35
III. ANALYSIS OF SPECIAL MASTERS INITIAL DISTRICT MAPS AND VIRGINIA NAACP PROPOSED DISTRICTS ..... 37
A. State House Districts ..... 39
B. State Senate Districts ..... 44
C. Congressional Districts ..... 47
CONCLUSION ..... 50

\section*{INTRODUCTION}

The Virginia State Conference of the NAACP ("Virginia NAACP") submits this written comment and accompanying proposed maps to help inform the work of Sean P. Trende and Bernard N. Grofman, Special Masters appointed by the Supreme Court of Virginia under Article II, Sections 6 and 6-A of the Constitution of Virginia and Code § 30-399(F), for the development of proposed redistricting maps for the Virginia House of Delegates, the Senate of Virginia, and Virginia's representatives to the United States House of Representatives.

Virginia NAACP, founded in 1935, is the oldest and largest civil rights organization in the Commonwealth. It oversees more than one hundred NAACP local branches, youth councils, and college chapters. Virginia NAACP's core mission is to secure the political, educational, social, and economic equality of all persons, without discrimination based on race. To further this mission, Virginia NAACP has been actively involved in the 2021 redistricting cycle by educating the public, organizing its members, and vigorously participating in the Virginia Redistricting Commission's public processes. Virginia NAACP now submits this written comment prepared in consultation with its members, local branch leaders, and legal counsel.

As described herein, to create an equitable and constitutional redistricting plan, the mapmakers must consider the lingering legacy of slavery and continued
racial discrimination against Virginians of color and Black Virginians in particular. Simply put, Virginia has a long and reprehensible history of racism and racial discrimination, the effects of which persist to this day. Multiple federal courts have recognized and relied upon this history in invalidating past redistricting plans.

Virginia NAACP thus respectfully requests that the Court and Special Masters consider this written comment and recommendations when evaluating and making revisions to the initial maps presented on December 7, 2021, including and especially our statistical analysis of the Special Masters' initial maps and the contours of the Virginia NAACP-proposed district maps, discussed below and attached as appendices. \({ }^{1}\) Our proposed maps were generated in close collaboration and consultation with Virginia NAACP local branch leaders and members, and are designed to best represent the Black communities of interest located in these districts, while satisfying all other legal criteria.

Virginia NAACP further requests that the Court and Special Masters hold additional public hearings after presenting the next, revised versions of the December 7, 2021 maps, before voting on any map's adoption. It is crucial that the communities where opportunities hinge on the contours of these maps are able to provide feedback on the final versions of any maps before their adoption. And it is

\footnotetext{
\({ }^{1}\) Virginia NAACP has also provided shapefiles for its proposed districts to the Clerk of the Supreme Court of Virginia in order to enable the Special Masters to fully take these into consideration, and request that the Special Masters obtain these shapefiles from the Clerk if they have note already been transmitted.
}
particularly important that the Court hear and consider the views of Black communities and other communities of color who have long been disenfranchised, discriminated against, and excluded from meaningful participation in Virginia's redistricting process.

\section*{SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS}
1. Virginia has a long history of racial discrimination in redistricting, voting, and in all aspects of its laws and society. The ongoing effects of this history must be considered in drawing redistricting plans to ensure that Black Virginians and other communities of color have an equal opportunity to participate fully in the political process.
2. The federal Voting Rights Act requires that districts be drawn in a way that does not dilute the voting power of Black Virginians and other communities of color, including by considering the extent of racially polarized voting in specific regions throughout the Commonwealth, which in turn requires an exacting and district-specific analysis.
3. Virginia law further requires that districts be drawn to preserve communities of interest, which includes Black communities of interest and other communities of color, and to create crossover coalition districts-districts that enable Black and other voters of color to vote
cohesively together and with white voters to elect their candidates of choice-wherever possible.
4. The Special Masters' use of American Community Survey ("ACS") data in conducting their analysis of whether Black voters would have the ability to elect candidates of choice in specific districts is flawed, because ACS data routinely and often significantly undercounts Black voting age population ("BVAP"), as reflected in the full 2020 Census count. See infra Section III. It is also unnecessary to use ACS data to determine Black citizen voting age population ("BCVAP") because the percentage of non-citizen BVAP is relatively low throughout the Commonwealth. This flaw has led the Special Masters to, in some cases, overestimate Black voting strength in specific districts, rendering these districts less effective in electing candidates of choice than asserted. See infra Section III. Recommendation: The Special Masters and the Supreme Court of Virginia must use 2020 Census data when determining Black voters' ability to elect candidates of choice under their proposed redistricting plans.
5. In order to fully analyze and accurately predict whether Black voters in a specific proposed district would have the ability to elect candidates of choice, it is necessary to conduct a precinct reconstruction analysis to
determine how the new district would have performed in past reference elections. However, it is unclear from the Special Masters' memorandum whether they have done this analysis, and, if so, which elections were used as a reference. Recommendation: The Special Masters must conduct a precinct reconstruction analysis when determining the ability of Black voters and other voters of color to elect candidates of choice in their proposed districts, and publicize this analysis, including which elections were used in conducting this analysis.
6. Virginia NAACP's proposed district maps, discussed below and attached as appendices, better represent the Black communities of interest in each region, can more consistently be relied on to elect Black voters' candidates of choice as required by the federal Voting Rights Act and Virginia law, and are generally more compact and with a lower population deviation than the corresponding Special Masters' maps. See infra Section III; Appendix D. Recommendation: The Special Masters should adjust their initial district lines to more closely represent the Black communities of interest in each region as reflected in the Virginia NAACP-proposed maps.
7. All Virginians, and in particular Black Virginians and other communities of color, must be given the opportunity to provide feedback on the final versions of any maps before their adoption. Recommendation: The Special Masters and the Supreme Court of Virginia should hold additional public hearings on the revised versions of the initial Special Masters maps, and any future revised versions, before their adoption by the Court.

\section*{I. HISTORY OF RACIAL DISCRIMINATION}

Virginia has a long history of racial oppression, including direct and indirect efforts to disenfranchise Black Virginians and other communities of color and to prevent them from building and exercising political power. Virginia's infamous history of targeting Black voters for mass disenfranchisement \({ }^{2}\) continued even after the Jim Crow era, with discriminatory voting practices and policies extending into recent decades. Black Virginians and other communities of color continue to face racial discrimination that prevents them from participating fully and equally in the political process. Racial gerrymandering and vote dilution in redistricting plans have

\footnotetext{
\({ }^{2}\) See, e.g., J. Douglas Smith, Managing White Supremacy: Race, Politics, and Citizenship in Jim Crow Virginia, 2428 (2002) (describing the 1901 Virginia Constitutional Convention and legal efforts to disenfranchise Black voters at the turn of the \(20^{\text {th }}\) century); Matt Ford, The Racist Roots of Virginia's Felon Disenfranchisement, The Atlantic (Apr. 27, 2016), https://www.theatlantic.com/politics/archive/2016/04/virginia-felon-disenfranchisement/480072/ (last visited Dec. 8, 2021); Daniel S. Goldman, The Modern-Day Literacy Test: Felon Disenfranchisement and Race Discrimination, 57 Stan. L. Rev. 611, 616 (2004) ("Starting with Mississippi in 1890, every state in the Deep South either adopted a new constitution or rewrote an existing constitution through 'disenfranchising conventions.' The purpose of these conventions was clear: 'Discrimination!' exclaimed Carter Glass, a delegate to the Virginia Convention of 1906. 'Why that is precisely what we propose; that exactly is what this convention was elected for.'").
}
extended this legacy and exacerbated racial disparities in Virginia's democratic process. See infra Subsection B. The U.S. Supreme Court's decision in Shelby County v. Holder, 570 U.S. 529 (2013), invalidated Section 4(b) of the Voting Rights Act of 1965 ("Voting Rights Act"), which had required Virginia to obtain preclearance for changes to its voting laws, enabling discriminatory voting changes to be implemented.

\section*{A. Virginia Has Long Used Discriminatory Voting Laws to Disenfranchise Black Voters.}

Both before and after passage of the Voting Rights Act, Black communities and other communities of color have faced legal obstacles and outright hostility when attempting to participate in Virginia's electoral process, as evidenced by a range of discriminatory voting measures enacted in a sustained effort to disenfranchise Black voters.

During Reconstruction, Black Virginians accessed the polls in large numbers. \({ }^{3}\) In 1867, 105,832 Black voters were registered to vote in Virginia and, of those registered, 93,145 (88\%) voted on October 22, 1867. \({ }^{4}\) Between 1869 and 1890, about 100 Black men served in the Virginia General Assembly. \({ }^{5}\) Hundreds more Black men were elected to office in city and county governments, as well as

\footnotetext{
\({ }^{3}\) Recognizing the African American members elected to the Virginia General Assembly during Reconstruction, S.J. Res. 89, Va. 2012 Regular Sess. (Va. 2012).
\({ }^{4} I d\).
\({ }^{5} I d\).
}
other federal governmental offices. \({ }^{6}\) At the end of Reconstruction, Virginia responded to this largely successful Black voter turnout by enacting discriminatory voting laws to disenfranchise Black voters.

After the 1901 Constitutional Convention, Virginia passed numerous measures designed explicitly to reserve the franchise for white voters and to ensure exclusive political power for white communities. \({ }^{7}\) For example, in reliance on a racially biased criminal justice system, the Commonwealth disenfranchised voters with felony convictions \({ }^{8}\); until the 1970s, Virginia imposed literacy tests demanding extensive memorization of the Constitution \({ }^{9}\); and the Commonwealth enacted a poll tax, requiring yearly payments and three years' payment up front for first-time voters. \({ }^{10}\) Virginia's multiple, deliberate efforts to disenfranchise Black voters worked: the literacy tests alone ensured that, of the roughly 147,000 Black Virginians of voting age in 1901, only \(21,000(14 \%)\) were able to remain on the

\footnotetext{
\({ }^{6}\) Id.
\({ }^{7}\) Many delegates to the 1901 Virginia Constitutional Convention openly discussed adopting suffrage restrictions, such as literacy tests and grandfather clauses, to eliminate the Black electorate. See Smith, supra note 2, at 25-26. State senator Carter Glass, whose leadership at the convention launched his very successful Virginia political career, proclaimed that "there stands out the uncontroverted fact that the article of suffrage which the Convention will to-day adopt does not necessarily deprive a single white man of the ballot, but will inevitably cut from the existing electorate four-fifths of the negro voters... This was the purpose of this Convention; that will be the achievement." Id. at 26.
\({ }^{8}\) Ford, supra note 2.
\({ }^{9}\) See Smith v. Bd. of Supervisors of Brunswick Cnty., 801 F.Supp. 1513, 1517 (E.D.N.Y. 1992) ("Until 1974, Virginia required proof of literacy in order to vote." (citing Virginia v. United States, 386 F.Supp. 1319 (D.D.C.1974)); Smith, supra note 2, at 25 (describing how the constitutional convention "adopted a number of literacy, understanding, and grandfather clauses that left open the possibility that generous registrars might allow illiterate whites to register while denying the privilege to black aspirants").
\({ }^{10}\) Marie Albiges, The poll tax kept black Virginians from voting. Half a century later, its finally being stripped from the books, THE VIRGINIAN-PILOT (Feb. 2020) https://www.pilotonline.com/government/virginia/vp-nw-poll-tax-20200221-dclwpj7hkreftgwqzyvj3xibvq-story.html.
}
voter rolls in 1902. \({ }^{11}\) By 1905, the poll tax halved that number. \({ }^{12}\) In part because of these racist voting restrictions, Virginia did not elect another Black representative at either the state or federal level until \(1967 .{ }^{13}\)

While literacy tests became unlawful with the Voting Rights Act and poll taxes were ruled unconstitutional, \({ }^{14}\) Virginia continues to disenfranchise voters with felony convictions. \({ }^{15}\) Because of the over-policing of Black communities \({ }^{16}\) and the racially discriminatory nature of the criminal justice system, \({ }^{17}\) as expected, this practice disproportionately disenfranchises Black Virginians. Despite the restoration of voting rights of almost 200,000 Virginians since 2016, \({ }^{18}\) as of 2020, more than one in seven-over \(14 \%\)-of Black Virginians remain disenfranchised due to a felony conviction. \({ }^{19}\)

\footnotetext{
\({ }^{11}\) Smith, supra note 2, at 26.
\({ }^{12}\) See Ford, supra note 2, at 14.
\({ }^{13}\) African American Legislators in Virginia, Virginia General Assembly Dr. Martin Luther King JR. MEMORIAL COMMISSION, http://mlkcommission.dls.virginia.gov/lincoln/african americans.html.
\({ }^{14}\) See Albiges, supra note 10.
\({ }^{15} \mathrm{Va}\). Const. art. II, § 1.
\({ }^{16}\) See e.g., Ned Oliver, New Data Shows Virginia Police Are More Likely To Stop and Search Black Drivers, Virginia MERCURY (May 19, 2021), https://www.virginiamercury.com/2021/05/19/new-data-shows-virginia-police-are-more-likely-to-stop-and-search-black-drivers/ (last visited Dec. 8, 2021) ("Black drivers in Virginia are almost two times more likely than white drivers to be pulled over by police and three times more likely to have their vehicles searched, according to data collected under the state's new Community Policing Act.").
\({ }^{17}\) The Sentencing Project, Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System (Apr. 19 2018), https://www.sentencingproject.org/publications/un-report-on-racial-disparities.
\({ }^{18}\) Chris Uggen, Ryan Larson, Sarah Shannon, and Arleth Pulido-Nava, Locked Out 2020: Estimates of People Denied Voting Rights Due to a Felony Conviction, The Sentencing Project (Oct. 30, 2020), https://www.sentencingproject.org/publications/locked-out-2020-estimates-of-people-denied-voting-rights-due-to-a-felony-conviction/.
\({ }^{19}\) Id.
}

Until 2020, \({ }^{20}\) the Commonwealth further diluted the effect of votes by voters of Black and Brown communities through "prison gerrymandering," a redistricting practice in which the state counts incarcerated individuals at the location of their correctional facility instead of their home address. As of 2017, 53\% of incarcerated Virginians were Black, a rate almost three times the state's 20\% Black population. \({ }^{21}\) This practice artificially inflated the total population numbers in the overwhelmingly white, rural communities where Virginia's correctional facilities are predominantly located, while simultaneously deflating the population of the communities from which these incarcerated individuals came and are likely to return, reducing the number of representatives in all levels of government from Black and Brown communities. \({ }^{22}\)

Until 2013, the Voting Rights Act's preclearance requirement provided some protection for Black Virginians and other voters of color from discriminatory voting laws. Between 1982 and 2006, the U.S. Department of Justice ("DOJ") blocked 15 voting changes Virginia submitted for preclearance on the basis that they would have had a discriminatory impact on voters of color. \({ }^{23}\) But in 2013, soon after the

\footnotetext{
\({ }^{20}\) The Virginia General Assembly passed a law in 2020 mandating that incarcerated Virginians be counted at their home addresses for purposes of redistricting. See Va. Code § 24.2-304.04(9).
\({ }^{21}\) Incarceration Trends in Virginia, VERA Institute for Justice (2019), .
\({ }^{22}\) Virginia Public Access Project, End of "Prison Gerrymandering" Saps Rural Virginia, (April 14, 2021) https://www.vpap.org/visuals/visual/transfer-clout-rural-to-urban/; Virginia Public Access Project, Prison Policy Shifts Population from Rural to Urban, https://www.vpap.org/visuals/visual/prisons_population_losers/ (Aug. 28, 2021).
\({ }^{23}\) Jeremy Duda, Supreme Court ruling on Voting Rights Act opened floodgates for new restrictions, Virginia MERCURY (Oct. 7, 2020) https://www.virginiamercury.com/2020/10/07/supreme-court-ruling-on-voting-rights-act-opened-floodgates-for-new-restrictions/.
}

Supreme Court struck down the preclearance coverage formula in Shelby County v.
Holder, Virginia purged almost 40,000 voters from its voter rolls, many of whom were later revealed to have been eligible voters removed in error. \({ }^{24}\) Because Black Americans are statistically more likely to share a name with another person than white Americans, \({ }^{25}\) eligible Black voters are more likely to be incorrectly purged from voter rolls than their white counterparts. \({ }^{26}\) Additionally, in 2013, Virginia enacted an unduly restrictive voter identification ("ID") law, eliminating the use of utility bills, pay stubs, bank statements, government checks, and Social Security cards as acceptable identification, and allowing only drivers licenses, voter ID cards, student IDs, or concealed handgun permits. \({ }^{27}\) It has been widely shown that restrictive voter ID laws cause disproportionate burdens on voters of color, who are less likely than white voters to possess the required forms of ID and less likely to be

\footnotetext{
\({ }^{24}\) Tomas Lopez, 'Shelby County': One Year Later, The Brennan Center for Justice (June 24, 2014) https://www.brennancenter.org/our-work/research-reports/shelby-county-one-year-later; Jim Nolan, Chesterfield registrar delays purge of voter rolls, Richmond Times-Dispatch (Oct. 9, 2013), http://www.timesdispatch.com/news/local/chesterfield/chesterfield-registrar-delays-purge-of-voter-rolls/article_162e36b5-0be7-5dc8-af9f-48876a167b43.html.
\({ }^{25}\) Many Black Americans share a common last name not because of a shared bloodline, but because of the continuing legacy of American slavery. Enslaved Black Americans were stripped of their own names and forced to take on those of their enslavers, which often persist today. See Lolly Bowean, The unspoken history hidden behind a surname, Chicago Tribune (Dec. 26, 2017) https://www.chicagotribune.com/opinion/commentary/ct-perspec-surname-names-history-heritage-1227-20171221-story.html ("[D]uring slavery, African-Americans were assigned names by their owners...so that they could be identified as that white family's property."). See also, Jonathan Brater et. al., Purges: A Growing Threat to the Right to Vote, The Brennan Center for Justice, 7 n .1 (2018) https://www.brennancenter.org/sites/default/files/2019-08/Report Purges_Growing_Threat.pdf (indicating that Black Americans are more likely to have a common last name with another registered voter than whites and so more likely to be mistakenly purged from the voter rolls).
\({ }^{26}\) See Brater, supra note 25.
\({ }^{27}\) Morgan Whitaker, Virginia Governor signs strict voter ID law, MSNBC (March 26, 2013) https://www.msnbc.com/politicsnation/virginia-governor-signs-strict-voter-id-law-msna20231. Note: This law is no longer in effect.
}
able to afford to obtain them. \({ }^{28}\) Together with new restrictions on third-party voter registration, \({ }^{29}\) these changes contributed to Virginia being ranked as one of the most difficult and costly states to vote in as recently as 2018. \({ }^{30}\)

\section*{B. Virginia Continues to Disenfranchise Black Voters Using District Maps that Dilute the Black Vote.}

After the 2010 Census, Black Virginians saw the concerns of their communities largely ignored by mapmakers who sought to dilute Black voting strength across the Commonwealth. These mapmakers did so both by "packing" Black voters into a smaller number of districts and by "cracking" Black voters across multiple districts. "Packing" dilutes the Black vote by districting the majority of Black voters into a single district or a small number of districts, thus decreasing the number of representatives preferred by Black voters that could be elected. "Cracking" dilutes the Black vote by doing just the opposite: splitting Black voters into many districts, resulting in a Black voting age population in each of those districts that is too small for Black voters to elect a candidate of their choice. Indeed, courts have relied on evidence of these discriminatory practices in invalidating Virginia's redistricting plans three times since the last census.

\footnotetext{
\({ }^{28}\) See generally, Vann R. Newkirk II, Voter Suppression is Warping Democracy, The Atlantic (July 17, 2018) https://www.theatlantic.com/politics/archive/2018/07/poll-prri-voter-suppression/565355/.
\({ }^{29}\) See Lopez, supra note 24.
\({ }^{30}\) See Quan Li, Michael J. PomanteII, and Scot Schraufnagel, Cost of Voting in the American States, 17 Election Law Journal: Rules, Politics, and Policy 234 (2018).
}
1. A Federal Court Held that Virginia's 2011 Congressional Maps Violated the United States Constitution by Packing Black Voters to Dilute Their Electoral Power.

In 2011, the divided state legislature deadlocked on a congressional plandisagreeing mainly on the creation of majority-minority districts-with the Virginia State Senate and Virginia House of Delegates approving competing redistricting plans. \({ }^{31}\) These plans were ultimately passed under a unified legislature in 2012. \({ }^{32}\)

However, the enacted plan, despite being precleared by the DOJ, \({ }^{33}\) packed Black voters unconstitutionally into the Third Congressional District, a district originally created in 1992 after the DOJ directed the Virginia legislature to draw a Black-majority district, following the 1990 census, in order to ensure fair representation for Black voters in Virginia. \({ }^{34}\) Since its creation, the Third District had been represented by Representative Bobby Scott, who was, at the time, the only Black member of Virginia's U.S. congressional delegation. \({ }^{35}\) Despite the consistent

\footnotetext{
\({ }^{31}\) Page Winfield Cunningham, State House, Senate OK rival maps on redistricting, Washington Times (June 9, 2011) https://www.washingtontimes.com/news/2011/jun/9/state-house-senate-ok-rival-maps-on-redistricting/.
\({ }^{32}\) Anita Kumar, Bob McDonnell signs Va. Congressional redistrict bill into law, The Washington Post (January 25, 2012) https://www.washingtonpost.com/blogs/virginia-politics/post/bob-mcdonnell-signs-va-congressional-redistricting-bill-into-law/2012/01/25/gIQADxR0QQ blog.html.
33 Letter from Thomas E. Perez to The Honorable E. Duncan Getchell, Jr. (Mar. 14, 2012), https://redistricting.1ls.edu/wp-content/uploads/VA-preclear-20120314-congress.pdf
\({ }^{34} 3^{r d}\) District, A Brief History, Virginia Public Access Project (Sep. 1, 2015),
https://www.vpap.org/updates/1996-3rd-district-brief-history/. The original version of this district had already been found to unconstitutionally pack Black voters in 1997, with the court ordering the legislature to redraw the district from \(61.6 \%\) to \(50.5 \%\) BVAP. See Moon v. Meadows, 952 F.Supp. 1141 (E.D. Va. 1997); Geoffrey Skelley, Virginia's Redistricting History: What's Past Is Prologue, SABATO'S CRYSTAL BALL, UVA CEnter for Politics, (June 18, 2015), https://centerforpolitics.org/crystalball/articles/virginias-redistricting-history-whats-past-is-prologue/
\({ }^{35}\) Lyle Denniston, No Delay of a New Virginia Federal Districting Map, SCOTUSBLOG (Feb. 2, 2016), https://www.scotusblog.com/2016/02/no-delay-of-new-virginia-federal-districting-map/.
}
reelection of Rep. Scott, the 2012 plan increased the BVAP from \(53.1 \%\) to over \(56.3 \%{ }^{36}\)

In Page v. Virginia State Bd. Of Elections, 58 F. Supp. 3d 533 (E.D. Va. 2014),
Black voters filed suit in 2013 challenging the 2012 plan, alleging that they had been packed into the Third District diluting their vote and constituting an unconstitutional racial gerrymander in violation of the Equal Protection Clause of the Fourteenth Amendment. The U.S. District Court for the Eastern District of Virginia agreed, striking down Virginia's 2012 congressional map, finding that (1) the plan unconstitutionally packed Black voters in a single district; (2) race predominated the legislature's drawing of the Third District; and (3) the redistricting plan's \(55 \%\) BVAP "floor" as applied to the Third District was not narrowly tailored to achieve non-retrogression in compliance with the Voting Rights Act. Id. at 545-53. \({ }^{37}\) The court considered direct evidence of legislative intent, including statements made by the author of the 2012 map, as well as circumstantial evidence, including the Third

\footnotetext{
\({ }^{36}\) Page v. Virginia State Bd. Of Elections, 58 F. Supp. 3d 533, 537 (E.D. Va. 2014).
\({ }^{37}\) Defendants appealed to the Supreme Court of the United States, which, on March 30, 2015, remanded the case back to the trial court for reconsideration in light of its March 25, 2015 decision in Alabama Legislative Black Caucus \(v\). Alabama, 575 U.S. 254 (2015). Cantor v. Personhuballah, 575 U.S. 931 (2015). In the Alabama case, the Court ruled 5 to 4 on a number of legal standards for determining whether race predominated in a redistricting plan, including that racial gerrymandering must be considered on a district-by-district basis, not statewide. See generally Alabama Legislative Black Caucus, 575 U.S. 254. On remand, the Eastern District of Virginia again ruled that an unconstitutional racial gerrymander had occurred in the drawing of Virginia's Third Congressional District, holding that race predominated in the creation of its boundary lines and that the legislature had no justification that satisfied strict scrutiny. Page v. Virginia State Bd. Of Elections, No. 3:13cv678, 2015 WL 3604029, *19 (E.D. Va. Jun. 5, 2015). The court ordered that the Third District be redrawn in light of this ruling. Id. at *18.
}

District's shape, non-contiguousness, and splits in political subdivisions. Id. at 541-
47.

Although the challenged map remained in effect for the 2014 election, the court ordered the legislature to draw new districts for later elections in order to ensure fair representation for Black Virginians. \({ }^{38}\) When the legislature then failed to do so, a panel of federal judges was assigned to redraw the map. \({ }^{39}\) The new map centered the Third District in Hampton Roads and added Richmond and Petersburg to the Fourth District. \({ }^{40}\) This redrawing dispersed the concentration of Black voters more fairly across the Third and Fourth Districts, increasing the overall influence of Black voters and enabling Black voters to elect a candidate of their choice in the Fourth District in 2016. \({ }^{41}\) These remedial maps were later upheld in Personhuballah v. Alcorn, 155 F. Supp. 3d 552 (E.D. Va. 2016), where the court held that the "unpacking" of the Third District from \(56.3 \%\) to \(45.3 \%\) BVAP did not lead to Black voters losing their ability to elect candidates of their choice. \({ }^{42}\)

\footnotetext{
\({ }^{38}\) Id. at 554-55. See also Rachel Weiner, Matt Zapotosky, and Laura Vozzella, Court declares Virginia's congressional map unconstitutional, THE WASHINGTON POST (Oct. 7, 2014), https://www.washingtonpost.com/local/virginia-politics/court-throws-out-virginia-congressional-map/2014/10/07/97fb866a-4e56-11e4-8c24-487e92bc997b story.html.
39 Simon Pathé, Judges Select New Virginia Congressional Map, Roll Call (Jan. 7, 2016), https://www.rollcall.com/2016/01/07/judges-select-new-virginia-congressional-map/
\({ }^{40}\) Andrew Cain, Judges impose new Va. congressional map, redrawing 3rd, 4th Districts, Richmond TimesDISPATCH (Jan. 7, 2016), https://web.archive.org/web/20201118180914/https://richmond.com/news/local/government-politics/judges-impose-new-va-congressional-map-redrawing-3rd-4th-districts/article 0ad5053b-6818-5d7e-b96e-c9ce02ad45cb.html (last visited Dec. 7, 2021).
\({ }^{41}\) Virginia Results, New York Times (Nov. 11, 2016), https://www.nytimes.com/elections/2016/results/virginia (last visited Nov. 17, 2011).
\({ }^{42}\) Personhuballah v. Alcorn, 155 F. Supp. 3d 552, 565 (E.D. Va. 2016), stay denied Wittman v. Personhuballah, 577 U.S. 1125 (2016), appeal dismissed, 578 U.S. 539 (2016).
}
2. A Federal Court Held that Virginia's 2011 General Assembly Maps Violated the United States Constitution by Packing Black Voters to Dilute Their Electoral Power.

During the same cycle, the 2011 General Assembly redistricting plan redrew the boundaries for twelve House of Delegates districts, packing Black voters into these districts such that each district had a BVAP of at least 55\%. \({ }^{43}\) In Bethune-Hill v. Virginia State Board of Elections, 141 F.Supp. 3d 505, 523-24 (E.D. Va. 2015), Black voters from each district sued the Board of Elections in 2014, alleging that the new maps diluted their voting power and were racially gerrymandered in violation of the Equal Protection Clause of the Fourteenth Amendment. \({ }^{44}\)

The U.S. District Court for the Eastern District of Virginia once again struck down Virginia's maps as racially discriminatory. \({ }^{45}\) The Court held that the Commonwealth used an "arbitrarily applied . . . mechanical 55\% racial threshold" to compress Black voters into only a few districts and thus limited Black Virginians' electoral power. \({ }^{46}\) An expert report submitted on behalf of plaintiffs conducted an analysis of the racial composition and voting patterns of the challenged districts and found that the districts did not require a BVAP of \(55 \%\) or higher in order to elect

\footnotetext{
\({ }^{43}\) Bethune-Hill v. Virginia State Bd. Of Elections, 141 F.Supp.3d 505, 523-24 (E.D. Va. 2015). The plan was subsequently precleared by the DOJ, https://redistricting.lls.edu/wp-content/uploads/VA-preclear-20110617-stateleg.pdf, and went into effect.
\({ }^{44}\) Id.
\({ }^{45}\) Bethune-Hill v. Va. State Bd. of Elect., 326 F. Supp. 3d 128, 180 (E.D. Va. 2018).
\({ }^{46}\) Id.
}
minority voter-preferred candidates. \({ }^{47}\) The Commonwealth's plan also "substantially reduce[d] geographic compactness" among the challenged districts and resulted in the split of counties and cities. \({ }^{48}\)

The Eastern District decision followed a Supreme Court order to engage in a "holistic analysis" of the use of race in Virginia's redistricting \({ }^{49}\) rather than simply accept the Commonwealth's argument that legislators believed that the twelve districts needed to contain a BVAP of at least \(55 \%\) to remain Black opportunity districts. \({ }^{50}\) The Supreme Court additionally held that Plaintiffs were not required to establish, as a threshold matter, that the challenged districts were inconsistent with traditional redistricting principles. \({ }^{51}\) Rather, a variety of direct and circumstantial evidence could sufficiently show race improperly predominated in a redistricting plan, even if a district otherwise complied with traditional redistricting principles.

\footnotetext{
\({ }^{47}\) Bethune-Hill v. Va. State Bd. of Elections, Report of Dr. Stephen Daniel Ansolabehere, No. 113CV00949, 2015 WL 6673859 (Mar. 11, 2015), •10.
\({ }^{48}\) Id.
\({ }^{49}\) Bethune-Hill v. Va. State Bd. of Elections, 137 S. Ct. 788, 800 (2018). The district court had initially held that the plaintiffs did not establish that race was the predominant factor in the creation of eleven of the twelve challenged districts. Bethune-Hill v. Virginia State Bd. of Elections, 141 F.Supp.3d 505, 510-11 (E.D. Va. 2015). The court additionally held that, although race was the predominant factor in the creation of one of the districts, House District 75 , the use of race was nevertheless constitutional, as the "General Assembly was pursuing a compelling state interest, namely, actual compliance with federal antidiscrimination law, and....used race in a manner narrowly tailored to achieve that interest." Id. at 511. Plaintiffs appealed to the Supreme Court. On March 1, 2017, the Supreme Court issued a ruling, holding that the district court had employed an incorrect legal standard in determining that race did not predominate in eleven of the twelve districts. Bethune-Hill, 137 S . Ct. at 796-801 (2017). The Court, however, agreed with the district court that the twelfth district was constitutional, , writing that a state need merely show that it had "good reasons to believe it must use race in order to satisfy the Voting Rights Act" to meet strict scrutiny. Id. at 801. The Court remanded the case and instructed the district court to re-evaluate the eleven districts under the correct legal standard. In June 2018, a three-judge panel ruled 2-1 that the eleven challenged House districts were unconstitutionally racially gerrymandered and ordered the General Assembly to draw a remedial map by October 30, 2018. The new plan went into effect in time for the 2019 elections.
\({ }^{50}\) Bethune-Hill, 141 F.Supp.3d at 519.
\({ }^{51}\) Bethune-Hill, 137 S. Ct. at 797-800.
}
"The ultimate object of inquiry is . . . the legislature's predominant motive for the design of the district as a whole., \({ }^{52}\)
3. Federal Courts Have Held that Recent Local Redistricting Plans in Virginia Violated the Voting Rights Act.

Applying these same principles, courts have likewise struck down Virginia's local redistricting plans. For example, just this year, the U.S. District Court for the Eastern District of Virginia struck down Virginia Beach's City Council plan because its discriminatory impact on voters of color combined with other aspects of societal discrimination to "den[y voters of color] equal access to the electoral and political process, in contravention of Section 2 of the Voting Rights Act." \({ }^{53}\) The court noted that voters of color struggled to elect their preferred candidates \({ }^{54}\) despite making up a sufficiently large and cohesive community, \({ }^{55}\) in part because white voters consistently voted against Black candidates of choice. \({ }^{56}\)

\section*{C. Racial Inequality Persists in Virginia, and the Commonwealth's Politicians Continue to Win Elections Through Appeals to Racial Prejudice.}

Beyond discriminatory voting laws and racial gerrymanders, Virginians of color continue to struggle with racial inequality and discrimination in a range of other ways. The Governor's Commission to Examine Racial Inequity in Virginia

\footnotetext{
\({ }^{52}\) Id. at 800.
\({ }^{53}\) Holloway v. Virginia Beach, 2021 WL 1226554, 59 (E.D. Va. 2021).
\({ }^{54}\) See id. at 6.
\({ }^{55}\) See id. at 24.
\({ }^{56}\) See id. at 39-40.
}

Law, established by Governor Ralph S. Northam, \({ }^{57}\) issued a 2020 report laying out in great detail the continuing and devastating effects of Virginia's "history of racial inequities and racially-discriminatory laws" in the areas of housing, education, criminal justice, health, and environmental justice, among other aspects of society. \({ }^{58}\) Courts consider "the extent to which minorities . . . bear the effects of discrimination in education, employment, and health," as evidence of continued barriers to "the ability to participate effectively in the political process" for voters of color. \({ }^{59}\) Persistent racial disparities throughout nearly all aspects of society combine to weaken Black electoral strength in Virginia.

Nationwide, Black American households, which amount to more than \(13 \%\) of the country, hold just \(4 \%\) of the nation's wealth. \({ }^{60}\) Meanwhile, median white household wealth is almost eight times that of Black households. \({ }^{61}\) This persistent inequality of opportunity translates to education as well, where Black students are more likely to attend underfunded schools, have poorer educational opportunities,

\footnotetext{
\({ }^{57}\) Commonwealth of Virginia Office of the Governor, Executive Order Number Thirty-Two (June 4, 2019), https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-32-Establishment-of-the-
Commission-to-Examine-Racial-Inequity-in-Virginia-Law.pdf
\({ }^{58}\) Report from The Commission to Examine Racial Inequity in Virginia Law, Identifying and addressing the vestiges of inequity and inequality in Virginia's laws (Nov. 15, 2020), https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/2020-Commission-Report---Inequity-and-Inequality-in-Virginia-Law.pdf.
\({ }^{59}\) S. Rep. No. 97-417, at 28-29 (1981); see also Thornburg v. Gingles, 478 U.S. 30, \(44-45\) (1986).
\({ }^{60}\) See id.
\({ }^{61}\) See Emily Moss, et.al., The Black-white wealth gap left Black households more vulnerable, THE BROOKINGS InSTITUTION (Dec. 8, 2020) https://www.brookings.edu/blog/up-front/2020/12/08/the-black-white-wealth-gap-left-black-households-more-vulnerable/.
}
and face discriminatory disciplinary enforcement while in school. \({ }^{62}\) These trends have only worsened during the pandemic. \({ }^{63}\) Black Americans are more likely than white Americans to have "poor health" and have the highest cancer mortality rate of any racial or ethnic group. \({ }^{64}\) Compounding this factor, Black Americans are less likely to be insured or have adequate access to insurance coverage. \({ }^{65}\)

Unfortunately, the hardships faced by Black Virginians largely parallel these national trends. Since the 1970s, Virginia's Black communities have trailed the Commonwealth's median wealth by about \(30 \% .{ }^{66}\) Virginia's schools are increasingly segregated, \({ }^{67}\) and continued racial discrimination has caused disproportionately negative health outcomes for Black Virginians. \({ }^{68}\) Ingrained poverty due, in part, to limited educational opportunities and low-wage employment make it difficult to impossible to take time off from work to vote and overcome other

\footnotetext{
\({ }^{62}\) See Emma Dorn, et. al., COVID-19 and student learning in the United States: The hurt could last a lifetime, MCKINSEY \& COMPANY (June 1, 2020), https://www.mckinsey.com/industries/education/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime; see also Talk of the Nation, Black Students More Likely to Be Disciplined, NPR (Mar 12, 2012) https://www.npr.org/2012/03/12/148460543/black-students-more-likely-to-be-disciplined.
\({ }^{63}\) See Dorn, supra note 62.
\({ }^{64}\) See Sofia Carratala \& Connor Maxwell, Health Disparities by Race and Ethnicity, Center for American PROGRESS (May 7, 2020) https://www.americanprogress.org/article/health-disparities-race-ethnicity/
\({ }^{65}\) See id.
\({ }^{66}\) See Katherine Hafner, Virginia's racial income gap closed more before the Civil Rights era than it has since, THE VIRGINIA-PILOT (Sept. 15, 2020) https://www.pilotonline.com/news/vp-nw-racial-income-gap-virginia-20200915-b5t4cl7p6fa7hkdtufpwrnj34e-story.html.
\({ }^{67}\) See Brian McNeill, School segregation by race and poverty is deepening in Virginia, report finds, VCUNEWS (Nov. \(11,2020)\) https://news.vcu.edu/article/School segregation by race and poverty is deepening in Virginia.
68 See Virginia Health Equity Report, VirginiA DEpt. OF HEALTH, 22 (2012) https://www.vdh.virginia.gov/content/uploads/sites/76/2016/06/Health-Equity-Report-2012.pdf.
}
obstacles to voting. Together, these factors make it far more difficult for Black voters to participate in Virginia's democracy.

Racial animus sadly remains a factor in Virginia's elections. The use of racist imagery and language in Virginia's campaigns over the last few years is well documented, \({ }^{69}\) but the 2021 General Assembly races were notably awash with racist ad campaigns and "dog whistles" meant to rile up white resentment towards people of color.

Specifically, in 2021, several Black members of the General Assembly were targeted with ad campaigns utilizing racist imagery. Mailers evoked the history of Black lynching by depicting each representative as a puppet hung from ropes held by House Speaker Nancy Pelosi, with Congresswoman Alexandria Ocasio-Cortez standing over her shoulder. \({ }^{70}\) One representative, Alex Askew, was even shown with the hue of his face artificially darkened and an image of his face set ablaze. \({ }^{71}\) When these mailers were called out for trading in lynching imagery, only one white opponent in these three races even acknowledged the mailers' existence. \({ }^{72}\) These racist tactics continue to affect election results and diminish electoral opportunity

\footnotetext{
\({ }^{69}\) See generally, Holloway,2021 WL 1226554 at *22-26.
70 Black state lawmakers decry flyers showing them as puppets, Associated Press (Oct. 6, 2021) https://apnews.com/article/virginia-richmond-race-and-ethnicity-racial-injustice2f1f7529c4757e7f3c2d74a66f6260bf.
\({ }^{71}\) Julie Carey \& NBC Washington Staff, Virginia GOP Campaign Flyers Show Ropes Around Black Male Delegates, NBC WASHINGTON (Oct. 5, 2021) https://www.nbcwashington.com/news/local/northern-virginia/virginia-gop-campaign-flyers-show-ropes-around-black-male-delegates/2822167/.
\({ }^{72}\) See Associated Press, supra note 70.
}
for Black voters. Each of the candidates in the campaigns that used these racist tactics succeeded. In all three General Assembly races, the white challenger unseated the Black incumbent.

None of these systems operates independently. Rather, they intersect and reinforce each other such that Virginia's democracy continues to be disproportionately inaccessible to Black voters. Whatever recent softening has occurred in Virginia's historically harsh voting landscape, the burdens experienced by voters of color in Virginia persist.

\section*{II. LEGAL STANDARDS}

Redistricting is fundamentally about ensuring that voters, and their communities, are adequately and fairly represented. The legal structures that guide this process reflect that goal. In its Redistricting Appointment Order, the Court instructed Special Masters Trende and Grofman to "fully comply with federal and state law" in drawing maps. \({ }^{73}\) As explained in this Section, these laws impose rigorous redistricting requirements. First, the federal Voting Rights Act serves as a "stern and powerful remedy" against the denial or dilution of the vote of Black and other voters of color. See Briscoe v. Bell, 432 U.S. 404, 410 (1977). Second, Virginia's own laws offer even greater protection: in the last year, Virginians

\footnotetext{
\({ }^{73}\) Redistricting Appointment Order, In Re: Decennial Redistricting Pursuant to The Constitution of Virginia, art. II,
 https://www.vacourts.gov/courts/scv/districting/redistricting_appointment_order_2021_1119.pdf
}
amended the Constitution and passed two new laws that expand on the federal Voting Rights Act's already-robust protections. Finally, new legislative maps must not abridge the rights afforded to Virginians by the Constitution of the United States, especially those enshrined in the Equal Protection Clause of the Fourteenth Amendment. To comply with these stringent legal standards, the Commonwealth must adopt maps that preserve, secure, and empower the voting rights of the people it has for so long disenfranchised.

\section*{A. Under Section 2 of the Voting Rights Act, Virginia Must Not Dilute the Voting Power of Black Voters in Regions of the State That Exhibit Racially Polarized Voting}

Under Section 2 of the Voting Rights Act, a state cannot pass any voting law that causes "a denial or abridgement of the right of any citizen . . . to vote on account of race or color." 52 U.S.C. § 10301(a). A state violates the Voting Rights Act when it draws maps that cause voters of color to "have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b). In essence, the law aims to proscribe any "electoral law, practice, or structure [that] interacts with social and historical conditions to cause an inequality in the opportunities enjoyed by [minority] and white voters to elect their preferred representatives." Thornburg \(v\). Gingles, 478 U.S. 30, 47 (1986); Holloway, 531 F. Supp. 3d at 1044.

Among other things, Section 2 prohibits "vote dilution," which occurs when an electoral practice-including the lines drawn in redistricting-combines with social and historical conditions to result in a weakening of the voting strength of a racial or language minority group. Any state with a significant racial minority population, such as Virginia, must conduct a vote dilution analysis as part of its redistricting process to ensure compliance with the Voting Rights Act. In short, Virginia must ensure it is neither "packing" Black voters into "excessive majorit[ies]" in too few districts, or "cracking" Black voters into "ineffective minorit[ies]" across many districts. Gingles, 478 U.S. at 46 n. 11 .

In Gingles, the Supreme Court instituted a two-step framework to analyze whether a particular redistricting plan would illegally dilute minority voting power. 478 U.S. 30. It first outlined three preconditions that, together, establish both the existence of "racially polarized voting," the phenomenon at the heart of vote dilution, and the possibility of drawing an effective district (i.e., a "majorityminority" district, a district with fifty-percent-plus-one minority voting age population) that would afford racial minority voters the opportunity to elect candidates of choice despite the presence of extreme or maximum racially polarized voting. Id. at 50-51; see also Collins v. City of Norfolk, 816 F.2d 932, 936 (4th Cir. 1987). These preconditions are established where a racial minority group is both sufficiently compact that it could constitute a majority in a given district and
politically cohesive enough that this district would elect candidates of their choice, but where the white majority votes sufficiently as a political bloc such that voters of color are usually unable to elect candidates of choice. Gingles, 478 U.S. at 50-51. If those conditions are met, one must next determine if, "based on the totality of circumstances, . . . the political processes leading to . . . election in the State . . . are not equally open to participation" by the electoral minority (emphasis added).

52 U.S.C. § 10301(b). If established, there exists a Section 2 vote dilution violation.
This framework has significant implications for Virginia's current redistricting process. The effect of racially polarized voting is particularly dangerous to voters of color because it "deprives . . . [them] of their preferred representative . . . and allows . . . elected [officials] to ignore [their] interests without fear of political consequences." Gingles, 478 U.S. at 48 n. 14 (quotations omitted). To be sure, Virginia exhibits significant racially polarized voting only in certain of its regions. \({ }^{74}\) In some districts, Black voting age population must approach or exceed fifty percent in order for Black voters to have an equal ability to elect candidates of their choice; in other districts, a lower percentage of Black voting age population may be effective in electing candidates of choice. It is therefore imperative that the

\footnotetext{
\({ }^{74}\) For example, Dr. Stephen Ansolabehere, in his 2015 expert report for Bethune-Hill v. Virginia State Board of Elections, found diversity in voting bloc habits even among only twelve challenged Virginia House of Delegates districts. Of the twelve, six exhibited significant racially polarized voting behavior, four lacked significant racially polarized voting, and two exhibited low levels of White cohesion and therefore moderate levels of racially polarized voting. Report of Stephen Ansolabehere, at \| 10.
}

Court and Special Masters consider potential vote dilution under the Section 2 framework on a region-to-region and district-to-district basis, in order to create effective Black opportunity districts without unnecessarily packing Black voters into fewer districts.

Additionally, the "totality of the circumstances" prong of Section 2 requires Virginia to carefully consider its own history of racial discrimination, and to draw maps that account for the continuing effects of that history on political participation by racial minority voters. This inquiry may include past legalized discrimination; evidence of racial disparities in education, employment and health; racial appeals in campaigns; the responsiveness of elected officials to the interests of the Black community; and the frequency with which Black and other candidates of color are elected to office, among other factors. Gingles, 478 U.S. at 36-37 (quoting S. Rep. No. 97-417, at 28-29).

In Gingles itself, for example, North Carolina drew maps that made Black voters the minority in several multimember districts, effectively "submerging [Black Voters] in a white majority." Id. at 46. The Supreme Court held that these maps violated the Voting Rights Act. Id. at 80. In reaching this holding, the Court noted several factors which helped perpetuate the state's unequal and discriminatory political system, including North Carolina's "legacy of official discrimination" in voting, education, housing, employment, and healthcare. Id. at 80. The Court
likewise noted that state politicians continued to appeal to racial prejudice on the campaign trail, and that North Carolinians often voted along racial lines. Id. Making matters worse, rather than countering this unequal environment, the state's voting maps "acted in concert" with these factors, causing a political process "not equally open" to Black North Carolinians. Id.

Many of the discriminatory hallmarks identified by the Gingles Court persist in Virginia today. Here, as in Gingles, the Commonwealth has a legacy of discrimination in voting, education, housing, employment, and healthcare. \({ }^{75}\) Here, as in Gingles, modern politicians appeal to racial prejudice to win elections. Virginia must therefore do today what North Carolina failed to do in Gingles: it must take these factors into account and draw districts that provide Black voters and other voters of color an equal opportunity to participate in its political process and elect candidates of their choice. This is especially true in the regions of the state in which voting is significantly racially polarized, and thus where the Voting Rights Act mandates such consideration. In sum, Virginia's final maps must scrupulously avoid packing and cracking Black voters. They must empower-not dilute-the Black vote.

\footnotetext{
\({ }^{75}\) See infra Section I.C. See also Report from The Commission to Examine Racial Inequity in Virginia Law, Identifying and addressing the vestiges of inequity and inequality in Virginia's laws (Nov. 15, 2020), https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/2020-Commission-Report---Inequity-and-Inequality-in-Virginia-Law.pdf.
}

\section*{B. Virginia State Law Provides Even Greater Protection for Black Voters than the Voting Rights Act.}

While federal law requires vigilant protection of the voting rights of people of color, Virginia law requires even more. Indeed, just last year, the people of Virginia amended the Commonwealth's Constitution to require districts that "provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." Va. Const. art. II, § 6. And since passing that amendment, the people have enacted two laws expanding and reaffirming legal protections for voters of color: Va. Code § 24.2-304.04 (the "Statutory Criteria") and Va. Code § 24.2-126 (the "Voting Rights Act of Virginia").
1. The Voting Rights Act of Virginia Reaffirms and Extends the Protections Guaranteed Under Federal Law.

Earlier this year, the Commonwealth passed the Voting Rights Act of Virginia. Va. Code § 24.2-126. This statute reaffirms the protections of the federal Voting Rights Act. It bars any voting law that "that results in a denial or abridgement of the right of any citizen of the United States to vote based on race or color[.]" Id. It goes farther with respect to local redistricting, prohibiting any map for a local governing body or elected school board that causes "retrogression in the position of members of a racial or ethnic group with respect to their effective exercise of the electoral franchise." Id. Va. Code § 24.2-129(C). This was an essential element of
redistricting in Virginia under the preclearance regime of the Voting Rights Act prior to the 2013 Shelby County v. Holder decision.

While not directly applicable to the statewide redistricting plans at issue here, Va. Code § 24.2-129 demonstrates a clear intent under Virginia law to ensure continued, fair, and adequate representation for communities of color by preventing the diminishment of already established electoral gains made by these communities. Any new maps should follow this same principle and ensure continued, adequate representation for communities of color. As evidenced herein, the road to something approaching adequate representation for Black Virginians has been long and hard, and it is essential that any new maps do not erase what gains have been made.
2. The Statutory Criteria Expand the Federal Voting Rights Act's Already-Robust Protections by Explicitly Barring the Packing and Cracking of Minority Voters, and by Securing Black Voters' Right to Form Coalitional Districts.

In 2020, Virginia passed the Statutory Criteria, a statute updating its redistricting process. Va. Code § 24.2-304.04. The Statutory Criteria establish nine requirements for voting districts, three of which relate to Virginia NAACP's interests here.

First, mirroring the federal Voting Rights Act, Va. Code § 24.2-304.04(3) states that "no district shall be drawn that results in a denial or abridgement of the right of any citizen to vote on account of race or color[.]" It likewise bars the Commonwealth from drawing districts "in a way that results in a denial or
abridgement of the rights of any racial . . . minority group to participate in the political process and to elect representatives of their choice." Id.

But this part of the Statutory Criteria also goes further than the federal Voting Rights Act-it explicitly prohibits the packing and cracking of communities of color. It bars the Commonwealth from "dispers[ing] [communities of color] into districts in which they constitute an ineffective minority of voters," and from "concentrate[ing] [people of color] into districts where they constitute an excessive majority." Va. Code § 24.2-304.04(3). This requirement directly mirrors the Supreme Court's reasoning in Gingles, where the Court used the same language to explain that the Voting Rights Act prohibits the packing and cracking of Black Voters. \({ }^{76}\) In other words, the Statutory Criteria makes explicit and affirmative what the text of the Voting Rights Act left implicit: The Commonwealth cannot dilute the Black vote by packing too many Black voters into one district or by separating them into multiple districts.

Second, Va. Code § 24.2-304.04(4) bars the Commonwealth from "dilut[ing] or diminish[ing] [voters' of color] ability to elect candidates of choice either alone or in coalition with others." This provision expands legal protection for "coalitional districts"-districts which enable racial minority voters to vote cohesively together

\footnotetext{
\({ }^{76}\) See Thornburg, 478 U.S.at 46 n .11 ("Dilution of racial minority group voting strength may be caused by the dispersal of blacks into districts in which they constitute an ineffective minority of voters or from the concentration of blacks into districts where they constitute an excessive majority.").
}
with other voters of color in sufficient numbers so as to elect their preferred candidates-to also include districts which enable voters of color to vote cohesively together with white "crossover" voters in sufficient numbers so as to elect their preferred candidates. This means that many more Black and other racial minority opportunity districts can be created in Virginia-and indeed that they must be created where failing to do so would have the effect of diluting or diminishing the ability of voters of color to elect candidates of their choice. See also Special Masters Mem. ("SM Mem.") at 27 ("The Statutory Criteria do require that we draw districts where minority groups are able to elect their candidates of choice, either alone or in coalition with other groups.").

Thus, in Virginia, Black and other voters of color have a protected right to coalesce not only together with other voters of color, but also with white voters with whom they vote cohesively, in order to form districts in which they can elect their preferred candidates. \({ }^{77}\) In drawing new district lines, the Commonwealth cannot impair Black Virginians' ability to form and preserve such coalitions.

\footnotetext{
\({ }^{77}\) The Statutory Criteria, thus, appear to go beyond the plurality opinion in Bartlett v. Strickland, which construed the Voting Rights Act as not applying to claims for the creation of "crossover" districts comprised of voters of color and white voters who "cross over" to vote cohesively with those voters of color. 556 U.S. 1, 13 (2009). See also Special Masters Mem. at 27 ("The Statutory Criteria do require that we draw districts where minority groups are able to elect their candidates of choice, either alone or in coalition with other groups. This follows the approach of a majority of federal circuits, which require such coalition districts." (citing Campos v. City of Baytown, 840 F.2d 1240 (5th Cir.), reh'g denied, 849 F. 2 d 943 (1988), cert. denied, 492 U.S. 905 (1989). But see Nixon v. Kent County, 76 F.3d 1381 (6th Cir. 1996) (en banc) (concluding that coalition districts are not required by the VRA)).
}

Third, under Va. Code § 24.2-304.04 (4), "[d]istricts shall be drawn to preserve communities of interest." A community of interest ("COI") is "a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests." Id.

Here, too, the Statutory Criteria may in certain instances go beyond the federal Voting Rights Act in providing additional protections for the Black and other communities of color that so often comprise local communities of interest. The Supreme Court has interpreted the Voting Rights Act to require that a state "take[s] [COIs] into account[.]" League of United Latin American Citizens ("LULAC") v. Perry, 548 U.S. 399, 434 (2006) (quotation omitted). But under the Statutory Criteria, districts "shall" be drawn to preserve COIs. Va. Code § 24.2-304.04 (4) (emphasis added), thus requiring their preservation where possible. Centering COIs in this way supports district cohesion and a sense of shared interests and identity among voters, and reflects a concern for ensuring that Virginians are represented by individuals who actually speak for their community and understand their community's needs.

Special Masters Trende and Grofman correctly note in their Memorandum that COIs can be defined by factors such as "media, public trans[it], . . and
institutions such as schools and churches. \({ }^{38}\) But under federal and state law, other factors define COIs as well. Indeed, under the Statutory Criteria, a community of interest includes people "who share similar social, cultural, and economic interests." Va. Code § 24.2-304.04 (4). This language fits federal court precedent defining COIs "by economic, social, cultural, and historical ties." Backus v. South Carolina, 857 F. Supp. 2d 553, 562 (D. S.C. 2012). \({ }^{79}\)

Applying these broader factors, federal courts have recognized COIs using more than just geography, topography, media markets, public transit systems, schools, and churches. For example, in Diaz v. Silver, a federal court recognized an Asian-American COI in two separate New York neighborhoods, Sunset Park and Chinatown. 978 F. Supp. 96, 123-24 (E.D. N.Y. 1997). The court noted that these neighborhoods' voters "work together, attend the same health clinics, . . . shop in the same stores[,] . . . and speak the same dialect." Id. at 124. The same community organizations likewise serve both neighborhoods. Id. at 102. While the court struck down the district containing this COI on other grounds, the state redrew maps that

\footnotetext{
\({ }^{78}\) Special Masters' Memorandum to the Chief Justice and Justices of the Supreme Court of Virginia (Dec. 7, 2021), https://www.vacourts.gov/courts/scv/districting/memorandum re va redistricting_2021.pdf.
79 See also Bethune-Hill v. Virginia State Bd. of Elections, 326 F. Supp. 3d 128, 142 (E.D. Va. 2018) ("[A] district that is drawn with some consideration of communities of interest links voters who share . . . social . . . [and] economic interests."); Graham v. Thornburgh, 207 F. Supp. 2d 1280, 1286 (D. Kan. 2002) (When identifying communities of interest, "common social, cultural, racial, ethnic, and economic interests should be considered."); King v. State Bd. of Elections, 979 F. Supp. 619, 625 n. 4 (N.D. Ill. 1997) (the Voting Rights Act permits states to consider the "preservation of cultural, social, and economic communities of interest") (quotation omitted).
}
preserved the COI—maps the Supreme Court summarily affirmed. Diaz v. Silver, 55 U.S. 801 (1997), aff'd mem. \({ }^{80}\)

Diaz shows that a state can preserve a COI centered around a community of color without having race predominate redistricting in a way that violates the Equal Protection Clause, see infra Subsection C. In Diaz, the state no doubt considered race: it drew a district containing a COI with voters "mostly of Chinese background." Diaz, 978 F. Supp. at 124. But the state also considered other social, cultural, and economic factors, including the industries in which the COI's voters worked, the stores in which they shopped, and their common dialect. Id. Applying this holistic approach, a state can preserve a minority COI without letting race necessarily predominate.

Similarly, in Rodango v. Illinois State Bd. of Elections, a federal court held that race did not predominate Illinois' decision to increase Black voting power by drawing a district that joined two majority-Black residential areas into one COI. 836 F. Supp. 2d 759, 761-65 (N.D. Ill. 2011). There, the court noted that these areas' voters work in similar industries, have similar recreational activities, use similar social services, and have family ties. Id. at 764. Thus, even though the state

\footnotetext{
\({ }^{80}\) See also Favors v. Cuomo, 39 F. Supp. 3d 276, 295 (E.D. N.Y. 2014) (noting that the Court "ultimately adopted a map that included districts that maintained the integrity of . . . [the] Asian-American communities [recognized as COIs in Diaz]").
}
recognized a COI that merged two majority-Black areas, race did not predominate. Id. at 766-70.

These same principles apply to Virginia's Black communities of interest. Thus, just like the communities of interest in Diaz and Radogno, Virginia's Black communities of interest must be preserved.

\section*{C. The Special Masters' Use of Race to Ensure Compliance with the Voting Rights Act After Drawing Their Initial Maps Is Constitutional}

The Equal Protection Clause of the Fourteenth Amendment prohibits Virginia from "separat[ing] its citizens into different voting districts on the basis of race" without sufficient justification. Bethune-Hill, 137 S. Ct. at 797; Miller v. Johnson, 515 U.S. 900, 911 (1995). Strict scrutiny is triggered whenever "circumstantial evidence of a district's shape and demographics or more direct evidence going to legislative purpose, that race was the predominant factor motivating the legislature's decision to place a significant number of voters within or without a particular district." Bethune-Hill, 137 S. Ct. at 797. This can include evidence that a state's use of race in drawing district lines predominated over or conflicted with other traditional redistricting principles. See id. at 797-99.

Nevertheless, as correctly highlighted in Special Masters Trende and Grofman's Memorandum of December 7, 2021, "[t]he U.S. Supreme Court has assumed, without deciding, that compliance with the [Voting Rights Act] reflects a
compelling governmental interest" and that "when the [Voting Rights Act] preconditions established in Thornburg \(v\) Gingles . . . are met and the totality of the circumstances would demand race-conscious drawing, the 14th Amendment would allow it." \({ }^{81}\) Thus, race may-and indeed must-be considered for the drawing of districts in the Virginia jurisdictions that exhibit racially polarized voting, insofar as it is used to protect voters from vote dilution. Additionally, preserving communities of interest-a requirement under Virginia law, see infra Subsection B.ii.-is a traditional redistricting principle that, while often correlated with race, can be accomplished without allowing race to predominate. See, e.g., Diaz, 978 F. Supp. at 124; Rodango, 836 F. Supp. at 761-70; see also infra notes 83, 84.

Special Masters Trende and Grofman's use of race in their map-drawing process appears to be entirely consistent with Supreme Court precedent, and will continue to be as they continue to ensure compliance with the Voting Rights Act and the preservation of communities of interest in accordance with this and other public comments.

Underlying all of these laws is one touchstone principle: in drawing voting maps, Virginia must actively counter its pervasive record of racial discrimination and disenfranchisement, and in particular that of Black voters. Virginia's recent

\footnotetext{
\({ }^{81}\) Supra note 78.
}
failures to draw a permissible map compound on its lengthy history of racial inequality and show that, rather than facing this discriminatory past, the Commonwealth continues to ignore it or, worse, embrace it. Virginia's long and shameful record of denying, diluting, and devaluing the Black vote must end-and federal and state law require that it does.

\section*{III. ANALYSIS OF SPECIAL MASTERS INITIAL DISTRICT MAPS AND VIRGINIA NAACP PROPOSED DISTRICTS}

Virginia NAACP has worked with our counsel to analyze the initial maps and accompanying memorandum presented to the Court by the Special Masters on December 7, 2021. While many of the Special Masters' proposed districts appear to continue to provide Black voters with equal opportunities to elect their candidates of choice, others do not. The primary factor underlying many of our concerns is that the Special Masters needlessly relied upon ACS estimates in constructing their districts instead of the more accurate complete-count 2020 Census data, despite the relatively small Black non-citizen population across the Commonwealth. \({ }^{82}\) That error has led the Special Masters to overestimate-and thereby dilute-Black voting strength in a number of districts, as more fully laid out below.

The Special Masters also acknowledge in the brief overview of both their

\footnotetext{
\({ }^{82}\) The total Black population of Virginia is 97.2 percent citizen and 2.8 percent non-citizen. The Black VAP is 96.8 percent citizen and 3.2 percent non-citizen. See Citizen Voting Age Population (CVAP) Special Tabulation from the 2015-2019 5-Year American Community Survey (ACS), available at https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.2019.html.
}
proposed House of Delegates and Senate plans that "we do not have as many minority-majority districts as the existing plans." SM Mem. at 26, 41. The Special Masters contend that "this is the incorrect inquiry under both Virginia and federal law." Id. Their conclusion is partially correct.

Fewer majority-minority districts can be indicative of a reduction in the ability of Black voters to have equal opportunities to elect candidates of their choice. This standard, known as "retrogression," has been well established in the Voting Rights Act since its enactment in 1965. Retrogression, or backsliding, simply means that the voting change "will make members of such a group worse off than they had been before the change." 28 C.F.R. § 51.54(b); Beer v. United States, 425 U.S. 130, 14042 (1976). Our analysis of the Special Masters' proposed House of Delegates and Senate districts takes into consideration both whether those proposed districts make Black voters worse off than they are under the existing plan, and whether those districts provide them with equal opportunities to elect their candidates of choice.

Virginia NAACP has also worked closely with NAACP local branch leaders and community members from across the Commonwealth over the past several months in generating our proposed district maps for the Virginia House, Senate, and US congressional delegation. These maps are designed to best represent the Black communities of interest in each region and proposed district, as reflected by input from members of those communities, as well as to best protect the ability of Black
voters to elect candidates of their choice in each district. We also took great care in ensuring our proposed districts satisfy Virginia's other redistricting criteria-and many cases do a better job of this than the Special Masters' maps. See Appendix D.

We chose not to propose statewide maps, but rather to focus on the areas with the largest Black communities of interest and thus the highest concentration of Black voters. This should not be seen as an endorsement of districts not addressed herein, but rather an effort to focus the attention of the Court and Special Masters on the areas of greatest importance to maintaining Black political representation in the House of Delegates, the Senate, and Virginia's US congressional delegation, as required by the federal Voting Rights Act and Virginia law.

\section*{A. State House Districts}

Our focus is on the six regions of the Commonwealth where Black voters currently have the ability to elect or influence House districts: Hampton/Newport News; Norfolk/Portsmouth; Richmond/Petersburg; Fredericksburg; Dale City/Quantico; and northern Virginia. See Appendix A, NAACP-Proposed Maps of House of Delegates Districts.

\section*{1. Hampton/Newport News}

The Hampton/Newport News area has two proposed districts, HD 85 and HD 87, with significant Black populations. According to the 2020 Census, \({ }^{83}\) proposed

\footnotetext{
\({ }^{83}\) For all references to Black VAP herein, see 2020 Census State Redistricting Data (Public Law 94-171) Summary File-Virginia Prepared by the U.S. Census Bureau, 2021.
}

HD 85 has a BVAP of 44.48 percent and proposed HD 87 has a BVAP of 56.57 percent, slightly lower than the 2019 CVAP estimates provided by the Special Masters. See SM Mem. at 45. Although we have shown that two compact majorityBlack House of Delegate districts can be drawn in this area (our proposed districts HD 92 and 95), it appears the two districts proposed by the Special Masters continue to provide Black voters with equal opportunities to elect their candidates of choice. The most significant difference between the Special Masters' proposed map and ours is that their proposed HD 87 does not include the area around Langley Air Force Base.

\section*{2. Norfolk/Portsmouth}

In the Norfolk/Portsmouth area, the Special Masters have combined much of the Black community of interest in our proposed HDs 79 and 80 into a single district, their proposed HD 88. That choice has a cascading effect on all of the districts in the region, resulting in fewer Black opportunity-to-elect districts statewide. The Special Masters' proposed House of Delegates districts also are less compact than our proposed districts, using the Reock and Polsby Popper metrics employed by the Special Masters. \({ }^{84}\) In addition, the Special Masters' decision to "maintain[] ignorance about the residence of incumbents," SM Mem. at 10 , resulted in the elimination of the cores of two Black ability-to-elect districts, and places two Black

\footnotetext{
\({ }^{84}\) See Appendix D, Figure 2.
}
incumbents in the same district, Special Master proposed HD 88. The substantial, but unneeded, changes made by the Special Masters in this area strongly support our recommendation to use the proposed House of Delegates districts we have drawn.

\section*{3. Richmond/Petersburg}

In the Richmond/Petersburg area, the Special Masters' and our plans propose four House of Delegates districts drawn around Black communities of interest. The Special Masters' proposed HD 82 is significantly different from what we have recommended. In our proposed HD 63, we have shown that a majority-Black district (50.31 percent BVAP) can be readily drawn from the core of Petersburg to include the Black community of interest extending northwards toward the area just outside of Chester. In contrast, the Special Masters' proposed HD 82, this greater community of interest is split and the BVAP is reduced to 45.51 percent. Their proposed HD 82 includes rural areas east, west, and south of Petersburg that are predominately non-Hispanic white, with little in common with the Black community of interest in and around Petersburg. Given the presence of racially polarized voting that is generally present in the rural areas of Virginia, it appears that Special Masters' proposed HD 82 may be insufficient to allow Black voters to continue to be able to elect their candidates of choice. Of the Special Masters' remaining proposed House of Delegates districts in and around Richmond/Petersburg, proposed HD 79 is the
only majority-Black district with a BVAP of 57.7 percent. The other two proposed districts, HD 80 and 81 , have BVAPs of 46.84 percent and 47.91 percent.

We recommend using our proposed districts in this region (our proposed HDs \(63,70,71\) and 74 ) because they are more compact and preserve core Black communities of interest while maintaining a BVAP in each exceeding 50 percent, except for our proposed HD 71 in Richmond, which has a BVAP of 44.54 percent.

\section*{4. Fredericksburg}

In Fredericksburg, we have proposed a House of Delegates district, HD 28, which maintains more of the Black of community of interest to improve Black voters' ability to influence the election with a BVAP of 21.89 percent. The Special Masters' district in this area, proposed HD 65, is less compact and includes areas to the north and east of Fredericksburg, resulting in a BVAP of just 17.26 percent. We are concerned about the Special Masters' unnecessary dilution of Black voting power in a district that for the first time elected a Black candidate of choice in close elections in 2019 and again in 2021.

Directly to the north, we propose the creation of a new influence district around a Black community of interest which has increased dramatically in population over the past decade, with our proposed HD 88 increasing in BVAP from 9.89 percent in 2010 to 23.09 percent in 2020. This is a compact district that runs
along I-95 and unifies the Black community of interest between Fredericksburg and Quantico.

\section*{5. Dale City/Quantico}

In the Dale City and Quantico region, we have proposed preserving the core Black community of interest within three districts (our HD 2, 51, 52) while the Special Masters' plan splits it among four (SMs’ HD 19, 23, 24, 25). While the BVAP in our proposed House of Delegates districts in the Dale City and Quantico region are comparable to those in the Special Masters' plan, our districts are far more compact, and center more closely around the core of the Black community of interest.

\section*{6. Northern Virginia}

Finally, in northern Virginia, Special Masters' proposed HD 3 and our proposed HD 49 are very similar. Generally, the BVAP in the remaining northern Virginia districts is the same between the two plans despite substantial differences in their configurations. The differences do not appear to be significant because there are no influence districts in which the BVAP exceeds 30 percent.

In South Alexandria, we propose a new influence district, HD 44, around a Black community of interest that has increased significantly in population over the past decade, up from just 15.36 percent BVAP in 2010 to 24.46 percent in 2020.

\section*{B. State Senate Districts}

Among the six regions of Virginia described by the Special Masters in their proposed State Senate redistricting plan, there are two regions that are the focus of our comments and our proposed districts: "Southside and Richmond" (Special Master SDs 8-17) and "Hampton Roads" (Special Master SDs 18-24). See SM Mem. at 21-22; Appendix B, NAACP-Proposed Maps of Senate Districts.

\section*{1. Southside and Richmond}

We have significant concerns with the Special Masters' proposed districts in the Southside and Richmond areas. Those proposed districts unnecessarily dilute the voting power of the geographically compact and politically cohesive Black community of interest in and around Petersburg and Richmond. That result is concealed by the Special Masters' use of less reliable Black CVAP data drawn from the 2019 five-year ACS estimates, which in this region in particular severely overestimate Black population compared to the actual BVAP reported in the 2020 decennial Census data.

For example, the Special Masters describe their proposed SD 13 as a majorityBlack district with an overestimated Black CVAP of 51.85 percent, \(i d\). at 29 , when in fact their proposed district has a BVAP of just 48.37 percent according to the 2020 Census. Similarly, the Special Masters describe their proposed SD 14 as a strong Black ability to elect district with an overestimated Black CVAP of 45.97 percent,
id., while 2020 Census data reveals a BVAP of just 37.97 percent. The Special Masters' proposed SD 15 likewise uses an overestimated Black CVAP of 42.97 percent, compared to 2020 Census data identifying a BVAP of only 36.73 percent. The Special Masters needlessly rely upon ACS estimates for these districts instead of more accurate complete-count 2020 Census data, despite the relatively small Black non-citizen population. That error has led the Special Masters to dilute Black voting strength by choosing to create three lower-performing Black opportunity districts instead of the two strong majority-Black districts.

The Special Masters' proposal also does not respect natural boundaries, needlessly splitting proposed SD 14 across the James River. Their proposed SD 13 unnecessarily crosses the James River to include Charles City, Highland Springs, and Montpelier to comply with equal population requirements. In the process, their proposed SD 13 joins together unrelated communities and splits the Black community of interest in Petersburg with their proposed SD 12. The combination of unrelated communities with little in common, spread out over a vast distance in SD 13, makes it more difficult for Black voters to elect their candidates of choice than under the existing Senate Districts and in our proposed districts.

In contrast, we recommend creating two effectively performing districts (our proposed SD 9 and SD 16), in the Southside and Richmond area, that have a BVAP of just over 50 percent according to 2020 Census data. Unlike the Special Masters’
proposed districts, our proposal respects the natural boundary that the James River forms between districts.

\section*{2. Hampton Roads}

Turning to the Hampton Roads region, we begin by observing that the Special Masters' proposed SD 23 generally appears to provide Black voters with the ability to elect their candidates of choice. The Special Masters' use of ACS data overestimates Black CVAP at 50.95 percent, compared to BVAP of 47.57 percent reported in the 2020 Census. It appears that by including the core Black community of interest in Hampton and Newport News, the Special Masters' proposed SD 23 preserves this community of interest and will provide Black voters with an equal opportunity to elect their candidate of choice.

However, the same is not clear with respect to the other three proposed districts in this area, Special Masters' proposed SDs 17, 18, and 21. The use of Black CVAP overestimates Black voting power in all three districts, although only marginally for proposed SD 17. Comparing the ACS estimates with 2020 Census data reveals: proposed SD 17 has an estimated CVAP of 41.84 percent and a VAP of 40.31 percent; proposed SD 18 has an estimated CVAP of 44.79 percent and a VAP of 42.59 percent; and proposed SD 21 has an estimated CVAP of 44.33 percent, and a VAP of 40.55 percent. In summary, none of the three proposed Senate Districts in this region has a BVAP greater than 42.59 percent. That raises
considerable questions about the ability of Black voters to elect their candidates of choice, taking into consideration higher levels of racially polarized voting in the area.

Our proposed districts for this region (our SDs 5 and 18) preserve Black communities of interest in two Senate Districts that maintain the ability to elect of Black voters.

\section*{C. Congressional Districts}

The Special Masters acknowledge that under the current congressional districting plan, there are two districts in which Black voters have an equal opportunity to elect their candidates of choice, CD 3 and CD 4. See SM Mem. at 14-15, 17. The Special Masters' proposed plan represents that it maintains CD 3 and CD 4 as "ability to elect" districts for Black voters, drawing districts in which "Black voters represent \(44.5 \%\) and \(45.26 \%\) of the populations, respectively." Id. at 17. According to the Special Masters, the percentages of Black voters are "sufficient to elect a Black candidate of choice in both districts" and parallel the "minority proportions" under the existing districting plan drawn by the federal court. Id.

The Special Masters have dramatically altered the boundaries of CD 3 in their proposed plan. They began by deviating from the existing boundaries drawn by Dr. Grofman and adopted by the federal court to create what they describe as "a compact district comprised of the four major cities in the Hampton Roads area: Norfolk,

Newport News, Hampton and Portsmouth. We then split the City of Chesapeake roughly at the Hampton Roads Beltway in order to maintain the district's compactness while achieving population equality." Id. They acknowledge that their choices "left few options for the 2nd District," which was redrawn to incorporate much of the existing Black community of interest in Isle of Wight County in the current CD 3. Id.

The Special Masters have overemphasized compactness and preserving the integrity of the four major cities in Hampton Roads, with the latter priority not present in the existing CD 3. They propose eliminating the CD 3 remedial district drawn by Dr. Grofman and imposed by the federal court in Personhuballah v. Alcorn, unnecessarily removing the western half of the district. Furthermore, they ignore the greater weight that Virginia law places on providing Black voters with equal opportunities to elect, Va. Code § 24.2-304.04, and preserving existing communities of interest, including those currently in the western portion of CD 3. Va. Code § 24.2-304.04(5). In the process, the Special Masters acknowledge that their changes have not improved the compactness of CD 2, and indeed have caused that district to "lose[] functional contiguity in the cities of Suffolk and Chesapeake...." SM Mem. at 14.

It is unnecessary to deviate from Personhuballah's remedial CD 3 by adding into the district Navy Station Norfolk and neighborhoods in northern Norfolk such
as Algonquin Park, Bel-Aire, Camelia Shores, East Ocean View, Larrymore Lawns, North Camelia Acres, Oceanair, Suburban Acres, and Willoughby Terrace. Instead, the Special Masters should continue to follow Personhuballah's inclusion of the Black community of interest from the existing CD 3 including: Deanes, Driver, Huntersville, Magnolia, Oakland, Red Top, and communities in the Quaker Neck and Sandy Bottom areas of Portsmouth County; Isle of Wight County; and the Independent City of Franklin. See Appendix C, NAACP-Proposed Maps of US Congressional Districts.

Under the Personhuballah remedial plan, the Black community of interest in the areas removed under the proposed CD 3 have had an equal opportunity to elect their candidate of choice. Joining with other Black voters in the Hampton Roads area, those voters have secured representation to address their common needs including depressed socio-economic status and disparities in educational and employment opportunities. The Black community of interest in CD 3 has worked together to form a politically cohesive group of voters with common ties that would be severed under the Special Masters' proposed CD 3. Regardless of the similar demographics, the proposed changes to Personhuballah's remedial CD 3 would make it more difficult for Black voters to elect their candidates of choice because it would effectively remove the western portion of the Black community of interest and replace it with a large group of voters who have had no ties to CD 3. The
unnecessary changes to CD 3 would make it more expensive and difficult for a Black candidate of choice to be elected because of the costs of reaching out to an entirely new constituency.

We strongly recommend that the Special Masters maintain, to the greatest extent possible, the contours of Personhuballah's remedial CD 3. Our proposed CD 3 illustrates the viability of continuing to include the entire Black community of interest in the district, while preserving the cores of both districts in the Hampton Roads region (CD 2 and CD 3).

CD 4, which currently provides Black voters with equal opportunities to elect their candidate of choice, appears to continue to have those opportunities under the Special Masters' plan. We nevertheless recommend that the Special Masters consider our alternative, which has some differences in the neighborhoods and communities proposed for CD 4, particularly around Richmond City and Henrico Counties, that better represent the greater Black community of interest in CD 4.

\section*{CONCLUSION}

For the reasons stated herein, the Virginia State Conference of the NAACP respectfully requests that the Special Masters and the Supreme Court of Virginia carefully consider this written comment, including and especially our analysis of the Special Masters' initial district maps and our proposed districts, and adjust future maps to be considered by this Court accordingly.

Respectfully submitted,
Robert N. Barnette Jr.

\section*{President}

Virginia State Conference of the NAACP
PO Box 27212
Richmond, Virginia 23261
DATE: December 17, 2021

Of Counsel
Jon M. Greenbaum
Ezra D. Rosenberg
James Tucker
Ryan Snow
Lawyers' Committee for Civil
Rights Under Law
1500 K Street, NW, Suite 900
Washington, D.C. 20005
(202) 662-8600
(202) 783-0857 (fax)
jgreenbaum@lawyerscommittee.org
erosenberg@lawyerscommittee.org
jtucker@lawyerscommittee.org
rsnow@lawyerscommittee.org
Janette Louard
Anthony P. Ashton
Anna Kathryn Barnes
NAACP
Office of the General Counsel
4805 Mount Hope Drive
Baltimore, MD 21215
Telephone: (410) 580-5777
jlouard@naacpnet.org aashton@naacpnet.org
abarnes@naacpnet.org
N. Thomas Connally III
(VSB No. 36318)
Hogan Lovells US LLP
8350 Broad Street, 17th Floor
Tysons, VA 22102
(703) 610-6100
(703) 610-6200 (fax)
tom.connally@hoganlovells.com
Jessica L. Ellsworth
(VSB No. 46832)
Hogan Lovells US LLP
555 13th St NW
Washington, D.C. 20004
(202) 637-5600
(202) 637-5910 (fax)
jessica.ellsworth@hoganlovells.com

\section*{Appendix A}

\section*{APPENDIX A TABLE OF CONTENTS}
A-NAACP-HD-002 ..... 1
A-NAACP-HD-011 ..... 2
A-NAACP-HD-028 ..... 3
A-NAACP-HD-044 ..... 4
A-NAACP-HD-046 ..... 5
A-NAACP-HD-049 ..... 6
A-NAACP-HD-051 ..... 7
A-NAACP-HD-052 ..... 8
A-NAACP-HD-063 ..... 9
A-NAACP-HD-069 ..... 10
A-NAACP-HD-070 ..... 11
A-NAACP-HD-071 ..... 12
A-NAACP-HD-074 ..... 13
A-NAACP-HD-075 ..... 14
A-NAACP-HD-076 ..... 15
A-NAACP-HD-077 ..... 16
A-NAACP-HD-079 ..... 17
A-NAACP-HD-080 ..... 18
A-NAACP-HD-085 ..... 19
A-NAACP-HD-088 ..... 20
A-NAACP-HD-089 ..... 21
A-NAACP-HD-090 ..... 22
A-NAACP-HD-092 ..... 23
A-NAACP-HD-095 ..... 24

\section*{A-NAACP-HD-002}


\section*{A-NAACP-HD-011}


A-NAACP-HD-028


\section*{A-NAACP-HD-044}


\section*{A-NAACP-HD-046}


\section*{A-NAACP-HD-049}


\section*{A-NAACP-HD-051}


A-NAACP-HD-052


\section*{A-NAACP-HD-063}


\section*{A-NAACP-HD-069}



\section*{A-NAACP-HD-070}


\section*{A-NAACP-HD-071}


\section*{A-NAACP-HD-074}


\section*{A-NAACP-HD-075}


\section*{A-NAACP-HD-076}


\section*{A-NAACP-HD-077}


\section*{A-NAACP-HD-079}


\section*{A-NAACP-HD-080}


\section*{A-NAACP-HD-085}


\section*{A-NAACP-HD-088}


\section*{A-NAACP-HD-089}


\section*{A-NAACP-HD-090}


\section*{A-NAACP-HD-092}


\section*{A-NAACP-HD-095}

\(0 \quad 1\) Miles


\section*{Appendix B}

\section*{APPENDIX B TABLE OF CONTENTS}
B-NAACP-SD-002 ..... 1
B-NAACP-SD-005 ..... 2
B-NAACP-SD-009 ..... 3
B-NAACP-SD-016 ..... 4
B-NAACP-SD-018 ..... 5

\section*{B-NAACP-SD-002}


\section*{B-NAACP-SD-005}


\section*{B-NAACP-SD-009}


\section*{B-NAACP-SD-016}


\section*{B-NAACP-SD-018}


\section*{Appendix C}

\section*{APPENDIX C TABLE OF CONTENTS}

C-NAACP-CD-003.................................................................................................................... 1
C-NAACP-CD-004.................................................................................................................... 2

\section*{C-NAACP-CD-003}


\section*{C-NAACP-CD-004}


\section*{Appendix D}

\section*{APPENDIX D TABLE OF CONTENTS}

\section*{STATE HOUSE DELEGATES TABLES}
Figure 1, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Hampton/Newport News area 1
Figure 2, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districtsin Norfolk/Portsmouth area1
Figure 3, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districtsin Richmond/Petersburg area2
Figure 4, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districtin Fredericksburg area2
Figure 5, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districtsin Dale City/Quantico area2
Figure 6, Comparison of NAACP's and Special Masters' Proposed House of Delegates Districtsin Northern Virginia3
STATE SENATE DISTRICTS TABLES
Figure 7, Comparison of NAACP's and Special Masters' Proposed State Senate Districts in Southside/Richmond area ..... 4
Figure 8, Comparison of NAACP's and Special Masters' Proposed State Senate Districts inHampton Roads area4

\section*{STATE CONGRESSIONAL DISTRICTS TABLES}

Figure 9, Comparison of NAACP's and Special Masters' Proposed Congressional Districts in Hampton Roads Area

Figure 1. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Hampton/Newport News area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
HD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
HD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 92 & 3 & 55.84 & 0.38 & 0.28 & 87 & 1,202 & 56.57 & 0.35 & 0.30 \\
\hline 95 & -118 & 50.59 & 0.16 & 0.22 & 85 & 1,515 & 44.48 & 0.28 & 0.32 \\
\hline
\end{tabular}
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.

Figure 2. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Norfolk/Portsmouth area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline NAACP HD* & Deviation & BVAP \% & Reock & Polsby Popper & \[
\begin{aligned}
& \text { SM } \\
& \text { HD }
\end{aligned}
\] & Deviation & BVAP \% & Reock & Polsby Popper \\
\hline 75 & 362 & 46.87 & 0.37 & 0.34 & 83 & 145 & 41.32 & 0.29 & 0.26 \\
\hline 76 & -96 & 44.29 & 0.43 & 0.26 & 84 & 1,310 & 41.03 & 0.24 & 0.18 \\
\hline & & & & & 89 & 390 & 28.65 & 0.30 & 0.24 \\
\hline 77 & 172 & 43.32 & 0.51 & 0.39 & 91 & 762 & 45.86 & 0.25 & 0.16 \\
\hline 79 & 23 & 31.81 & 0.24 & 0.24 & 88 & 57 & 48.93 & 0.45 & 0.41 \\
\hline & & & & & 92 & -156 & 49.04 & 0.36 & 0.28 \\
\hline & & & & & 94 & -1,661 & 21.05 & 0.30 & 0.40 \\
\hline 80 & 260 & 53.02 & 0.6 & 0.46 & 88 & 57 & 48.93 & 0.45 & 0.41 \\
\hline 85 & -69 & 24.56 & 0.53 & 0.33 & 95 & -1,990 & 31.47 & 0.40 & 0.31 \\
\hline 89 & -264 & 44.31 & 0.55 & 0.41 & 92 & -156 & 49.04 & 0.36 & 0.28 \\
\hline 90 & 161 & 41.37 & 0.53 & 0.34 & 93 & -408 & 45.85 & 0.47 & 0.29 \\
\hline
\end{tabular}

\footnotetext{
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.
}

Figure 3. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Richmond/Petersburg area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
HD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
HD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 63 & -81 & 50.31 & 0.48 & 0.24 & 82 & -302 & 45.51 & 0.21 & 0.20 \\
\hline 70 & 159 & 50.24 & 0.29 & 0.16 & 81 & \(-1,596\) & 47.91 & 0.30 & 0.22 \\
\hline 71 & 77 & 44.54 & 0.35 & 0.27 & 79 & 1,486 & 57.70 & 0.31 & 0.23 \\
\hline 74 & -248 & 54.63 & 0.19 & 0.2 & 80 & -621 & 46.84 & 0.26 & 0.22 \\
\hline
\end{tabular}
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.

Figure 4. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Fredericksburg area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
HD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
HD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 28 & 440 & 21.89 & 0.14 & 0.24 & 65 & 825 & 17.26 & 0.46 & 0.27 \\
\hline
\end{tabular}
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.

Figure 5. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Dale City/Quantico area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
HD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
HD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 2 & -366 & 25.39 & 0.36 & 0.17 & 23 & \(-1,594\) & 33.08 & 0.29 & 0.22 \\
\hline 51 & -113 & 22.82 & 0.25 & 0.24 & 22 & \(-2,044\) & 10.15 & 0.41 & 0.24 \\
\hline & & & & & 25 & 895 & 21.78 & 0.32 & 0.24 \\
\hline 52 & 171 & 34.25 & 0.62 & 0.51 & 24 & \(-1,380\) & 22.99 & 0.36 & 0.32 \\
\hline
\end{tabular}

\footnotetext{
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.
}

Figure 6. Comparison of NAACP's and Special Masters' Proposed House of Delegates Districts in Northern Virginia.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
HD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
HD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 43 & -155 & 24.46 & 0.44 & 0.22 & 16 & -106 & 15.27 & 0.60 & 0.34 \\
\hline & & & & & 17 & 163 & 20.52 & 0.40 & 0.34 \\
\hline 46 & -164 & 28.38 & 0.4 & 0.31 & 4 & -698 & 27.77 & 0.59 & 0.43 \\
\hline 49 & 87 & 15.66 & 0.38 & 0.41 & 3 & 573 & 13.47 & 0.33 & 0.42 \\
\hline
\end{tabular}

\footnotetext{
* NAACP HDs use the same district numbers as the existing HDs, which form the core of those districts.
}

Figure 7. Comparison of NAACP's and Special Masters' Proposed State Senate Districts in Southside/Richmond area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
SD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
SD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 9 & 53 & 50.28 & 0.30 & 0.27 & 13 & \(-2,162\) & 48.37 & 0.50 & 0.29 \\
\hline & & & & & 14 & 3,544 & 37.97 & 0.32 & 0.22 \\
\hline 16 & 44 & 53.13 & 0.27 & 0.09 & 13 & \(-2,162\) & 48.37 & 0.50 & 0.29 \\
\hline & & & & & 15 & 4,414 & 36.73 & 0.31 & 0.17 \\
\hline
\end{tabular}
* NAACP SDs use the same district numbers as the existing SDs, which form the core of those districts.

Figure 8. Comparison of NAACP's and Special Masters' Proposed State Senate Districts in Hampton Roads area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
SD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
SD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 2 & -131 & 51.22 & 0.29 & 0.25 & 23 & -215 & 47.57 & 0.36 & 0.35 \\
\hline 5 & -244 & 53.63 & 0.39 & 0.18 & 18 & \(-2,690\) & 42.59 & 0.44 & 0.42 \\
\hline 18 & 185 & 53.54 & 0.29 & 0.13 & 17 & 939 & 40.31 & 0.28 & 0.25 \\
\hline & & & & & 21 & \(-1,577\) & 40.55 & 0.55 & 0.54 \\
\hline
\end{tabular}

\footnotetext{
* NAACP SDs use the same district numbers as the existing SDs, which form the core of those districts.
}

Figure 9. Comparison of NAACP's and Special Masters' Proposed Congressional Districts in Hampton Roads area.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{c} 
NAACP \\
CD*
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} & \begin{tabular}{c} 
SM \\
CD
\end{tabular} & Deviation & BVAP \% & Reock & \begin{tabular}{c} 
Polsby \\
Popper
\end{tabular} \\
\hline 3 & -2 & 45.32 & 0.40 & 0.21 & 3 & -319 & 42.11 & 0.43 & 0.34 \\
\hline 4 & 0 & 40.88 & 0.52 & 0.17 & 4 & -306 & 39.84 & 0.50 & 0.30 \\
\hline
\end{tabular}
* NAACP CDs use the same district numbers as the existing CDs, which form the core of those districts.
\begin{tabular}{ll} 
From: & Priscilla Burbank \\
To: & Redistricting \\
Subject: & District 4 ( and others) \\
Date: & Friday, December 17, 2021 10:02:24 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Richmond (the city of) It seems ridiculous to chop[ up the Richmond metro area, especially the western edge of Henrico County and the eastern portion of Goochland County, which have much more in common with Richmond than rural areas to the south of Richmond all the way to the North Carolina border. The same thing occurs in District 5, which includes parts of Chesterfield County, the residents of which consider themselves to be living in Richmond. Also District 5 goes all the way to the North Carolina border. The rural southern part of Virginia has more commonality with its counties than the cities of Charlottesville and Lynchburg.

Also, District 1 puts much of Henrico County (also residents of which consider themselves to live in Richmond) with rural counties along the Eastern Shore.

It would make much more sense to include Richmond and its surrounding counties as one district and possibly Colonial Heights and Petersburg as one district. The southern rural districts should be combined into far west, middle and eastern districts.

Thank you for your consideration.
\begin{tabular}{ll} 
From: & Barbara Nielsen \\
To: & Redistricting \\
Subject: & Support Farkas Map - Oppose Special Masters Map \\
Date: & Friday, December 17, 2021 10:36:31 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Greetings
I am writing to voice my support of the Farkas congressional redistricting map as opposed to the maps created by the Special Masters. While the Special Master map appears, at first glance, to eliminate gerrymandered districts, it decimates all 3 districts held by women, and does not keep communities of interest cohesive.

In contrast, the Farkas map retains the current congressional split, keeps communities of interest together, and protects minority interests, all while creating a near perfect population division.

Please consider and support the Farkas congressional redistricting map.
Thank you
Barbara Nielsen
15758 Mosaic Creek Blvd
Richmond VA 23238
Goochland County, VA
\begin{tabular}{ll} 
From: & Leslie Rubio \\
To: & Redistricting \\
Subject: & Congressional Districts Map \\
Date: & Friday, December 17, 2021 9:38:42 AM
\end{tabular}

\title{
EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Good Morning!
I am emailing to let you know that I am opposed to the proposed Congressional maps for Virginia. I request that you adopt the Farkas map instead.

I am a native of Virginia, and have voted in every election since I became eligible.
Respectfully,
--
Leslie Rubio
Activist/Advocate for Women
she/her
Commonwealth of Virginia Notary Public \#7278454 (804) 484-9884

December 16, 2021
Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. 9th St, \(5^{\text {th }}\) Floor
Richmond, VA 23219
Dear Ms. Pitney:
On November 13, 2020, Sean Trende declared that application of "modest redistricting, combined with the demands of reapportionment, are likely to lead" Virginia to "no change" in its 7-4 party affiliation split among its congressional delegation, absent "aggressive gerrymander[ing]." One year later, this Court tasked Mr. Trende with redrawing Virginia's congressional map upon his promise to apply fair and neutral redistricting principles. \({ }^{2}\) This Court now has before it a map that the Special Masters claim produces a " \(6-5\) " party affiliation split, in which "Republicans could win a majority of the seats in Virginia's delegation" some years. \({ }^{3}\) Thus, upon the advice of Mr. Trende himself, this Court should view this map with some skepticism. By employing strict adherence to modest, traditional redistricting principles, this Court should reject the Special Masters' congressional map-and any aggressive gerrymander-that causes this unpredictable shift.

The memorandum accompanying the court-appointed Special Masters' congressional map released on December 8 (the "December 8 Map") is confounding. Over 55 pages, the Special Masters endeavor to paint a picture of maps drawn in a mindful and rigorous manner. Yet, upon engaging with the content, the vague reference to the constitutional principles that should dominate this court-ordered redistricting process gives way to a haphazard, unprincipled process that is unmoored from the history, tradition, and communities that form the Commonwealth. Indeed, the Special Masters' first point of order as they write to assure this Court and Virginians that they have performed their duty well is to declare that their "prime directive for drawing these maps comes not from the constitutional or statutory provisions described by this Court," but from the need to "behave in an apolitical and nonpartisan manner. \({ }^{, 4}\) It seems the Special Masters have misunderstood the purpose of their work, as appearances of bipartisanship are not a defense to unconstitutional maps.

The December 8 Map falls short on numerous traditional redistricting principles, even failing to achieve the population equality that is the singular driving force behind this entire decennial process.

\footnotetext{
\({ }^{1}\) Sean Trende, Part 2: What Redrawn House Maps Could Mean in 2023, Real Clear Politics (Nov. 13, 2020), https://www.realclearpolitics.com/articles/2020/11/13/part_2_what_redrawn_house_maps_could_mean_in_202 3_144651.html.
\({ }^{2}\) See Nov. 19, 2021 Redistricting Appointment Order at 1.
\({ }^{3}\) December 7, 2021 Memo from Bernard Grofman, Ph.D. and Sean Trende to the Chief Justice and Justices of the Supreme Court of Virginia re Redistricting Maps ("Memo") at 18-19.
\({ }^{4}\) Memo at 2 (emphasis added).
}

Worse, it does so to the detriment of minority populations, which constituted the whole of Virginia's population growth over the last decade, and to the detriment of Virginia's close-knit communities, which it dices and divides with a complete lack of precision. As the Special Masters are no doubt aware, the currently existing congressional map is the result of a years-long litigation dedicated to ensuring fair representation for certain of Virginia's minority communities while adhering to federal and state legal requirements. Rather than use this court-approved map as a starting point and building upon the redistricting principles it embodied, the Special Masters chose to start from scratch. While the December 8 Map may be, in the Special Masters' words, a "true joint effort," it departs significantly from the lessons learned by the Commonwealth and its leaders in the last decade. If adopted, the December 8 Map would likely suffer from the same fate as its 2011 predecessor-years of tumult in the courts.

Our client has a vested interest in avoiding such an outcome. We represent James Farkas, a Virginia voter who successfully challenged the General Assembly's unconstitutional racial gerrymander of the congressional map following the last census. The federal court reviewing Mr. Farkas's challenge found that the Virginia General Assembly unjustifiably packed Black voters in Congressional District 3, thereby diluting their voting strength elsewhere in the Commonwealth. As a plaintiff to that litigation, Mr. Farkas now seeks to ensure that the principles behind the federal court's ruling are preserved-and the errors underlying the General Assembly's 2011 congressional plan are not replicated-in the redistricting that is now taking place before this Court.

In light of the December 8 Map's failures, and pursuant to Virginia law and this Court's rules inviting public participation in the Court's redistricting deliberations, \({ }^{5}\) we submit the attached congressional map (the "Farkas Map") on behalf of our client for consideration by the Supreme Court of Virginia and its Special Masters. \({ }^{6}\) The Farkas Map satisfies all applicable provisions of federal and Virginia law. Importantly, it achieves strict population equality, preserves communities of interest, and ensures that the voting strength of Virginia's growing racial and ethnic minority population is not diluted. We strongly encourage the Special Masters and this Court to adopt the Farkas Map for Virginia's congressional districts.

\section*{I. Background}

\section*{A. The Virginia General Assembly enacted an unlawful congressional plan in 2011.}

During the one hundred years following Reconstruction, Virginia did not elect a single Black representative to Congress. \({ }^{7}\) That changed in 1992, when the U.S. Department of Justice, acting under the power of the federal Voting Rights Act, directed the Virginia General Assembly to draw a

\footnotetext{
\({ }^{5}\) Va. Code Ann. § 30-399(C) (2020); Sup. Ct. of Va., Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, R4(a) (Feb. 23, 2021), https://www.vacourts.gov/courts/scv/article_2_section_6a_rules_procedures.pdf.
\({ }^{6}\) Images of the Farkas Map are included in-line in this submission as well as in the attached Appendix. Several mapping files for the Farkas Map have been submitted to the Court alongside this submission, in a .zip file labeled "Farkas Map Mapping Files."
\({ }^{7}\) David Wasserman, Is it Time to Rethink Hyper-Minority Districts?, The Atlantic (Sept. 20, 2021), https://www.theatlantic.com/politics/archive/2021/09/it-time-rethink-hyper-minority-districts/620118/.
}
congressional district that provided Black voters an opportunity to elect a representative of their choice. \({ }^{8}\) As a result, District 3 was drawn as a majority-Black district in 1992 and voters in that district elected Representative Bobby Scott to Congress that same year. Representative Scott has represented District 3 continuously since then. He was the only Black member in Virginia's congressional delegation from 1992 through 2016.

Over time, what began with the Department of Justice's important effort to ensure that Black voters in Virginia were represented in Congress turned into the Virginia General Assembly packing Black voters into one congressional district, diluting their voting strength elsewhere in the Commonwealth. Although Black voters in District 3 had consistently elected their representative of choice by significant margins, ranging from 69 percent to 97 percent of the vote, the Republican-controlled General Assembly raised the Black voting age population ("BVAP") of District 3-from 53.1 percent to 56.3 percentfollowing the 2010 Census. \({ }^{9}\) To do so, the General Assembly moved "predominantly white" populations out of District 3 and moved "predominantly African-American" voters into the district. \({ }^{10}\)

Along with other residents of District 3, Mr. Farkas brought a lawsuit in federal court, arguing that the district was an unconstitutional racial gerrymander. In 2014, the majority of a three-judge panel agreed, finding that the General Assembly had violated the U.S. Constitution by unjustifiably packing Black voters into District 3. \({ }^{11}\) The court concluded, based on direct and circumstantial evidence, that "race was the predominant factor" in drawing District 3, as mapdrawers sought to ensure the district's BVAP exceeded 55 percent. \({ }^{12}\) Upon reconsideration, the court again declared the General Assembly's plan unconstitutional \({ }^{13}\) and appointed Dr. Bernard Grofman as a special master to advise the court on the appropriate redistricting remedy. \({ }^{14}\) In 66 pages analyzing two map configurations, Dr. Grofman explained the considerations that went into his map-drawing and why his proposed maps addressed the court's concerns, \({ }^{15}\) including that his "concern[] for contiguity and the avoidance of unnecessary splitting of existing political subunit boundaries, and [his] attention to compactness" led to a heavily minority District

\footnotetext{
\({ }^{8}\) Va. Pub. Access Project, 3rd District, A Brief History (Sept. 1, 2015), https://www.vpap.org/updates/1996-3rd-district-brief-history/.
\({ }^{9}\) Page v. Va. State Bd. of Elections, 58 F. Supp. 3d 533, 539 (E.D. Va. 2014), vacated sub nom. Cantor v. Personhuballah, 575 U.S. 931 (2015) (vacating for reconsideration in light of Ala. Legis. Black Caucus v. Alabama, 575 U.S. 254 (2015)); Ballotpedia, Virginia's 3rd Congressional District, (last visited Nov. 6, 2021), https://ballotpedia.org/Virginia\%27s_3rd_Congressional_District; Ballotpedia, Bobby Scott (Virginia), (last visited Nov. 6, 2021), https://ballotpedia.org/Bobby_Scott_(Virginia).
\({ }^{10}\) Page, 58 F. Supp. 3d at 547.
\({ }^{11}\) Id. at 536 .
\({ }^{12}\) Id. at 541-50. The General Assembly used this same 55 percent target when drawing districts for Virginia's House of Delegates following the 2010 census. A different panel of three federal judges struck down several of those districts as unconstitutional racial gerrymanders in 2018. See Bethune-Hill v. Va. State Bd. of Elections, 326 F. Supp. 3d 128, 180-81 (E.D. Va. 2018). The U.S. Supreme Court later dismissed an appeal of this decision, leaving the panel's ruling intact. Va. H.D. v. Bethune-Hill, 139 S. Ct. 1945, 1956 (2019).
\({ }^{13}\) Page v. Va. State Bd. of Elections, No. 3:13cv678, 2015 WL 3604029, at *18 (E.D. Va. June 5, 2015). Republican members of the Virginia congressional delegation appealed the decision to the U.S. Supreme Court, but the Court rejected the appeal and left the panel's decision intact. Wittman v. Personhuballah, 136 S . Ct. 1732, 1736-37 (2016).
\({ }^{14}\) See Letter to Couns. of R. from the Ct., Personhuballah v. Alcorn, 155 F. Supp. 3d 552 (E.D. Va. 2016) (No. 3:13-cv-00678-REP-LO-AD), ECF No. 236 ("Personhuballah Letter").
\({ }^{15}\) See Rep. of the Spec. Master, Personhuballah, 155 F. Supp. 3d 552, ECF No. 272 ("Personhuballah Rep.").
}

3 that did not reflect "in any way a predominant concern for race," but rather "naturally reflect[ed] the underlying demography of the state . . . ." \({ }^{16}\) Critically, Dr. Grofman explained that when the new District 3 was drawn in accordance with traditional districting principles alone, rather than predominantly focusing on race, a substantial minority population in District 4 arose "virtually automatically." \({ }^{17}\)

In adopting one of Dr. Grofman's maps, the court credited his approach to drawing the districts, concluding that Dr. Grofman was "guided by the neutral goals of compactness, contiguity, and avoiding unnecessary city or county splits, rather than any racial considerations." \({ }^{18}\) The court explained that Dr. Grofman's plan accorded with the principles of Section 2 of the federal Voting Rights Act because Black voters would not be deprived of the opportunity to elect their candidates of choice in either District 3 or District 4. \({ }^{19}\) The final, court-adopted plan lowered District 3's BVAP to approximately 45 percent and increased District 4's BVAP to about 41 percent. \({ }^{20}\) Each of these BVAP percentages has proven more than sufficient for the Black communities in those districts to elect the candidates of their choice, in coalition with others. Indeed, during the 2016 election, the newly redrawn District 4 elected its first Black member, Representative Donald McEachin, while the newly redrawn District 3 reelected Representative Scott. Both representatives were subsequently reelected in 2018 and 2020.

\section*{B. Virginia's voters demand an end to gerrymandering with the 2020 constitutional amendment.}

Following the unlawful and tumultuous redistricting process of the 2010 cycle, voters successfully placed a proposed amendment to the Virginia Constitution on the 2020 general election ballot, known as the Virginia Redistricting Commission Amendment (the "Amendment"). The Amendment sought to establish a new redistricting commission comprised of 16 members from across the political spectrum, including non-partisan citizens. The Amendment garnered overwhelming support, with almost 66 percent of the electorate voting in favor of adoption. \({ }^{21}\) Nearly every Virginia county showed majority support for the Amendment. \({ }^{22}\) The results demonstrated the intent of the majority of Virginians to ensure that the General Assembly's mapping manipulations that resulted in two unconstitutional redistricting maps last cycle would not be repeated.

\section*{C. The 2020 Census results reveal significant minority population growth.}

The 2020 Census results reveal that Virginia's population has grown significantly in both number and diversity. Virginia has experienced a nearly 8 percent increase in population over the past decade, adding more than 630,000 people. The majority of these gains are attributable to Virginia's racial and ethnic minority populations: the minority population increased by more than 7 percent since 2010, while

\footnotetext{
\({ }^{16}\) Id. at 15.
\({ }^{17}\) Id. at 15-16.
\({ }^{18}\) Personhuballah v. Alcorn, 155 F. Supp. 3d 552, 562 (E.D. Va. 2016).
\({ }^{19} \mathrm{Id}\). at 565.
\({ }^{20} I d\).
\({ }^{21}\) Daniella Cheslow, Virginia Voters Approve Redistricting Amendment Against Pleas From Democratic Leadership, WAMU 88.5 (Nov. 4, 2020), https://wamu.org/story/20/11/04/virginia-voters-approve-redistricting-amendment-against-please-from-democratic-leadership/.
\({ }^{22}\) Virginia Dep't of Elections, 2020 November General Election Referendum Results (Jan. 21, 2021, 3:02 PM), https://results.elections.virginia.gov/vaelections/2020\%20November\%20General/Site/Referendums.html (last visited Nov. 24, 2021).
}
the Commonwealth's white population decreased by 5.1 percent during that same time period. \({ }^{23}\) Notably, Virginia's Black population, which is largely concentrated in the southeastern and northern portions of the Commonwealth, outpaced the general population growth rate, increasing by 8.9 percent to now account for 20.9 percent of the Commonwealth's population. \({ }^{24}\)

\section*{D. The Commission fails to adopt a map, triggering this Court's duty to redistrict.}

After the selection of members in the fall of 2020, the Virginia Redistricting Commission began meeting in early 2021. It held 38 meetings in Richmond and 16 public hearings across the state during which it considered public comment and proposed maps. \({ }^{25}\) Unfortunately, however, the Commission deadlocked during its final meetings in September and October and found itself unable to agree on either the process of drawing new redistricting plans or the substance of those plans. \({ }^{26}\) Without hope of bridging the impasse, the Commission disbanded without proposing maps for the General Assembly's consideration. The Commission's inaction triggered a constitutional failsafe by sending the task of drawing maps directly to this Court. \({ }^{27}\)

\section*{E. The Court's Special Masters produce a map that fails to comply with the law.}

On November 19, 2021, this Court selected two Special Masters, Dr. Bernard Grofman and Sean Trende, to assist in its mapdrawing duty, directing the Special Masters to work together to produce legally compliant maps within 30 days. \({ }^{28}\) Less than three weeks later, the Special Masters produced a draft congressional map-the December 8 Map-for the Court's and the public's consideration. Unfortunately, the December 8 Map violates governing legal and traditional redistricting principles.

\section*{i. The December 8 Map fails to achieve population equality while fully abandoning a modest change approach.}

The most apparent-and entirely unnecessary-violation is the December 8 Map's failure to equally apportion Virginia's population across the 11 congressional districts. Remarkably, it misses this baseline mark while not making any attempt to preserve current districts through modest adjustments.

\footnotetext{
\({ }^{23}\) Adriana Rezal, States With the Biggest Increases in Racial Diversity, U.S. News \& World Report (Nov. 8, 2021), https://www.usnews.com/news/best-states/articles/2021-11-08/these-states-saw-the-biggest-shifts-in-racial-diversity.
\({ }^{24}\) Staff of America Counts: Stories Behind the Numbers, Virginia Adds More Than 600,000 People Since 2010, U.S. Census Bureau: Va.: 2020 Census (Aug. 25, 2021), https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-census-decade.html.
25 MyDistricting Virginia, Meetings and Public Hearings, Va. Redistricting Comm'n, https://www.virginiaredistricting.org/PageReader.aspx?page=Hearings (last visited Nov. 23, 2021).
\({ }^{26}\) Andrew Cain, 'This isn't working': Virginia's redistricting commission near failure on congressional map, Richmond Times-Dispatch (Oct. 20, 2021), https://richmond.com/news/state-and-regional/govt-and-politics/this-isnt-working-virginias-redistricting-commission-near-failure-on-congressional-map/article_fb041792-94d9-57ea-bee3-a057e85d49be.html.
\({ }^{27}\) Va. Const., art. II, § 6-A(g) ("If the Commission fails to submit a plan for districts by the deadline set forth in subsection (d), the Commission shall have fourteen days following its initial failure to submit a plan to the General Assembly. If the Commission fails to submit a plan for districts to the General Assembly by this deadline, the districts shall be established by the Supreme Court of Virginia.").
\({ }^{28}\) See Nov. 19, 2021 Redistricting Appointment Order, at 2.
}

When tasked with drawing maps, courts often employ a "least-change" approach, minimizing their impact on the lines drawn by concordant branches of government or affirmed by previous courts. \({ }^{29}\) The preparation of new maps, then, typically begins with an analysis of how the previous map can be updated to best reflect traditional redistricting principles and population equality. \({ }^{30}\) This is particularly important when the previous map-or some portion thereof-has gone through judicial review, as is the case here. \({ }^{31}\) Eschewing this principle entirely, the December 8 Map abandons the meticulous review of courts past in favor of a brazen reimagination that is both unfamiliar with and detached from the communities that will live under this congressional plan for a decade to come.

\section*{ii. The December 8 Map appears to impermissibly use race as a predominant factor.}

In disregarding the judicial history of Virginia's maps, the Special Masters fail to integrate the lessons learned with respect to constructing legally compliant districts that do not use race as a predominant factor and still permit Virginia's heavily minority districts to elect candidates of their choice in coalition with others. The Special Masters strenuously insist in their memorandum that they "simply drew districts without race as the predominant interest . . . by drawing districts that comply with traditional good government districting criteria . . . and considered race only after we had drawn a map fully subject to the constraints of those factors." \({ }^{\prime 32}\) But when explaining the process that the Special Masters followed to draw historically Black Districts 3 and 4, a different picture emerges.

The Special Masters report their process for drawing District 3 by starting with an overarching assertion that the "Hampton Roads area presently contains one district that consistently elects the candidate of choice of the African-American population." \({ }^{33}\) The Special Masters then assert that they drew the new district lines specifically to comprise "the four major cities in the Hampton Roads area," without regard for the surrounding communities of interest. \({ }^{34}\) Next, the Special Masters report that the new urban-concentrated District 3 that they have created "left few options for the \(2^{\text {nd }}\) District," which now creates an odd ' \(J\) ' shape to include portions of the military community, the Eastern Shore, and then clumsily wraps inland. Nonetheless, the Special Masters did not then re-examine their District 3 lines or

\footnotetext{
\({ }^{29}\) E.g., Johnson v. Wis. Elections Comm'n, -- N.W. 2.d --, 2021 WL 5578395 at *14-16 (Nov. 30, 2021); Wright v. City of Albany, 306 F. Supp. 2d 1228, 1237 (M.D. Ga. 2003).
\({ }^{30}\) Stenger v. Kellett, No. 4:11CV2230 TIA, 2012 WL 601017, at *3 (E.D. Mo. Feb. 23, 2012) ("A frequently used model in reapportioning districts is to begin with the current boundaries and change them as little as possible while making equal the population of the districts. This is called the 'least change' or 'minimal change' method, which assumes that if the current district map complied with the redistricting criteria during the previous census, then a new map will likely comply with only limited changes."). Martin v. Augusta-Richmond Cty., Ga., Comm'n, No. CV 112-058, 2012 WL 2339499, at *3 (S.D. Ga. June 19, 2012) ("Keeping the minimum change doctrine in mind, the Court only made the changes it deemed necessary to guarantee substantial equality and to honor traditional redistricting concerns."); Below v. Gardner, 148 N.H. 1, 963 A.2d 785, 794 (2002) ("[B]y using the existing senate districts, we are able to ensure, to the greatest extent practicable, that each senatorial district contains roughly the same constituents as the last validly enacted plan.").
\({ }^{31}\) Crumly v. Cobb Cty. Bd. of Elections \& Voter Registration, 892 F. Supp. 2d 1333, 1345 (N.D. Ga. 2012) ("In preparing the draft map, the Court began with the existing map drawn by Judge Carnes in 2002.").
\({ }^{32}\) Memo at 5 (emphases added).
\({ }^{33}\) Id. at 14.
\({ }^{34} \mathrm{Id}\).
}
look to the prior court-approved map for guidance; rather they remained committed to a District 3 that pulled in as much urban population as possible.

Next, and more overtly, the Special Masters report that they proceeded to draw District 4 to purposefully increase the BVAP. Dr. Grofman found in 2016 that a constitutionally drawn District 3 would result "virtually automatically" in a substantial minority population in District \(4 .{ }^{35}\) And yet, the Special Masters now report that their initial lines for District 4, which aimed to create a "compact district that included only Richmond City and Henrico/Chesterfield counties," left Black voters comprising "a little more than a third of the population. \({ }^{, 36}\) Without any further examination or explanation of voting trends across coalitions, and without regard to the court-approved existing District 4, the Special Masters simply drew the District anew, employing their own standard of "reasonably compact," to divide Henrico and Chesterfield counties in a manner that inflated the BVAP by 15 percentage points to 45.3 percent. \({ }^{37}\)

The result of the Special Masters' approach to Districts 3 and 4 leaves each with BVAP populations that exceed the percentages that have proved more than sufficient for Black voters to have an opportunity to elect their preferred candidates. Notably, the Special Masters' approach to these minority-opportunity districts stands in sharp contrast to their deference to "Virginia's lengthy tradition of placing a district in Southside Virginia" \({ }^{38}\) to create the \(73 \%\) white District \(5,{ }^{39}\) and the lamenting concern of the pre- and post-Civil War deference to the Blue Ridge and Appalachian communities of Districts 6 and \(9,{ }^{40}\) which are over \(86 \%\) and \(90 \%\) white, respectively. Such racially disparate mapdrawing cannot stand.

\section*{iii. The December 8 Map fails to respect communities of interest.}

Finally, the December 8 Map sharply divides communities of interest across the state, with the notable exception of providing special care to keep Virginia's Appalachian communities united. \({ }^{41}\) From Northern Virginia's metropolitan D.C. communities, to the military communities on the Eastern Shore, to the affinity between the Albemarle and Richmond's Western exurbs, the December 8 Map does little to unite Virginians of common interest under common representation. The overwhelming commentary from Virginians during the public hearing on December 15 before this Court supports the fact that Virginians want to keep their communities together, and the December 8 Map fails to do so. Citizen after citizen informed this Court that the western exurb communities of Richmond are inextricably linked by social, educational, environmental, and economic common interests. Others pleaded for central Virginia to retain its representation and identity in District 7. And several Virginians highlighted the stark disparities in interest between Loudoun County and counties to the south. This failure to keep together the communities in which Virginians live their lives and find their common voice is nonsensical, as well as noncompliant. This Court and the Special Masters can and must do better.

\footnotetext{
\({ }^{35}\) Personhuballah Rep. at 15-16.
\({ }^{36}\) Memo at 14.
\({ }^{37}\) Id. at 15.
\({ }^{38}\) Id. at 15.
\({ }^{39}\) Id. at 18.
\({ }^{40} \mathrm{Id}\). at 12-13.
\({ }^{41}\) See id. at 6, 12-14.
}

\section*{F. The Farkas Map accounts for Virginia's population changes while ensuring compliance with federal and Virginia law.}

Mr. Farkas submits the Farkas Map for consideration by the Special Masters and the Court. For the reasons explained below, the Farkas Map provides equally apportioned districts that are compact, share common community interests, and protect the voting power of Virginia's increasing racial and ethnic minority populations, consistent with all applicable laws and legal precedent. We submit that the Farkas Map achieves these goals more fully and consistently than the Special Masters' December 8 Map.

\section*{II. Legal Standards}

\section*{A. Population equality}

To ensure every voter has an equal voice in government, districts must be evenly apportioned by population. " \([A]\) bsolute population equality is the paramount objective," \({ }^{42}\) as the Constitution unequivocally requires that elections for the U.S. House of Representatives must be based upon population, first and foremost, such that "one man's vote in a congressional election is to be worth as much as another's." \({ }^{43}\) Under federal law, therefore, U.S. congressional districts must be as nearly equal in population as is practicable. \({ }^{44}\) Moreover, a court-ordered redistricting plan must conform to a higher standard of population equality than a redistricting plan created by a legislature, permitting only negligible variance. \({ }^{45}\) Likewise, the Virginia Constitution requires that redistricting maps "be so constituted as to give, as nearly as is practicable, representation in proportion to the population of the district." \({ }^{36}\)

\section*{B. Contiguity and Compactness}

The Virginia Constitution requires that every "electoral district shall be composed of contiguous and compact territory." \({ }^{47}\) A district is not contiguous if it is connected only by "water running downstream or upriver . . .." \({ }^{48}\) "[L]and masses separated by water may[] satisfy the contiguity requirement in certain circumstances. \({ }^{,{ }^{49} \text { To comply with the compactness requirement, districts must be }}\) drawn "employing one or more standard numerical measures of individual and average district compactness, both statewide and district by district. \({ }^{, 50}\) While ease of travel within a district may be considered when evaluating its compactness, it should not be the controlling factor. \({ }^{51}\)

\footnotetext{
\({ }^{42}\) Abrams v. Johnson, 521 U.S. 74, 98 (1997) (citation and internal quotation marks omitted).
\({ }^{43}\) Wesberry v. Sanders, 376 U.S. 1, 7-8 (1964).
\({ }^{44}\) Id.; see also Roman v. Sincock, 377 U.S. 695, 710 (1964) (same for state legislature districts).
\({ }^{45}\) Abrams, 521 U.S. at 98; see also Connor v. Finch, 431 U.S. 407, 414 (1977) (same for state legislature districts); Chapman v. Meier, 420 U.S. 1, 26-27 (1975) (same).
\({ }^{46} \mathrm{Va}\). Const. art. II, § 6.
\({ }^{47} \mathrm{Id}\).
\({ }^{48}\) Va. Code Ann. § 24.2-304.04(6) (2020).
\({ }^{49}\) Wilkins v. West, 571 S.E.2d 100, 109 (Va. 2002) (emphasis added).
\({ }^{50}\) Va. Code Ann. § 24.2-304.04(7) (2020).
\({ }^{51}\) Wilkins, 571 S.E.2d at 109.
}

\section*{C. Preservation of Communities of Interest}

Virginia law requires that districts "be drawn to preserve communities of interest," which are defined as "a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests." \({ }^{52}\) The U.S. Supreme Court has recognized that "maintaining communities of interest" constitutes a "traditional districting principle[]." \({ }^{53}\)

\section*{D. Protection of Racial and Ethnic Minority Groups}

Both federal and Virginia state law protect the political rights of racial and ethnic minorities in the map-drawing process.

\section*{i. Federal law}

The Equal Protection Clause of the Fourteenth Amendment protects against the drawing of districts that "rationally cannot be understood as anything other than an effort to segregate citizens into separate voting districts on the basis of race without sufficient justification.. \({ }^{54}\) Courts apply a two-step analysis to racial gerrymandering claims. First, courts ask whether "race was the predominant factor motivating the legislature's decision to place a significant number of voters within or without a particular district." 55 "Second, if racial considerations predominated over others, the design of the district must withstand strict scrutiny." \({ }^{56}\) The burden shifts to the map-drawer "to prove that its race-based sorting of voters serves a 'compelling interest' and is 'narrowly tailored' to that end." \({ }^{57}\)

Separately, Section 2 of the Voting Rights Act prohibits any "standard, practice, or procedure" that "results in a denial or abridgement of the right . . . to vote on account of race." \({ }^{58}\) Section 2 protects against "vote dilution" brought about by the "dispersal of [a group's members] into districts in which they constitute an ineffective minority of voters." \({ }^{59}\) If a map-drawer invokes the Voting Rights Act to justify race-based districting, "it must show that it had 'a strong basis in evidence' for concluding that the statute required its action." \({ }^{60}\)

An "effective minority district" is generally understood as one that "contains sufficient population to provide the minority community with an opportunity to elect a candidate of its choice." \({ }^{" 1}\)

\footnotetext{
\({ }^{52}\) Va. Code Ann. § 24.2-304.04(5) (2020).
\({ }^{53}\) See League of United Latin Am. Citizens v. Perry, 548 U.S. 399, 433 (2006); see also Miller v. Johnson, 515 U.S. 900, 916 (1995) (including respect for "communities defined by actual shared interests" in list of "traditional race-neutral districting principles").
\({ }^{54}\) Shaw v. Reno, 509 U.S. 630, 652 (1993).
\({ }^{55}\) Cooper v. Harris, 137 S. Ct. 1455, 1463 (2017) (quoting Miller v. Johnson, 515 U.S. 900, 916 (1995)).
\({ }^{56}\) Id at 1464. (citing Bethune-Hill v. Va. State Bd. of Elections, 137 S. Ct. 788, 800 (2017)).
\({ }^{57}\) Id.
\({ }^{58} 52\) U.S.C. § 10301(a); see also id. § 10303(f)(2).
\({ }^{59}\) Cooper, 137 S. Ct. at 1464 (quoting Thornburg v. Gingles, 478 U.S. 30, 46 n. 11 (1986)).
\({ }^{60}\) Id. at 1497 (citing Ala. Legis. Black Caucus v. Alabama, 135 S. Ct. 1257, 1274 (2015)).
\({ }^{61}\) Nat'l Conf. of State Leg., Redistricting Law 2010 at 68 (Dec. 1, 2009), https://www.ncsl.org/Portals/1/Documents/Redistricting/Redistricting_2010.pdf.
}

\section*{ii. State law}

The Virginia Constitution requires that redistricting occur "in accordance with the requirements of federal and state laws that address racial and ethnic fairness." \({ }^{.62}\) The Constitution further requires that "[d]istricts shall provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." \({ }^{, 63}\) Virginia also recently adopted a provision modeled after Section 2 of the federal Voting Rights Act, the Virginia Voting Rights Act, prohibiting maps containing districts that result in a denial or abridgment of "the right of any citizen to vote on account of race or color or membership in a language minority group" or "to elect representatives of their choice." \({ }^{64}\) A district map violates this provision if, "on the basis of the totality of the circumstances, it is shown that districts were drawn in such a way that members of a racial or language minority group are dispersed into districts in which they constitute an ineffective minority of voters or are concentrated into districts where they constitute an excessive majority." \({ }^{65}\) Furthermore, "[d]istricts shall be drawn to give racial and language minorities an equal opportunity to participate in the political process and shall not dilute or diminish their ability to elect candidates of choice either alone or in coalition with others." \({ }^{.66}\)

\section*{E. Political Fairness}

Virginia law prohibits maps that, "when considered on a statewide basis, unduly favor or disfavor any political party." \({ }^{67}\) This provision has not yet been interpreted by a Virginia court.

\section*{III. The Farkas Map Satisfies all Legal Requirements and Ensures Fair Representation for Virginians.}

\section*{A. Overview}

The Farkas Map takes the existing congressional map as its starting point but improves upon it in nearly all respects in a way that is more consistently compliant with the legal principles articulated above than the December 8 Map. It satisfies population equality requirements, increases district compactness, preserves communities of interest, and protects the voting strength of minority groups.

\footnotetext{
\({ }^{62}\) Va. Const. art. II, § 6.
\({ }^{63}\) Id.
\({ }^{64}\) Va. Code Ann. § 24.2-304.04(3) (2020).
\({ }^{65}\) Id.
\({ }^{66} I d\). § 24.2-304.04(4).
\({ }^{67} I d . \S 24.2-304.04(8)\).
}

Figure 1: Farkas Map


In the northern Virginia region, the Farkas Map places the entirety of District 11 within Fairfax County, thereby creating a more compact district with a cohesive community. The map also improves the compactness of District 10, which previously ran from the Capital Beltway to the West Virginia border, by instead anchoring it in the suburban Washington, D.C. area. In central and southwestern Virginia, the Farkas Map unites Charlottesville and the surrounding Albemarle County with the suburbs surrounding Richmond in District 7. This change unites communities of interest while also improving the compactness of District 5. The map also addresses population loss in District 9 by moving Roanoke into that district. And finally, in southeastern Virginia, the Farkas Map ensures that Black communities in Districts 3 and 4 maintain their voting strength, consistent with Dr. Grofman's remedial map and the findings of a Virginia federal court in our client's case, the Page litigation. The map also keeps the military community in District 2 whole by anchoring the district in Norfolk and including Virginia Beach City and Chesapeake City within it.

\section*{B. The Farkas Map satisfies traditional redistricting criteria, improving upon the current plan.}
i. The Farkas Map meets population equality requirements.

The Farkas Map creates districts of equal population. Six of the districts under the Farkas Map are exactly equal to the ideal population. The other five districts vary only by a single person. By stark contrast, the December 8 Map varies widely from district to district, assuring that the voice of voters in some districts, such as District 10, will carry less weight than voters in others, such as District 6.
\begin{tabular}{|l|l|l|l|l|}
\hline \multirow{2}{*}{\begin{tabular}{l} 
Proposed \\
District
\end{tabular}} & \multicolumn{3}{|l|}{ Farkas Map } & \multicolumn{2}{l|}{ December 8 Map } \\
\cline { 2 - 5 } & \begin{tabular}{l} 
Proposed \\
Population
\end{tabular} & \begin{tabular}{l} 
Deviation from \\
Ideal Population
\end{tabular} & \begin{tabular}{l} 
Proposed \\
Population
\end{tabular} & \begin{tabular}{l} 
Deviation \\
Ideal Population
\end{tabular} \\
\hline 1 & 784,673 & +1 person & 783,413 & \(-1,259(-0.16 \%)\) \\
\hline 2 & 784,673 & +1 person & 784,453 & \(-219(-0.03 \%)\) \\
\hline 3 & 784,673 & +1 person & 784,353 & \(-319(-0.04 \%)\) \\
\hline 4 & 784,672 & 0 & 784,366 & \(-306(-0.04 \%)\) \\
\hline 5 & 784,672 & 0 & 785,740 & \(+1,068(+0.14 \%)\) \\
\hline 6 & 784,672 & 0 & 783,436 & \(-1,236(-0.16 \%)\) \\
\hline 7 & 784,672 & 0 & 783,613 & \(-1,059(-0.13 \%)\) \\
\hline 8 & 784,672 & 0 & 784,141 & \(-531(-0.07 \%)\) \\
\hline 9 & 784,671 & -1 person & 786,021 & \(+1,349(+0.17 \%)\) \\
\hline 10 & 784,672 & 0 & 786,469 & \(+1,797(+0.23 \%)\) \\
\hline 11 & 784,671 & -1 person & 785,388 & \(+716(+0.09 \%)\) \\
\hline \begin{tabular}{l} 
Overall \\
Deviation
\end{tabular} & 2 people (de minimis percentage) & 3,056 people \((0.39 \%)\) \\
\hline
\end{tabular}
U.S. congressional districts must be as nearly equal in population as is practicable. \({ }^{68}\) Indeed, the Supreme Court has declared that "[a] court-ordered plan should 'ordinarily achieve the goal of population equality with little more than de minimis variation." \({ }^{39}\) The federal court that approved remedial Virginia districts in the Page litigation strictly adhered to this requirement, as did Special Master Grofman when submitting his proposal to that court. \({ }^{70}\) Not only does the December 8 Map abandon Virginia's history of strict adherence to this principle, but, as is apparent from the near perfect equality achieved by the Farkas Map, the December 8 Map does not even achieve population equality as closely as is practicable. Far from it. This failure would subject the December 8 Map to an exacting standard upon review.
"With a court plan, any deviation from approximate population equality must be supported by enunciation of historically significant state policy or unique features." \({ }^{71}\) The Special Masters report that they "worked diligently to ensure that the congressional districts were reasonably close to equipopulous," \({ }^{72}\) but this is simply not the appropriate legal standard. The Special Masters make no mention of what, if any, historically significant state policy or unique features support these deviations in population.

Indeed, the December 8 Map cannot even survive the less exacting standard applied to districts drawn by state legislatures. The U.S. Supreme Court permits some flexibility to state legislatures to achieve exact population equity, requiring that a state "justify population differences between districts

\footnotetext{
\({ }^{68}\) Id.; see also Roman v. Sincock, 377 U.S. 695, 710 (1964) (same for state legislature districts).
\({ }^{69}\) Abrams, 521 U.S. at \(98-9\) (deeming a court-drawn map with a deviation of \(0.35 \%\) permissible due to the fact that the court-"in detail"-reviewed and accounted for specific historic preferences and unique features that demanded such a deviation).
\({ }^{70}\) Personhuballah Rep. at 11 ("Since the present map and all of the maps offered in briefs submitted . . . were either exactly at ideal district size . . or plus or minus one person, the illustrative maps I have offered to the Court also provide this level of strict population equality.").
\({ }^{71}\) Chapman, 420 U.S. at 26.
\({ }^{72}\) Memo at 3 (emphasis added).
}
that could have been avoided by a good-faith effort to achieve absolute equality. \({ }^{, 73}\) In such instances, courts should consider "the size of the deviations, the importance of the State's interests, the consistency with which the plan as a whole reflects those interests, and the availability of alternatives that might substantially vindicate those interests yet approximate population equality more closely." \({ }^{74}\) Here, there is an available alternative-the Farkas Map-that, as explained further below, substantially vindicates the other interests this Court must consider.

\section*{ii. The Farkas Map creates more compact, contiguous districts.}

The Farkas Map creates more contiguous and compact congressional districts than the current map provides. These improvements are evidenced by both improved mathematical compactness scores as well as comparison with the naked eye.

Virginia courts have relied upon two leading mathematical methodologies for measuring district compactness: the Reock method and the Polsby-Popper method. \({ }^{75}\) The Reock score "compares the area of a district to the area of the small circle that can be drawn around the district." \({ }^{76}\) The Polsby-Popper score "compares the area of a district to the area of a circle with the same perimeter." \({ }^{77}\) Both methods produce a score between 0 and 1 , with 1 being most compact. \({ }^{78}\) Thus, if a score increases from one map to another, that indicates an increase in compactness. The Farkas Map increases the statewide average Reock score over the current map-one that the federal district court already found adhered to principles of compactness \({ }^{79}\)-by over 20 percent and increases the statewide Polsby-Popper score by over 47 percent. The Farkas Map is thus even more compact on average than the current map adopted by a threejudge court.

\footnotetext{
\({ }^{73}\) Tennant v. Jefferson Cnty. Com'n, 567 U.S. 758, 759 (2012) (per curiam) (citations and internal quotation marks omitted).
\({ }^{74} \mathrm{Id}\). at 760 .
\({ }^{75}\) See, e.g., Bethune-Hill v. Va. State Bd. of Elections, 141 F. Supp. 3d 505, 535 (E.D. Va. 2015), aff'd in part, vacated in part, \(137 \mathrm{~S} . \mathrm{Ct} .788\) (2017) (discussing relative attributes of both the Reock and Polsby-Popper methods). The Special Masters report in their December 7 memorandum to the Court that they have utilized a third measure-"Dave's Redistricting App"-without explanation as to how this source calculates its scores or what the range of available scoring is. We are aware of no instance of a Virginia court, or any court for that matter, approving of "Dave's Redistricting App" as a reliable source with which to measure compactness. Quite the opposite: the Southern District of Ohio previously declined to credit maps that were drawn using Dave's Redistricting App, determining that "testimony that the application allows for the manipulation of districts [and] failure to establish the parameters . . . used to produce the maps is problematic" and ultimately that the evidence "is insufficient to establish the reliability of the methodology used to create the maps." Ohio Org. Collaborative v. Husted, No. 2:15-CV-1802, 2016 WL 8201848, at *8 (S.D. Ohio May 24, 2016).
\({ }^{76}\) Vesilind v. Va. State Bd. of Elections, 813 S.E.2d 739, 743 n .3 (Va. 2018) (quoting an explanation provided by an expert witness).
\({ }^{77}\) Id.
\({ }^{78}\) Id.
\({ }^{79}\) Personhuballah, 155 F. Supp. 3d at 562, ("[Dr. Grofman's map] also vastly improves the Third District's compactness score and meaningfully improves the Plan's average compactness scores across all the affected districts.").
}

The same is true when evaluating compactness of the individual districts. In the vast majority of instances, the Farkas districts are more compact than the existing map whether measured by the Reock or Polsby-Popper methods.
\begin{tabular}{|l|l|l|l|l|}
\hline \multirow{2}{*}{\begin{tabular}{l} 
Proposed \\
District
\end{tabular}} & \multicolumn{2}{|c|}{ Reock } & \multicolumn{2}{c|}{ Polsby-Popper } \\
\cline { 2 - 5 } & Existing & Farkas & Existing & Farkas \\
\hline 1 & 0.341 & 0.346 & 0.228 & 0.259 \\
\hline 2 & 0.28 & 0.245 & 0.215 & 0.314 \\
\hline 3 & 0.428 & 0.472 & 0.227 & 0.324 \\
\hline 4 & 0.415 & 0.565 & 0.213 & 0.293 \\
\hline 5 & 0.294 & 0.435 & 0.154 & 0.322 \\
\hline 6 & 0.259 & 0.3 & 0.162 & 0.155 \\
\hline 7 & 0.257 & 0.353 & 0.194 & 0.201 \\
\hline 8 & 0.331 & 0.321 & 0.256 & 0.348 \\
\hline 9 & 0.22 & 0.178 & 0.188 & 0.167 \\
\hline 10 & 0.29 & 0.35 & 0.126 & 0.3 \\
\hline 11 & 0.203 & 0.423 & 0.093 & 0.34 \\
\hline \begin{tabular}{l} 
Statewide \\
Average
\end{tabular} & 0.302 & 0.363 & 0.187 & 0.275 \\
\hline
\end{tabular}

These metrics confirm what is observable with the naked eye, particularly with respect to the northern Virginia region. Between Districts 8,10 , and 11 alone, the population increased by nearly 300,000 Virginians, which accounts for almost 50 percent of Virginia's overall growth since 2010. This growth necessitates more compact boundaries. The existing Districts 8,10 , and 11 -intentionally left untouched in Dr. Grofman's 2016 remedial map-currently sprawl across seven counties and five independent cities, collectively. The Farkas Map, by contrast, reduces this spread to just four counties and four independent cities. \({ }^{80}\) Specifically, while the existing District 11 winds from northern Fairfax County down to southeastern Prince William County, the Farkas Map keeps all of District 11 within Fairfax County's borders, giving it a much more compact shape with sensible boundaries. Similarly, while the existing District 10 runs from the Capital Beltway to the West Virginia border, across five counties and three independent cities, the Farkas Map reduces District 10 to three counties and two independent cities, concentrated in the suburban Washington, D.C. area. \({ }^{81}\) These changes improve upon traditional districting criteria to provide less sprawling and more sensible districts.

\footnotetext{
\({ }^{80}\) See App., fig. 2.
\({ }^{81}\) The Farkas Map leaves District 8 largely the same, with a nearly 90 percent overlap with the current District boundaries, given that District 8 saw only modest population gains. The Farkas Map does, however, significantly reduce the jigsaw nature of the current boundary line District 8 shares with District 11. See id.
}

Figure 2: Northern Virginia


Unlike the December 8 Map, the Farkas Map achieves increased compactness without sacrificing other critical considerations like population equality and preservation of communities of interest. Indeed, the Farkas Map and December 8 Map achieve comparable average Reock scores that are just 0.02 points apart. \({ }^{82}\) District-by-district, the Farkas Map outperforms the December 8 Map on Reock scores in six of the eleven districts. \({ }^{83}\)

\section*{iii. The Farkas Map reunites and preserves communities of interest.}

The Farkas Map reunites communities of interest that were torn apart by the General Assembly in the previous congressional map and which are similarly divided in the December 8 Map. The current map, using 2010 Census geographies, split 14 counties, 37 census-designated places, and 22 voter tabulation districts. The Farkas Map, using 2020 Census geographies, splits only ten counties, 25 censusdesignated places, and 14 voter tabulation districts. These political subdivisions represent common interests and ought to be kept whole to the extent possible. \({ }^{84}\)

\footnotetext{
\({ }^{82}\) The December 8 Map has an average Reock score of 0.383 , according to Princeton University's Gerrymandering Project. Princeton Gerrymandering Project, https://gerrymander.princeton.edu/redistricting-report-card?planId=recOUnE4ZKjEyaVyJ (last visited December 11, 2021).
\({ }^{83}\) Compare supra p. 13 with Memo at 18.
\({ }^{84}\) Miller, 515 U.S. at 916, 919-20.
}

Region by region, the Farkas Map responds to concerns raised by Virginians during both the Virginia Redistricting Commission's tenure \({ }^{85}\) and this Court's process. \({ }^{86}\) For example, numerous commenters emphasized that Charlottesville, home to the University of Virginia, and its surrounding Albemarle County have more in common with suburban Richmond County than the rural mountain areas in District 5. One Charlottesville resident urged this Court to "consider the cohesion of metropolitan areas" and to not "combine Albemarle County with a Congressional district in the Shenandoah Valley." 87 Another explained that the current District 5 "lumps [voters] into a New Jersey-sized monolith, meaning we have no common interests . . . with other parts of the district . . . ." \({ }^{88}\) Yet another commented that Albemarle has "no cultural, economic, or community connections" with the western portion of the state, but instead is "closely intertwined" with Richmond to the east. \({ }^{89}\) Numerous government metrics affirm this point. For example, the Metropolitan Planning Organization for Richmond-a regional divide utilized by both the Virginia Department of Transportation and the U.S. Department of Transportationincludes the regions to the West of Richmond stretching toward Charlottesville, including Goochland and Powhatan. \({ }^{90}\) The regions are also clearly linked by the I-64 corridor running East-West between the two metropolitan areas.

The December 8 Map, in contrast, exacerbates the splits problem by even further breaking up the Charlottesville and Albemarle County community of interest. The December 8 Map cleaves Albemarle County in half, splitting it between the Fifth District (extending all the way to Virginia's Southern border) and Tenth District (extending all the way to Virginia's Northern border). This does not improve on the currently existing map; it makes it worse. Indeed, in the days following the release of the December 8 Map, several Virginians have expressed concern about the split representation of Charlottesville and Albemarle County. \({ }^{91}\)

The Farkas Map addresses this issue, moving Charlottesville and Albemarle County to District 7 in order to unite it with the Richmond suburbs. This change also improves the compactness of District 5, which in its current form stretches all the way from Virginia's southern border, through Charlottesville, up to the edge of the Washington, D.C. metro area. In the Farkas Map, District 5 is anchored in the southcentral region of the state. It unites Martinsville and its suburbs, which are currently separated across two districts, and it also includes Lynchburg and its surrounding counties. Further west, the map addresses population loss in District 9 by moving Roanoke into the district. This change unites Roanoke and Salem, neighboring cities that were previously placed in separate districts.

\footnotetext{
\({ }^{85}\) See Public Comments Submitted to VRC - Organized by Region, Va. Redistricting Comm'n (Nov. 19, 2021), \(\mathrm{https}: / / v i r g i n i a r e d i s t r i c t i n g . o r g / P a g e R e a d e r . a s p x\) ?page=SubmittedPublicComments (hereinafter "VRC Comments").
\({ }^{86}\) Public Comments as of 11-23-21 (10:00am), Va. Jud. System, https://www.vacourts.gov/courts/scv/districting/public_comments.pdf (hereinafter "Va. Sup. Ct. Comments").
\({ }^{87}\) Va. Sup. Ct. Comments at 73 (comment of Barbara Gehrung, Nov. 10, 2021).
\({ }^{88}\) Id. at 200 (comment of Robert E. Beard, Nov. 10, 2021).
\({ }^{89}\) VRC Comments, Central Region at 20-21 (comment of CMS, Oct. 18, 2021).
\({ }^{90}\) PlanRVA, https://planrva.org/ (last visited Dec. 14, 2021).
\({ }^{91}\) See MyDistricting Virginia, https://www.virginiaredistricting.org/legdistricting/comments/plan/513/1 (last visited December 11, 2021) (comments placed near Charlottesville).
}

Figure 3: Central Virginia


In the northern Virginia region, the Farkas Map unites communities in the Washington, D.C. metropolitan and suburban areas. These communities share similar social, cultural, and economic interests, as they house the metropolitan D.C. workforce. The Farkas Map recognizes this reality and ensures that Districts 8, 10, and 11 are focused in metropolitan and suburban Northern Virginia. This greatly improves upon the current map, which, for example, currently includes a northern district (District 10) that stretches all the way to the West Virginia border, tying the D.C. suburbs with rural communities that do not share common interests. The Farkas Map reduces District 10 to predominantly Loudon and Prince William counties, tracing the expanding D.C. suburban area and reducing county splits. By contrast, the December 8 Map carves Loudoun County out of the metropolitan D.C. districts, separating it from neighboring Fairfax County communities along Route 7 as well as from neighboring Prince William County. The splitting of communities that serve the Dulles Technology Corridor defies logic because they are all inextricably tied by common interests to the greater D.C. area. Indeed, recognizing the links of these communities to each other and D.C., the U.S. Department of Transportation has worked with local authorities to expand Metrorail service on the new Silver Line to Washington Dulles

International Airport and further west into Loudoun County in a project dubbed the "Dulles Corridor Metrorail Project. \({ }^{92}\)

In southeastern Virginia, the Farkas Map ensures that the community of veterans and active-duty military in and around Norfolk is kept whole by anchoring District 2 in that county and by including Virginia Beach City and Chesapeake City in the same district. This is not the case with the December 8 Map, which unnecessarily divides these closely linked military communities between Districts 2 and 3 . The populations of Norfolk and Virginia Beach share common federal and environmental concerns, and together form the socio-economic backbone of the Hampton Roads region; they should not be divided. As one commenter to this Court explained, "Norfolk and Virginia Beach are tied to the Norfolk Naval Base with all the active duty and veterans who reside here. . . . Please consider a Norfolk/VB district for [District 2]." \({ }^{93}\) Instead, the December 8 Map lumps Virginia Beach with Isle of Wight and Suffolk, despite those communities having more in common with Portsmouth than Virginia Beach.

Figure 4: Hampton Roads


For all these reasons, the Farkas Map thus reflects and significantly improves upon the preservation of communities of interest across the Commonwealth. The memorandum accompanying the December 8 Map expressed great solicitude for defining and maintaining communities of interest along
92 See U.S. Dep't of Transp., Dulles Corridor Metrorail Project, https://www.transportation.gov/buildamerica/projects/dulles-corridor-metrorail-project (last visited Dec. 11, 2021); see also Dulles Corridor Metrorail Project, Silver Line Stations, https://www.dullesmetro.com/silver-line\({ }_{93}\) stations/ (last visited Dec. 11, 2021).
\({ }^{93}\) Va. Sup. Ct. Comments at 166 (comment of Charles F. Stanton, Nov. 10, 2021).
the Blue Ridge and in Appalachia, which are predominantly white, rural communities. \({ }^{94}\) Similar care ought to be applied to preserving the communities described above, which are in many instances more diverse, urban and suburban communities. The Farkas Map fully accounts for those communities that the December 8 Map neglects.

\section*{iv. The Farkas Map protects racial and ethnic minority groups.}

The Court should ensure that the failures of the General Assembly, which required years of federal litigation to remedy, are not repeated this redistricting cycle. The Court should be guided by race-neutral districting principles and reject any map that unjustifiably overpacks Black voters within districts. This approach does not require significantly altering the Black voting age population in either of Virginia's effective minority districts, Districts 3 and 4, where Black voters have been able to elect their candidates of choice under the current congressional map. \({ }^{95}\)

The Special Masters' memorandum suggests that their first and predominant consideration in the Greater Richmond and Hampton Roads areas was race, resulting in an unjustifiable increase of the BVAP percentages in the effective minority districts in those areas. The Special Masters claim that they "considered race only after [they] had drawn a map fully subject to the constraints of [the] traditional" redistricting principles. \({ }^{96}\) But the district-specific descriptions tell another story. In discussing the Richmond and Southside regions, the Special Masters explain that they initially created "a compact district that included only Richmond City and Henrico/Chesterfield counties. \({ }^{997}\) However, the mapdrawers then observed that Black Virginians "would total a little more than a third of the population" of the district, and so altered the map. \({ }^{98}\) The map-drawers split both Henrico and Chesterfield Counties, in order to construct a district with a Black CVAP of \(45.3 \%\), higher than the \(40 \%\) Black CVAP in the current District \(4 .{ }^{99}\) The only justification they gave was that the high-BVAP district would "likely continue to elect the African-American population's candidate of choice. \({ }^{100}\) The Special Masters provided no analysis that would justify this assumption. Similarly, the Special Masters' rationale for drawing District 3 in the Hampton Roads area appears limited to ensure ability-to-elect by including as many urban areas as possible, without providing any justification that such an approach was necessary. \({ }^{101}\)

\footnotetext{
\({ }^{94}\) See Memo at 13.
\({ }^{95}\) Personhuballah, 155 F. Supp. 3d at 562.
\({ }^{96}\) See Memo at 5.
\({ }^{97}\) Id. at 15.
\({ }^{98}\) Id.
\({ }^{99}\) Id.
\({ }^{100} \mathrm{Id}\).
\({ }^{101} I d\).
}

Figure 5: Greater Richmond


The Farkas Map, in contrast, was drawn in accordance with race-neutral districting principles and still maintains the voting strength of Virginia's Black communities. As explained above, the Farkas Map ensures population equality, creates compact districts, and preserves communities of interest. Doing so results in a map that includes two effective minority districts and does not dilute minority voting strength.

The Farkas Map unites all of Norfolk and Virginia Beach into District 2 and all of Hampton in District 3. In so doing, the Farkas Map decreases the BVAP in District 3 from 47 percent to 41.9 percent, resembling the demographics and configuration of the remedial map proposed by Dr. Grofman in 2016 and adopted by a federal court while retaining the same general configuration and location. \({ }^{102}\) District 3 thus remains an effective minority district in which Black voters may continue to influence election outcomes in coalition with others. \({ }^{103}\) In the current configuration of District 3, Representative Scott won over 66 percent of the vote in 2016, over 91 percent in 2018, and over 68 percent in 2020. \({ }^{104}\)

The BVAP of District 4 rises only nominally to 40.1 percent in the Farkas Map from 39.7 percent in the current map while better adhering to traditional districting principles. Specifically, the Farkas Map removes the irregular arm of Suffolk and Chesapeake counties from District 4 and places them in a more

\footnotetext{
\({ }^{102}\) Personhuballah, 155 F. Supp. 3d at 565 (noting BVAP of 45.3 percent in District 3 and 40.9 percent in District 4 at time of adoption of existing maps in 2016).
\({ }^{103}\) See Bartlett v. Strickland, 556 U.S. 1, 13 (2009) (describing an effective minority district as one in which the minority population does not make up a majority of the voting-age population but "at least potentially . . . is large enough to elect the candidate of its choice with help from voters who are members of the majority and who cross over to support the minority's preferred candidate.") (plurality opinion).
104 Ballotpedia, Virginia's 3rd Congressional District, (last visited Oct. 20, 2021), https://ballotpedia.org/Virginia\%27s_3rd_Congressional_District.
}
contiguous and compact manner in District 3. District 4 of the Farkas Map also keeps Franklin City with neighboring Southampton.

While the Farkas Map hews closely to the versions of these minority-opportunity districts approved by the federal court in 2016, the Special Masters' December 8 map packs a greater percentage of Black voters into each district, particularly District 4.
\begin{tabular}{|l|c|c|c|c|}
\hline & \begin{tabular}{c} 
Enacted Map \\
BVAP (At \\
Adoption)
\end{tabular} & \begin{tabular}{c} 
Enacted Map \\
BVAP (Current)
\end{tabular} & \begin{tabular}{c} 
Farkas Map \\
BVAP
\end{tabular} & \begin{tabular}{c} 
December 8 \\
Map BVAP
\end{tabular} \\
\hline District 3 & \(45.3 \%\) & \(47.2 \%\) & \(41.9 \%\) & \(44.5 \%\) \\
\hline District 4 & \(40.9 \%\) & \(39.7 \%\) & \(40.1 \%\) & \(45.3 \%\) \\
\hline
\end{tabular}

Dr. Grofman's 2016 analysis of the maps he proposed to the district court demonstrate that the higher percentages are not necessary to achieve adherence to legal standards. The 2016 percentages created "a realistic opportunity [for a Democratic candidate of choice] to win election in CD3 due to cohesive voting from within the African-American community and cross-over voting from non-black Democrats." \({ }^{105}\) The changes to BVAP proposed in the December 8 Map-taken together with the failure to abide by other principles such as population equality and not dividing communities of interest-raises significant concern that Black voters are being improperly packed into these two districts.

The changes made in the Farkas Map abide by all federal and state law imperatives while having the effect of preserving the opportunity of minority voters to elect candidates of their choice in coalition with others. The Farkas Map thus comports with the principles of Dr. Grofman's 2016 maps that remedied the unconstitutional gerrymander of the Virginia legislature following the 2010 census.

\section*{v. The Farkas Map does not unduly favor any political party.}

The Farkas Map offers a blueprint for fair, representative redistricting that properly and fully accounts for all legal requirements without unduly favoring any one political party over another. The Farkas Map ameliorates the partisan bias of the December 8 Map and existing map-both with a score of approximately -9.7 percent-to just -0.6 percent based on the turnout from the 2020 presidential race. \({ }^{106}\)

\section*{vi. The December 8 Map ignores important impacts on incumbents.}

The U.S. Supreme Court has held that states have a legitimate interest in preserving the constituencies of congressional incumbents. \({ }^{107}\) The Special Masters have reported that they created the December 8 Map without any knowledge as to "which incumbents have been placed in [congressional]

\footnotetext{
\({ }^{105}\) Personhuballah Rep. at 47.
\({ }^{106}\) Partisan bias is the difference between each party's seat share and \(50 \%\) in a hypothetical, perfectly tied election. Thus, the closer the partisan bias is to 0 , the lower the map's skew toward one party or the other. A negative partisan bias score indicates bias in favor of the Republican Party, while a positive partisan bias score indicates bias in favor of the Democratic Party.
\({ }^{107}\) White v. Weiser, 412 U.S. 783, 797 (1973).
}
districts with other incumbents." \({ }^{108}\) But they and this Court should be aware that the three incumbents whom the December 8 Map most threatens are the only three women in Virginia's delegation. Indeed, some of the most problematic changes that the December 8 Map seeks to make are precisely the changes that could lead to Virginia not having a single female incumbent. The December 8 Map's complete uprooting of District 7 can have only one effect on Representative Abigail Spanberger's tenure in Congress, whether one knows the precise town in which she currently resides or not. Likewise, detaching District 10 from the Washington D.C. metropolitan area to incorporate rural communities to the south threatens Representative Jennifer Wexton's position, without solving the problem of District 10's sprawling geographic reach. Finally, splitting the military communities in Norfolk and Virginia Beach directly threatens the incumbency of Representative Elaine Luria, who is well-known for her military service and connection with that community. Representative Luria is also double-bunked with Representative Scott, one of the delegation's only two Black members and the longest serving incumbent in the state.

Thus, the threat that the December 8 Map poses to the female and minority members-and only those members-of Virginia's delegation is apparent without detailed knowledge of each incumbent's residential address. As many Virginians explained to this Court during the December 15 public hearing, to turn a blind eye to such a result is hardly in the interest of Virginians.

\section*{vii. Nesting is not applicable to congressional maps.}

The December 8 Map was drawn to "carve[] . . Senate districts out of U.S. House districts" "to the extent practicable." \({ }^{109}\) The accompanying report acknowledged that this practice, known as "nesting," is not required by Virginia law, nor is it required by federal law. \({ }^{110}\) Moreover, if nesting is applied in redistricting at all, it is typically used when drawing state legislative districts, rather than congressional districts, which are much larger and often to do not correspond neatly to the number of state legislative districts. \({ }^{111}\) It is unclear how application of this non-statutory principle served to constrain or guide the Special Masters' drawing of the congressional districts, specifically. It is clear, however, that the Special Masters report that they employed nesting to keep communities of interest together despite previously acknowledging that they are not fully apprised of the communities of interest that exist in Virginia. \({ }^{112}\) As discussed above, the December 8 Map unnecessarily fractures multiple important communities of interest across the Commonwealth at the congressional district level. The Special Masters' application of nesting thus serves only to replicate this noncompliance across all maps. Indeed, there does not appear to be a principled basis for the December 8 Map's adoption of certain non-statutory criteria, such as nesting, and rejection of others, such as incumbency.

\footnotetext{
\({ }^{108}\) Memo at 10.
\({ }^{109}\) Id.
\({ }^{110}\) See id.
\({ }^{111}\) See Ballotpedia, Nesting, https://ballotpedia.org/Nesting (last visited December 11, 2021) (discussing nesting in the context of state legislative districts only); see also Bethune-Hill v. Va. State Bd. of Elections, 141 F. Supp. 3d 505, 538 (E.D. Va. 2015), aff'd in part and vacated in part, 137 S. Ct. 788 (2017) (discussing nesting in the context of state legislative districts); Davis v. Bandemer, 478 U.S. 109, 179 n. 18 (1986), abrogated in part on other grounds by Rucho v. Common Cause, 139 S. Ct. 2484 (2019) (J. Powell, concurring in part) (same).
\({ }^{112}\) Compare Memo at 7 (acknowledging lack of awareness of all applicable communities of interest) with Memo at 10 (reporting that nesting was used to align communities of interest under common representation).
}

\section*{IV. Conclusion}

This Court, with the help of the Special Masters, now has the duty to draw congressional districts that will govern elections over the next ten years. The Farkas Map offers fair, representative congressional districts that are fully compliant with federal and Virginia law. It apportions Virginia's population equitably; improves upon traditional districting metrics of contiguity, compactness, and political subdivision splits; and preserves and reunites long-split communities of interest. In so doing, it ensures that Virginia's growing racial and ethnic minority communities, which have been the main drivers behind Virginia's population growth, retain their opportunity to elect candidates of their choice in coalition with others, without diluting their voting strength by packing them within certain districts

Any map adopted by the Court must contend with these important considerations and requirements in order to comply with the law and the will of Virginia voters. Accordingly, Mr. Farkas respectfully requests that the Special Masters and ultimately the Court adopt the Farkas Map for Virginia's congressional districts.

Respectfully submitted,
\(\frac{/ s / \text { Marc E. Elias }}{\text { Marc E. Elias* }}\)
Haley K. Costello Essig, Va. Bar \# 85541
Henry J. Brewster*
Harleen K. Gambhir*
ELIAS LAW GROUP LLP
10 G St NE, Suite 600
Washington, DC 20002
melias@elias.law
hessig@elias.law
hbrewster@elias.law
hgambhir@elias.law
T: (202) 968-4490
F: (202) 968-4498
Abha Khanna*
ELIAS LAW GROUP LLP
1700 Seventh Ave, Suite 2100
Seattle, WA 98101
akhanna@elias.law
T: (206) 656-0176
F: (206) 656-0180
Counsel for James Farkas
* Not admitted to practice in Virginia.

Mssrs. Elias and Brewer are admitted in

DC, Ms. Gambhir is admitted in CA, and Ms. Khanna is admitted in WA.

Enclosures:
Appendix, Figures 1-5
Farkas Map Mapping Files

\section*{APPENDIX}

\section*{FIGURE 1}

Farkas Map


\section*{FIGURE 2}

Northern Virginia


\section*{FIGURE 3}

Central Virginia


\section*{FIGURE 4}

\section*{Hampton Roads}


\section*{FIGURE 5}

Greater Richmond

\begin{tabular}{ll} 
From: & Lynn Chipkin \\
To: & Redistricting \\
Subject: & Patrick County \\
Date: & Friday, December 17, 2021 11:31:55 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Regarding the map for Patrick County, clearly the interests of the county are with Henry and Martinsville. Pairing it with Floyd and Carroll makes no sense to anyone who has lived here and understands the demographics of the region.

Thank you,
Lynn Chipkin
Woolwine, VA.
\begin{tabular}{ll} 
From: & Donna Granski \\
To: & Redistricting \\
Subject: & Maps \\
Date: & Friday, December 17, 2021 11:38:01 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Morning,
I am a \(75+\) year old retired teacher of 35 years. I have lived in Chesterfield for 44 years and beg you to keep the districts that share common needs together.
Western Chesterfield and Henrico have too many similarities to divide them.
Thank you for your kind attention,
Donna Granski
15302 Fox Briar Court
Midlothian, VA 23112
(804) 338-2367

Sent from my iPhone
\begin{tabular}{ll} 
From: & Kathleen Mullen \\
To: & Redistricting \\
Subject: & Comments on Redistricting in the Mount Vernon area of Fairfax County \\
Date: & Friday, December 17, 2021 11:58:28 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep Mount Vernon together! The Super Masters' choice of new maps cuts Mt Vernon in half and includes us with West Springfield, which we do not have anything in common. Many of us have discussed and agreed on the following. These are some of many of the reason why Mount Vernon must stay together.

We are now in the 36th Senate District which would become the 34th which says we are anchored in Franconia and Springfield. It only makes sense that I-95 should be the western boundary of this district. Fairfax County has much more in common than the areas south of Occoquan in Prince William County or West of I-95. However, this map pairs the Mount Vernon District with Springfield. The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they REMOVED a Springfield district because we do not share common interests. Here is a link to that map: https://www.fairfaxcounty.gov/.../2021-adopted...
The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I-95 are not communities of interest. An example is the Mount Vernon High School that is located on 8515 Old Mount Vernon Road that would be split in half with this map. See the map of the school boundaries on this map: https://www.fcps.edu/.../boundary-maps/Mountvernon_HS.pdf The memo that states that the 34th district is anchored in West Springfield and Franconia is not true. Looking at the map of Fairfax County AND the school boundary of Mount Vernon High School will inform the Special Masters where the boundaries should be.

The Mount Vernon Community, which contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK - details here:
https://fairfaxcountygis.maps.arcgis.com/.../index.html... ) is of concern to all of the residents who live along the corridor, but is not of interest to West Springfield or even Franconia.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with organizations like the Mount Vernon Democratic Committee, http://mvdemocrats.com/, MVCCA (Mount Vernon Council of Citizens' Associations) https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ Indivisible Below the Beltway (https://www.facebook.com/indivisiblebelowthebeltway/) all of which include members all along the Route 1 Corridor.

Mason Neck is also a part of the Mount Vernon District, as is Lorton, who have nothing in common
with the residents of Haymarket and Fredericksburg. For example: Gunston Hall Elementary is a part of our region 3 Pyramid school system and this area will become the 7th Congressional district instead of the 8th, where both are communities of interest and is where they belong.

Please consider these comments, as this affects our everyday lives.

Sincerely,

Kathleen Mullen
Concerned citizen of the Mount Vernon Community
8702 Curtis Avenue
Alexandria, VA 22309
\begin{tabular}{ll} 
From: & Brenda Hill \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Friday, December 17, 2021 12:21:53 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Members of the Court,
Thank you for listening to the concerns of citizens in regards to redistricting maps proposed by the "masters". Please consider replacing the "masters" map with the Farkas map. The Farkas map keeps communities of interest together. Those of us living in Chesterfield and Henrico have much in common. We cross Route 288 to go to work, shop, doctors appointments, events........ Separating these communities will leave us without representation that is important to us.

Thanks again for listening to our concerns.
Brenda Hill
804-218-1717

\title{
Commonweatth of Zirginia
}


\author{
MR. GERALD D. ARRINGTON \\ COMMONWEALTH'S ATTORNEY FOR BUCHANAN COUNTY \\ P. O. BOX 804 -GRUNDY, VIRGINIA 24614
}

December 17, 2021
'Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
\[
\text { RE: } \frac{\text { Rules and Procedures for Implementing the Requirements of Article II. }}{\text { Section 6-A --- Including Buchanan County in Proposed Senate District } 5}
\]

Dear Ms. Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 . I applaud all the effort and hours of hard work that many people have dedicated to creating what each believes to be the best map that can be drawn, and I understand that no map will ever be perfect. With that being said, I sincerely believe that it is in Buchanan County's best interest to be included in the \(5^{\text {th }}\) district.

As a citizen there are many reasons that I could provide you as to why Buchanan County should be included in the district. Those reasons include the sharing of the US 460 corridor, the shared mining industry (there are multiple mines that exist in both counties even though the entrance is in one county or the other) our joint ventures through the regional IDA, and so many others.

Today, I write you as the Commonwealth's Attorney for Buchanan County and want to focus on my concerns with the splitting of Buchanan and Tazewell Counties into two separate districts. While I could write pages as to all the reasons and rationale, I will focus on trying to put forth some of the most important reasons as succinctly as possible.

First, from a law enforcement perspective, Buchanan County is uniquely situated geographically. We are bordered by Kentucky on the western side of the county, West

Virginia on the northern side of our county, and Tazewell County on the eastern side. On its face, this doesn't seem particularly notable, but it is quite significant for many reasons. US 460 by way of the Mountain Parkway runs from Lexington, Kentucky through Pike County and the city of Pikeville, Kentucky into Buchanan County, Virginia. This route is used to transport illegal narcotics from Lexington, Kentucky into Buchanan County and Virginia as a whole. US 460 runs through both our county seat, Grundy, and Tazewell's county seat, Tazewell, and ends in Virginia Beach, Virginia.

In addition to sharing the US 460 corridor, both Buchanan and Tazewell Counties share their northern borders with West Virginia. Our bordering counties in West Virginia have some of the nation's most affected counties when it comes to illicit drug use. McDowell County has led the nation in the past with the most overdose deaths per capita. Buchanan and Tazewell Counties, unfortunately, have led Virginia in overdose deaths per capita in years past. Again, we have similar concerns and interests from a law enforcement perspective. Narcotics regularly come across the borders through the "backwoods" but we also see a significant quantity of illegal drugs coming into Buchanan County out of West Virginia's cities of Princeton and Bluefield, which are both on US-460 and those narcotics are transported through Tazewell County into Buchanan County.

Second, from a judicial efficiency perspective, Buchanan and Tazewell Counties comprise the majority of the \(29^{\text {th }}\) Judicial Circuit. Tazewell leads the four-county circuit with the most significant number of cases with Buchanan County and Russell County typically seeing a similar case load. I believe that whenever possible, a judicial circuit should share the same legislators given their duty and authority to appoint the judiciary that serves the circuit.

Finally, I believe that it is important for both Buchanan and Tazewell County to share the same legislators. There are many reasons for this that are unrelated to law enforcement, but this sharing is beneficial to law enforcement and public safety. We currently, and as drawn, will continue to share the same representative in the House of Delegates. By sharing the same Senator, it allows our counties to combine our efforts to talk with our shared representatives about public safety concerns. These discussions range from concerns for police officers' safety while working the streets to Commonwealth's Attorneys seeing legislative "fixes" that need to be enacted to further protect public safety or to ensure that citizens' rights are not infringed upon.

In sum, as Commonwealth's Attorney for Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.


Joe G. Street
1226 Clear Creek Road
Vansant, VA 24656

December 17, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
Dear Ms. Pitney,
It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6. The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.

Sincerely,


Pete Savage
1104 Winter Wren St.
Grundy, VA 24614

December 17, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia

Dear Ms. Pitney,
It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6 . The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.


Jessica Dotson
1302 Granny Road
Pilgrims Knob, VA 24634

December 17, 2021

Ms. Muriel-Theresa Piney
Clerk of the Supreme Court of Virginia

Dear Ms. Pitney,

It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6. The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.

Sincerely,


Jessica Dotson

Jessica Vanover
2221 Elkins Branch Road
Grundy, VA 24614

December 17, 2021

Ms. Muriel-Theresa Piney
Clerk of the Supreme Court of Virginia
Dear Ms. Piney,
It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6. The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.

Sincerely,
Tumica Vanowa
Jessica Vanover

Tina Clevinger
2219 Belchers Fork Road
Grundy, VA 24614

December 17, 2021

Ms. Muriel-Theresa Piney
Clerk of the Supreme Court of Virginia

Dear Ms. Pitney,

It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6. The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.

Sincerely,


Jessica Savage
1104 Winter Wren St.
Grundy, VA 24614

December 17, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia

Dear Ms. Pitney,

It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6. The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.

Sincerely,


Kenneth Roulett
3197 Lovers Gap Road
Vansant, VA 24656

December 17, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia

Dear Ms. Pitney,

It is my understanding that through redistricting in the State Senate, that Buchanan County will be moved from Senate District 5 to Senate District 6 . The proposed change will move Buchanan County's Senator to Todd Pillion instead of Travis Hackworth. Although we feel that Todd Pillion is an excellent State Senator, Travis Hackworth was born and raised in Buchanan County. His native roots give him a leg up on understanding the county and its people. I feel that it would be a disadvantage for Buchanan County to lose Travis Hackworth as its State Senator. Please consider leaving Buchanan County as part of Senate District 5 during the redistricting process.


Kenneth Roulett

\section*{SENT VIA EMAIL TO Redistricting@vacourts.gov}

Re: Decennial Redistricting Pursuant to the U.S. Constitution, the Constitution of Virginia, and the Code of Virginia

\section*{December 15, 2021}

Honorable Muriel-Theresa Pitney, Clerk of Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street
Richmond, VA 23219-1315

To the Clerk of Court and the Justices of the Supreme Court of Virginia,

\section*{I write to extend several insights on the Special Masters Draft redistricting plans.}

I have no partisan affiliation or interests, nor any personal connections to a party, interest group, elected official or candidate with an interest in the Virginia redistricting process. I am a faculty member in the Department of Politics at the University of Virginia. For the past 31 years, my research, publication and teaching areas have included GIS, the U.S. Census, the history of Virginia elections, and the topics of apportionment, redistricting, and electoral administration. I regularly teach GIS-related courses at the University of Virginia, including a course on redistricting. In 2011, my UVA students won most of the awards in the Virginia university public redistricting competition, and a former UVA student of mine served as an appointed member on the 2021 Virginia Redistricting Commission. In addition, in 2011 I served as a GIS and election expert on the Charlottesville Reprecincting Committee that redrew the City's precinct boundaries to align with the requirements of the Virginia Code. Finally, between 2000 and 2007, I directed an exploratory effort involving hundreds of UVA students who helped to create the first online historical database of Virginia elections, election districts and elected officials from 1776 to the present. The initial form of this historical database remains available online, but its final form and much (but not all) of the collected data is now housed and curated by the Virginia Board of Election Historical Database.

My first concern regarding the Special Masters draft plans relates to the Special Masters assumption that the Prisoneradjustment process required by the VA Code (§ 24.2-314) has been correctly "implemented in [the Division of] Legislative Services' data." The highlighted prison-adjustment datafiles from the Commission, however, contain both a serious error and a problematic omission.

Virginia Redistricting Commission

\section*{Data Downloads}

Statewide 2020 geodatabase containing Counties, VTDS, and Blocks with prison adjusted population and election results and selected primary election results (zip)
Statewide 2020 Geopackage continining Counties, VTDS, and Blocks with prison adjusted population and election results (zip file)
Statewide 2020 geodatabase containing Counties, VIDs, and Blocks with prison adiusted populiation and election results (zip file

As indicated in the screenshot below, the Redistricting Commission's prison-adjusted data erroneously reports there are 21 Virginia Census blocks with negative (!) populations. Unlike a typographical mistake, an error like this typically indicates a systemic data-processing problem. If left uncorrected, this datafile will undermine the Court's effort to comply with the U.S. and Virginia constitutional expectation for election district population equality.
\begin{tabular}{|r|r|r|r|r|r|r|}
\hline 2 & PRES12L & PRES12C & PRES12G & PRES12TOTV & PRADJPOPD & ADJPOP \\
\hline 0 & 0 & 0 & 0 & 0 & -700 & -700 \\
\hline 2 & 0 & 0 & 0 & 4 & -694 & -675 \\
\hline 16 & 10 & 6 & 5 & 270 & -1051 & -422 \\
\hline 39 & 2 & 4 & 1 & 266 & -1179 & -371 \\
\hline 0 & 0 & 0 & 0 & 0 & -351 & -351 \\
\hline 0 & 0 & 0 & 0 & 2 & -345 & -341 \\
\hline 0 & 0 & 0 & 0 & 0 & -284 & -284 \\
\hline 0 & 0 & 0 & 0 & 0 & -268 & -268 \\
\hline 12 & 4 & 3 & 1 & 148 & -531 & -202 \\
\hline 1 & 0 & 0 & 0 & 2 & -181 & -176 \\
\hline 2 & 0 & 0 & 0 & 43 & -214 & -144 \\
\hline\(; 9\) & 3 & 2 & 0 & 156 & -436 & -114 \\
\hline 22 & 0 & 0 & 0 & 44 & -254 & -93 \\
\hline 24 & 1 & 0 & 0 & 58 & -207 & -62 \\
\hline 3 & 1 & 4 & 0 & 97 & -320 & -50 \\
\hline 38 & 8 & 4 & 3 & 358 & -840 & -44 \\
\hline 19 & 0 & 0 & 0 & 33 & -104 & -43 \\
\hline 9 & 0 & 0 & 0 & 41 & -132 & -32 \\
\hline 27 & 1 & 0 & 0 & 85 & -339 & -30 \\
\hline 18 & 0 & 1 & 0 & 49 & -126 & -19 \\
\hline 23 & 1 & 0 & 0 & 43 & -100 & -2 \\
\hline 0 & 0 & 0 & 0 & 0 & 0 & 0 \\
\hline
\end{tabular}

My second concern relates to the apparent fact that the Redistricting Commission's datafiles do not readjust Virginia's 2020 Census block populations to reflect "the race and ethnicity" of Virginia's incarcerated persons in the population count of the locality in which he is deemed to reside" (§ 24.2-314 D.). According to the Virginia Redistricting Commission data, 41,855 incarcerated persons in 103 Census blocks were reassigned to 24,035 home residency Census blocks and yet the race/ethnicity of these individuals was not adjusted in either the original or new home residency Census blocks. Before authorizing any new Virginia redistricting plans, the Virginia Supreme Court needs to inquire if the Redistricting Commission prison-adjusted data is in compliance with the expectations of the Voting Rights Act.

My third concern is that in the wake of the Virginia Redistricting Commission's wholesale failure the Special Masters draft plans will be accepted without a clear or public demonstration that they best satisfy the constitutional and statutory criteria governing the creation of election districts in Virginia. To test the possibility that the Special Masters plans are not providential or optimal, I offer 6 alternative U.S. House District plans, which I assess and compare against the Special Masters plan. Four constitutional and statutory criteria highlighted by the Special Masters are adopted as the benchmarks by which each plan is assessed. These four benchmarks are:
1) District population equality,
2) Protection and promotions of voting rights,
3) District Compactness, and
4) Minimization of Locality Splits.

As the tables below reveal, the Special Masters Congressional District Plan clearly are suboptimal in three benchmark categories (1,3,4), with one category (2) open to interpretation by the Court and others.
DistrictBuilder URL
UVA-1
U.S. Districts_8 Splits_32\% Compactness
https://app.districtbuilder.org/projects/81194c4b-
da35-4f10-b2c4-47c65c877a14
UVA-2
U.S. Districts_10 Splits_31\% Compactness
https://app.districtbuilder.org/projects/8e412a6c-
UOcf-4461-beca-7d5cb5fec101
UVA-3
U.S. Districts_10 Splits_32\% Compactness
https://app.districtbuilder.org/projects/d9a0e0b6-
399c-4e88-a468-adaa451cad2d
UVA-4
U.S. Districts_10 Splits_35\% Compactness
https://app.districtbuilder.org/projects/8422d4d8-
6e34-47b1-af54-11541489fb6f
https://app.districtbuilder.org/projects/5ef335a0-
U9a1-434c-8de9-ebf74272f9f1
UVA-5
U.S. Districts_11 Splits_35\% Compactness
https://app.districtbuilder.org/projects/d045fee5-
ca41-4f4f-a6a6-fab7eb3c3ffc

\section*{1) District Population Equality}

In Karcher v. Daggett (1983), the U.S. Supreme Court interpreted the "as nearly as practicable" population equality standard for Congressional districts as requiring a good faith effort to achieve the smallest possible district population deviations. The Special Masters Congressional Plan clearly fails to meet this standard. As Table 1 reveals, each of the 6 alternative plans more closely satisfies the Karcher minimalist standard at both the individual district levels and at the level of a plan's average deviation.

\section*{Table 1}
\begin{tabular}{|l|c|c|c|c|c|c|c|}
\hline \(\mathbf{1 1}\) \\
Congressional \\
Districts
\end{tabular}

\section*{2) Protection and promotions of voting rights}

The federal Voting Rights Act prohibits discriminatory voting practices against racial/ethnic minorities, including election districts that create an "ineffective minority" or an "excessive majority." When required remedially and where possible spatially, the VRA affirmatively promotes state creation of election districts that afford underrepresented minority voters the "opportunity to elect candidates of their choice." Virginia State law extends these protections and opportunities by recognizing minority "Coalition" opportunity districts in which the "white" population is less than \(50 \%\) (Va. Code Ann. §24.2-304.04(4)).

Although federal and state courts are the final arbiters of how a redistricting plan best advances the protection of voting rights, this should not preclude a clear and public assessment and comparison of the Special Masters draft plans relative to other alternative plans. Table 2 affords this opportunity for the Court and others to review. What seems evident is that none of the 7 evaluated plans yields a conventionally-understood VRA "majority minority" district, and the Special Masters plan creates two "coalition opportunity" districts whereas the other plans create 4-5 similar districts.

Table 2
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
11 \\
Congressional Districts
\end{tabular} & Special Masters & UVA \#612 Splits36\% Compactness & UVA \#5 11 Splits35\% Compactness & \begin{tabular}{l}
UVA \#4 10 Splits35\% \\
Compactness
\end{tabular} & \begin{tabular}{l}
UVA \#3 \\
10 Splits 32\% \\
Compactness
\end{tabular} & \begin{tabular}{l}
UVA \#2 \\
10 Splits31\% \\
Compactness
\end{tabular} & UVA \#1 8 Splits32\% Compactness \\
\hline \begin{tabular}{l}
\# of VRA \\
Majority \\
Minority \\
Districts
\end{tabular} & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\
\hline \begin{tabular}{l}
\# "Coalition" \\
Majority \\
Districts
\end{tabular} & 2 & 5 & 5 & 5 & 4 & 5 & 5 \\
\hline District-1 & \begin{tabular}{l}
Total: 54.0\% \\
Black \\
(45.3\%) \\
Hispanic \\
(3.5\%) \\
Asian (2.0\%)
\end{tabular} & & \begin{tabular}{l}
Total: 59\% \\
Black (47\%) \\
Hispanic (8\%) \\
Asian (4\%)
\end{tabular} & & \begin{tabular}{l}
Total: 61\% \\
Black (48\%) \\
Hispanic (8\%) \\
Asian (5\%)
\end{tabular} & \begin{tabular}{l}
Total: 61\% \\
Black (48\%) \\
Hispanic (8\%) \\
Asian (5\%)
\end{tabular} & \begin{tabular}{l}
Total: 61\% \\
Black (48\%) \\
Hispanic (8\%) \\
Asian (5\%)
\end{tabular} \\
\hline District-2 & \begin{tabular}{l}
Total \\
54.01\% \\
Black \\
(44.5\%) \\
Hispanic \\
(5.2\%) \\
Asian (2.9\%)
\end{tabular} & & Total 50\%
Black (33\%)
Hispanic (10\%)
Asian (7\%) & & \begin{tabular}{l}
Total 47\% \\
Black (30\%) \\
Hispanic (10\%) \\
Asian (7\%)
\end{tabular} & Total 54\%
Black (39\%)
Hispanic (10\%)
Asian (5\%) & Total 54\%
Black (35\%)
Hispanic (10\%)
Asian (7\%) \\
\hline District-3 & & & Total 59\%
Black (18\%)
Hispanic (23\%)
Asian (18\%) & & Total 57\%
Black (21\%)
Hispanic (23\%)
Asian (13\%) & Total 57\%
Black (21\%)
Hispanic (23\%)
Asian (13\%) & Total 57\%
Black (21\%)
Hispanic (23\%)
Asian (13\%) \\
\hline District-4 & & & Total 52\%
Black (16\%)
Hispanic (21\%)
Asian (15\%) & & Total 50\%
Black (16\%)
Hispanic (19\%)
Asian (15\%) & Total 50\%
Black (16\%)
Hispanic (19\%)
Asian (15\%) & Total 50\%
Black (16\%)
Hispanic (19\%)
Asian (15\%) \\
\hline District-5 & & & Total 50\%
Black (9\%)
Hispanic (14\%)
Asian (27\%) & & Total 50\%
Black (8\%)
Hispanic 15\%)
Asian (26\%) & Total 50\%
Black (8\%)
Hispanic 15\%)
Asian (26\%) & \begin{tabular}{l}
Total 50\% \\
Black (8\%) \\
Hispanic 15\%) \\
Asian (26\%)
\end{tabular} \\
\hline
\end{tabular}

\section*{3) District Compactness}

The third evaluative benchmark is "District compactness." There are many different mathematical ways of measuring the property of "compactness" and all offer only partially adequate measurements of the highly irregular spatial boundary properties of U.S. states, localities, and the hierarchical scale of U.S. Census block geographies. The Special Masters employ the two most conventional methods for measuring district compactness. Table 3 reports the Polsby-Popper Compactness scores for the 7 evaluated plans, clearly revealing that the Special Masters Plan is not the most compact plan possible.

Table 3
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
\[
11
\] \\
Congressional Districts
\end{tabular} & Special Masters & \begin{tabular}{l}
UVA \#6- \\
12 Splits36\% \\
Compactness
\end{tabular} & \begin{tabular}{l}
UVA \#5 \\
11 Splits35\% \\
Compactness
\end{tabular} & UVA \#4 10 Splits35\% Compactness & \begin{tabular}{l}
UVA \#3 \\
10 Splits 32\% Compactness
\end{tabular} & \begin{tabular}{l}
UVA \#2 \\
10 Splits31\% Compactness
\end{tabular} & \begin{tabular}{l}
UVA \#1 \\
8 Splits32\% \\
Compactness
\end{tabular} \\
\hline Average Compactness & 29\% & 36\% & 35\% & 35\% & 32\% & 31\% & 32\% \\
\hline Least Compact & 20\% & 22\% & 22\% & 21\% & 22\% & 23\% & 20\% \\
\hline & 21\% & 26\% & 24\% & 22\% & 24\% & 24\% & 24\% \\
\hline & 22\% & 27\% & 27\% & 24\% & 25\% & 25\% & 25\% \\
\hline & 25\% & 34\% & 34\% & 34\% & 25\% & 25\% & 25\% \\
\hline & 26\% & 36\% & 36\% & 36\% & 30\% & 25\% & 30\% \\
\hline & 30\% & 36\% & 36\% & 36\% & 32\% & 28\% & 33\% \\
\hline & 31\% & 42\% & 38\% & 38\% & 33\% & 30\% & 33\% \\
\hline & 34\% & 42\% & 42\% & 42\% & 34\% & 33\% & 34\% \\
\hline & 34\% & 42\% & 42\% & 42\% & 36\% & 34\% & 37\% \\
\hline & 40\% & 43\% & 42\% & 42\% & 41\% & 41\% & 41\% \\
\hline Most Compact & 40\% & 44\% & 43\% & 43\% & 51\% & 51\% & 51\% \\
\hline
\end{tabular}

\section*{4) Minimization of Locality Splits}

The fourth evaluative benchmark is "Minimization of Locality splits." The Special Masters should be commended for their efforts to protect the integrity of the 133 local political communities that are legally recognized in the state of Virginia. Residents of a state may or may not decide to participate in or to self-identify with other super or sub-local "communities of interest," but every resident is directly affected by the shared interests, institutions and decisions of their local governments. Locality-first redistricting offers a rationality that corrects many of the worse self-interested abuses of redistricting processes controlled by political elites, parties and incumbents. As the Special Masters mention several times in their narrative, their draft plan is a great improvement over the existing set of Congressional districts. How much of an improvement is not reported, nor it seems is the final number of locality splits specified in their draft plan narrative: is it 10 or 11? As reported in Table 4, the 6 alternative plans demonstrate that compact, population equal, VRA-compliant Congressional districts can be formed in Virginia without dividing more than 12 of Virginia's localities. Table 4 also indicates that this multi-dimensional goal can be achieved with as few as 8 locality divisions.

Table 4
\begin{tabular}{|l|c|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{c}
\(\mathbf{2 0 1 1}\) \\
Adopted \\
Plans
\end{tabular} & \begin{tabular}{c} 
Special \\
Masters
\end{tabular} & \begin{tabular}{c} 
UVA \#6 \\
12 Splits- \\
\(\mathbf{3 6 \%}\)
\end{tabular} & \begin{tabular}{c} 
UVA \#5 \\
11 Splits- \\
\(\mathbf{3 5 \%}\)
\end{tabular} & \begin{tabular}{c} 
UVA \#4 \\
10 Splits- \\
\(\mathbf{3 5 \%}\)
\end{tabular} & \begin{tabular}{c} 
UVA \#3 \\
10 Splits- \\
\(\mathbf{3 2 \%}\)
\end{tabular} & \begin{tabular}{c} 
UVA \#2 \\
10 Splits- \\
\(\mathbf{3 1 \%}\)
\end{tabular} & \begin{tabular}{c} 
UVA \#1 \\
\(\mathbf{8}\) Splits- \\
\(\mathbf{3 1 \%}\)
\end{tabular} \\
\hline \begin{tabular}{l} 
U.S. \\
House
\end{tabular} & 37 & \(?\) & 12 & 11 & 10 & 10 & 10 & 8 \\
\hline \begin{tabular}{l} 
Virginia \\
Senate
\end{tabular} & 124 & \(?\) & & & & & & \\
\hline \begin{tabular}{l} 
Virginia \\
House
\end{tabular} & 197 & \(?\) & & & & & & \\
\hline
\end{tabular}

In closing, I hope this brief assessment deepens the capacities of the Virginia Supreme Court to evaluate the Special Masters draft plans and the set of possibilities available for the selection of Congressional and General Assembly districts that will best serve the residents of Virginia until the next decennial Census in 2030. As important, I want to encourage the Court to see their role in 2021 as a first important contribution to fixing the broken and dysfunctional partisan-based redistricting process that led to this highly unusual moment in which a set of unelected judges are required to create and to impose a new set of election district boundaries for the residents and voters of the state.

Sincerely,
Charles A. Kromkowski, Ph.D.
Department of Politics
University of Virginia
P.O. Box 400787

Charlottesville, VA 22904
\begin{tabular}{ll} 
From: & Dan Hosek \\
To: & Redistricting \\
Subject: & Comments on the redistricting \\
Date: & Friday, December 17, 2021 1:05:48 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Redistricting Committee,

I am writing to petition the redistricting courts to not divide the Mount Vernon community of Northern Virginia in half. The maps that have been drawn for the Congressional District 8 and the Senate District 34 seem to do just that. Congressional District 8 map is especially bad, as citizens of Mount Vernon are now split, with the part split away going into a district that contains both Haymarket and Fredericksburg, which are communities with very different focuses.

It is more logical to continue to maintain the area north of the Occoquan River as a part of the Mount Vernon District, and also to maintain the Mount Vernon Estate in this district. All of our children attend Fairfax County Schools, and we should all be represented in the State Senate as one. I realize that this change will require a rebalancing of Districts 7,8 and 11, but I think that this could be accomplished, while still not ripping apart long standing communities of interest in any of those Districts.

Regards,

Dan Hosek
Collingwood Springs
\begin{tabular}{ll} 
From: & Manjula Ambur \\
To: & Redistricting \\
Subject: & VA Redistricting Concerns about House of Delegate Districts 69 and 71 \\
Date: & Friday, December 17, 2021 1:20:57 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

VA Redistricting concerns about House of Delegate Districts 69 and 71

I am Mrs. Manjula Ambur, resident of York County over the past 32 years. I am writing this email to express my serious concerns about the newly drawn Virginia maps for House of Delegates Districts 69th and 71st.

I am very concerned about Williamsburg and lower James City county not being part of District 69 and the details are given below. I very much appreciate your consideration of these issues and consider including Williamsburg and James City county in District 69.
- Williamsburg has always been part of Hampton Roads and should be considered to be part of Delegate District 69 as it has more in common socio economically with this District. Now it is being proposed to be in the District 71 with Richmond extended areas that does not seem to have that much in common.
- Williamsburg and lower James City County rely on same services such as Transportation, Healthcare, and Social services thar are in Williamsburg. So it is very beneficial for both to be in the same House Delegate District 69.
- Small part Gloucester is included in House Delegate District 69 and it should be part of the district with the rest of the Gloucester on the other side if the York River.

Thank you for your consideration
Mrs. Manjula Ambur

\section*{myambur@gmail.com \\ 757-869-0251}
--
Manjula Ambur, M.S
Associate CIO for AI and Data Science (Retired)
NASA Langley Research Center
Hampton, VA
CURRENT INTERESTS: Democracy, Climate, Education, and Food Bank
\begin{tabular}{ll} 
From: & \begin{tabular}{l} 
Sean Regan \\
To:
\end{tabular} \\
\begin{tabular}{ll} 
Subject: & Rules and Procedures for Implementing the Requirements of Article II, Section 6-A. A \\
Date: & Friday, December 17, 2021 1:52:03 PM
\end{tabular}
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Clerk of the Supreme Court of Virginia:
I am a member of the Herndon Town Council but am writing as a private citizen of the
Commonwealth. The Town of Herndon should not be split between districts at any level of government.

Thank you,
Sean Regan

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A --- Including Buchanan County in Proposed Senate District 5

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example, Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those
counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5.

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access I-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,

Latasha N. Hagerman
\begin{tabular}{ll} 
From: & Lohn Taylor \\
To: & Redistricting \\
CC: & Ceon Boyd \\
Subject: & Citizen Letter re SCV Redistricting \\
Date: & Friday, December 17, 2021 2:02:40 PM \\
Attachments: & Citizen letter to Senate.docx \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov

\section*{RE: Rules and Procedures for Implementing the Requirements of Article II. Section 6-A --- Including Buchanan County in Proposed Senate District}

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5.

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example,

Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5.

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access l-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

I also believe personally, that this initially started as a political gerrymandering ploy, before Virginia recently turned Red. We are Fine, the way we are. Please leave it be.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,
John Taylor
SWVA Sportsmen-Director

PO Box 269
Vansant Va. 24656
276-596-3987 cell
\begin{tabular}{ll} 
From: & Michael Gropman \\
To: & Redistricting \\
Subject: & General Assembly Map \\
Date: & Friday, December 17, 2021 2:03:44 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My wife and I have lived in our house in Burke Centre since July, 2006. I have Delegate Eileen Filler Corn and Senator Dave Marsden as my representatives to the General Assembly. Under the new maps I will not be there in their district. There are some residents of Burke Centre who will have two members of the House of Delegates and two State Senators in their district. My suggestion is to have all the Burke Centre residents to have the same Delegate and State Senator.

Thanks

Michael Gropman

This email has been checked for viruses by Avast antivirus software.
www.avast.com
\begin{tabular}{ll} 
From: & Walkinshaw, James \\
To: & Redistricting \\
Cc: & Anderson, Frank \\
Subject: & Redistricting Comment from Braddock District Supervisor J ames Walkinshaw \\
Date: & Friday, December 17, 2021 2:08:46 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I represent the Braddock District on the Fairfax County Board of Supervisors and live in the Wakefield Precinct. First, I want to thank the special masters for their work in developing these proposed maps and to the court for creating an opportunity for public engagement. I recognize the immense challenge in drafting maps that meet the various legal requirements while balancing the oft-competing goals of population equalization, preservation of communities of interest, compactness, etc. That said, I would like to express some concerns with the division of some communities of interest in the Braddock District.
1. Wakefield Precinct should move from the proposed 15th House of Delegates District to the proposed 14th House of Delegates District. This change would not have a significant effect on population deviation and would ensure that both districts remain "nested" within the 35th State Senate District. Wakefield Precinct shares school attendance boundaries, commuting patterns, and public facilities like recreation centers with the neighborhoods in the proposed 14th HOD district. It is more logically located there.
2. Kings Park West (Robinson and Laurel Precincts) is one of the most established, cohesive neighborhoods in Fairfax and is clearly a community of interest. Unfortunately, it is divided in both the House and Senate maps. This should be remedied.
3. The Burke Centre Conservancy (Fairview, Burke Centre, and Terra Centre Precincts) is one of three Planned Residential Communities (PRCs) in Fairfax County. PRCs are unique zoning districts established to encourage innovative design for land use and ample open space. Their unique zoning status and management by the Burke Centre Conservancy contribute to the cohesion of the community. Its 5,862 homes make it larger than many towns and it is a clear community of interest that should not be divided.
4. The neighborhoods within the Cardinal, Keene Mill, and Irving precincts are a community of interest with the same school boundaries, commuting patterns, and concerns regarding traffic calming needs and preservation of Lake Accotink. Division of those precincts between two Board of Supervisors' districts has caused confusion for residents and was addressed in the redistricting plan recently adopted by the Board of Supervisors. The division of these neighborhoods in both the HOD and State Senate maps will cause unnecessary confusion and should be remedied.
5. The Fairfax County neighborhoods and precincts surrounding George Mason University (Sideburn, Robinson, Woodson Precincts) are part of a community of interest that includes the City of Fairfax and George Mason University. They are most directly impacted by the
growth in student population and activities taking place on the George Mason University campus. Separating those neighborhoods from George Mason University will diminish their voice on that, and other, important issues.
\begin{tabular}{ll} 
From: & Lohn Feroldi \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Friday, December 17, 2021 2:18:18 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Members of the Committee:
I believe the effort to redistrict is sound and there appears to be some gerrymandering, but that is bound to happen given human beings are involved. What is most revealing are some incumbents bellyaching about there district being rearranged. That gives me comfort knowing that the effort is probably on track to accomplish the intended purpose of electoral equilibrium.

Thank you and have a nice holiday.

Very Respectfully, John R Feroldi
703-855-1156


ABRAHAM FINANCIAL ADVISORS LLC
"Serving clients with wise financial solutions"

This e-mail (including any attachments) is for the sole use of the intended recipient(s) and may contain information that is confidential and/or protected by legal privilege. Any unauthorized review, use, copy, disclosure or distribution of this e-mail is strictly prohibited. If you are not the intended recipient, please notify the sender immediately and destroy all copies of this e-mail. The sender does not accept any liability for breach of security, error or virus that may result from the transmission of this message.

Members of the Court and Special Masters,
We believe the currently proposed \(41^{\text {st }}\) House of Delegates District (HOD) to violate rationale outlined and described by the Special Masters within their memo sent to the Supreme Court of Virginia on December \(7^{\text {th }}, 2021\). We argue the two following points are not met within outlined criteria:
1. The Community of Interest (COI) of Blacksburg, Christiansburg, and Radford is not recognized under the currently proposed draft (see below).
2. The proposed 41st House of Delegate District fails to meet the component of functional contiguity. Functional contiguity effectively requires that a representative be able to travel between any two points within a district without leaving the district. We understand this to not be an explicit requirement under contiguous guidelines outlined within the memo, as proposed districts were drawn "somewhere in between" census and functional contiguity; however, the proposed district fails to meet functional contiguity within a large portion of the proposed \(41^{\text {st }}\) district.

Blacksburg, Christiansburg, and Radford: The 'True' 41 st Community of Interest
The Community of Interest that is Blacksburg, Christiansburg, and Radford are currently spilt between the \(41^{\text {st }}\) and \(42^{\text {nd }}\) HOD districts as drawn and require rearrangement to fulfill the proper political representation this community deserves. The three areas currently meet multiple criteria within said memo.
1. The Federal Government has defined these areas as an economic nucleus: Blacksburg, Christiansburg, and Radford are defined by the Federal Office of Management and Budget (OMB) as a Metropolitan Statistical Area (MSA). The three cities are the population nucleus of said MSA. This statistical measurement generates from the clear knowledge that nucleus areas have a high degree of economic and social integration with one another.
* According to MSA data, residents within the City of Radford are statistically as likely to commute for work to Montgomery County as they are to work within the city. For those in the city of Radford, Montgomery County is the most commuted-to area of work (https://www.census.gov/data/tables/2015/demo/metro-micro/commuting-flows-2015.html).
* The Aquatic Center in Christiansburg was partially funded by Virginia Tech and is the training center for the Virginia Tech Swim and Dive teams (https://www.cacpool.com/148/Our-Mission-Vision).
* Educational services are the leading industry of employment for all three communities. Almost 66\% of the area's employment came from Radford University and Virginia Tech in 2017. Virginia Tech is located in Blacksburg, which extends to the beginning of Christiansburg, and Radford University lies within the City of Radford (https://nrvrc.org/wp-content/uploads/2018/09/NRVRC-CEDS-Update-2018-19.pdf)
* The Town of Christiansburg provides the central retail shopping for the surrounding communities of Radford and Blacksburg (https://www.christiansburg.org/DocumentCenter/View/13878/2021-Audit).

\section*{2. These areas include Supreme Court of the United States broader definitions as to what constitutes a Communities of Interest, which are "shared broadcast and print media, public transport infrastructure, and institutions such as schools and churches."}
* Shared Educational Institutions:
- Blacksburg and Christiansburg reside in the same educational district within Montgomery County.
- Virginia Tech and Radford University share multiple joint degree programs and are a singular U.S. Army ROTC program
* Shared Public Transport Infrastructure:
- Radford Transit (bus service) has joint stops in both Christiansburg (the area retail center) and on the Virginia Tech campus in Blacksburg. The Blacksburg Transit System extends to Christiansburg as well.
- All personal rail travel will be centered in the future Amtrak station set for Christiansburg.

\section*{Recommendation}

We respectfully recommend redrawing the proposed district to reflect the work of Michael Moriarty (House Plan 412). Moriarty's' hypothetical draft preserves the Community of Interest that is Blacksburg, Christiansburg, and Radford while simultaneously honoring the criteria listed within the redistricting considerations. Moriarty's 49th district, this brief's argued COI, is attached below.

https://www.virginiaredistricting.org/legdistricting/comments/plan/412/1

Derek Kitts and Dillon Woods
6003 Belspring Road
Fairlawn, VA 24141

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A --- Including Buchanan County in Proposed Senate District 5

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example, Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those
counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5.

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access I-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,

Christie Stiltner
Buchanan County Citizen
1710 Red Dirt Road
Vansant, VA 24656

\section*{December 17, 2021}

Ms. Muriel-Theresa Putney, Clerk
Supreme Court Building
100 North Ninth Street
Richmond, VA 23219

Dear Ms. Putney,
The Stafford County Board of Supervisors is concerned about how the proposed Congressional and General Assembly election district maps could impact Stafford County. Members of the Board wish to provide the following concerns for Justices' consideration:
- Congressional - Proposed House District 7 groups the entirety of Stafford County into a district with Prince William County and parts of Fairfax and Spotsylvania Counties. Members believe this arrangement is problematic as it could diminish the representation and voting interests of Stafford County residents in favor of those of other localities.
- Virginia Senate - The proposed Senate District Maps divide Senate Districts 27 and 29 at Garrisonville Road north of Aquia Creek. Members believe Garrisonville Road should remain the district boundary north of Aquia Creek. Communities north of Garrisonville Road should be included Senate District 27 and communities south should be included in Senate District 29.
- Virginia House of Delegates - Proposed House Districts 23 and 64 are similarly divided at Garrisonville Road north of Aquia Creek. Members believe Garrisonville Road should remain the district boundary north of Aquia Creek. Communities north of Garrisonville Road should be included in House District 23 and communities south should be included in House District 64.

Thank you for taking the time to read this letter and for providing us the opportunity to comment on this maps. Members of the Board feel Stafford County's representation and voting interests should be maintained to the extent practical and strongly object to proposed maps which could serve to diminish the voting interests of our residents in order to benefit other localities

Sincerely,


Crystal Vanuch, Chairman
Stafford County Board of Supervisors
Rock Hill District
\begin{tabular}{ll} 
From: & Andrew Green \\
To: & Redistricting \\
Subject: & Public comment to Special Masters maps \\
Date: & Friday, December 17, 2021 2:41:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I strongly urge you to heed the comments from the Lawyers' Committee for Civil Rights Under Law that Virginia must do more to protect fair representation for Black voters in their new statewide redistricting maps. They point to the extensive research conducted by the Virginia NAACP, and their maps which uphold fair representation for Black Virginians. Virginia's Black voters deserve fair and equal representation, and it is imperative that these concerns be incorporated into the new maps after generations of misjustice.

Thank you for your attention to this matter, Andrew Green
Crozet, VA
\begin{tabular}{ll} 
From: & Rebecca Breeding \\
To: & Redistricting \\
Subject: & Proposed Redistricting \\
Date: & Friday, December 17, 2021 2:44:33 PM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I live in Augusta County at 530 Barnhart Road, Fort Defiance.
I am concerned of the proposal to divide Augusta County. The County has two neighboring cities (Staunton and Waynesboro) with which we have various partnerships and communities. Our needs are for unity in our services to the residents of the County and adjoining Cities, not in division. And for unity in our communities. Communities of interest should remain together, not be divided. This is a concern for many areas throughout the Commonwealth, particularly in rural areas.

No one individual should be given preference to maintain a seat in the Senate or House. And yet we need to be aware of the need for institutional knowledge and experience for the citizens of the Commonwealth.

I would like to see further options for the redistricting proposals.

\section*{Rebecca Breeding}

Joy, Peace \& Hope, Becky Breeding 540-292-5435
"Lord, our Lord, how majestic is your name in all the earth!" Psalms 8:9 Choose to look out and up and see God's glory in your daily walk.
\begin{tabular}{ll} 
From: & Cathy Combs \\
To: & Redistricting \\
Subject: & Opposition to Redistricting \\
Date: & Friday, December 17, 2021 2:58:30 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Supreme Court's Special Masters
Re: Redistricting
I have two major concerns with the redistricting as it impacts Virginia Beach and Norfolk. Both cities are home to our large military contingency, men and women who enrich our community as they serve our country. They are one entity that should not be split when it comes to their representation. Secondly, environmental issues affecting Virginia Beach and Norfolk share common causes and should be handled with common goals. In either case, dividing up this population could dilute the effectiveness of their representation, and consequently not provide the best solution.

We have an incredible woman representing our district. Elaine Luria is a centrist who has worked both sides of the aisle and I have every confidence she will continue to do so. If it ain't broke, don't fix it!!

Respectfully submitted,
Mary "Cathy" Combs
2508 Admiral Drive
Virginia Beach, VA 23451
757-619-8731
ccombs50@verizon.net

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
RE: Rules and Procedures for Implementing the Requirements of Article II. Section 6-A --- Including Buchanan County in Proposed Senate District 5

Dear Ms. Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen there are many reasons that I could give you as to why Buchanan County should be included in the district. Those reasons include the sharing of the US 460 corridor, the shared mining industry (there are multiple mines that exist in both counties even though the entrance is in one county or the other) our joint ventures through the regional IDA, and so many others.

Today, I write you as the Sheriff for Buchanan County and want to focus on my concerns with the splitting of Buchanan and Tazewell Counties into two separate districts.

First, from a law enforcement perspective, Buchanan County is uniquely situated geographically. We are bordered by Kentucky on the western side of the county, West Virginia on the northern side of our county, and Tazewell County on the eastern side. On its face, this doesn't seem particularly notable, but it is quite significant for many reasons. US 460 by way of the Mountain Parkway runs from Lexington, Kentucky through Pike County and the city of Pikeville, Kentucky into Buchanan County, Virginia. This route is used to transport illegal narcotics from Lexington, Kentucky into Buchanan County and Virginia as a whole. US 460 runs through both our county seat, Grundy, and Tazewell's County seat, Tazewell, and ends in Virginia Beach, Virginia.

In addition to sharing the US 460 corridor, both Buchanan and Tazewell Counties share their northern borders with West Virginia. Our bordering counties in West Virginia have some of the nation's most affected counties when it comes to illicit drug use. McDowell County has led the nation in the past with the most overdose deaths per capita. Buchanan and Tazewell Counties, unfortunately, have led Virginia in overdose deaths per capita in years past. Again, we have similar concerns and interests from a law enforcement perspective. Narcotics regularly come across the borders through the "backwoods" but we also see a significant quantity of illegal drugs coming into Buchanan County out of West Virginia's cities of Princeton and Bluefield, which are both
on US-460 and those narcotics are transported through Tazewell County into Buchanan County.

Second, from a judicial efficiency perspective, Buchanan and Tazewell Counties comprise the majority of the \(29^{\text {th }}\) Judicial Circuit. Tazewell leads the four-county circuit with the most significant number of cases with Buchanan County and Russell County typically seeing a similar case load. I believe that whenever possible, a judicial circuit should share the same legislators given their duty and authority to appoint the judiciary that serves the circuit.

Finally, I believe that it is important for both Buchanan and Tazewell County to share the same legislators. There are many reasons for this that are unrelated to law enforcement, but this sharing is beneficial to law enforcement and public safety. We currently, and as drawn, will continue to share the same representative in the House of Delegates. By sharing the same Senator, it allows our counties to combine our efforts to talk with our shared representatives about public safety concerns. These discussions range from concerns for police officers' safety while working the streets to Commonwealth's Attorneys seeing legislative "fixes" that need to be enacted to further protect public safety or to ensure that citizens' rights are not infringed upon.

In sum, as Sheriff for Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be a tragedy to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all of your hard work.


Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A --- Including Buchanan County in Proposed Senate District 5

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example, Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those
counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5.

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access l-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,

\author{
Leon Boyd \\ President- Noah Horn Well Drilling \\ 1070 Sandy Valley Lane \\ Oakwood, Va. 24631 \\ 276-935-5902 office
}
\begin{tabular}{ll} 
From: & OLDJUBE \\
To: & Redistricting \\
Subject: & I would like to speak about keeping Green Springs and Patrick Henry 1 in Louisa with the rest of the County. \\
Date: & Friday, December 17, 2021 3:23:06 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We do not want to be in with Albemarle and Charlottesville!

Gerald Harlow

HELP PREVENT SPAM \& VIRUSES! if you forward this message, be courteous and DELETE the forwarding history (which includes my name and email address). Use the BCC option when inserting addresses to protect the privacy of those you are sending this message to. I have protected your privacy when sending this to you ~ kindly return the favor. THANK YOU! (The Information contained in this e-mail message is privileged and confidential, and is intended for the use of the addressee and no one else. If you are not the intended recipient, please do not read or use this e-mail message and notify the sender of the mistaken transmission. Please do not forward without the writers permission.)
\begin{tabular}{ll} 
From: & \begin{tabular}{ll} 
Rusty Tutton \\
To: & Redistricting \\
Subject: & Modification to Special Master"s Map \\
Date: & Friday, December 17, 2021 3:19:58 PM \\
Attachments: & SCreenshot 2021-12-16 4.50.39 PM.png \\
& Screenshot 2021-12-16 4.38.04 PM.pnq \\
& Screenshot 2021-12-16 4.48.22 PM.png \\
& Screenshot 2021-12-16 4.30.57 PM.png \\
& Screenshot 2021-12-17 3.16.13 PM.png
\end{tabular} \\
&
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

All,
In accordance with my testimony advocating for a slightly revised federal map, please see the attached images with details of my map proposal as well as corresponding demographic information for each district. Additionally, you can view my map proposal in detail at the following link:
https://davesredistricting.org/maps\#viewmap::066e4976-0187-498a-b29e-4020db3040c6
Again, I want to stress that these changes are only possible if the Court is willing to move the precincts in the western City of Richmond to the 1st. This allows Richmond Metro to be split into 2 more compact districts and Charlottesville/Albermarle to remain whole in VA-05.

Thank you,
--
Rusty Tutton
Phone: (512) 644-2945
E-mail: RTutton@gmail.com

Home
DIMen \(x\)
Iona G：\(\times\)
kp \(2022 \mathrm{~F} \times\)
The of \(x\)
DRA \(20 \times\)
Poquo \(x\)
\(+\)
\(\leftarrow \rightarrow\) C davesredistricting．org／maps\＃viewmap：：066e4976－0187－498a－b29e－4020db3040c6
（3）Rating Percentage l ．．



Population
Shapes
Partisan Lean
Demographics (VAP)
DOWNLOAD
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline ID & Total & +/- & 匆 & \(\square\) & Dem & Rep & Oth & Total & White & Minority & Hispanic & Black & Asian & Native & Pacific \\
\hline Un & 0 & & & & 0.00\% & 0.00\% & 0.00\% & 0 & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% & 0.00\% \\
\hline 1 & 783,377 & -0.17\% & 0 & ( & 50.37\% & 47.54\% & 2.09\% & 627,437 & 69.98\% & 30.02\% & 4.84\% & 16.86\% & 6.47\% & 1.82\% & 0.18\% \\
\hline 2 & 777,529 & -0.91\% & - & () & 49.62\% & 48.31\% & 2.07\% & 604,094 & 61.27\% & 38.73\% & 6.31\% & 23.95\% & 6.96\% & 2.16\% & 0.37\% \\
\hline 3 & 789,323 & 0.59\% & 0 & 0 & \(68.20 \%\) & 29.86\% & 1.94\% & 617,361 & 42.09\% & 57.91\% & 7.37\% & 45.21\% & 4.44\% & 2.38\% & 0.41\% \\
\hline 4 & 788,500 & 0.49\% & 0 & 0 & 59.96\% & 38.42\% & 1.62\% & 615,753 & 47.62\% & 52.38\% & 7.94\% & 40.13\% & 3.12\% & 1.98\% & 0.18\% \\
\hline 5 & 784,628 & -0.01\% & ( & () & 45.23\% & 53.00\% & 1.77\% & 634,058 & 69.99\% & 30.01\% & 3.56\% & 21.73\% & 2.96\% & 1.69\% & 0.11\% \\
\hline 6 & 783,436 & -0.16\% & - & 0 & 38.54\% & 59.45\% & 2.01\% & 621,797 & 80.90\% & 19.10\% & 6.38\% & 8.65\% & 2.14\% & 1.96\% & 0.12\% \\
\hline 7 & 783,211 & -0.19\% & 0 & 0 & 47.33\% & 50.60\% & 2.07\% & 585,702 & 62.94\% & 37.06\% & 11.16\% & 18.12\% & 5.98\% & 2.45\% & 0.27\% \\
\hline 8 & 784,452 & -0.03\% & 0 & 0 & \(75.71 \%\) & 21.94\% & 2.36\% & 620,895 & 52.64\% & 47.36\% & 17.71\% & 14.26\% & 14.45\% & 1.90\% & 0.24\% \\
\hline 9 & 786,021 & 0.17\% & 0 & 0 & 30.79\% & 67.67\% & 1.60\% & 641,371 & 86.94\% & 13.06\% & 2.46\% & 6.43\% & 2.16\% & 1.74\% & 0.09\% \\
\hline 10 & 786,352 & 0.21\% & 0 & () & 64.07\% & 33.70\% & 2.23\% & 585,701 & 54.55\% & 45.45\% & 12.39\% & 8.00\% & 23.87\% & 1.43\% & 0.20\% \\
\hline 11 & 784,564 & -0.01\% & \(\theta\) & () & 65.49\% & 32.42\% & 2.09\% & 591,485 & 43.23\% & 56.77\% & 21.24\% & 15.29\% & 19.49\% & 2.00\% & 0.26\% \\
\hline & 784,672 & 1.50\% & 0 & () & 54.01\% & 44.00\% & 1.99\% & 613,187 & 61.33\% & 38.67\% & 9.11\% & 19.88\% & 8.23\% & 1.95\% & 0.22\% \\
\hline
\end{tabular}

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov
RE: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A --- Including Buchanan County in Proposed Senate District 5

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example, Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those
counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5.

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access I-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,

\author{
Sarah Vanover
}
\begin{tabular}{ll} 
From: & Carol Buckingham \\
To: & Redistricting \\
Subject: & New Proposed Redistricting Map \\
Date: & Friday, December 17, 2021 3:45:35 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This map makes much more sense by creating compact districts and avoiding the division of communities.

Carol Buckingham
804 W 30th St,
Richmond, VA 23225
\begin{tabular}{ll} 
From: & 牛 Jewett \\
To: & Redistricting \\
Subject: & Redistricting Comments \\
Date: & Friday, December 17, 2021 3:47:31 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I respectfully urge the Court to resist the temptation to revise the maps proposed by the Special Masters. The proposed maps are not perfect. But attempts to improve them are likely to make them worse and damage the reputation of the Court, for the following reasons:
1) Dr. Grofman and Mr. Trende scrupulously followed the instructions of the Court. Both Special Masters have considerable expertise and experience with redistricting issues. The members of the Court cannot duplicate their expertise and experience, and so any maps devised by the members of the Court are more likely to reflect errors, misjudgments, and simple ignorance of potential consequences than the maps produced by the Special Masters. Neither Grofman, nor Trende, based on their experience and publications, appears to be motivated by partisan considerations, particularly when compared to other redistricting experts, and the maps that they have jointly produced are probably as free of bias and partisanship as is realistically possible.
2) The maps proposed by the Special Masters may not be perfect, but in redistricting perfection is unattainable, and should not be the objective of the Court. The Statutory Criteria that must be applied are sometimes inconsistent with each other and require subjective judgments, and no statutory guidance is provided as to the degree of weight to be given to each criterion. Any improvement that the Court might make to conform the maps more closely to one of the Statutory Criteria is likely to result in less conformance to another criterion. If you squeeze the balloon in one place, it will bulge in another. "Communities of interest" are a particular quagmire. Everyone is a member of multiple different communities of interest, and many people do not share social, cultural, and economic interests even with their closest neighbors. If the Court attempts to redraw the proposed maps based on a different assessment of "communities of interest" it will be stepping upon the slipperiest of slopes.
3) Underlying much of the criticism of the Congressional District maps is the assumption that dividing a city, county, or metropolitan area among more than one district is somehow disadvantageous to the residents of that city, county, or metropolitan area. Yet of course some splitting is unavoidable. The Richmond metropolitan area must be divided between districts because it is much too large to fit into any one district. But in addition, my experience working for Congress leads me to believe that the Richmond metro are will actually have more influence in Congress if it is represented by more than one Congressperson, and the same is true at the state level. Many of the comments seem to confuse local government with representation in Congress and the General Assembly. If a local government boundary does not respect communities of interest it can result in a significant loss of governmental efficiency. The same is not true of legislative districts.
4) Any changes to the proposed maps made by the Court, regardless of its actual reasons, will be seen through a partisan lens. Any changes will inevitably be viewed as being to the advantage of some interest groups, parties, or individuals, and to the disadvantage of others. No matter how disinterested the Court attempts to be, it will be assumed that the Court's ultimate motivation is to influence the outcome of elections. The Court will take a hit in terms of its public image as being above politics. In addition, if the Court takes over drawing district lines, rather than leaving this task to the Special Masters, future General Assemblies will be encouraged to appoint more political justices to the Court. Partisanship caused the Virginia Redistricting Commission to fail. Above all else, the Supreme Court should strive not only to avoid
partisanship in its handling of redistricting, but even the hint of partisanship. The people of Virginia amended the Constitution in an attempt to take politics out of redistricting. The success of that effort depends on the Court exercising judicial restraint and deferring to the recommendations of the Special Masters which it wisely appointed.

These comments reflect my views as a citizen of the Commonwealth, and are not submitted on behalf of any group or entity, or for the benefit of any current or potential future officeholder.

Jon Jewett
Ashland, Virginia
\begin{tabular}{ll} 
From: & Samira Raenell Brooks \\
To: & Redistricting \\
Subject: & Stop the Redistricting of our cities! \\
Date: & Friday, December 17, 2021 3:49:14 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Military}
-
Military and veteran populations that are essential to the socio-economic strength of Hampton Roads should not be split in the congressional districts.

Naval Station Norfolk, Fleet Forces in Norfolk, as well as Air Station Oceana in Virginia Beach work so closely together and have active duty servicemembers who live in both localities. They deserve to have the same federal representation in order to best advocate for their interests.

\section*{Environmental}
-
The ocean view and waterfront parts of Norfolk and Virginia Beach specifically should be together in federal representation due to their shared environmental concerns.

Reports by leading environmental scientists that the sea level could rise by several feet along our shores by the end of the century should be raising serious alarm.
Beyond the human cost of that disastrous possibility, the economic and infrastructural damage such a change could inflict on these communities is unthinkable.

\section*{Contiguity/Compactness}

The district is shaped like a "crooked J" that is not functionally contiguous. Due to the Great Dismal Swamp, constituents would have to drive through a majority of the 3 rd district to get from one end of the 2 nd to the other.

By putting Suffolk/Isle of Wight back in the 3rd, you get a more compact district in the \(2 n d\) and don't disrupt the compactness of the 3 rd.

Samira Brooks
```

From: sdavis sdavisgroupconsulting.com
To: Redistricting
Subject: Voter comment on redistricting plan for Congress
Date: Friday, December 17, 2021 4:08:17 PM

```

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

The Honorable Members of Virginia's Supreme Court,

It appears that the Special Masters you appointed to develop a redistricting plan for Virginia's congressional districts have developed a plan that may be technically correct but is absent any sense of voter preference. I call it a "nerd's plan" that is politically insensitive. The plan as currently presented may treat the two major political parties equitably, but it fails to provide for equitable representation of protected classes of voters.

Voting rights laws for the Commonwealth of Virginia and for our federal government acknowledge past inequities in the representation of both ethnic minorities and women, and any redistricting plan should ensure that the rights of these groups are not further reduced. Unfortunately, the plan put forth by the Special Masters fails to address the voting rights of African Americans, Latinos and women. The most obvious evidence of this would be the impact of redistricting on the three female Representatives to the U.S. Congress.

I urge you to require the Special Masters to revise the plan they have presented to ensure that women, African Americans and Latinos have at least an equal opportunity to be elected in multiple congressional districts. The virtual elimination of the current 7th congressional district is particularly unfortunate as it eliminates one of the most competitive congressional districts in the Commonwealth and places counties in Richmond's western suburbs and exurbs in a districts with counties with whom the voters will have nothing in common. It may benefit those running for office as Democrats, but it eliminates from contention one of Virginia's most popular and effective members of Congress. While a satisfactory redistricting plan should not be designed to preserve incumbency, it should acknowledge the interests of voters that have been provided for more than three decades.

Please require that the Special Masters return to you a redistricting plan that is not only politically neutral but is one that recognizes the interests of women and ethnic minorities and acknowledges the differences between urban-suburban communities and those that are primarily rural in nature.

Thank you very much for your consideration of these concerns.

204 N. Granby Street
Richmond, VA 23220
(804) 314-1836
\begin{tabular}{ll} 
From: & Linda Boatman \\
To: & Redistricting \\
Subject: & Statement to the Supreme Court of Virginia specifically effecting proposed Senate 26 \\
Date: & Friday, December 17, 2021 4:10:19 PM \\
Attachments: & CD1.SD26.HOD67.pdf
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\title{
Statement to the Supreme Court of Virginia regarding the proposed districts by the Special Masters. Specifically effecting Westmoreland County, Virginia
}

December 17, 2021

\section*{This statement is in support of the proposed districts, with one suggested change}

I extracted the relevant pages from the proposed district pdfs and combined them into one file, for your convenient reference. The file is attached.

\section*{CD 1= proposed Congressional District 1 \\ SD 26 = proposed Virginia Senate District 26 \\ HOD 67 = proposed Virginia House of Delegates District 67}

I propose the following change:

\section*{For Proposed Virginia Senate District 26:}

Please include King George and Caroline counties instead of parts of New Kent and James City counties in proposed senate district 26.

\section*{This change would accomplish the following non-partisan representational goals:}
1. Improves the "nesting" quality of the proposed senate district with both the proposed HOD 67 and proposed CD 1.
2. Including King George and Caroline Counties in Senate District 26 adds representation up to the fall line of this geographically important watershed region of the Northern Neck and Middle Peninsulas. The Rappahannock River, which is a designated wild river, flows between Caroline and King George Counties. This change would provide representation of both sides of this important river in senate district 26, from the fall line to the mouth.
3. Provides single district representation for two important highway corridors, Highway 3 and Highway 17, and three important bridge connections to the nearest medical, judicial, airport, and other services used by many Northern Neck residents. Hwy 3 and Hwy 360 intersect at the town of Warsaw. Seven miles away at Tappahannock, the Hwy 360 bridge across the Rappahannock River intersects with Hwy 17. Farther south, The Highway 3 bridge across from the White Stone area in Lancaster County to the Saluda area in Middlesex County connects to
highway 17. The third important bridge is the 301 bridge across the northern part of the peninsulas, connecting south to Richmond and north to Maryland via the Nice Bridge across the Potomac River.
4. Improves the competitiveness grade of the proposed senate district, which, according to the Princeton Gerrymandering Project's interactive map, is presently rated F for competitiveness.
5. Frees the proposed areas of New Kent and James City counties for use in other senate districts.

Thank you very much for your very difficult work, and for considering this requested change to proposed Virginia Senate District 26.

Sincerely,
Linda Boatman, Resident, COI Westmoreland County, VA
73 Mallard Ct.,
Montross, VA 22520

Sent from Mail for Windows


Map Date:
12/6/2021 3:30:20 PM
Plan Last Edited on: 12/6/2021 2:25:48 PM


Ideal Population: 215,785
Deviation:
-1.35 \%
Total Population: 212,878
Draft 1 Senate Districts (SD) - Based on: 2020 Census Geography, 2020 PL94-171

\begin{tabular}{ll} 
From: & Morgan Griffith \\
To: & Redistricting \\
Subject: & congressional maps \\
Date: & Friday, December 17, 2021 4:18:22 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. 9th St, 5th Floor
Richmond, Virginia 23219
Dear Ms. Pitney:
Drawing lines for redistricting is a thankless task. There is no way to get a perfect map. I
know, been there, tried that.
But the voters of Virginia changed the process and now they are counting on you. The burden is yours even though you did not want or seek this burden.

The appointed Special Masters gave you some maps to help guide you all. I will address only Congressional maps and specifically the deficiencies as they relate to how the Special Masters drew the \(9^{\text {th }}\) district.

I encourage the Court to use the Tom Davis map as a starting point for further line drawing. It is better in many respects - it improves the \(9^{\text {th }}\) and \(10^{\text {th }}\) districts and follows federal requirements for Zero Deviation.

However, like any map, it can be improved upon.

As the 9th district has grown over the decades, parts of west Roanoke County have been in the 9th for 30 years. Salem was added 10 years ago as was the remainder of West Roanoke County.

Salem and West Roanoke County belong in the 9th.
Population growth, or the lack thereof, requires the Roanoke Valley be divided in some fashion. On this point the Special Masters’ division lacks an understanding of the region.

As I speak to my constituents, many are shocked that Salem and West Roanoke County are out of the \(9^{\text {th }}\) and Bedford is now in the 9th. The Special Masters did not just put a precinct or two of Bedford in the \(9^{\text {th }}\). Their map includes the town of Bedford, all the way to the community of Big Island and Highway 501. Highway 501 is the connector road between Buena Vista, located in Rockbridge County, in the \(6^{\text {th }}\) district and Lynchburg in the \(5^{\text {th }}\).

Additionally, the main road from Roanoke to the town of Bedford is US460. Traversing that road from Montgomery County to Bedford, one must go through West Roanoke County, Salem, Roanoke City and finally Botetourt County. If you traveled on Interstate 81, you would pass through West Roanoke, Salem, North Roanoke County and Botetourt County.

Bedford is a great place, and if it were absolutely necessary it be placed into the 9th, people would understand.

But it is not necessary to add Bedford County and thus bring a new region into the 9th. Frankly, it is unfair to Bedford, Salem and Roanoke.

Bedford is in the Lynchburg Metropolitan Statistical Area (MSA). It is not in the Roanoke MSA. Its community of interest is oriented to the east toward Lynchburg, not toward Roanoke.

Contrast that with Salem, Roanoke, Botetourt, Franklin and Craig, all of which are in the Roanoke MSA.
The 9th district has never before even been close to the Lynchburg MSA.
Including Bedford in the 9th violates the Special Masters’ stated criteria as well!
Bedford County is both east of the Blue Ridge Mountains and not part of the Appalachian region (using the same definitions as the Special Masters used).

Salem, West Roanoke County, more of Roanoke, and even long-time 9th district Craig County are a better fit for the 9th.

The Special Masters mistakenly believe that the cities of Salem and Roanoke must be together. They do not!

The two cities have vastly different histories. I could write a book, but briefly, Salem was founded in 1802. The town leaders were instrumental in having Roanoke County formed in 1838. In the late 1870s, Salem and West Roanoke County leaders backed one railroad company to come into Southwest Virginia. The leaders in Eastern Roanoke County around Big Lick backed the Norfolk and Western Railroad. The Norfolk and Western Railroad was given economic incentive money by its Big Lick supporters. Obviously, the Norfolk and Western Railroad won the race to serve Southwest Virginia. Big Lick became Roanoke City within a year much to the consternation of the leaders of Salem and West Roanoke County. A rivalry between the two communities has existed in varying degrees ever since.

Salem became a city in 1969 to prevent being annexed out of existence by Roanoke City. Virginia's annexation moratorium was created by Members of the House of Delegates representing Salem and West Roanoke County to prevent encroachment by Roanoke City.

While the Redistricting Commission failed, the one map Republicans and Democrats agreed on was a good map for the 9th district. It included Salem, West Roanoke County and more of Roanoke.

The Special Masters divided Elliston and Shawsville in Montgomery County from their historical ties to West Roanoke County and Salem.

Lastly, while living in Salem, I was elected to represent the \(9^{\text {th }}\) from outside the district in 2010.

In a hotly contested race, one of the major issues was, could or should Salem be part of the \(9^{\text {th }}\) ?

A majority of the voters (nearly a 100,000 ) said, Yes!
This was their decision!

Since the 9th has to grow, this Supreme Court should respect the will of the voters who said Salem and West Roanoke County should be in the \(9^{\text {th }}\).

Sincerely,
H. Morgan Griffith
\begin{tabular}{ll} 
From: & LaFrancis D. Francis \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Friday, December 17, 2021 4:31:22 PM
\end{tabular}

\author{
EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Redistricting to control the vote is not part of a democracy.--
LaFrancis Sent from Gmail Mobile

\section*{RESOLUTION IN OPPOSITION TO STATE'S REDISTRICTING PLAN THAT PLACES BUCHANAN COUNTY INTO THE NEW \(6^{\text {TH }}\) SENATORIAL DISTRICT INSTEAD OF THE NEW \(5^{\text {TH }}\) SENATORIAL DISTRICT}

WHEREAS, the current \(38^{\text {th }}\) Senatorial District includes the following Bland, Buchanan, Dickenson, Pulaski, Russell and Tazewell Counties; the cities of Norton and Radford; and parts of Montgomery, Smyth and Wise Counties; and

WHEREAS, the proposed redistricting for senatorial districts places Buchanan County, in a newly named \(6{ }^{\text {th }}\) Senatorial District; and

WHEREAS, it is the understanding of the Buchanan County Board of Supervisors that redistricting guidelines provide for including "communities of interests" in the same electoral districts; and

WHEREAS, furthermore "communities of interests" are communities with shared cultural, social and economic interests;

WHEREAS, the current \(38^{\text {th }}\) Senatorial District includes the coalfield counties of Tazewell and Buchanan both of which have economies based on the extraction of coal and gas; furthermore Buchanan and Tazewell counties are contiguous to each other which has generated mutual aid agreements in law enforcement and fire and rescue; more recently Buchanan County, Tazewell County along with Russell County have entered Participation and Revenue Sharing Agreements in two major regional economic projects, including Project Jonah; additionally Buchanan County, Tazewell County along with Russell Counties created the Cumberland Industrial Facilities Authority(CIFA) to further facilitate regional economic development project; and

WHEREAS, it is respectfully submitted that Buchanan County along with Tazewell County should be included in the new \(5^{\text {th }}\) Senatorial District while placing Smyth County in the new \(6^{\text {th }}\) Senatorial District; and

WHEREAS, it is respectfully submitted the above suggested adjustments to the new proposed \(5^{\text {th }}\) and \(6^{\text {th }}\) Senatorial Districts would keep communities of interests with shared cultural, social and economic interests together in the same Senatorial District; and

NOW THEREFORE, BE IT RESOLVED that the Buchanan County Board of Supervisors hereby confirms its opposition to the proposed \(5^{\text {th }}\) and \(6^{\text {th }}\) Senatorial Districts and recommends in the alternative that Buchanan County be included in the \(5^{\text {th }}\) Senatorial District with Tazewell County and that Smyth County be moved into the new \(6{ }^{\text {th }}\) Senatorial District; BE IT FURTHER RESOLVED that a certified copy of this Resolution be tendered upon Hon. James W. Morefield; Hon. T. Travis Hackworth; the Clerk of the Virginia House of Delegates; the Clerk of the Virginia Senate; and the Clerk of the Virginia Supreme Court.

It is so RESOLVED this \(17^{\text {th }}\) day of December, 2021 with ratification on the \(21^{\text {st }}\) day of December 2021..


Drew Keene, Chairman
Buchanan County, Va. Board of Supervisors
ATTEST:
\(\frac{\text { Rolvest Craig Horn/LLmns }}{\text { Robert Craig Horn }}\)
County Administrator
Buchanan County, Va.

\section*{RECORDED ROLL CALL VOTE:}

Moved by:
Seconded by:
Roger Rife:
Carroll Branham:
Craig Stiltner:
Trey Adkins: \(\qquad\)
Tim Hess:
Jeff Cooper:
Drew Keene:
\(\qquad\)

Muriel Theresa-Pitney, Clerk of the Court
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Via email: redistricting@vacourts.gov

\title{
RE: Rules and Procedures for Implementing the Requirements of Article II. Section 6-A --- Including Buchanan County in Proposed Senate District 5
}

Dear Ms.Theresa-Pitney, Special Masters, and Justices of the Supreme Court of Virginia:

I am writing you today to express my concerns regarding the proposed redistricting of Virginia's Senatorial Districts, particularly the inclusion of Buchanan County into proposed district 6 as opposed to district 5 .

As a citizen of Buchanan County there are many reasons that I could provide you as to why Buchanan County should be included in district 5 . I will try to keep my letter short and focus on some of the most important.

First, and maybe foremost, is our shared economic interests. Both Buchanan and Tazewell Counties are coal mining economies. In fact, multiple coal mines run across county lines despite the mine entrance being in one county or the other. This generates taxes and revenue for both counties as well as providing good paying jobs to citizens of both counties.

Despite having the coal industry, both counties have determined that we must diversify our economy. Both counties have begun aggressive tourism campaigns that share many similar offerings and opportunities for joint ventures. These range from traditional outdoor activities such as fishing, kayaking, and camping to the development of a trail system for ATVs ("four-wheelers") and UTVs ("side by sides") to travel through our rugged mountains.

Not only do we share these economic interests, but they also distinguish Buchanan County from many of the counties that are in the proposed \(6^{\text {th }}\) district. For example, Washington county has a very diversified economy as a result of its historic preservation, its hospitals and medical facilities, and its location on Interstate I-81. Its location in proximity to the interstate puts its economic interests much more in line with its neighbor Smyth County, which is also located in the I-81 corridor, than Buchanan County. Similarly, while our neighbor, Russell County, shares some coal interests, much of its industry is farming and cattle ranching. Further, a significant portion of Russell County's residents work in Washington County or the City of Bristol. Again, our economic interests with Tazewell County are much more similarly aligned. Finally, our other neighbor, Dickenson County, again shares some interest in the coal industry, but its proximity to Wise County results in more traffic and commerce between those
counties than what exists between Buchanan and Dickenson County. For these reasons, I believe that our interests are more commonly aligned with Tazewell County and many of the rural counties in the proposed district 5 .

Second, Buchanan and Tazewell Counties have come together to begin several joint ventures through a regional IDA which will allow the creation of jobs and generation of revenue that will serve the citizens of both counties. Project Jonah, an aquaculture venture (or "fish farm" as we like to call it), is presently being constructed in Tazwell County. Due to the unique arrangement, despite its location in our neighboring county, Buchanan County will receive a significant portion of the revenue. This not only helps generate much needed income for our county, but also more job opportunities for the citizens of Buchanan County. This is one of the first of what we hope to be many joint ventures with Tazewell County.

Finally, Buchanan and Tazewell Counties share the US 460 corridor. This highway is the lifeline of rural far southwest Virginia and is used by our citizens, businesses, and suppliers to access I-75 in Tazewell County. Because of this corridor, businesses in each county serve customers from both counties. Families often live in one county and work in the other because we both have easy access to jobs in the other county due to the convenience of a major four lane highway (as opposed to the narrow and curvy roads that Buchanan Countians must use to access other counties). Also because of a significant common border and shared economies, families are often split by the county lines with some family members living in Buchanan County while others live in Tazewell County.

In sum, as a citizen of Buchanan County I truly believe that our shared interests with Tazewell County are so interwoven that it would be devastating to split our counties into two separate Senatorial Districts. Thank you for your time, your consideration, and all your hard work.

Sincerely,


Carmela Michelle Roark Buchanan County Resident 1160 Whitewater Drive Big Rock, VA 24603
\begin{tabular}{ll} 
From: & Sandra Tarpinian \\
To: & Redistricting \\
Subject: & City of Falls Church belongs with Fairfax County, not Arlington \\
Date: & Friday, December 17, 2021 4:50:21 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I believe that the City of Falls Church (CFC) is much more aligned with Fairfax County as Communities of Interest than with Arlington. There are several reasons:
CFC sits on an economic corridor between Tyson's Corner and Bailey's Crossroads, both in Fairfax County.
CFC shares services with Fairfax County such as the Health
Dept. and water company
CFC is embarking on a major economic development project in collaboration with Fairfax County and WMATA at the West Falls Church metro area.
A CFC elementary school sits on land that is in Fairfax County and requires permission from FFX County Board if Supervisors for alterations to the school.
Please redistrict the CFC to align with Fairfax County!

Sandra Tarpinian
105 Great Falls St.
Falls Church, VA 22046
Sent from my iPhone
\begin{tabular}{ll} 
From: & Genie McCreery \\
To: & Redistricting \\
Subject: & Fwd: Redistricting comments \\
Date: & Friday, December 17, 2021 4:54:55 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Dear Supreme Court of Virginia and Special Masters,}

Please keep Mount Vernon together! The Special Masters' choice of new maps cuts the Mt Vernon District in half and includes West Springfield, with which we have nothing in common. Many of us have discussed and agreed on the following. These are many of the reasons why Mount Vernon must stay together.

We are now in the 36th Senate District which would become the 34th which the Special Masters characterize as being anchored in Franconia and Springfield. For this community, the core of this Senate district has always been the Mount Vernon, Fort Belvoir and Lorton areas. It only makes sense that I-95 should be the western boundary of this district and that it be anchored in Kingstowne, Lorton and Mount Vernon. Although Springfield is not part of this community, this map pares Mount Vernon District with Springfield. It should be noted that, the Fairfax County Board of Supervisors just approved a new Magisterial District Map. In this map they specifically removed a Springfield precinct because it does not share commonalities with the Mount Vernon district. Here is a link to that map: https://www.fairfaxcounty.gov/redistricting/sites/redistricting/files/assets/documents/ 2021-adopted-redistricting-plan-map.pdf

The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I95 are different communities of interest.
Another problem with the proposed map is that the students who attend Mount Vernon High School would now reside in two different Senate districts. See the map of the school boundaries on this map: https://www.fcps.edu/sites/default/files/boundarymaps/Mountvernon_HS.pdf

The Mount Vernon Community contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The planned development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK details here: https://fairfaxcountygis.maps.arcgis.com/apps/MapSeries/index.html? appid=7e2f347f24bd4f7e909a92b3b2f274a9 ) is of concern to all of the residents who
live along the corridor, but is not of interest to West Springfield or Franconia. The significant development that will occur as part of the Embark project, will add substantial population in this area over the next decade, further anchoring this Senate district to this community.

The Mount Vernon Estate and Gunston Hall are the focal points of the Mount Vernon and Lorton communities and many community members volunteer at these historic sites. We have strong community organizations that interact together such as MVCCA (Mount Vernon Council of Citizens' Associations) - https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ , Mason Neck Citizen Association, https://masonneck.org, The Federation of Lorton Communities, https//Southcountyfederation.com now know as the South County Federation, The Lorton Community Action Center. https://Lortonaction.org, Rising Hope Mission Church in Mount Vernon, https://risinghopeumc.org, The volunteer community in the Lorton/ Mount Vernon area work together to support these groups up and down the Route 1 Corridor.

We also want to point our the Mount Vernon/Lorton community has always been part a been a part of the 8th or 11th Congressional District, and has more in common with Alexandria and Fairfax county than the rest of the proposed 7th congressional district.

We hope you take these comments seriously as our representation has an impact on our sense of community.

Sincerely,

The following list of concerned citizens in Mount Vernon

\author{
Barbara Gershman \\ Beverly Bacon \\ Sylvia Cikins \\ Otis Langford \\ Elkan D Sanders \\ Wayne Christian \\ Shambrica Christian \\ Zyquan Walker \\ Kristine Vega \\ Maria J Vorel \\ richard \(m\) titus \\ Matt Bell \\ Genie McCreery \\ Frank Zawitoski \\ Max Zawitoski \\ Gabriele Drechsel \\ Nancy Yane-Fernald \\ Gale Curcio \\ Dawn Drennen
}

Arina van Breda
Mark Richer
Kathleen Mullen
Barbara Slinker
Todd Smyth
Irene Schubert
Deborah Mathews
Cathy Hosek
Chris Ambrose
\begin{tabular}{ll} 
From: & Anita Kozakewicz \\
To: & Redistricting \\
Subject: & 7th District VA \\
Date: & Friday, December 17, 2021 4:57:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am opposed to the proposed map of congressional districts and ask that you adopt the Farkas map instead. Abigail Spanberger has been my representative for three years, and I am looking forward to her continuing to serve the present 7th District. Thank you, Anita Kozakewicz
```

From: power MASCK
To: Redistricting
Subject: Comments on Redistricting in the Mount Vernon area of Fairfax County
Date: Friday, December 17, 2021 5:32:55 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep Mount Vernon together! The Super Masters’ choice of new maps cuts Mt Vernon in half and includes us with West Springfield, which we do not have anything in common. Many of us have discussed and agreed on the following. These are some of many of the reason why Mount Vernon must stay together.

We are now in the 36th Senate District which would become the 34th which says we are anchored in Franconia and Springfield. It only makes sense that I-95 should be the western boundary of this district. Fairfax County has much more in common than the areas south of Occoquan in Prince William County or West of I-95. However, this map pairs the Mount Vernon District with Springfield. The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they REMOVED a Springfield district because we do not share common interests. Here is a link to that map: https://www.fairfaxcounty.gov/.../2021-adopted...

The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I-95 are not communities of interest. An example is the Mount Vernon High School that is located on 8515 Old Mount Vernon Road that would be split in half with this map. See the map of the school boundaries on this map: https://www.fcps.edu/.../boundary-maps/Mountvernon HS.pdf The memo that states that the 34th district is anchored in West Springfield and Franconia is not true. Looking at the map of Fairfax County AND the school boundary of Mount Vernon High School will inform the Special Masters where the boundaries should be.

The Mount Vernon Community, which contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK - details here: https://fairfaxcountygis.maps.arcgis.com/../index.html... ) is of concern to all of the residents who live along the corridor, but is not of interest to West Springfield or even Franconia.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with organizations like the Mount Vernon Democratic Committee, http://mvdemocrats.com/, MVCCA (Mount Vernon Council of

Citizens' Associations) - https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ - Indivisible Below the Beltway
(https://www.facebook.com/indivisiblebelowthebeltway/) all of which include members all along the Route 1 Corridor.

Mason Neck is also a part of the Mount Vernon District, as is Lorton, who have nothing in common with the residents of Haymarket and Fredericksburg. For example: Gunston Hall Elementary is a part of our region 3 Pyramid school system and this area will become the 7th Congressional district instead of the 8th, where both are communities of interest and is where they belong.

Please consider these comments, as this affects our everyday lives and our neighborhoods.

Thanks so much!

Sedgwyck Dowling
Concerned citizen of the Mount Vernon Community
8702 Curtis Avenue
Alexandria, VA 22309
\begin{tabular}{ll} 
From: & Carter Nevill \\
To: & Redistricting \\
Subject: & Warenton \\
Date: & Friday, December 17, 2021 5:33:19 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable members of the redistricting committee,
As a citizen of Virginia I think that the Special Masters have done an excellent job with these maps, however as the Mayor of Warrenton in Fauquier County, I have some concerns with the way our town is divided by Senate Districts 31 and 28. The Northern Piedmont, a unique cultural area stretching from Warrenton to Lovettsville is correctly districted into SD 31, but it should include the Town of Warrenton's precincts of Courthouse and Warrenton, which comprise our downtown and business district. I encourage the Special Masters to include these precincts in HD 31, as our economy largely depends on the relationships to the North, and Warrentonians often commute northward and eastward, but rarely to the South. Warrenton is considered part of the Washington-Baltimore Statistical Area, meaning that our policy decisions, economic drivers, and general vision of the town will always be more heavily influenced by activities to our North and East. As such, we would be at a severe representational disadvantage should our legislative team be focused on the more rural issues that are distinct to the district we are currently drawn into. Furthermore, the town is currently in negotiations with Fauquier County on a boundary line adjustment, which could potentially divide representation between residents in the town. I sincerely thank the Special Masters for their diligent work on our behalf.

Thank you for your consideration
Carter Nevill
Mayor
Town of Warrenton
cnevill@warrentonva.gov
(540) 359-5246

Sent from my iPhone. Please excuse any typos.
\begin{tabular}{ll} 
From: & Carolyn Lempert \\
To: & Redistricting \\
Subject: & District 2 \\
Date: & Friday, December 17, 2021 6:22:37 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I find no logic in your proposal to eliminate Norfolk from this district and add Isle of Wight. The east side of Norfolk has common interests with Virginia Beach: heavy military
presence, coastal areas important for tourism, areas subject to the ravages of climate change and flooding. I find no similarities with Isle of Wight, an inland, rural area. Please reconsider your map.
Thank you,
Carolyn Lempert
4609 Miles Standish Rd
Virginia Beach 23455
Sent from my iPhone
```

From: Corey Salyers
To: Redistricting
Subject: Public Comment on proposed redistricting
Date: Friday, December 17, 2021 7:16:17 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My name is Corey Salyers. I live in Gate City, which is in Scott County and the 9th congressional district. I recently reviewed the redistricting map proposed by the Court's Special Masters and was shocked at the new 9th. As someone who resides in the far southwestern corner of the Commonwealth, it is important for our "region" to speak with one voice in the United States Congress. By region, I mean Southwest Virginia.

Regardless of how the district lines are drawn, Southwest Virginia differs from the rest of the Commonwealth. Its history, its cultural ties to rural central Appalachia, its recent economic struggles, and its creative new economic development strategies are unique. From coal mining to farming or from manufacturing to outdoor recreation, the mountains of Appalachia form the identity of the 9th district, its economy, its people, and its future.

That's why it makes far more sense for Salem, Craig, Covington, and Allegheny to be in the 9th district than Bedford, Franklin, and Henry. Either way, I - as a resident of far Southwest Virginia - believe Salem is far more representative of my home community than Bedford or Lynchburg. If the new districting prevails the "true members of Southwest Virginia" would not be represented, in actuality the new lines are geared more towards central Virginia.

Finally, it is my respectful request and sincere hope that you would keep Salem in the 9th district when you finalize the district maps.

All the best, Corey Salyers
\begin{tabular}{ll} 
From: & Tony Tony \\
To: & Redistricting \\
Subject: & Representative Whitman \\
Date: & Friday, December 17, 2021 7:33:10 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I ask not to be disenfranchised by a redistricting plan that takes away my sole voice in
Congress. It is already deeply discouraging to have two U.S. Senators diametrically opposing my values.
\begin{tabular}{ll} 
From: & Dianne Salva \\
To: & Redistricting \\
Subject: & Mount Vernon Redistricting plan \\
Date: & Friday, December 17, 2021 8:47:53 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

\section*{Dear Sir or Madam:}

Please keep Mount Vernon together! The Super Masters' choice of new maps cuts Mt Vernon in half and includes us with West Springfield, which we do not have anything in common. Many of us have discussed and agreed on the following. These are some of many of the reason why Mount Vernon must stay together.

We are now in the 36th Senate District which would become the 34th which says we are anchored in Franconia and Springfield. It only makes sense that I-95 should be the western boundary of this district. Fairfax County has much more in common than the areas south of Occoquan in Prince William County or West of I-95. However, this map pairs the Mount Vernon District with Springfield. The Fairfax County Board of Supervisors just approved a new Magisterial District Map for our districts and they REMOVED a Springfield district because we do not share common interests. Here is a link to that map: https://www.fairfaxcounty.gov/.../2021-adopted...
The newly drawn Fairfax County magisterial district map is a much better representation than the Senate map as West Springfield and the communities east if I-95 are not communities of interest. An example is the Mount Vernon High School that is located on 8515 Old Mount Vernon Road that would be split in half with this map. See the map of the school boundaries on this map: https://www.fcps.edu/.../boundary-maps/Mountvernon HS.pdf The memo that states that the 34th district is anchored in West Springfield and Franconia is not true. Looking at the map of Fairfax County AND the school boundary of Mount Vernon High School will inform the Special Masters where the boundaries should be.

The Mount Vernon Community, which contains many communities of interest which cover the area from the southern edge of Alexandria City (Belle View) all the way south down to the Prince William County line. It goes from the Potomac River west to I-95. The development of the Route 1 corridor from Old Town to Fort Belvoir (EMBARK - details here: https://fairfaxcountygis.maps.arcgis.com/../index.html... ) is of concern to all of the residents who live along the corridor, but is not of interest to West Springfield or even Franconia.

The Mount Vernon Estate is the anchor of the Mount Vernon community. Please take note that Mount Vernon has a very strong community with organizations like the Mount Vernon Democratic Committee, http://mvdemocrats.com/, MVCCA (Mount Vernon Council of Citizens' Associations) - https://www.mvcca.org/ and VIC (Ventures in Community) - https://venturesincommunity.org/ - Indivisible Below the Beltway (https://www.facebook.com/indivisiblebelowthebeltway/) all of which include members all along the Route 1 Corridor.

Mason Neck is also a part of the Mount Vernon District, as is Lorton, who have nothing in common with the residents of Haymarket and Fredericksburg. For example: Gunston Hall Elementary is a part of our region 3 Pyramid school system and this area will become the 7th Congressional district instead of the 8th, where both are communities of interest and is where they belong.

Please consider these comments, as this affects our everyday lives.
Sincerely,
Dianne Salva
Concerned citizen of the Mount Vernon Community

Sent from my iPhone
\begin{tabular}{ll} 
From: & Marlene Meade \\
To: & Redistricting \\
Subject: & Congressional districts \\
Date: & Friday, December 17, 2021 9:03:01 PM
\end{tabular}
\begin{tabular}{|l|l} 
EXTERNAL EMAIL \\
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON \\
ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
\end{tabular}

I am opposed to the proposed map of the congressional districts and urge you to adopt the Farkas map instead.
Please keep Virginia elections fair and assessable to all.
Thank you,
Marlene Meade

Sent from the all new AOL app for iOS
```

From: Mark Donner
To:
Redistricting
Subject: Congressional Redistricting Comment - Mark Donner
Date: Friday, December 17, 2021 9:29:08 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court of Virginia:

I fundamentally disagree with the alignments of Robert Scott and Donald McEachin's specially carved districts, otherwise known as the 3rd and 4th. Why can Portsmouth and Norfolk not be joined with their surrounding suburbs to unify the Hampton Roads area's racial groups under a common representative? They have nothing in common with Hampton and Newport News other than race. This stokes racial division and ruins our country.

What does Southside rural Virginia have more in common with urban Richmond than Richmond's suburbs do, other than race? This Reconstructionist philosophy to amplify racial discrimination in politics does not actually yield racial equity, but promotes an ability for the well-established members of society to "divide and conquer."

The draft maps would finally allow me to live in a competitive district (2nd), but the problems described above have caused my votes in the 3rd and 4th to not be meaningfully cast for 18 years of voting in my home state of Virginia. This is a basic deprivation of democracy in the name of de jure racial separation.

Sincerely, Mark Donner
\begin{tabular}{ll} 
From: & DALE RUMBERGER \\
To: & Redistricting \\
Cc: & DALE RUMBERGER \\
Subject: & 2021 Redistricting proposal \\
Date: & Friday, December 17, 2021 11:49:40 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

We wish to object to portions of the redistricting plan proposed by the Virginia Supreme Court.
On behalf of the 17000 members of the South County Federation, a citizens representation organization found in southeastern Fairfax County, the proposed alignment of the House of Delegates, State Senate and finally Congressional representation seem to fly in the face of existing natural boundaries that have been used for decades (and into centuries.)

The Occoquan River has been a firm boundary in separation of Fairfax and Prince William counties. To throw that aside and move the Mason Neck area into a congressional boundary stretching past the City of Fredericksburg also stretches the credibility of your efforts.

The split of the proposed 18th and 19th districts has torn asunder long established precincts, neighborhoods and facilities located in those areas that were hard earned by community involvement and effort.

If you look farther west you see tremendous discrepancies in terms of majority/minority percentage of population. I am not speaking of 5-7 points difference; I mean 30 points of difference. A much closer reexamination of those percentages is in order, at least in those areas of Fairfax County.

Your split of the Mount Vernon Magisterial district, placing the Mount Vernon Estate into a congressional district touching Ferry Farm might be "clever" for some history buffs, but it does nothing for support of the area in terms of representation, let alone tourism.

While this could be seen as a good first draft, it is hardly ready for real political representation, especially in these fractious times of polarized party discontent. New boundaries should project a sense of new excitement about potential connections, not alarm or dread.

We urge you to take the above into consideration and engage the public in drawing boundaries that both represent AND respect.

Cordially,

\section*{Dale Rumberger President, South County Federation}
\begin{tabular}{ll} 
From: & Finale Norton \\
To: & Redistricting \\
Subject: & Proposed Second Congressional District Map \\
Date: & Saturday, December 18, 2021 9:21:56 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Finale Norton
4542 Peaceful Shores Dr
Jamesville, Va
757.769.1835

Disapproval of Map for CD2
The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
Dear Ms Pitney,
The Special Masters have recommended a crooked "J" shaped map that skips Norfolk. I live on the Eastern Shore, and with it comes it's own complications, As part of a rural community it is difficult to get a fair shot at all voices being heard, Rural communities are not monolithic. Here's why Norfolk is so important:
1. It gives a more fair opportunity for communities of color to be heard...already in the map drawn for House District 100 consolidated with Va Beach, communities of colors voices have all been primarily silenced. Norfolk gives us a shot.
2. The Eastern Shore separated by the Chesapeake Bay Bridge Tunnel has all the coastal challenges with Norfolk as well as Virginia Beach, they should all be addressed by one congressional representative for continuity so we get the best and most consistent results possible.
3. Wallops Island, US Naval installations in both Va Beach, and Norfolk, the commonality is for military veterans, active duty, and support systems to remain together is the greatest benefit for the best outcomes in services with consistent representation.

Whatever our race and background we all deserve the best and most consistent representation we can get. This is the occasion where zip codes matter. I hope you will take the action of putting CD2 back the way that is most beneficial to all of its constituents.

Respectfully,
Finale Norton

Sent from my iPad
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Ivelisse Gilman } \\
To: & Redistricting \\
Subject: & Opposed to taking Norfolk out of 2nd district. \\
Date: & Saturday, December 18, 2021 10:02:21 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
I am a resident of Yorktown, Virginia and I was
shocked to see the new redistricting maps.
How does taking Norfolk out of the 2nd district make any sense?
The military populations need to be together and have the same federal representation in order to best advocate for their needs.
There are also similar environmental needs for Norfolk and Virginia Beach and keeping them together in the same district makes a lot more sense.

Please consider keeping Norfolk in the 2nd district.

Thank-you,
Ivelisse
213 Water Fowl Drive
Yorktown, VA 23692
Sent from my iPhone
\begin{tabular}{ll} 
From: & Loanne \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Saturday, December 18, 2021 10:02:51 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a voter in the 2nd district and am concerned and distresses about the proposed redistricting plan.
Militarily, the veterans and active duty population should not be split. They are vital to the socio-economic strength of Hampton Roads. Air Station Oceana in Virginia Beach and Norfolk’s Naval Station, Fleet Forces personnel work closely together and reside in both cities. They deserve to have the same federal representation to advocate for their interests.

Environmentally, Ocean View and waterfront
parts of Norfolk and Virginia Beach specifically require to have federal representation together because of their shared concerns.

Contiguity is another issue for our 2 nd district. People would need to drive through the majority of the 3rd district to get from one end of the second district to the other due to the Dismal Swamp! That is a disconnect.

Thank you for reading and taking the time to consider my concerns.
Joanne Glass
Virginia Beach

Sent from my iPhone
\begin{tabular}{ll} 
From: & Kati Hornung \\
To: & Redistricting \\
Subject: & Something is aMISS \\
Date: & Saturday, December 18, 2021 11:05:19 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
The women in Virginia, which is to say a majority of Virginians, are taking note of the fact that the only House of Representatives incumbents given a more difficult path to reelection are women.

Perhaps if one of the map masters had been a woman, it would have given her pause pause to create a map with the potential to eliminate all three Virginia women serving in the House of Representatives.

Perhaps if one of the map masters had been a woman, communities would have been kept together, rather than split down the middle of a large road in the county.

Perhaps if one of the map masters had been a woman, a woman representing the 7th District of Virginia would not have been written out of her district.

It is 2021 and women are tired of not having a seat at the table where decisions such as this are made. Those choosing map masters need to think a little harder about how they have silenced the majority of Virginians. Those chosen as map masters need to ensure their results do not appear to discriminate based on the sex of incumbents. While it is not yet constitutionally protected in the same way as race, it impacts a majority of us and should weigh heavily on the conscience of those shaping our futures.

Sincerely,
Kati Hornung
\begin{tabular}{ll} 
From: & Kati Hornung \\
To: & Redistricting \\
Subject: & p.s. \\
Date: & Saturday, December 18, 2021 11:07:58 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I forgot to add this in my note sent moments ago:
I am opposed to the map proposed by the map masters. Please instead adopt the Farkas map.
Thank you.
- Kati Hornung
\begin{tabular}{ll} 
From: & Gail Wade \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Saturday, December 18, 2021 11:50:38 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

As a forty five year resident of Fairfax City and Fairfax County, I have to express my dismay at the proposal I have just seen, particularly in regard to changing the 37th delegate district to the 11th.

Looking at the map, I can see the geographic appeal of the proposal, but there are several local issues that bear consideration. George Mason University, and their 30,000 students have a huge impact on the entire area of the former 37th District, and a substantial financial impact on the county. I have seen the town-gown relationship go from contentious to collegial, and to replace the southern area of Burke-Fairfax and replace it with Oakton seems to ignore the commonality of interests the areas around GMU share.

Braddock District has always been the most heavily residential, and least commercial, of the districts in Fairfax County. I had to research to learn the identity of the County Supervisor for Oakton. I was shocked to learn that the Providence supervisor, who represents Oakton, also represents Tysons. I am simply unable to wrap my brain around serving the interests of GMU, the Braddock suburban neighborhoods, and the urban sprawl which is Tysons Corner.

Fairfax City, in particular, has a particularly involved electorate. When our representatives in Richmond come home and hold a Town Meeting mid-session, folks know to arrive thirty minutes early, because they are standing room only. (This was pre-pandemic, of course.). I'm afraid that redrawing the district to respect geography rather then common interests will will have a negative impact on voters interest in often murky world of Richmond.

Gail Wade
Fairfax City

Delegate Vivian Watts - Revision to reflect actual census data to replace comment posted 12/14/21 based on estimates.
Wakefield Precinct should be moved from proposed HD15 to the proposed HD14 and the portion of Woodburn Precinct inside the Beltway should be moved from the proposed HD14 to the Proposed HD13:
(1) The deviation for HD15 under the proposed plan of \(+2.01 \%\) would tighten to \(-1.62 \%\). The deviation of HD14 would tighten from \(-0.86 \%\) to \(+0.76 \%\). Although the deviation for HD13 would increase from \(+0.16 \%\) to \(+2.16 \%\), it still would be less than 9 other proposed House districts.
(2) The nesting of 5 House districts within 2 Senate districts would not be breached: HD15 remains wholly within SD35. HD14 also remains wholly within SD35 within the exception of a precinct in SD37 already assigned to it. HD13 remains split between SD35 and SD37.
(3) Compactness of HD13, HD14 and HD15 would not change because Wakefield Precinct and Woodburn Precinct are at a corner of the districts involved. In addition, the identifiable borders of HD13 and HD14 will be significantly improved by using the Beltway, which will divide the current Woodburn Precinct as proposed by Fairfax County in their redistricting. Furthermore, HD13 and HD14 will be defined by the entire length of Gallow Rd inside the Beltway.
(4) HD14 and HD13 would remain solidly majority-minority districts:
\begin{tabular}{rrrrrrrrr} 
& Deviation & Adj Pop & White & Hispanic & Asian & Others & Black & HWA/PI \\
proposed HD14 & \(-0.86 \%\) & 85,572 & 32,568 & 22,663 & 19,704 & 12,796 & 8,822 & 47 \\
Wakefield & & 3,132 & 2,140 & 254 & 507 & 84 & 102 & 1 \\
Woodburn (pt) & & \(-1,734\) & \(-1,106\) & -140 & -353 & -48 & -34 & 0 \\
revised HD14 & \(0.76 \%\) & 86,970 & 33,602 & 22,777 & 19,858 & 12,832 & 8,890 & 48 \\
& & & & & & & & \\
proposed HD13 & \(0.16 \%\) & 86,448 & 35,215 & 28,662 & 15,849 & 16,333 & 5,810 & 53 \\
Woodburn (pt) & & 1,734 & 1,106 & 140 & 353 & 48 & 34 & 0 \\
revised HD13 & \(2.16 \%\) & 88,182 & 36,321 & 28,802 & 16,202 & 16,381 & 5,844 & 53
\end{tabular}
(5) Community of interest will be served. Wakefield Precinct residents are in the Annandale 22003 zip code which is dominant zip code of HD14 but is only barely represented in HD15. Wakefield Precinct shares school attendance areas with essentially the same number of households in either HD14 or HD15. A recorded citizen comment about shopping patterns of Fairfax County's proposed Woodburn Precinct divide would be echoed in many border precincts of districts throughout Northern Virginia's suburban sprawl.
(6) If the critical redistricting principles in 1-5 have been satisfied, I am not aware of established court precedent for not considering where current elected officials reside. HD15 has two incumbents; HD14 has none. At this point in Virginia House history, un-justified loss of legislative experience is particularly serious to the complexity of shaping public policy. Both incumbents have more than 10 years of experience, while two-thirds of the 2022 House has less than 10 years and almost half have less than 5 years.
(7) Moving Wakefield Precinct into the under-populated HD14 gives more flexibility to address numerous public concerns about HD15 regarding splitting the Kings Park West community, as well as addressing the awkward hook of Cardinal Precinct in HD15's border.
\begin{tabular}{ll} 
From: & Linda Franzitta \\
To: & Redistricting \\
Subject: & Redistricting Proposal for CD2 \\
Date: & Saturday, December 18, 2021 1:20:57 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

As a citizen of Virginia Beach for the past 35 years, I am very concerned about the proposal to redraw the Second Congressional District. Military orders brought us to Virginia Beach in 1986. The proposal will split the Hampton Roads military constituency and remove the voting bloc that CD2, which includes Naval Station Norfolk, Joint Base Langley/Eustis, Naval Air Station Oceana, and Joint Expeditionary Base Little Creek/Fort Story, has traditionally maintained. By separating these very important military installations into different districts and replacing them with rural localities the political strength of our military population would almost certainly be diluted. The plan would result in different districts which serve the military competing witheach other for critical Congressional funding and would not serve the interests of our nation, our state or our distinctly military-centric region. For as long as I can recall, CD2 has been recognized as the "Virginia military district," and its representative has served on the Armed Services Committee. All of the bases work closely together to support our national interest. Active-duty service members live in most of the localities and commute to work. Active duty and retired military members deserve to have the same federal representative advocate for their mutual interests in Congress. I would join those concerned citizens asking you to leave the current area of Norfolk which lies in the second district intact.

Sincerely,
Linda Franzitta
964 Commodore Drive
Virginia Beach, VA
\begin{tabular}{ll} 
From: & Sara Hollberg \\
To: & Redistricting \\
Subject: & Redistricting Staunton/Waynesboro/Augusta County \\
Date: & Saturday, December 18, 2021 1:47:16 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

TO WHOM IT MAY CONCERN:

Please keep Staunton and Waynesboro in the Senatorial district with the rest of Augusta County and the central Shenandoah Valley.

The proposed redistricting map that would split Augusta County and send Staunton and Waynesboro into a district that far south and west makes no common sense on the ground and would be very detrimental to citizen interests of not just the area split off but also the remaining area of common interest. This split would directly harm our ability to be well represented in the General Assembly. Staunton and Waynesboro are central to Augusta County and to the central Shenandoah region. We have strong common interests also with Rockingham County, particularly on economic and land use issues, and are the primary hub for Highland County residents as well.

I know these communities well as a resident and also as a land use planner working at the Central Shenandoah Planning District Commission and other regional jobs throughout my career. Splitting these cities off to the be the satellite of a distant region would make us potentially irrelevant and unheard in the new district as well as gut the remaining Augusta north district. This split would go against our entire history of interwoven ties of shared interest, economies, land use issues, institutional partnerships, and alliances in the county. It also cuts against most of the regional groupings for state agencies and programs.

Thank you for your consideration.

Sara Hollberg
24 Church Street
Staunton VA 24401
540.290.1520
\begin{tabular}{ll} 
From: & Don Sharpe \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 1:52:36 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Virginians are tired of the politics of gerrymandering and party attempts to control power not through the ballot box but through controlling the districts. Please follow the constitution, not your party affiliation in setting districts. Virginians deserve better than the attempts of Democrats to gerrymander districts in their favor. Just do what is right and proper, not what is party desired.--

Don Sharpe
804.426.7822
donsharpe52@gmail.com
\begin{tabular}{ll} 
From: & Sherry Eckert \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 1:56:45 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The town of Vinton is within Roanoke County but with the proposed redistricting will be separated from most of Roanoke County and much of the valley. I encourage you to keep communities of interest together with redistricting. Also avoid gerrymandering of our districts.
\begin{tabular}{ll} 
From: & Mike Fiorillo \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 1:57:31 PM
\end{tabular}


I believe that the new Governor would oppose this action, I therefore strongly advise this redistricting be defeated, it is an obvious attempt to set up liberal agendas

Get Outlook for iOS
\begin{tabular}{ll} 
From: & \(\underline{\text { aeiouyw1 }}\) \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 1:57:52 PM
\end{tabular}


Western Louisa County should not be combined with Albemarle for any office. Louisa is a rural county and has nothing in common with Albemarle.

\author{
Sent from my Verizon, Samsung Galaxy smartphone
}
\begin{tabular}{ll} 
From: & Linda Meyer \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:07:47 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This remaking should be done according to established county perimeters \& not helter-skelter on this street \& roadway. Linda Meyer, 1118 Dry road, Speedwell, VA 24374
\begin{tabular}{ll} 
From: & Anna Whetsel Rucker \\
To: & Redistricting \\
Subject: & Virginia redistricting \\
Date: & Saturday, December 18, 2021 2:12:40 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear fellow Virginians,
In redistricting Virginia, I understand it is a huge task on your part. I do however feel it would be a huge disservice to SWVA, New River Valley especially Radford to remove Blacksburg from our district. We work together, live together and have church together. We need funding in our area to increase not decrease. Removing Blacksburg and also Salem from these Senate and Congressional Districts takes teacher and community funding, infrastructure and transportation funding, Health care and community awareness funding from me, my family and the families I serve. I am a Doula and HypnoBirthing \({ }^{\circledR}\) Childbirth Educator. I serve families in the New River and Roanoke Valleys. These families depend on funding and decision to be made with them in mind. The redistricting proposed does not support this. Please keep Radford, Blacksburg and Montgomery County together.

Sincerely,
Anna Whetsel Rucker
--
Peace \& Many Blessings, Anna Whetsel Rucker
\begin{tabular}{ll} 
From: & Sarah Koch \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:26:05 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
As a Representative of We the People Grassroots, we adamantly oppose the redistricting drafts as they are encouraging gerrymandering of the Roanoke and New Rivery Valleys. As such, the districts should be compact.

Thank you,
Sarah Koch, VA We the People Grassroots Representative
Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android
\begin{tabular}{ll} 
From: & Candace Graham \\
To: & Redistricting \\
Subject: & Written remarks \\
Date: & Saturday, December 18, 2021 2:31:13 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Just in case you weren't able to open the attachment ...
Chief Justice and honorable members of the court, thank you for this opportunity to tell you why I'm opposed to the map of congressional districts that has been proposed. My name is Candace Graham and I live in Western Chesterfield County, in the Richmond Metro Area of Central Virginia. Many of those testifying on Wednesday demonstrated that Chesterfield and Henrico are a community of interest and should not be separated. Access to healthcare, shopping, business and recreation is shared by both counties, via Interstates 288 and 64 and the Chippenham Parkway. Western Chesterfield and Henrico are developing rapidly. We share common challenges in infrastructure, education and transportation. Chesterfield County has much more in common with suburban Henrico (In the proposed 1st CD) than it does with any of the rural counties south and west of us (in the proposed 5th CD).

Others who have testified listed the agencies that provide services to the entire Central VA region. This is the region the map masters should start with, instead of treating it as an afterthought. Henrico County was established in 1611. This region is the birthplace of the nation. How can this important region be adequately represented by 4 different representatives?
On a related note, I am a member of a national organization whose purpose is to elect more women to office. There are currently 3 Congresswomen representing Virginia. Instead of creating districts that are more competitive, the proposed map decimates the district of one of the women incumbents, draws another woman incumbent out of her district, and makes the district of the third a toss-up. It feels like we're going backwards. These women have been elected and re-elected
because the majority of their constituents feel well-represented. Their existing districts are already competitive and challenging.
I am asking the court to instruct the map masters to adopt the Farkas map, instead. It would preserve this historic community of interest in Central Virginia, and it would retain the districts of the 3 women incumbents.

Thank you so much for your consideration.
Sincerely,
Candace Graham
Midlothian, VA


To of Virginia Supreme Court,
Districts in the Roanoke and New River valley should be compact not gerrymandered all over the valley.

Regards, Mrs. Anna Bruce
\begin{tabular}{ll} 
From: & \(\underline{\text { Ken Anderson }}\) \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:34:22 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am an engineer and surveyor whose company, Anderson \& Associates, pioneered GIS and GIS based redistricting in western Virginia in the 1970's and 1980's.

I don't know the current issues with any districts but I would be extremely leery of complaints by political organizations as I understand there is in the Roanoke-Blacksburg area.

I also served as Co-Chair of the New Century Council which involved Roanoke and the New River Valley.

I would be happy to provide input based on my experience. I do, however, have my bias as a Republican.

Ken Anderson, PE-LS
5403924429

Sent from my iPhone
\begin{tabular}{ll} 
From: & Thomas And Janet Russell \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:37:08 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I believe communities of interest need to be drawn together in redistricting plans.
It is hard to avoid politicization of this process but the court should look for any potential manipulations which might separate and/or isolate some towns (like Vinton, which would be better as part of Roanoke valley instead of being drawn with Staunton).
Our elections are important and drawing districts in funky ways can be devastating.
Thank you for exercising your powers carefully.
\begin{tabular}{ll} 
From: & stevedthompson777 \\
To: & Redistricting \\
Cc: & "David Suetterlein" \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:43:41 PM \\
Importance: & High
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Dear Honorable Justices,
My name is Steve Thompson. I am a Virginia resident and an active voter and Virginia taxpayer.

I am writing you today to tell you that I am STRONGLY opposed to the Blacksburg Democrat arguments that encourage a gerrymander of the Roanoke and New River Valley districts.

This is unethical and possibly criminal.
Please oppose these Democrat dirty tricks and impropriety.
Sincerely,
Steve.

Best Regards,
Stephen D. Thompson
702.715.6287
stevedthompson777@gmail.com
\begin{tabular}{ll} 
From: & Steve Himes \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 2:55:58 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Supreme Court,
I do not support gerrymandering districts for any reason. Districts should be compact. Most of the draft Virginia re-district map makes sense to me, even though I am sad that my location will no longer be in VA-01. I will miss Congressman Rob Wittman.
Regards,
Capt Stephen J. Himes (USN Ret)
10225 Moss Tower Place
Bristow, VA 20136
\begin{tabular}{ll} 
From: & Eileen \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:01:45 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We need to stay with compact districts. Bigger is not always better when dealing with, \& caring for your district. Eileen Langowsky
District 9
Sent from my iPhone
\begin{tabular}{ll} 
From: & Donna Pringle \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:33:37 PM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Voting districts in Virginia should be compact, not serpentine.

Supreme Court of Virginia
Public Comment
17 December 2021
Brandon Thurner
Fairfax County, VA

I want to thank members of the Supreme Court of Virginia for your time in hearing public comments to these proposed maps. My name is Brandon Thurner, and I am offering my public comment on the congressional maps as a longtime resident of Fairfax County. While these maps are more compact than the current gerrymandered districts, they require a significant rework so as not to separate communities of interest, as well as to make the districts more competitive.

While the proposed congressional maps look more compact, the approach is inconsistent. It is not fair to allow some regions to keep their communities of interest while breaking up others, such as the l-64 corridor in Central VA.

In the proposed maps, the three current congressional districts that largely populate my region of Northern VA - districts 8, 10, and 11 - retain their population load centers of Fairfax, Arlington, and Loudon Counties as related communities of interest. It is common for residents - myself included - to live in one of these three counties, but work and socialize in one or both of the other two.

Unfortunately, this level of respect is not afforded to all regions of the Commonwealth, particularly Central VA. Specifically, Henrico County and Chesterfield County are now split in multiple directions and into three congressional districts \(-1,4\), and 5 . I often drive through and visit friends in different counties in Central VA. Henrico and Chesterfield are clearly related communities of interest. Further, why not draw Albemarle County in with the Richmond suburbs of Henrico and Chesterfield? Albemarle has more in common economically and socially with the Richmond suburbs than it does with the two rural districts into which it would be cleaved. Unfortunately, the proposed maps split up Central VA and the Richmond suburbs like spare parts of a car at an auto auction.

From my visits, I recognize that just like back home in Fairfax, Arlington, and Loudon Counties, the people of Henrico, Chesterfield, and Albemarle Counties often live in one county and cross into the other two Counties as well as Richmond proper for work and socializing. But where I jump on the Fairfax County Parkway or the DC Metro system to traverse Fairfax County, residents of Central VA hop on I-64 and the Chippenham Parkway, which also serve as physical infrastructure boundaries of the region.

Additionally, most of the proposed congressional districts look absurdly safe for one political party or the other - for example, VA08 is \(\mathrm{D}+50\) and VA09 is \(\mathrm{R}+46\). One would expect this level of packing from partisan gerrymandering, but not from a bipartisan redistricting commission. We need more chances to meet and speak with neighbors who may not see matters the same way as we do - conversation often leads to mutual understanding.

My request for the Special Masters and the Supreme Court of Virginia is twofold. First, revisit these congressional maps and make substantial changes toward reuniting natural communities of interest, specifically in the Richmond suburbs. Second, rework the boundaries which leave districts far less competitive, perhaps by integrating Prince William County into the proposed VA10. Said another way, the proposed Farkas Map would reunite communities of interest in Central VA as well as ensure Northern VA also remains together making it preferable to the proposed maps.

I thank members of the Court for the opportunity to address you today.
\begin{tabular}{ll} 
From: & wilcher@tds.net \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:43:37 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

All of Roanoke County, Roanoke City and Salem should be in the 9th Congressional District because it aligns with Montgomery County and Radford. All of Bedford County should be in the 6th. Thank you for your consideration.

John W. Wilcher
540-309-9991
PO Box 66 Ne Castle, Va 24127
\begin{tabular}{ll} 
From: & Lames M. Bowling IV \\
To: & Redistricting \\
Subject: & Redistricting Albemarle County \\
Date: & Saturday, December 18, 2021 3:45:30 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sirs,
I have been a long- time resident of Albemarle County. In recent years it has been hard to keep track of whom is representing Albemarle County since there have been so many of them, several with small pieces of Albemarle at the tail end of their election district. Now I have read that you want to make Albemarle the only split county, dividing it in half. You have a difficult job. I implore you to find a way to make Albemarle County one district, no matter where you put it. Fair is fair.

Jim Bowling
\begin{tabular}{ll} 
From: & Stephen Vinson \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:51:54 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please consider allowing communities to be grouped together with contiguous communities that are similar geographically, economically and socially.
\begin{tabular}{ll} 
From: & Susan Turner \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:57:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am extremely tired of being in a district in Virginia that doesn't include my neighborhood but is stretched from here to yonder and then paired with cities in which I do not hold common values.
Please leave politics out and create compact districts that make me feel like a real citizen with a real voice.
--
Susan Turner
757-618-5882
weddingbysusan.com

Virginia Living Magazine "Top Wedding Professionals In The State" 2018
\begin{tabular}{ll} 
From: & tim fisher \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 3:59:25 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your Judgeship,
Please note my opposition to gerrymandering districts to get a desired vote. I oppose any attempt to break up a community's vote. Citizens should be voting for representatives from their own geographical community not from a community many miles away.

\author{
Sincerely, Dr. Timothy H. Fisher
}

Sent from my iPhone
\begin{tabular}{ll} 
From: & CHRIS THOMAS \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 4:06:22 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep the City of Salem in the 9th District. We are and Independent City who thoughts and views are aligned with our Nieghbor's to the west, and the parts of Roanoke county that are currently in the 9th. We have nothing in common with Winchester or the City of Roanoke. We would be swallowed up by the sixth district if the Redistricting maps are approved as drawn. Please keep Salem independent and in the 9th! Please..

Sent from my iPhone
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ nancy ford } \\
To: & Redistricting \\
Subject: & Problems with the 2nd Congressional District in Virginia \\
Date: & Saturday, December 18, 2021 4:24:43 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have been a resident of Virginia Beach for 25 of the past 42 years. I have come to appreciate its distinctive geographical, economic and social attributes and love interacting with its great variety of residents from all over the country. Few localities combine a flourishing tourist industry with critical military operations as do Virginia Beach and Norfolk. Because of these unique features, Virginia Beach and Norfolk share many critical interests that necessitate preserving their coastlines and waterways. Sea level rise is projected to impact our region far more than most in the United States and it is imperative that our representatives in Congress present a strong, united front on climate change and military issues. Certainly, Virginia Beach and Norfolk share many more common concerns in these areas and others than do Virginia Beach and Isle of Wight or Suffolk. Military operations, base development and resource usage, veterans' care and support for military families are far more significant issues for these two coastal localities than they are for inland communities with no notable military presence. The same is true for environmental concerns such as coastal erosion, off-shore energy production and encroachment of the seas on military bases and resort areas.

If the purpose of drawing congressional districts is to provide effective representation in Congress for communities with distinctive needs, the creation of the proposed 2nd District makes little sense at all. It is emblematic of the grotesque gerrymandering that has plagued redistricting for centuries and makes a mockery of the claim that the special masters have created districts that are compact and contiguous as well as representative of people with similar interests and concerns. It is imperative that you create districts that allow representatives to focus on the major issues of their region, not a plethora of unrelated concerns that people in a far-flung district might have. Virginia Beach and Norfolk must share representation.

Thank you for your consideration of these matters that will impact our region for generations to come.

Nancy Ford
Virginia Beach
\begin{tabular}{ll} 
From: & Nancy Markon \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 4:39:20 PM \\
Attachments: & image.png
\end{tabular}

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS


This is a major improvement compared to what previously existed. I'm in favor of districts being geographically compact, so I'm glad to see that the "snake districts" which stretched across many miles and multiple jurisdictions are gone.

To the maximum degree possible, I believe it's important to vote and pay taxes with the same group of people. We're more likely to have shared concerns even if there's an urban, suburban, and rural population mix in a district. Yet like it or not, as populations grow, urban areas will have more and more impact on election outcomes. Historically, they tend to vote for Democrats.

What's most important to me is that districts be drawn so that the people choose their representatives and not the other way around.

Nancy W Markon
Midlothian, Va 23113
\begin{tabular}{ll} 
From: & Gail \\
To: & Redistricting \\
Subject: & Mount Vernon \\
Date: & Saturday, December 18, 2021 4:44:52 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello, the redistricting of Mt Vernon community together with Lorton and Woodbridge makes absolutely no sense, crossed two counties, has no regard for the community of Mt. Vernon, The homes in the original five farms of Gw and the representation of those in our community, which is Alexandria in Fairfax County. I am strongly opposed. And I vote.
\begin{tabular}{ll} 
From: & Robert Norvell \\
To: & Redistricting \\
Subject: & Negative effects that the new plan will have on Augusta county and surrounding Valley area. \\
Date: & Saturday, December 18, 2021 4:49:55 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Staunton and Waynesboro are part of one unit that needs unform representation. The current plan is not a good one for this area. I hope you can go back again to the drawing board and restore the integrity of this district.
Sent from Mail for Windows
E current plan willl

\title{
Gerald W. Hyland 6504 Boulevard View, Apt. A1 Alexandria, VA 22307
}

December 16, 2021

\author{
Mr. Bernard Gropfman \\ Mr. Sean Trende \\ Supreme Court of Virginia \\ 100 N. \(9^{\text {th }}\) Street \\ Richmond, VA 23219
}

Re: Redistricting Comments
Dear Special Masters:
I am writing to comment on your draft proposed redistricting map in the area of Fairfax County that represented for 28-years.

First, I commend you on your efforts to redistrict the Congressional and Legislative Districts in a nonpartisan manner. The existing districts often lack a cohesive basis other than political interests and often divided our existing communities in a manner that was confusing to our residents. In general, your draft proposed maps did a much better job of keeping communities together, but I also understand how given your time constraints and unfamiliarity with communities why you might miss some of the nuances that defines how Eastern Fairfax County residents identify with their community.

\section*{Eastern Fairfax County and Mount Vernon}

The Mt. Vernon Community is the oldest part of Fairfax County and contains communities that have the oldest English settlements in Virginia. As Fairfax County grew, it settled from East to West over the following century. Our nation's first General of the Army and first President, George Washington, settled in Fairfax County at his home of Mt. Vernon and the when the General Assembly created our local form of government, the Mt. Vernon Magisterial District was formed covering all of the land effective east of I-95 and has retained that name for over 100 years. Today, the land east of I-95 is covered by two Supervisor Districts representing approximately 200,000 people - Mt. Vernon and Lee District. I was honored to serve as the Mt. Vernon District Supervisor for 28 years from 1987 until 2015.

There are several major geographical obstacles that define our community. First, the Capital Beltway or I-495/I-95 and I-95 serve as major barriers that keep our community separate from the communities North and West. The City of Alexandria to the north is a different jurisdiction, has a different form of government, has completely different zoning rules given its urban density and is a difference place. While we share an "Alexandria" post office appellation, the community of Mt. Vernon is a markedly different place and there have even been campaigns to rid ourselves of the "Alexandria" post office appellation that the U.S. Postal Service has forced upon us.

The community of Springfield lies to the West of I-95. Springfield has different post offices, different commuting patterns, and markedly different demographics. Given that it was built out much later than the areas East of I-95, it developed different demographics and residents who tend to commute more to the west to Tyson's Corner rather than North. Interstate 95 tends also tends to divide the high school pyramids, planning communities and is served by a different police substation. It is a different community.

Within the Mt. Vernon and Lee Communities, Fort Belvoir is a major geographic obstacle. Since 2001, local residents cannot enter the base without military identification so it is a nearly 9,000 acre. In addition, Fairfax County's largest park, Huntley Meadows is attached to Fort Belvoir on the east and is nearly 1,500 acres. The two of these geographic obstacles obstacles total over 10,000 acres and create a major East-West and North-South obstacle to travel and define separate communities within our area. The only way to cross the obstacles are four roads - U.S. 1, the Fairfax County Parkway, Jeff Todd Way, and Lockheed Boulevard/Harrison Lane. This divides Mt. Vernon and Lee into two distinct communities. Here is a map:


Any maps in this area need to be drawn with these obstacles in mind.

\section*{Congressional District Problems}

First, while I understand your efforts are limited by population constraints, your memo seems to indicate that you simply made a judgment to split the Mt. Vernon and Lee Communities instead of the much more recently developed "Orange Line Corridor." I do not believe it is better to split an older, more diverse, and more established community than a newer one. Most Mt. Vernon residents commute North through the City of Alexandria to Washington, D.C. The Mount Vernon Community has belongs in the \(8^{\text {th }}\) Congressional District with Alexandria and Arlington. In fact, the first "modern" Democratic Congressman for the \(8^{\text {th }}\) District Congressional District was Herb Harris who was elected in 1974 and lived 50 feet from the boundary of the Mt. Vernon Estate. In addition, your present line splits Eastern Fairfax County's largest homeowner's association, Kingstowne literally right in half in Lee District.

The proposed boundary for CD8 (and SD34 and HD16) also splits the historic Mt. Vernon Estate.


If there are population constraints, you should first draw the \(8^{\text {th }}\) Congressional District along the Potomac to the Occoquan River, capture the entire U.S. 1 Corridor and Mt. Vernon, and only then start to move to the East. This would put Mt. Vernon in the \(8^{\text {th }}\) Congressional District and the Lee area of Eastern Fairfax County which lies West of Fort Belvoir and Huntley Meadows Park into the \(11^{\text {th }}\) Congressional District.

\section*{State Senate}

Next, before extreme gerrymandering came more potent in 2001, the Senate District (known today as the \(36^{\text {th }}\) District) representing our area basically encompassed the area between I-95, I-95/I-495 the Occoquan and the Potomac River. It looked like this using your map:


This basically captured the entire community East of I-95 and south of the City of Alexandria and consolidated Mt. Vernon and Lee Supervisor Districts into one Senate seat. This is the configuration you should aim for today.

Instead, the draft proposed map uses the poorly placed \(8^{\text {th }}\) Congressional District line along VA235 which cuts off the Mount Vernon Districts namesake - Mt. Vernon - from the rest of Mt. Vernon. It cuts Fort Belvoir into two separate senate districts. It cuts the attendance area of one of Fairfax County's oldest high schools - Mt. Vernon High School - in half and leaves a part of the Hayfield Secondary School District isolated in the proposed \(33^{\text {rd }}\) Senate District. It is also important to remember that in suburban areas like Fairfax County, our high school pyramids often serve as centers of community organization.

It incorporates the area West of I-95 - Springfield - which has different high schools, a third supervisor district, a third police station, different commuting patterns, and people who simply do not identify with anyone in Eastern Fairfax County. This area identifies with communities who live in Greater Springfield, Burke or Laurel Hill to the South. Interstate 95 may as well be a canyon. These areas should not be drawn together, and you should draw the Mt. Vernon and Lee Communities from Alexandria to the County Line (the Occoquan River) into one district.

\section*{House of Delegates}

Finally, the proposed House of Delegates map seems to disregard to the boundaries of our existing communities, local district lines, or geographic obstacles. As I mentioned above, Fort Belvoir and Huntley Meadows Park constitute a 10,000-acre obstruction in the middle of Eastern Fairfax County. The people east and west of this area in separate magisterial districts ( Mt . Vernon and Lee) and attend separate school districts (West Potomac H.S. or Mt. Vernon H.S. versus Hayfield Secondary School, Edison H.S. or Justice H.S.). Here is the proposed House of Delegates map showing with Fort Belvoir (GREEN) and Huntley Meadows (GRAY) highlighted.


There are three changes that should be made:
(1) The Mt. Vernon Estate (Westgate Precinct) should be consolidated with the rest of Mt. Vernon in HD16 and moved from HD19.
(2) The proposed maps have stranded the residents of the southern part of U.S. 1 in an island of precincts in HD17 stuck between Fort Belvoir, Huntley Meadows Park and HD16. These precincts should be placed in HD16.
(3) The precincts north and west of U.S. 1 after it intersects with North and South Kings Highway along I-495 should be placed with HD17 and the remaining voters of Lee District.

This would create one delegate seat for the Mt. Vernon Community and a separate delegate seat for the Lee Community (you call it "Franconia" in your memorandum) and much better aligns the delegate seats with the communities that actually exist and would looks like this:


These changes would allow our community to be properly represented by officials who represent entire communities with similar interests and fulfill your mission of creating true communities of interest. Thank you for all of your work and for considering my comments.

Very Truly Yours,


Gerald W. Hyland
Retired Mt. Vernon District Supervisor
\begin{tabular}{ll} 
From: & Robert Norvell \\
To: & Redistricting \\
Subject: & Negative effect on Augusta county and surrounding Valley area \\
Date: & Saturday, December 18, 2021 5:09:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Staunton and Waynesboro are an integral part of our district. I hope you can appreciate the negative effects and fix the problem of carving up the district in the way you are proposing.

Sent from Mail for Windows
\begin{tabular}{ll} 
From: & bobnorvell@aol.com \\
To: & Redistricting \\
Subject: & Negative effects of new plan on Augusta County and surrounding Valley area \\
Date: & Saturday, December 18, 2021 5:21:27 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I hope this part of the plan can be revisited and adjustments made to retore the integrity of the Staunton Waynesboro Augusta county unit. The negative effects far outweigh the benefits.
```

From: Nancy Nixon
To:
Redistricting
Subject: Redistricting concerns as to why I feel these points should be considered.
Date:
Saturday, December 18, 2021 5:26:40 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The district is shaped like a "crooked J" that is not functionally contiguous. Due to the Great Dismal Swamp, constituents would have to drive through a majority of the 3rd district to get from one end of the 2nd to the other.

By putting Suffolk/Isle of Wight back in the 3rd, you get a more compact district in the 2nd and don't disrupt the compactness of the 3rd.
-
It takes longer to drive from Southampton County to the Virginia Beach District Office than it does to a District Office in Newport News.
-
The special masters intended to adhere to functional congruity however they focused more in minimizing county splits. There should be a balance that doesn't disenfranchise voters in the Hamptons Roads districts.
Sincerely Nancy Nixon 2116 Cocoa Circle VA BCH VA 23454
\begin{tabular}{ll} 
From: & Sharon Baumgarten \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 5:37:10 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

There should be no redistricing of the Roanoke Valley and New River Valley! Sharon Baumgarten

Sent from my iPad
\begin{tabular}{ll} 
From: & jvp444@yahoo.com \\
To: & Redistricting \\
Subject: & Reappointment \\
Date: & Saturday, December 18, 2021 5:59:00 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I believe all of Loudoun County should be associated with northern Virginia - NOT the Charlottesville area. Thank you for considering my opinion.

Sent from my iPhone

Comments for Public Hearing on 2021 Proposed Redistricting

My name is Mary Kranz and I live in Louisa County.

Thank you for this opportunity to speak on the proposed redistricting maps. Its been an understandably difficult process and the outcome overall looks fair to me. I have lived in Louisa County for 50 years and so my concern is with Louisa County, both the Congressional and State maps.

I'll start with the Congressional map. -District 1

Louisa is kept whole and I am pleased with that. However, it is placed on the extreme western edge of the newly drawn District 1. This district extends eastward to the Chesapeake Bay. The map places us with other 'rural' counties. Yes, these are 'rural' counties, but Louisa County is very different from these other rural counties. Louisa is squeezed between three urban centers, Fredericksburg, Charlottesville and Richmond. Our concerns are different. We are faced with uncontrolled development. We have very different kinds of hopes of attracting good jobs. We are in the Piedmont, they are tidewater. Even our agriculture is different. When I drive through these counties, I see vast fields of cotton and peanuts. Forestry is primary in Louisa.

People who live in Louisa have connections with Henrico, Chesterfield, and Albemarle. That's often where our children have chosen to live. That's where our jobs are. That's where we shop and eat. We have little common interest or personal connection with New Kent or Charles City county.

I ask you to take another look to see if Louisa might be placed more within its community of interest.

Now I would like to talk about the state maps.

District 59 for the House of Delegates and District 10 for the Senate. Both state maps divide Louisa County.

As a 50 year resident of Louisa County, my community of interest is aligned with the boundary of Louisa County. Our County government works with our state government. It is as a County that we deal with the development along 164 that extends from Zion Crossroads to Shannon Hill.

The HOD map -59, places us with another 'rural' county, Hanover, with which we do not actually have common interests, in spite of both being rural. Louisa's interests are tied with Fluvanna and Goochland by our common border with I64. It is with Fluvanna and Goochland that we work with our state agencies, most recently in working with the Monacan Tribe on the proposed line to obtain water from the James River.

In closing, I ask you to take another look to see whether there is a way that Louisa can be kept whole on these two state maps, and whether the HOD map can better group our county with those with similar regional concerns.
\begin{tabular}{ll} 
From: & Elizabeth Garrison \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 7:06:30 PM
\end{tabular}


I am a Virginia voter and I am opposed to Gerrymandering

Elizabeth Garrison, BS, CCA
\begin{tabular}{ll} 
From: & Pat Hughes \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 7:09:13 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear all,
I write today concerning the Supreme Court's initial drafts for redistricting. I am concerned that once again, politics is pushing a gerrymandered outcome, especially regarding the Roanoke and New River Valleys, I strongly believe that the districts should be compact.
The map makers are clearly listening to comments and I urge you to make your voice heard. I shared some comments with WFIR this week and plan to provide extended comments to the map makers. I hope you will also share your thoughts with the Supreme Court on the websiteor by email.

Please do not hesitate to contact me for further comment and clarification of my concerns.
With warmest regards, Pat Hughes
\begin{tabular}{ll} 
From: & Bob Smith \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 7:14:54 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Good evening:}

As a long-time resident of the New River Valley, I feel compelled to express my unmitigated displeasure with the way the so-called "non-partisan" group of amateur cartographers has decided to redraw the voting districts here in Southwest Virginia for our House of Delegates. I can only imagine the contortions they had to endure to end up with the convoluted demarcations they created in order to find every single way possible to divide the voters in this part of the Commonwealth.
Frankly, it looks to me like they had no idea what the meaning of the term "compact" means on terms of determining district boundaries! The monstrosity submitted by this group looks more like a work by Jackson Pollock than a map, and I can only say that it would require far less expertise to devise a better and less partisan layout. Perhaps a group of first-graders could be given the opportunity of creating an alternative re-districting proposal.
Got crayons?
Bob Smith
Indian Valley, Virginia
Sent from Yahoo Mail on Android
\begin{tabular}{ll} 
From: & Lana Ruble \\
To: & Redistricting \\
Subject: & plans \\
Date: & Saturday, December 18, 2021 7:19:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
"I'm concerned that the redistricting plans for the Montgomery County area fail to support communities of interest. Having lived near major universities my whole life, I realize that I have a particular interest in higher education and the powerful sense of community these institutions encourage. To separate Blacksburg, Christiansburg, and Radford will undermine the special contributions our communities have made to the state through the years. Please reunite us!"
Jana Ruble
Blacksburg VA
\begin{tabular}{ll} 
From: & Charlesmhess \\
To: & Redistricting \\
Subject: & Map \\
Date: & Friday, December 17, 2021 7:10:32 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ok, this does not pass the idiot test. I live in eastern Spotsylvania County and have no connection or like interest with Loudon County which is more than 50 miles north. It's ludicrous to think we or they would be adequately represented. This needs to go back to the drawing board and be resubmitted.

Charles Hess
9702 Hope Court
Fredericksburg, VA 22407
charlesmhess@aol.com
Sent from the all new AOL app for Android
\begin{tabular}{ll} 
From: & Storck, Dan \\
To: & Redistricting \\
Cc: & Morin, Christine A; Speer, Camela \\
Subject: & 2021 Special Masters Redistricting Proposal \\
Date: & Saturday, December 18, 2021 7:45:28 PM \\
Attachments: & \begin{tabular}{l} 
image005.png \\
\end{tabular} \\
& image006.png
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters:
I am writing to comment on your draft proposed redistricting maps for the Mount Vernon and Lorton areas of Fairfax County
that I currently represent on the Fairfax County Board of Supervisors. Thank you for your efforts to redistrict the Congressional and Legislative Districts in a nonpartisan manner. While "Mount Vernon" is unmentioned in your narrative and Lorton not truly addressed, Mount Vernon and Lorton are long-standing "communities of interest" sharing print media, public transport infrastructure, and institutions such as schools and churches and voters.

While generally your proposed maps did a better job of keeping the Mount Vernon and Lorton communities together, there are several aspects of the proposed maps that are essential to change to adequately keep together these southeastern Fairfax County communities of Mount Vernon and Lorton. On behalf of our communities, I urge you to make these changes:
1. The Mt. Vernon Estate (Westgate Precinct) should be consolidated with the rest of Mt. Vernon in House District16 and moved from House District 19.
2. The proposed maps have isolated the residents of the southern part Fairfax County along U.S. 1 in an island of precincts in House District 17 stuck between Fort Belvoir, Huntley Meadows Park and House District 16. These precincts should be placed in House District 16.
3. The precincts north and west of U.S. 1 after it intersects with North and South Kings Highway near I-495 should be placed with House District 17 and the remaining voters of Fairfax County's Lee District.

Your existing proposals both basically split the Mount Vernon High School Pyramid and Mount Vernon Supervisor District in half. With the limited changes recommended above, you can dramatically improve upon your maps while providing more diverse inclusion, population balance and intact communities of interest.

We urge you to take the above into consideration and respect the long-standing connections and ethnic diversity while understanding the military base (Fort Belvoir) and large natural park area (Huntley Meadows) geographical impact on keeping our communities separate from others and true communities of interest. Thank you.

Respectfully yours in public service,

Supervisor
Mount Vernon District
2511 Parkers Lane
Alexandria, VA 22306
Main: 703-780-7518
www.fairfaxcounty.gov/MountVernon
Introducing Potomac Banks - Explore Fairfax South!


For the latest updates on Coronavirus (COVID-19), visit the County's webpage and subscribe to our newsletter.


Please be advised, unless otherwise requested, that your email address will be added to our Mount Vernon District Advisor (newsletter) distribution list. Additionally, correspondence with Supervisors is subject to the Virginia Freedom of Information Act (FOIA). This means that your correspondence may be made public if someone requests it. Only a few matters are exempt from disclosure, including personnel information about individual employees.
\begin{tabular}{ll} 
From: & Susan Healy \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 8:03:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Supreme Court:
Congressional districts should be compact, and not shifted around by gerrymandering, in order to favor particular political candidates. This is just one more example of political corruption. How about being honest, for a change, and give the voters fair representation?

\section*{Susan Healy}

Henrico.
\begin{tabular}{ll} 
From: & Lo Leary \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 8:14:22 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not include Vinton in District 4 because the interests of that community are closely linked to Roanoke City and Roanoke County, which are in District 3. Vinton has no community connection with Lexington or Staunton on the other end of District 4.

\author{
Joanne Leary \\ Roanoke, VA
}
\begin{tabular}{ll} 
From: & Mike Bowie \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 8:26:03 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please know that I and most of the Roanoke Valley do not approve of the redistricting changes being considered for our area.

Thank you for your consideration.

Michael Bowie
4052 Southmont Dr SW
Roanoke VA 24014
\begin{tabular}{ll} 
From: & Roland Winston \\
To: & Redistricting \\
Subject: & Redistricting Map \\
Date: & Saturday, December 18, 2021 8:28:08 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms. Muriel-Theresa Pitney Clerk of Court Supreme Court of Virginia 100 N. 9th St, 5th Floor Richmond, VA 23219 Dear Ms. Pitney:
By employing strict adherence to modest, traditional redistricting principles, this Court should reject the Special Masters' congressional map—and any aggressive gerrymander.

The Court should utilize the Farkas map.
Thank you,
S R Winston
4th Congressional District
1370 Darbytown Rd,
Richmond, VA 23231
\begin{tabular}{ll} 
From: & Bud Derey \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 8:34:34 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not change the vetoing maps !
They are fine as they are
C W Derey
Roanoke Va
Sent from my iPhone
\begin{tabular}{ll} 
From: & usgss1ffd \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 9:06:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

All Congressional Districts should be balanced between parties. The only swing population should be independents based on prior election voting history.
\begin{tabular}{ll} 
From: & AK \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Saturday, December 18, 2021 9:41:55 PM
\end{tabular}


I oppose the redistricting it isn't keeping Vinton in the Roanoke area and would associate them with the New River Valley. This isn't right and I urge you to stop your push to "fix" something that isn't broken.

Thank you
\begin{tabular}{ll} 
From: & Pat Bernier \\
To: & Redistricting \\
Subject: & VA 2nd district \\
Date: & Saturday, December 18, 2021 9:47:10 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern:
I am very concerned about proposed changes to the District 2 Map.
I feel very strongly that Norfolk and Virginia Beach should be represented by the same representative. Their interests are very co-mingled.

So many residents of these cities are Military - either active duty or retirees. It is important to these military constituents interest's that their representation not be diluted. They should be in the same district.

Their shared coastal location and environmental concerns also demands shared representation.

Please respect the unique needs of the Norfolk / Va Beach area in regards to the effectiveness of their congressional representation.

Do not split up District 2.
Pat Bernier
VA Beach
--
Pat Bernier
\begin{tabular}{ll} 
From: & Diane Flood \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 1:40:36 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This new 7th district ignores the long standing relationships that Stafford holds with the counties surrounding it in the Rappahannock region. Further harm comes from these maps because the new state senate district and new house of delegates districts are designed to nest in to the new congressional districts
. Stafford county should not be attached to northern Virginia simply because I 95 runs through it. Stafford is more than a couple of exits off the high way , and these maps need to reflect that. We must weigh in with the Virginia Supreme Court.
Mike Flood
\begin{tabular}{ll} 
From: & David Wynne \\
To: & Redistricting \\
Subject: & redistricting \\
Date: & Sunday, December 19, 2021 6:15:42 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Court,
I urge you to ignore, best you can, partisan calls. I know it's hard when incumbents are lumped, especially if they are one party and even one gender.
I hope you will ignore past voting.
As best you can, I hope you will design compact districts by population only, that follow historic or natural borders and to the extent possible avoid splitting municipalities. I understand you are required to pay some attention to race.
After that, let the chips fall where they may.
Not an easy task, but they gave it to the right people. .
Thank you for your service.
blessings in season
Dave Wynne
Va Beach
\begin{tabular}{ll} 
From: & Susan Clarke \\
To: & Redistricting \\
Subject: & Redistricting in virginia \\
Date: & Sunday, December 19, 2021 7:18:27 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have been following redistricting for over 50 years. It seems that it became very controversial when we decided to base the maps on race. There was less representation of African Americans 50 years ago but that is no longer the case. I would imagine that most Americans now want a representative who represents their interests and don't care about the color of his/her skin. It's time to get back to basing the maps on communities.
Thanks for taking on this difficult task.
Susan Clarke

Sent from my iPad
\begin{tabular}{ll} 
From: & Gale Lee \\
To: & Redistricting \\
Cc: & gale Lee \\
Subject: & Redistricting - Written Public Comment \\
Date: & Sunday, December 19, 2021 7:29:15 AM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sir and Madame:
Thank you for providing this redistricting response opportunity, to the residents of VA.

I understand the request given to Special Masters Sean P. Trende and Bernard N. Grofman. But, when the map was recreated and the districts compacted, it causes two of our minority senators to compete against each other. Those Senators are Lionell Spruill, Sr. and Louise Lucas.

If this map were accepted it would diminish minority (Black) representation in the Senate and localities by race and gender. Black representation in the Senate presently, four Black Senators. The compacting of this map would reduce representation to three Black Senators and the gender representation might reduced our female representation to two females and even more importantly, possibly eliminate our only Black male Senator - Lionell Spruill, Sr.).

My request is to allow Senator Lionell Spruill, Sr. and Senator Louise Lucas, to retain districts that allow diversity and gender to be represented. This would allow these two Senators, to vie for their seats against other competitors instead of each other.

Respectfully submitted,
Gale A. Lee, Chesapeake, VA resident
\begin{tabular}{ll} 
From: & Maureen Rooks \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 7:48:44 AM \\
&
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Stop the redistricting!! This is clearly being pushed by the Democratic Party to assist in their agenda. STOP IT!!!!
Maureen Rooks
Real Estate Manager, Midwest
Dollar Tree, Inc.
(757) 321-5673 (Direct)
(757) 567-5958 (Cell)

Sent from my iPhone
\begin{tabular}{ll} 
From: & Best Body \& Beauty Co \\
To: & Redistricting \\
Subject: & Redistricting Maps-for New River Valley and Roanoke \\
Date: & Sunday, December 19, 2021 7:52:32 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Do not redistrict our voting districts for Virginia.
Keep these compact !
Concentrate on our upholding our rights as citizens of this fine state to encourage small business as well as big corporations to come back to thrive here.
Pam Best
Best Body Co
\begin{tabular}{ll} 
From: & chapperw@cox.net \\
To: & Redistricting \\
Subject: & New redistricting plan \\
Date: & Sunday, December 19, 2021 8:17:33 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Virginians across the state voted in favor of redistricting reform in the belief that doing so would prevent incumbents from ensuring reelection by drawing their own districts. One of the very best things about the plan put forward by the court appointed experts is that it was done with no regard for impact on current office holders. In that sense, it is absolutely consistent with the will of the voters.

I also like that to the extent possible, district lines conform with those of existing political jurisdictions - cities, towns and counties - that will allow elected representatives to better represent the interests of those communities. No longer does the map feature a district that stretches from the Potomac and the Washington suburbs to the tobacco fields along the North Carolina border.

It is also my understanding that the plan increases the number of districts with majority minority populations when all minorities are considered.

It should be approved without additional change.

Ronnie Chappell
101 Elizabeth Meriwether
Williamsburg VA 23185
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ dancer0504 } \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 8:18:43 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I vehemently disagree with the Battlefield District of Spotsylvania county being included with the more rural district 25 . Our issues would not be served at all. The Battlefield District is a suburb of FREDERICKSBURG District 27, and share similar interests, issues, growth patterns. Please change this map.

Kori Joseph
Sent from my iPhone
\begin{tabular}{ll} 
From: & Cynthia Hill \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 8:21:37 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please add Williamsburg back into the 69th and remove the portion of Giloucester.
Cynthia Hill
Resident of Williamsburg, VA
\begin{tabular}{ll} 
From: & Mike Nickelsburg \\
To: & Redistricting \\
Subject: & District 2 \\
Date: & Sunday, December 19, 2021 9:50:47 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I respectfully request you take another look at the way District 2 was split in the proposed redistricting plan. The military, its supporting contractors, and military retirees are a vital part of the economy of this area and the Commonwealth. Splitting Norfolk apart from Virginia Beach will dilute the impact of our representative in Congress.
Thank you for your consideration.
Michael Nickelsburg, Capt. USN, retired
Virginia Beach, VA

Sent from my iPad
\begin{tabular}{ll} 
From: & Linda Piersawl \\
To: & Redistricting \\
Subject: & Redistributing \\
Date: & Sunday, December 19, 2021 9:54:46 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Special Masters should adjust their initial district lines to more closely represent the Black communities of interest in each region as reflected in the Virginia NAACP-proposed maps.

Thanks,
Linda Piersawl
\begin{tabular}{ll} 
From: & mike strother \\
To: & Redistricting \\
Date: & Sunday, December 19, 2021 9:55:41 AM
\end{tabular}


Hi My name is Mike Strother. I urge the proposed map be redrawn. District 7 is fine the way it is. This makes no sense to serve farther north. I urge u to let us stay together.

Phil Miskovic
Town Manager
Brian S. Thrower

Police Chief
Alfredo Ferrer

Town Attorney
Eric A. Gregory

Council William "Billy" Abel

Wendy Bowen Sean Davis
Jessica Faas
Aaron Reed
Anne Stinson
Susan "Sue" Yeatts

125 East Carolina Ave. Crewe, VA 23930 (434) 645-9453 Office (434) 645-1240 Fax
E-mail: info@townofcrewe.com
Website: townofcrewe.com
December 17, 2021

To the Honorable Chief Justice and Justices of the Supreme Court of Virginia:
I am writing to express concerns that Crewe Town Council and I have over the proposed House of Delegates redistricting map submitted to the Court by the Special Masters. The proposal would move Nottoway County from the current \(61^{\text {st }}\) district composed of Amelia, Cumberland, Mecklenburg, Nottoway, and part of Lunenburg Counties into the new \(72^{\text {nd }}\) district composed of Amelia, Nottoway, Powhatan, and part of Chesterfield Counties.

Our concerns are:
1. The proposed change does not adequately address the Communities of Interest requirement with regard to Nottoway County, specifically as it relates to economic and demographic factors; and
2. The proposed change could adversely impact any influence Nottoway County voters have in state house races and divide our representative's attention to the detriment of Nottoway.

To the first point, though Nottoway, Powhatan, and Amelia Counties are all considered "rural", Nottoway differs from the latter two economically and demographically. Nottoway (along with Cumberland, Mecklenburg, and Lunenburg) are considered "nonmetro" counties by the USDA, a designation which takes into consideration the economic influence of major population centers \({ }^{1}\). Counties within a major metropolitan area like Amelia, Powhatan, and Chesterfield face different needs and challenges, and have different levels of access to resources than those in non-metro areas.

Additionally, data show a significant disparity in income when comparing Nottoway County residents to our current \(61^{\text {st }}\) district and Nottoway County to the proposed \(72^{\text {nd }}\) district. Using Median Household Income (MHI) as a metric, Table 1 illustrates these disparities by comparing Nottoway County's data to that in each of the counties in the proposed and current districts. Given Nottoway County's MHI of \(\$ 45,900\), Chesterfield County's MHI is nearly \(78 \%\) over that of Nottoway, and Powhatan's is more than double at \(\$ 94,300\). \({ }^{2}\)

\footnotetext{
\({ }^{1}\) https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx
\({ }^{2}\) https://www.countyhealthrankings.org/app/virginia/2021/measure/factors/63/data
}


Figure 1: Current 61 \({ }^{\text {st }}\) district
Source: https://whosmy.virginiageneralassembly.gov/index.php/legislator?search=23930\#


Figure 2: Proposed new 72 \({ }^{\text {nd }}\) district
Source: https://www.vacourts.gov/courts/scv/districting/scv_draft_1_hod_maps.pdf

Table 1: Median Household Income
\begin{tabular}{|c|c|c|c|}
\hline Nottoway & \multicolumn{3}{|l|}{\$45,900} \\
\hline \multicolumn{4}{|c|}{Proposed 72 \({ }^{\text {nd }}\) District} \\
\hline County & Median Household Income & Difference & \% \\
\hline Amelia & \$60,100 & \$14,200 & +30.9\% \\
\hline Powhatan & \$94,300 & \$48,400 & +105.4\% \\
\hline Chesterfield & \$81,600 & \$35,700 & +77.8\% \\
\hline \multicolumn{4}{|c|}{Current 61 \({ }^{\text {st }}\) District} \\
\hline County & Median Household Income & Difference & \% \\
\hline Amelia & \$60,100 & \$14,200 & +30.9\% \\
\hline Cumberland & \$52,000 & \$6,100 & +13.3\% \\
\hline Lunenburg & \$44,900 & -\$1,000 & -2.2\% \\
\hline Mecklenburg & \$43,100 & -\$2,800 & -6.1\% \\
\hline
\end{tabular}

Economic factors are not our only concern regarding Communities of Interest. According to the memo from the Special Masters, the White, Black, and Hispanic racial makeup of the proposed new \(72^{\text {nd }}\) district is as follows: Non-Hispanic White, \(77.78 \%\); Black, \(18.21 \%\); Hispanic, \(1.77 \%\). Table 2 shows an estimated racial makeup of our current \(61^{\text {st }}\) district and Nottoway County based on 2019 and 2020 data. Nottoway County has a diverse, heterogenous population. To move Nottoway into a district where nearly fourfifths of the population are white could disenfranchise the minority voting population.

Table 2: Racial Makeup of Districts and Nottoway
\begin{tabular}{|l|c|c|c|}
\hline & Proposed 72 \({ }^{\text {nd }}\) District & Current 61 \({ }^{\text {st }}\) District & Nottoway County \\
\hline Non-Hispanic White & \(77.78 \%\) & \(62 \%\) & \(55 \%\) \\
\hline Black & \(18.21 \%\) & \(32 \%\) & \(37 \%\) \\
\hline Hispanic & \(1.77 \%\) & \(3.6 \%\) & \(4.9 \%\) \\
\hline
\end{tabular}

Finally, we believe the proposed change could adversely impact any influence Nottoway County voters have in state house races and divide our representative's attention to the detriment of Nottoway. As a non-metro area, Nottoway County faces different challenges than others in the proposed new \(72^{\text {nd }}\) district. We need significant attention within the General Assembly in order to address our complex challenges. But given the estimated population of the new proposed \(72^{\text {nd }}\) district at 88,033 and Nottoway County's population at under 15,000 , Nottoway would account for less than \(17 \%\) of the \(72^{\text {nd }}\) district's population. This, along with the income and racial disparities, creates a district divided by community interests and needs, with Nottoway County in the extreme minority. Our political influence would be lessened, and it is likely our challenges-those of the minority - are set aside in order to address the needs of the majority of the district.

In conclusion, we strongly encourage the Court to reconsider the proposed House of Delegates map and take into consideration additional factors related to Communities of Interest, including economics and demographics; and to consider the impact the proposed change will have on each locality.

Thank you for your service to the people of the Commonwealth of Virginia.

\begin{tabular}{ll} 
From: & Melissa M Dart \\
To: & Redistricting \\
Subject: & Proposed Map Feedback \\
Date: & Sunday, December 19, 2021 10:56:51 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Chief Justice and Justices,

My name is Melissa Dart and l've lived in Henrico County for 25 years in the \(7^{\text {th }} \mathrm{CD}\) for 15 . I understand that new maps are a necessity coming out of the Census. I do not understand how or why a conservative, serious and an august body such as the Virginia Supreme Court would even consider maps such as these that effectively blow up the \(7^{\text {th }}\) Congressional District as it currently exists. By so doing you would be separating Henrico and Chesterfield, two massive suburban communities of interest. In some cases you would completely minimize if not destroy voices of people of color as well as centrist and independent voters. Black voters from the \(7^{\text {th }}\) are being packed into the \(4^{\text {th }} \mathrm{CD}\) which effectively dilutes their representation. It reeks of redlining. I appreciate the work and experience of the Special Masters. That said, they are not from Virginia so cannot understand that the James River makes no sense as a district dividing line. With the transportation infrastructure (288/Chippenham pkwy) Henrico and Chesterfield are effectively one community sharing economic, social and cultural ties. We work hard together as one region. Lumping me in Short Pump with Zions Crossing/Williamsburg and the Northern Neck is illogical in terms of demography and geography. That said at the end of the day this is not about me or my family. No matter who represents us in local/state/federal government we are in a great position of privilege. I'm here today to give voice to the rural voters, people of color. They do not have the time or resources to learn about these proposed maps. Those are constituents in the \(7^{\text {th }}\) who are currently actively represented; their needs being met. They have the most to lose in these new districts. We cannot rest until they are taken care of.

Based on the masters' memorandum, the \(7^{\text {th }}\) appears to have been
drawn last. The way it was drawn and quartered, it looks like an afterthought where pieces were just thrown anywhere there was a spot. This strategy disenfranchises an enormous voting block. Is there another current district on these maps that is obliterated the way the \(7^{\text {th }}\) is? There couldn't be less of a connection between Richmond and Tidewater. No matter how it might appear on a map it makes no other practical sense if you are in any way familiar with either area.

I would be remiss if I didn't mention that of the 11 congressional districts in the Commonwealth, 3 seats are currently held by women. These proposed maps just so happen to weaken the 3 incumbent women and bolster the 8 men. Gender was not considered explicitly. That said I'm not a believer in coincidences and I cannot help but think as far as we've come in almost 2022, misogyny is still baked in the cake. There must be a way to draw fair maps that does not dilute the women or the voters of central Virginia.

The maps under consideration are not only inviting local scrutiny and criticism but are attracting national attention from voter rights advocates. Virginia has been a bastion of fairness and good representation for a long time. None of us want this type of attention. The good news about this attention is that the Elias Group took notice and created what are now known as the "Farkas maps". I would encourage you to seriously considering adopting these maps as they check all of the boxes on the list of criteria for fair, non-partisan maps.

Thank you, Chief Justice \& Justices, for your time and consideration. I pray that the voices you hear this week are listened to and make a difference.

Regards, Melissa M Dart
```

From: Sara Johnson-Ward
To: Redistricting
Subject: Fwd: Testimony from 12/17
Date: Sunday, December 19, 2021 11:19:47 AM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
Below is the written testimony that I gave today before the Court. Thank you again for the opportunity to share my concerns with the current maps.

Good afternoon Chief Justice, Justices, Special Masters and Clerk of the Court,

My name is Sara Johnson-Ward and I live in the Roseland Precinct 517 in Chesterfield County. I am a lifelong Virginian.

Continuity of government is important for a stable, functioning society, but lifelong incumbency is not necessary to achieve this. Imagine my surprise to find that I, in the Richmond Metro area, have been redistricted into the \(5^{\text {th }}\) that borders the county where I grew up and is three hours from here! I am sure the Special Masters have noted that the Piedmont region is the largest region in Virginia and is very diverse. The new \(5^{\text {th }}\) includes Amherst - an agricultural community; South Boston known for growing tobacco; Charlottesville home of one of Virginia's founding fathers and recently renowned for the Unite the Right Rally; and Pittsylvania County where the show "Tickle" is filmed for the Discovery Channel. In my Midlothian neighborhood, my neighbors are employed by Capitol One, MCV, CarMax, Dominion, DuPont, the State of Virginia, Chesterfield County, and various local nonprofit cultural organizations. None of them grow tobacco, make moonshine, or farm. Pittsylvania County has more in common with Franklin County than the suburbs of Richmond and Mr. Tickle deserves fair representation too.

Princeton has rated the partisan fairness of the Congressional Maps A, Senate Maps B, and House maps A. They have rated the Competitiveness of the Congressional maps C, Senate Maps F, and House maps B. Finally, they have rated the Geographic features C for all maps. I and other members of Precinct 504 in Chesterfield concur with these ratings for our new districts. They will be submitting comments in writing. The districts are not competitive or compact. For example, House district 72 now has an odd finger that dips below Midlothian Turnpike and divides the neighborhood Walton Park in half. This was the exact issue that I had hoped would be fixed moving forward so that voters voices matter to those seeking office. None of the districts that I am now assigned to will be competitive, not Congressional District

5, Senate District 12 or House District 73. They are all 10-point districts. It is my belief that Virginians want fair, competitive seats where representatives must listen to their constituents no matter which party affiliation they share.

Additionally, I am concerned that 50 percent of the General Assembly will turnover in 2 years. Businesses reorganize often, but a business ridding itself of \(50 \%\) of its staff in 2 years is rare. Although I am not a fan of multi decade incumbency, I am worried that this much change at once will cost institutional memory and create instability. Finally, the minority population in Virginia grew over the last 10 years but this map reduces the number of minority held seats.

I have spent time reviewing the Farkas Map. Care and time were taken with it to solve many of these issues and comply with the law. I ask this court to consider the Farkas Map as an alternate solution because the map is fair, competitive, geographically compact, and preserves minority and female leadership.

Good luck in this endeavor and thank you for the opportunity to speak with you today.

Sincerely,
Sara Johnson-Ward
\begin{tabular}{ll} 
From: & Frank \& Debbie Ray \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 11:37:25 AM
\end{tabular}


Please keep communities of interest together. Vinton should not be in the same district as Staunton.

Southwest Virginia is not even represented on this commission. We are very disappointed in this process.

Frank Ray and Deborah Ray
\begin{tabular}{ll} 
From: & Theodore Kramer \\
To: & Redistricting \\
Subject: & Special Masters Plan \\
Date: & Sunday, December 19, 2021 12:06:25 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Dear Virginia Supreme Court:

I believe the Special Masters did great representing communities of interest in Arlington while keeping our representation compact. Keeping communities of interest together such as the R-B Corridor, Halls Hill, and Green Valley will keep our diverse community strong and represented. In addition, including Falls Church City along with Arlington also makes sense given we already share our judicial functions and several constitutional officers. Both the House and Senate maps accomplish this goal.

In conclusion, I urge the Supreme Court to adopt without change the proposed House and Senate maps that respect the unique and individual communities of interest in Arlington and Falls Church.

Respectfully, Theodore Kramer
Arlington
\begin{tabular}{ll} 
From: & pdfishback@comcast.net \\
To: & Redistricting \\
Subject: & Changes \\
Date: & Sunday, December 19, 2021 12:08:00 PM
\end{tabular}

\author{
EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Please keep Abigail Spanberger's district as it is.
Patricia D. Fishback, Ph.D.
\begin{tabular}{ll} 
From: & Lackie Kramer \\
To: & Redistricting \\
Subject: & Special Masters Plan \\
Date: & Sunday, December 19, 2021 12:09:40 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Supreme Court:
I believe the Special Masters did great representing communities of interest in Arlington while keeping our representation compact. Keeping communities of interest together such as the R-B Corridor, Halls Hill, and Green Valley will keep our diverse community strong and represented. In addition, including Falls Church City along with Arlington also makes sense given we already share our judicial functions and several constitutional officers. Both the House and Senate maps accomplish this goal.

In conclusion, I urge the Supreme Court to adopt without change the proposed House and Senate maps that respect the unique and individual communities of interest in Arlington and Falls Church.

Respectfully,
Jackie Kramer
Arlington
\begin{tabular}{ll} 
From: & Elizabeth Davis \\
To: & Redistricting \\
Subject: & Williamsburg VA \\
Date: & Sunday, December 19, 2021 12:13:07 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear map masters,
Please put Williamsburg back in the 69th district where it belongs. And remove Gloucester from the 69th district.
Gloucester is on the Middle Peninsula and belongs to that county. Williamsburg shares a multitude of services and schools with James City County and should remain together. Also, Williamsburg is part of the historic triangle and is connected to the Hampton Roads communities.
The map seems very partisan and it is sad that Virginia can't be above that and care about everyones vote.
Elizabeth Davis
\begin{tabular}{ll} 
From: & Lois Willis \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 12:27:07 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I live in Nellysford and see that the new map has our area included into Albemarle County and Charlottesvile. We have not much in common on any level with that population.
Our voices will NOT be heard in this new map area!!!
Please put us with the rural folks.
Lois P Willid
\begin{tabular}{ll} 
From: & Ken Shandelson \\
To: & Redistricting \\
Subject: & Odd drawing for District 2 \\
Date: & Sunday, December 19, 2021 12:32:10 PM
\end{tabular}


What an odd shape you drew for D2. Every other district in the state seems to coalesce around one area while D2 just goes on and on. It appears you drew all the others and what was left went to D2. It also appears that you targeted Elaine Luria for defeat.

Please reconsider.
Ken Shandelson
2008 Starboard Ct, Virginia Beach, VA 23454
\begin{tabular}{ll} 
From: & \(\frac{\text { Mary Player }}{\text { To: }}\) \\
\begin{tabular}{ll} 
Subject: & Redistricting \\
Date: & Redistricting \\
& Sunday, December 19, 2021 12:57:32 PM
\end{tabular}
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

We need better way to represent the minority population. Diluting black vote will not accomplish this so keep this in mind when you are drawing the lines.

Sent from my iPhone
\begin{tabular}{ll} 
From: & Owings, William A. \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 1:04:27 PM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS \\ Dear Folks,}

Thank you for the opportunity to comment on our reactions to the redistricting plan to date. In my opinion, redistricting should include the following components:
1. It should protect geographic cohesion. Communities should be kept together as much as possible.
2. This geographic cohesion should be balanced with some incumbent protection - especially to ensure minority representation. Elaine Luria should not have to compete with Bobby Scott for a seat. Politics, as seen clearly in this example, while inevitable, should not be that blatant.

Again, the opportunity to share input is appreciated.

Dr. William Owings
Distinguished Fellow, National Education Finance Academy
Professor of Educational Leadership
Old Dominion University
Norfolk, Virginia 23529
757.683.4954 (work)
757.749.4440 (cell)

While the early bird may get the worm, the second mouse gets the cheese.

Department Website: http://www.odu.edu/efl
\begin{tabular}{ll} 
From: & slades123@aol.com \\
To: & Redistricting \\
Subject: & Proposed Redistricting Map \\
Date: & Sunday, December 19, 2021 1:08:37 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am opposed to the proposed map as drawn by the Special Masters. It divides our community of interest (Chesterfield and Henrico) and makes the re-election of the three incumbent Congresswomen nearly impossible. Please ask the Court to instruct the Special Masters to adopt the Farkas map.

Respectfully submitted,
Eileen Slade
5311 Chestnut Bluff Terrace
Midlothian, Virginia 23112
804-245-5474
Sent from the all new AOL app for iOS
\begin{tabular}{ll} 
From: & David Tiller \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 1:26:32 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Vinton is in the Roanoke Valley and should be represented with the area.
In northern Virginia rural areas should be separate from urban and suburban areas. Rural areas' needs are vastly different from urban/suburban areas and need their own representation.

All Virginians deserve to be represented in a manner that serves their distinct needs and those needs should be equally represented.

Thank you for the opportunity to comment. Thank you for your service to the Commonwealth.

\section*{David Tiller}
--
"Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind."--- Dr. Seuss.
\begin{tabular}{ll} 
From: & Winstead, Barbara A. \\
To: & Redistricting \\
Subject: & redistricting \\
Date: & Sunday, December 19, 2021 1:44:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a citizen of Norfolk, VA, I object to the proposed redistricting map. Norfolk and Virginia Beach share critical concerns: veteran's issues, military spending, sea level rise, and others. We should share congressional representation.

Barbara A. Winstead, PhD
\begin{tabular}{ll} 
From: & Elizabeth Balcar \\
To: & Redistricting \\
Subject: & Comment on Redistricting maps \\
Date: & Sunday, December 19, 2021 1:45:35 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear All,
The maps drawn by the Special Masters are passing muster with the Princeton Gerrymandering Project. However, if a line has been drawn the cuts a representative out his/her largely intact district, then I support, redrawing the line to include the representative's abode - BUT only if the district is largely intact. Yours truly,
El i zabeth Bal car
1304 Woodhurst Drive
Virginia Beach, Virginia 23454
757-306-9740
\begin{tabular}{ll} 
From: & Thomas Dawson \\
To: & Redistricting \\
Subject: & Current redistricting plan drawing up by VA Supreme Court \\
Date: & Sunday, December 19, 2021 2:00:32 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Current redistricting law's intent was to eliminate politics from redistricting in VA.
I can understand why the current law's bipartisan committee failed because the is no provisions within the committee for impartial arbitration.
Even though the current VA. Supreme Court plan earns high grades, it does not meet the intent of the law which the VA Supreme Court is most qualified to accomplish.
The plan does the following:
1. removes Incumbent Representative Elaine G. Luria from the district that she represents.
2. Puts Lucas and Spruill in same district which dilutes experienced political representation within Tidewater.
3. Limits representation for minorities and women.

The current proposed plan does not meet the intent of the law and no one id happy. At least under the old system one party was happy.

I request that we put some human input into plan.
Thank you,
Tom Dawson
125 Brittany Lane
Suffolk, VA 23435
\begin{tabular}{ll} 
From: & icervera60@aol.com \\
To: & Redistricting \\
Subject: & Virginia Redistricting \\
Date: & Sunday, December 19, 2021 2:13:35 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

James A. Cervera

1797 Grey Friars Chase Virginia Beach, Virginia 23456
Redistricting Map of 2nd Congressional District
JCervera60@aol.com
757-621-6754

Comment:
Please accept my comments to the proposed redistricting map of the Second Congressional District. I submit my comments as a long time resident of Virginia Beach, a forty-two year public servant and a staunch Independent voting citizen. I do find a major flaw with the new redistricting proposal for the 2nd Congressional District. I believe the proposal, while attempting to maintain cohesion in some cities, has done so at the expense of splitting the "Communities of Interest " of Virginia Beach and Norfolk.

Through the new proposal we will weaken the economic, social, environmental, and military cohesion of Virginia Beach and Norfolk through separate representation in our nation's capital. There is absolutely no question that residents of Virginia Beach work, visit, shop, attend cultural events and attend institutions of higher learning in Norfolk. The same is also true of the residents of Norfolk who flock to Virginia Beach for the same myriad reasons. The economic, educational and social viability of both cities are dependent upon a single representative who understands the interoperability of the two cities into one regional effort. This has worked to the citizens advantage for a number of years and has proven that the region is an successful example for many parts of the country to copy.

There is absolutely no questioning the strategic importance of the military presence in both of our cities and the need to maintain a strong system to support their operational viability. The fact that Norfolk is home to the largest naval fleet and aircraft carriers in the free world (something I am proud to distinguish every time I speak publicly throughout the United states) and the aircraft, amphibious fleet and other warfare units are housed in Virginia Beach, is the logical reason to keep the continuity of our area under one Congressional District.

I remain hopeful that you will have a deeper understanding of the overarching need to maintain a seamless congressional influence between our cities, as the only distinguishing difference between Norfolk and Virginia Beach is a dividing line drawn on a map many decades ago.

Respectfully, James A. Cervera
\begin{tabular}{ll} 
From: & Lanet Graham \\
To: & Redistricting \\
Subject: & Proposed Redistricting Boundaries \\
Date: & Sunday, December 19, 2021 2:38:30 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a five-year resident of James City County, I strenuously object to the proposed redistricting boundaries for House of Delegates Districts 69 and 71. It is ludicrous, in my opinion, to artificially separate the City of Williamsburg from the rest of Hampton Roads. This action ignores the transportation, tourism, economic, cultural, and historical ties that Williamsburg has long had with the rest of Hampton Roads and appears to be a blatant act of gerrymandering for purely partisan reasons. The Historic Triangle of Yorktown, Williamsburg, and Jamestown is important to all of the entities involved and should be honored in our representation in the House of Delegates. Furthermore, adding a small PART of Gloucester to the 71st District-by crossing the York River, a natural boundary that separates two very different areas-defies all logic and common sense. Please add Williamsburg back into the 69th District and remove the portion of Gloucester from the 71st.
\begin{tabular}{ll} 
From: & Carol Miller \\
To: & Redistricting \\
Subject: & Redistricting maps - comments \\
Date: & Sunday, December 19, 2021 2:39:09 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am a constituent in the current 2nd congressional district, \& am NOT in favor of the changes made by the masters.

The waterfront areas in Norfolk \& Virginia Beach should be represented TOGETHER due specifically to their shared environmental concerns. Sea level rising should have a coordinated plan, with a shared representative spearheading this joint effort.

In addition, both Norfolk \& Virginia Beach have military bases \& should have the same person representing their concerns, not split representation. The military is essential to Hampton Roads as a whole. Don't split us up.

Carol Miller
2829 Wood Duck Dr , 23456

Sent from my iPad
\begin{tabular}{ll} 
From: & rhagen12@verizon.net \\
To: & Redistricting \\
Subject: & Incumbents and Maps \\
Date: & Sunday, December 19, 2021 2:55:49 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I would like to thank the Supreme Court justices, the court staff, the Special Masters and the many Citizens who gave testimony at the 2 public hearings. I was extremely impressed with the coherent and well researched presentations of the Citizens.

I would like to add my voice to the discussion of Incumbents. There were several presenters who wanted their current Legislators included in their district. In the Sunday Virginian Pilot the Editorial Staff also wanted maps redrawn to include Incumbents. I have volunteered with OneVirginia2021 for 5 years and every time Legislators discussed maps the number one issue was where the Incumbents live. I should add that my current Representative, who I campaigned for, will not be in my district based on the current maps. I believe she can still run in the district, but it is a real handy cap. I do not want the map redrawn with the sole purpose of putting her in my district.

I believe the Special Masters got it right when they said in their support document that they only knew where one Legislator lived. I would ask that Legislator addressed NOT be considered. I also assume that the Justices will not consider the party that elected them to their position. Our country is in dire need of people who are non partisan.

This entire process has proven that partisan Legislators should have no place in drawing district maps. We need to try to get a Nonpartisan commission to draw the maps in 2031.

Thanks again for all the hard work. I am looking forward to seeing the final product.
Happy Holiday's
Richard Hagen
Virginia Beach
\begin{tabular}{ll} 
From: & Will Pace \\
To: & Redistricting \\
Subject: & Please add the Town of Hurt to House District 48, while Leaving Senate District 9 and the Fifth Congressional \\
& District Alone \\
Date: & Sunday, December 19, 2021 3:11:06 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Madam Clerk,
My name is Will Pace. I am a resident of Pittsylvania County and the Mayor of Chatham. I spoke before the Virginia Supreme Court on December 17 to share my thoughts on the districts that Dr. Grofman and Mr. Trende (the Mapmakers) developed, specifically where I reside. Below are the written remarks of what I said on December 17.

\section*{House District 48}

Overall, House District 48 is a decent House district. It keeps Chatham, Gretna, and Martinsville communities of interest intact. It is very important to keep Chatham, Gretna, and Martinsville's Communities of Interest intact, so please do not make any changes to the western, southern and eastern boundaries of House District 48. I say this also because the Mapmakers kept Danville's communities of interest intact within House District 49.

However, as mentioned during the Supreme Court public hearing on December 15 by Hurt Mayor Gary Hodnett, the town of Hurt and its communities of interest are not intact as the town of Hurt is in House District 51 (Campbell County and southern Bedford County), not in House District 48 with the rest of Pittsylvania County. The towns of Chatham, Gretna, and Hurt should be in the same House district.

The town of Hurt is located on the northern tip of Pittsylvania County within the Hurt precinct. Hurt's communities of interest include Motley, Renan, and Sycamore. These communities are in House District 48, unlike Hurt. Hurt shares many similarities and interests with the rest of Pittsylvania County such as the Staunton River Regional Industrial Facility Authority, which was established to improve the economic base of Hurt by developing the Southern Virginia Multimodal Park in Hurt. No locality in House District 51 has a partnership with this and by adding Hurt in a House District with Campbell County may jeopardize and/or create obstacles to accomplish the final touches to this industrial park.

There is a way to resolve this. I understand that Dr. Grofman and Mr. Trende used a 2.5\% deviation, but as they stated in their memo, the deviation can go as high as 5\% (the Redistricting Commission drew maps that had a 5\% deviation). According to the proposed House district maps developed, House District 48 has a deviation of \(-2.17 \%\) while House District 51 has a deviation of \(-0.61 \%\). By adding the Hurt precinct into House District 48 and not touching any other parts of this district, the deviation becomes \(1.64 \%\). Removing the Hurt precinct from House District 51 and not touching any other parts of this district, the deviation becomes \(-4.42 \%\), outside the \(2.5 \%\) deviation set by the mapmakers, but within the statutory required \(5 \%\) deviation. It is possible to add the Hurt precinct into the House District 48 and out of House District 51 without deviating outside of the required \(5 \%\) deviation. I hope that you will add the Hurt precinct into House District 48 without making any other changes to House

\section*{District 48.}

\section*{Senate District 9}

Please leave Senate District 9 as it is a good Senate district that keeps much of Southside Virginia's localities.

\section*{Fifth Congressional District}

The Fifth Congressional District is not perfect, but it is decent and compact. While there are some things that I personally don't like about how the Fifth District looks (such as how Bedford County was split within this district), time is not on our side and these Congressional Districts need to be approved very soon. Remember that Party Primary filings begin in March. Furthermore, every Congressional District in Virginia must have a population of 784,672, while the Mapmakers used a deviation of \(0.25 \%\). Nevertheless, this is a very low deviation compared to General Assembly Districts.

I would like to direct the Mapmakers to look at the recent historical boundaries of the Fifth Congressional District and you will see that recent history is on your side. For example, in the 1990s, Albemarle County was split between two Congressional Districts. During the 1970s, portions of Chesterfield County were in the Fifth Congressional District. What Dr. Grofman and Mr. Trende drew for the Fifth Congressional District is not out of the ordinary by any means.

The bottom line is that if you make any changes to the Congressional Districts with such low deviation, you will open up to new and more criticism. As such, leave the Fifth Congressional District as is.

\section*{Conclusion}

While I support how Senate District 9 and the Fifth Congressional District are drawn, I hope that you will consider adding the Hurt precinct into House District 48 without making any other changes to this district as this can be done under \(5 \%\) deviation. Thank you very much.

Sincerely,

Will Pace
Mayor of Chatham
\begin{tabular}{ll} 
From: & Lacob Levy \\
To: & Redistricting \\
Subject: & Re: 2nd and 3rd CD Redistricting: Constituent Input \\
Date: & Sunday, December 19, 2021 3:25:32 PM \\
Attachments: & Screen Shot 2021-12-19 at 15.24.12.png
\end{tabular}

Hi Sharon,
Thank you for ensuring that the public comment video testimony went so smoothly this week!
If there is any way the below screenshot I could submit the attached screenshot as public comment into the record, in accordance with the changes I described in my testimony, I would really appreciate it.

Thank you for your time, Jacob Levy


On Wed, Dec 15, 2021 at 2:57 PM Jacob Levy <jml437@georgetown.edu> wrote:
Thank you!
On Wed, Dec 15, 2021 at 2:07 PM Redistricting <Redistricting@vacourts.gov> wrote:
Confirmed. You will receive a meeting link tomorrow.

Sharon L. Abernathy
Supreme Court of Virginia
100 North 9th Street

Richmond, VA 23219

From: Jacob Levy <jml437@georgetown.edu>
Sent: Wednesday, December 15, 2021 2:02 PM
To: Redistricting <Redistricting@vacourts.gov>
Subject: Re: 2nd and 3rd CD Redistricting: Constituent Input

Hi Sharon,

Thank you for your response.

Could I please speak at the public hearing on Friday the 17th?

Email: JML437@georegtown.edu
Phone: 757-477-2212
Residence: Virginia Beach

Please let me know if there is anything else I can provide to speak on Friday!

Thank you,
Jacob Levy

On Thu, Dec 9, 2021 at 2:22 PM Redistricting < Redistricting@vacourts.gov> wrote:
Dear Mr. Levy,

Via this email account, you may submit written comments or you may request an opportunity to present virtual live comments to the Court on either December 15 or 17.

If you would like to present live, please let me know which day (12/15 or 12/17), and also provide me with the following information:

Email address to which the webex link should be sent;
Cell phone number (or number where you can be reached on the day of the hearing); and

Area of the Commonwealth where you reside

If you would like to provide written comments only, for posting on the public comments page, those can be submitted to me and I will have them posted.

If you need any other information, please let me know.

Best regards,

Sharon

Sharon L. Abernathy
Supreme Court of Virginia
100 North 9th Street
Richmond, VA 23219
(804) 786-5754

From: Jacob Levy <jml437@georgetown.edu>
Sent: Thursday, December 09, 2021 2:12 PM
To: Redistricting < Redistricting@vacourts.gov>
Subject: Re: 2nd and 3rd CD Redistricting: Constituent Input


Hello,

Following up to my prior email, I believe I may have misunderstood the process. If this email account is simply to register to voice suggestions on the redistricting process, I would like to write simply just to request an opportunity to voice comments in the December 17th hearing on the maps.

Thank you,
Jacob Levy

The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
P.O. Box 1315

100 N. Ninth Street
Richmond, VA 23219-1315

\section*{Re: Requested Minor Correction to Boundary of House of Delegates District 96/ House of Delegates District 98 at Elbow Road and Indian River Road}

Dear Ms. Pitney,
Pursuant to Rule 4a of the rules and procedures for implementing the requirements of article II section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions requesting a minor correction to the boundary between House of Delegates District 96 and House of Delegates District 98.

I am a retired lawyer and a 30 year resident of the City of Virginia Beach. I write to request that the Hillcrest Farms neighborhood be included in proposed House of Delegates District 96, not House of Delegates District 98, for three reasons.

First, the proposed district line between draft HD 96 and draft HD 98 runs from the southeast corner of Stumpy Lake along the present alignment of the oddly configured intersection of four roads: Indian River Road (Route 603) headed west, Elbow Road headed south and then southwest, and Elbow Road headed northeast, which immediately again crosses Indian River Road (Route 603), now headed south along the Hillcrest Farms neighborhood. (See maps 1,2, and 3 .)

This is the current version of several realignments of this disjointed intersection, none of which successfully resolved the confusion caused by an odd historical configuration, with multiple repeating/conflicting road names in an extremely small area around the southeast corner of Stumpy Lake.

To solve this problem, the City of Virginia Beach has imminent plans to realign Elbow Road in the immediate area that the Special Masters have tentatively designated as the dividing line between draft HD 96 and draft HD 98. (See map 4). The new alignment of Elbow Road will run directly through the Hillcrest Farms neighborhood, then intersect with Indian River Road (Route 603) to the south of the present alignment of the confusing four road intersection described above. The Hillcrest Farms Homeowners' Association has already conveyed the land to the City, so this road project should start very soon.

Given these imminent changes to the alignment of Elbow Road, it makes sense to include the Hillcrest Farms neighborhood in HD 96 rather than HD 98. The dividing line between the two districts is Elbow Road, which will soon run directly through the Hillcrest Farms neighborhood. Obviously, the entire Hillcrest Farms neighborhood, and arguably the entire Hillcrest precinct (VB precinct number 87) should be included in HD 96 as a key community of interest. This correction will avoid further compounding any confusion in voting locations or House of Delegates representation that these pending road changes in this small but complicated area will otherwise inevitably cause.

Second, the suburban character of the Hillcrest Farms neighborhood further argues for its inclusion in HD 96. Most of draft HD 98 beyond this proposed far northwest corner is quite dissimilar to suburban Hillcrest Farms. Draft HD 98 is centered around the large rural/farmland area of Pungo and the beach area along the Sandbridge strip, culminating in the uninhabited

Back Bay National Wildlife Refuge and False Cape State Park. In contrast, most of draft HD 96 is exclusively suburban in character like the Hillcrest Farms neighborhood and precinct. These compact, contiguous, similar suburban communities of interest should be included together in House of Delegates District 96.

Third, the current incumbent in HD 21 (the forerunner district to draft HD 96) has significant ties to the Filipino community in current HD 21/future draft HD 96 and throughout the City of Virginia Beach. Historically, both Republican and Democratic Delegates in this House of Delegates District have ably represented the local Filipino community, the largest Filipino community in the United States. These capable Filipino-American Delegates have done so in a bipartisan fashion, without any regard to party affiliation. They continue to work in concert to advance this beloved local community. It would be a shame to deprive the large, vibrant, cohesive and important Filipino community of Virginia Beach of its chosen representative, who lives less than a mile from Elbow Road in the Hillcrest Farms neighborhood, because of a simple, easily correctable mapping fluke understandably but incorrectly based on the current, soon-to-be changed alignment of the various intersections now labeled Indian River Road and Elbow Road.

For these reasons, I respectfully request that the Hillcrest neighborhood (and perhaps the entire Hillcrest precinct) be included in House of Delegates District 96.

Thank you very much for your consideration and action on this request.
Respectfully submitted, Susan B. Potter, Esq.



\begin{tabular}{ll} 
From: & Less \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 4:20:56 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good Morning,
I am a resident of Fredericksburg, VA. I wish to express my support of the Farkas map. I oppose the map masters plans that sharply decrease the black and brown vote as well as the female vote.

Thank you,
Jessica
\begin{tabular}{ll} 
From: & Laura Tripp \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 4:29:02 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing in support of keeping Williamsburg in HD-69.

It is important for our community that Williamsburg be kept in the same district with the surrounding geographic locations in James City County because we share so many services (schools and school boards, roads and infrastructure, tourism).

Williamsburg should be included in the the newly proposed HD-69. Please reconsider the decision to separate Williamsburg from the surrounding locales in HD-69 as you continue the redistricting efforts.

Thank you.

Laura Tripp
313 E. Tazewell's Way
Williamsburg 23185
Laura.tripp@cox.net
\begin{tabular}{ll} 
From: & \begin{tabular}{l} 
Stacy Kern-Scheerer \\
To: \\
Subject:
\end{tabular} \\
\begin{tabular}{ll} 
Redistricting \\
Date:
\end{tabular} & \begin{tabular}{l} 
Comment on Proposed Districts 23 and 24 \\
Sunday, December 19, 2021 4:30:46 PM
\end{tabular} \\
\hline & EXTERNAL EMAIL \\
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON \\
ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
\end{tabular}

My comment is that Poquoson should be put in the 23rd District, with Hampton. This change would preserve the community of interest that exists between Hampton and Poquoson.

Thank you,
Stacy Kern-Scheerer
Resident of Hampton Roads (Williamsburg)
\begin{tabular}{ll} 
From: & Stacy Kern-Scheerer \\
To: & Redistricting \\
Subject: & Comment on Proposed HOD Districts 69 and 71 \\
Date: & Sunday, December 19, 2021 4:42:11 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Hello,
My comment: I have a great deal of concern regarding the proposed 69th and the 71 st districts, specifically with respect to the City of Williamsburg.

I work in a profession that involves a lot of connecting individuals to various social services in the area. I know first-hand that residents and workers in Lower James City County and Williamsburg rely on many of the same services in the greater Williamsburg area, such as transportation, healthcare, education, and social services.

Of greatest concern to me is that, under the proposed map, Williamsburg would be in a district (the 71st) that runs all the way to Providence Forge. Williamsburg is and has always been a part of Hampton Roads. Please don't put Williamsburg in a district that runs all the way into the Richmond area. Williamsburg is a part of Hampton Roads in every way - in services, in sharing of residents and workforce, in infrastructure, and in identity. Please keep Williamsburg with other Hampton Roads communities.

Kind regards, Stacy Kern-Scheerer
Resident of Hampton Roads (City of Williamsburg)
\begin{tabular}{ll} 
From: & Linda Plaut \\
To: & Redistricting \\
Subject: & State senate district \\
Date: & Sunday, December 19, 2021 4:42:52 PM \\
&
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Court,
The current plan for Blacksburg's state senate district makes no sense-it puts our University town together with entirely rural districts. Please pair us with Roanoke City, with whom we have life-saving collaboration that helps every citizen with complicated medical conditions!
Thanks,
Linda Plaut
Blacksburg
\begin{tabular}{ll} 
From: & Susan Melson \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 5:46:20 PM \\
&
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep Vinton with the Roanoke Valley in redistributing map.

Thank you,
Susan Melson
5634 Green Meadow Rd
Roanoke, VA 24018

Sent from my iPhone
```

From: Patricia Condle-Boyd
To: Redistricting
Subject: Redistricting of the 69th and 71st Districts
Date: Sunday, December 19, 2021 5:53:46 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Members of the Virginia State Supreme Court. I submit the following items to be considered about the proposed redistricting of the 69th and 71st districts. I am opposed to the new changes being proposed for the following reasons:
1. Williamsburg has been separated from lower James City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower James City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
3. The 69th takes a head-scratching jog across the York River and picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
4. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities where the majority of us live, work and play.

Respectfully submitted,
Patricia Condle Boyd
Retired Virginia Public School Teacher from Poquoson and Williamsburg Resident
\begin{tabular}{ll} 
From: & \(\underline{\text { Dave Schutz }}\) \\
To: & \(\underline{\text { Redistricting }}\) \\
Subject: & I"m a resident of Arlington, in proposed District 2. \\
Date: & Sunday, December 19, 2021 6:03:04 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I've been a very happy constituent of Patrick Hope, who I will lose if the map goes forward as drawn. That said, I think the map does nicely for Arlington, the districts make sense and the new District 2 should provide a good representation for Ariington's many apartment dwellers. On the Senate, it makes FAR more sense for Barbara Favola (or whoever is elected) to represent Arlington, rather than the district stretching out to Loudoun which has existed. So, count me a supporter. Dave Schutz 900 North Ivy Street Arlington VA 22201

\section*{MEMBER OF CONGRESS}

\section*{Bobby Scott}

Third District
December 19, 2021
Virginia
Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
\(100 \mathrm{~N} 9^{\text {th }}\) Street, \(5^{\text {th }}\) Floor
Richmond, VA 23219

\section*{Sent via electronic mail to redistricting@vacourts.gov}

Dear Ms. Pitney,
After recent written and public testimony before the Court regarding the pending redistricting map submitted by the two Special Masters, I felt compelled to make a comment about the \(3^{\text {rd }}\) congressional district.

Several comments have suggested that the \(3^{\text {rd }}\) congressional district should, at a minimum, maintain its current Black Voting Age Population (BVAP) of 47 percent in order to comply with the federal Voting Rights Act. Some have even argued that further unpacking the \(3^{\text {rd }}\) district would dilute minority voting strength. I am troubled that some of my fellow Virginians misunderstand the Voting Rights Act, the importance of maximizing minority voter influence, and the appropriate methods and remedies to achieve this goal. If the Special Masters' map is in violation of the Voting Rights Act, it is only because the draft continues to overpack minority voters in the \(3^{\text {rd }}\) congressional district.

While I am concerned that the Special Masters unnecessarily drew incumbents into the same district, I commend them for their efforts to continue to unpack Virginia's \(3^{\text {rd }}\) congressional district by lowering the district's BVAP from 47.2 percent to 44.5 percent. However, even a BVAP of 44.5 percent still makes the \(3^{\text {rd }}\) congressional district unnecessarily overpacked thus diluting minority voting strength in the adjacent congressional districts in violation of the Voting Rights Act.

The \(3^{\text {rd }}\) congressional district can still be an effective minority district with a lower BVAP. In establishing this number, the Court should consider the voting coalitions that minority communities can form in order to elect the candidate of their choice. For some communities, this may require a higher BVAP but for others a lower BVAP can be sufficient and strengthen minority voting influence in additional districts.

I strongly encourage the Court to adjust the Special Masters' map to further unpack the \(3^{\text {rd }}\) congressional district. The Commonwealth is an incredibly diverse state, and it is critical that legislative and congressional district lines reflect this diversity to ensure that minority communities have the strongest voice possible in who they send to Richmond and Washington.

Very truly yours,


ROBERT C. "BOBBY" SCOTT
Member of Congress
\begin{tabular}{ll} 
From: & Bill Kayser \\
To: & Redistricting \\
Subject: & Redistricting Maps, Roanoke \& New River Valley \\
Date: & Sunday, December 19, 2021 6:45:20 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
Please oppose the effort to redistrict Roanoke and the New River Valley by gerrymandering them into a combined district. I believe they should remain as compact individual districts. Thank you for the opportunity to comment.

Sincerely,
William Kayser
Vinton, VA
\begin{tabular}{ll} 
From: & Elton Adams \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 7:26:21 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom concerned, I do not think that our town on Hurt should be redistricted. We are part of Pittsylvania county and should stay that way. We have lots of business ties with our county. Nothing would be gained by this... Thank you
E. Collin Adams Jr. Town Council town of Hurt

Sent from my iPhone
\begin{tabular}{ll} 
From: & juliet schweiter \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Sunday, December 19, 2021 7:33:23 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not put Stafford county with prince William county. This will be taking away the voice of those who live in Stafford county.
Thank you
Juliet Schweiter
Stafford county resident
\begin{tabular}{ll} 
From: & Rod Sayles \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 8:01:44 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I encourage you to reconsider excluding Vinton from the Roanoke Valley district. It does not make since because Vinton \& Roanoke are within the same metro area and far removed from Staunton.

Respectfully,
Rodney Sayles
PO BOX 701
HARDY, VA 24101
540-721-5755

\author{
Sent from AT\&T Yahoo Mail on Android
}
\begin{tabular}{ll} 
From: & \multicolumn{1}{c}{} \\
To: & Redistricting \\
Subject: & Redistricting Feedback \\
Date: & Sunday, December 19, 2021 8:01:51 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I'm writing to put in a good word for the map proposed by former Congressman Tom Davis. I thought that the districts looked very compact, with none of the weird tendrils that gerrymandered districts often have. Even the districts in Northern Virginia had solid geometric shapes, which we rarely see in that region. I would like to see something very similar to the Davis map be adopted by the Court.

Thanks,

Jeff Bolander
540 421-9275
Rockingham County, VA

Dear Chief Justice Lemons, Justices and Special Masters
My name is Pete Costigan and I live in Ruckersville in Greene County.
I'd like to commend and congratulate the Chief Justice and other Justices for appointing Prof Grofman and Mr. Trende as Special Masters and the Special Masters themselves for their thorough and transparent work on Virginia's proposed Congressional, State Senate and House of Delegates maps. Although, as many have observed already, no set of maps could ever satisfy all interested parties, I suspect most Virginians agree that these proposed maps are a significant improvement over the current maps.

That said, l'd like to propose the following changes regarding the Special Masters' proposed maps for HOD and State Senate. First, in the HOD map, I propose that Greene Country be taken out of district 62 and be made part of district 55 . Second, in the State Senate map, I propose that Greene County be taken out of district 28 be made part of district 11. Albemarle County, which borders Greene County to its south, is part of both proposed HOD district 55 and State Senate district 11.

As the Special Masters state in their comprehensive memo accompanying their proposed maps, " we followed the Court's command and prioritized federal constitutional and statutory requirements, as well as those in the Virginia Constitution." As the memo also clearly states, recognizing Communities of Interest is one of those statutory requirements. I believe the community of interest Greene County forms with Albemarle County is well established for the following reasons.

First, Greene County residents regularly drive to Albemarle for shopping and medical care. In addition, many Greene residents drive to Albemarle every day to their jobs at the National Ground Intelligence Center in northern Albemarle, to State Farm and to various UVa facilities in Albemarle among other employers. In fact, a significant percentage of Greene County's employed residents work in Albemarle. In contrast, relatively few drive the 30-35 miles north to shop or work in Madison, Culpeper or Orange Counties which are in proposed HOD district 62 and State Senate district 28.

Second, Greene is a small county with about \(55 \%\) of its 20,500 residents living mostly south of the intersection of east-west route 33 and north-south route 29, two major state highways. Since the Greene/Albemarle border in less than four miles south of this intersection, Route 29 provides easy access for Greene County residents shopping and working in Albemarle.

Third, Greene County, along with Albemarle, is among the counties served by the Thomas Jefferson Planning Commission (Planning District 10.) Through the

Commission's Legislative Services program, the interests of the counties are represented before the legislature and other state policymakers. Much of this effort occurs in the General Assembly during the January-March session each year. Amherst County, which is currently part of proposed State Senate district 11, is not served by the Thomas Jefferson Planning Commission. Amherst County is in Planning District 11 along with Campbell, Bedford and Appomattox Counties and the city of Lynchburg.

For these reasons, I believe Greene and Albemarle Counties should be in the same HOD and State Senate districts.

I recognize that in shaping the districts, the Special Masters adhered closely to another statutory requirement: equal representation based, as practicably as possible, on equal population. Therefore, if the Court were to implement my proposals for the HOD and State Senate districts in question, the Special Masters would be required to make other adjustments to the affected districts to maintain that equal representation. I suggest the following for their consideration.
1. If Greene County's 20,500 residents were removed from HOD district 62 and placed in HOD district 55 as I propose, district 62's remaining population could be equalized by adding all or some of the residents of Orange County that are not currently included in district 62. This change would also address the preferences of others who posted on the interactive maps and spoke at the hearings. Their preferences were to keep all or most of Orange, Madison, and Culpeper Counties in the same HOD district.
2. If Greene County's 20,500 residents were added to HOD district 55 as I propose, the Louisa County residents currently included in district 55 could be reunited with those Louisa County residents currently included in district 59. At least one comment on the interactive map from a Louisa County resident opined that Nelson County residents have more in common with Albemarle than Louisa County residents and at least one Nelson County resident agreed.
3. If Greene County's 20,500 residents were removed from State Senate district 28 and placed in State Senate district 11 as I propose, district 28's remaining population could be equalized by adding those residents, currently in State Senate district 27, who live along Route 3 in western Spotsylvania County. Several district 27 residents, reacting to the interactive map, seemed to support this change.
4. If Greene County's 20,500 residents were added to State Senate district 11 as I propose, all or some of the residents of Amherst County could be removed. As I mention above, Amherst County is in planning district 11 while both Albemarle and Greene Counties are in the Thomas Jefferson Planning district (district 10).

Thank you for considering my proposals and for the difficult but important work you are doing.

\section*{Pete Costigan}
\begin{tabular}{ll} 
From: & cii1997@aol.com \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 8:34:00 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Virginia Supreme Court:
One of the things the Virginia voted for when passing the recent amendment was to reduce or end gerrymandering as much as possible and ensure that districts are reasonable regarding such issues as the likelihood of voters to have access to media that would keep them informed about issues and candidates in their area so as to make them more informed voters. A gerrymandered Senate district that would include the Town of Vinton in a district extends as far north as Staunton would put the citizens of Vinton at a huge disadvantage both geographically and informationally. Vinton does and will get its news from Roanoke. I do not think Vinton can logically be included in a district stretching to Staunton. That would defeat the purpose of the amendment.
For these same reasons it would not be reasonable to include Roanoke County with Radford. Please keep the Roanoke Valley intact as much as possible. It will lead to better representation, better informed voters and, therefore, better government. That, I believe, is what the voters were hoping for when they passed the recent amendment.
Thank you,
Gene Rose
5902 Bighorn Dr.
Roanoke, VA 24018
\begin{tabular}{ll} 
From: & Arlene Joynes \\
To: & Redistricting \\
Subject: & Redrawn map \\
Date: & Sunday, December 19, 2021 8:46:02 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\author{
Arlene Joynes \\ 4493 Eastway CT \\ Cape Charles, VA 23310 \\ Disapprove \\ arlenetj23@gmail.com \\ 757-414-1414
}

I am opposed to the redrawn redistricting map.
It makes no sense to split the military and veteran populations in the Hampton Roads area.
The men and women of those military bases work closely together and deserve to be represented by the same congressional district.
\begin{tabular}{ll} 
From: & Lane Banfield \\
To: & Redistricting \\
Subject: & District 69\& 71 \\
Date: & Sunday, December 19, 2021 9:06:56 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Sent from Mail for Windows

Re: 69 \& 71
Williamsburg and James City County, along with Hampton Roads share common socio-economic interests and would be best served in the same district.
It would be difficult for a representative to address the needs of his constituents if those interests are so varied to make a compromise impossible.
Extending geographic boundaries to include multiple urban, suburban, and rural areas does not lend itself to a community of interest.
\begin{tabular}{ll} 
From: & Euphemia \\
To: & Redistricting \\
Subject: & Region 6 Newport News \\
Date: & Sunday, December 19, 2021 9:22:57 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Most egregious redrawing of map, I have seen. Why are you all so blatantly cruel? Too expensive to dilute the true representative population based on 2020 census.
Sent from my iPhone
\begin{tabular}{ll} 
From: & Clinton Perdue \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 9:26:32 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please keep Salem in the 9th district. For that matter, compacting the districts in general would be better. The proposed 6th district takes over three hours to traverse and covers more than half the length of the state. My local representative should be well, local - not splitting attention between Salem and the exurbs of Washington.
\begin{tabular}{ll} 
From: & Clark James \\
To: & Redistricting \\
Cc: & nicolecolefinancial@gmail.com \\
Subject: & District 27 and Spotsylvania Battlefield Redistricting \\
Date: & Sunday, December 19, 2021 9:28:39 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
- Please redraw these districts and include the entirety of the BATTLEFIELD District of Spotsylvania county with DISTRICT 27 and Fredericksburg. Our interests as a growing and competitive suburb are more aligned with the City of Fredericksburg. Battlefield, Fredericksburg and District 27 share similar socio political and economic interests, diversity and growth patterns and community relations than those communities in the rural areas. Districts aligned with similar interests is more beneficial and advantageous than focusing on serving the needs of rural Virginians. Redrawing these lines would be a gross mistake and disservice to Battlefield District citizens.
- Redrawing district lines would significantly impact and cripple legislative representation and more importantly funding for infrastructure growth, public school needs and local government sponsored goods and services.

Sent from my iPhone

Members
Virginia Supreme Court

Dear Justices of the Supreme Court,

I have just finished up my \(18^{\text {th }}\) year in the current \(43^{\text {rd }}\) House of Delegates district. I commend the Special Masters for creating a new House of Delegates map that comes with many surprises but is a very good start. The citizenry will be better served with more competitive districts. Politicians should not draw their own districts.

On the other hand, if the Commonwealth were to have drastic changes dropped on it every ten years like this, I am convinced it would lead to poorer, less effective governance. There are good reasons to take a cautious approach, building off, or from, what came before, when possible, consistent with competition, and obviously consistent with the Voting Rights Act. Legislatures are run largely by seniority for many reasons-importantly, one needs to learn the job and the people to be effective. Further, if we have maps like this again in ten years, Virginia members of the 435 -member U.S. House of Representatives will be much less likely to chair an important committee considering the extreme gerrymandering (leading to stability) underway across the USA.

With this type of change every ten years, our part-time citizen Virginia House would likely be less functional or efficient given our crazy eight-week and six-week dashes-a freshman runs for re-election with 14 weeks of legislative experience under her/his belt. The 'permanent government' would enjoy more power as new member education would be constant, e.g, what is the COPN fight all about? Obscure but highly debated policies are rarely known to new Members and must be learned upon taking and serving in office.

With these concerns in mind, I urge you to adopt minor and easy changes to the Virginia House plan that do not change the balance and competitiveness sought by the Special Masters. The changes I recommend below for proposed districts 16 and 17 are not as existential to the communities as others are that I hope you will make around the Commonwealth. But the changes will not impact the performance of proposed districts 16 and 17, and I offer them as a clear and simple improvements to the two draft districts.

\section*{REQUEST}

As referenced, my request today for the proposed \(17^{\text {th }}\) district (the heart of the current \(43^{\text {rd }}\) ) is less urgent but is nonetheless fully justified. Please reconsider the unnecessary shifting of precincts between current \(44^{\text {th }}\) district ( 16 in proposed map) and district 43 (17 in proposed map). The proposed map splits high school attendance areas and splits the Greater Wilton Woods Citizens Association (by taking Clermont (423) and Mt. Eagle (408)) out of the proposed \(\left.17^{\text {th }}\right)\). Switching these precincts BACK to existing lines does not change the electoral performance of either the proposed 16th or 17th.

In our suburban communities, sometimes the only sense of community comes from the school pyramids. The Edison High School pyramid is in the current \(43{ }^{\text {rd. }}\). Unfortunately, five Edison HS precincts (Grosvenor (621 not in current 43), Huntington ( 607 where I live), Cameron (402), Mt Eagle (408), Clermont (423) were placed in the new \(16^{\text {th }}\) ( \(44^{\text {th }}\) ) district). Concurrently, none of the Edison HS attendance area is currently in the \(\mathbf{4 4} \mathbf{4}^{\text {th }}\left(\mathbf{1 6}^{\text {th }}\right)\) District. In leveling population lost to the \(17^{\text {th }}\left(43^{\text {rd }}\right)\), the Special Masters placed three Mt Vernon HS precincts of similar overall population in the \(17^{\text {th }}\) (Fairfield (413), Pinewood (428) and Woodlawn (627)). There was previously no Mt Vernon HS attendance area in the \(\mathbf{4 3}^{\text {rd }}\). Furthermore, making this switch as requested allows the map makers to use Route 1 (Richmond Highway) as an obvious dividing line at I-95, then South Kings Highway, rather than using Fairfax County precinct lines in Clermont and Mt. Eagle that run right through the community on residential streets (Florence Lane and Clermont Rd). Note: for communities-of-interest purposes, a precinct line does not divide a community unless it is used to divide an electoral district, as done in this proposal. Florence Lane and Clermont Road are main streets in their communities with the same style housing on both sides of the street.

In summary, the population of the five "new" district 16 precincts and the three "new" district 17 precincts is comparable. . Please reconsider the unnecessary precinct shifting between current district 44 (16 in proposed map) and district 43 (17 in proposed map). There is no public policy reason to split these two high school attendance areas and the Wilton Woods Community. I am grateful for your attention to this matter of importance to these communities. Thank you very much for your consideration.

Mark D. Sickles
Member, District 43
Virginia House of Delegates
\begin{tabular}{ll} 
From: & William Holladay \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 10:01:33 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I have lived in both the Roanoke Valley and New River valley and while both areas share a wide range of political ideas, there is vast difference of values that separates liberals in Roanoke and Blacksburg that support baby infanticide from the conservatives in the surrounding counties of Floyd, Pulaski, Montgomery etc.. You know the ones that like to read their bibles, go to church and raise their families...These differences are a good thing because when folks share values with whom they live closer to they are strengthened. This is a natural way of settling differences that our state allows, so consider keeping these districts compact or risk a tangling of opinions that aren't true to their localities.

Also, keeping them compact paints clear picture of the values of Southwest Virginians.
Thank you for your diligence,
Will Holladay
\begin{tabular}{ll} 
From: & Sarah Jane Newton \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Sunday, December 19, 2021 10:04:23 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Communities should stay together and be compact along the lines of redistricting. Example: The town of Vinton is in Roanoke County but will be separated from it in the proposed redistricting. Please keep our communities together.

Thank you for your time and consideration of this most important matter.
Sarah Jane Newton
Notice my new email address SarahJaneNewtonN@gmail.com

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
ANY LINKS OR DOWNLOADING ANY ATTACHMENTS ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

I would like to make the following comments about the aforementioned map.
1. Williamsburg has been separated from lower James City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove, and so they should not be separated.
2.The 69th makes a bizarre move across the York River and picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities. Bizarre again to

\section*{suggest this change.}

Thanks in advance for any consideration.
David Koenig
2052 Hornes Lake Rd.
Williamsburg, VA
23185
\begin{tabular}{ll} 
From: & \multicolumn{1}{c}{ Shaun Brown } \\
To: & Redistricting \\
Subject: & Comments - Reject the voting maps submitted by the Special Masters \\
Date: & Sunday, December 19, 2021 10:29:02 PM \\
Attachments: & \begin{tabular}{l} 
RedistrictingCommentDecember2021.odt \\
\end{tabular} \\
& RedistrictingCommentDecember2021.odt
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My comments are below and attached.
December 19,2021

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street, 5th Floor
Richmond, Virginia 23219-1315
Dear Madam Clerk:
My name is Shaun Brown, I am a lifelong resident, born and raised in Virginia, attending Brown University, The London School of Economics and St.Hilda's College, Oxford University. I urge this Court to reject the voting maps submitted by the Special Masters because they sharply limit the number of majority-Black Senate and House Districts throughout Virginia.

My first experience with speaking out and fighting the lawsuits and backroom negotiations to dilute the vote of Black Virginians started when I graduated and returned home from Brown University in 1980 soon becoming one of the youngest members of the Democratic Party's Central Committee representing Newport News. On the Peninsula, the City of Newport News, led the way for single member districts at the local level. That set the tone for a single member district fight for House of Delegate seats that would insure not just Black representation but Black representation that reflected the neighborhood, socio-economic and class issues of the community. More than just securing a Black face, the neighborhood and community consensus, was to insure a Black face that was tied to the community. At that time there were several vibrant civic and community organizations throughout the City of Newport News, not just in the Black community. This issue
of the type of Black representation was a problem for the House of Delegate, State Senator, now Congressman Bobby Scott who fought against us in favor of multimember House of Delegate Districts. The thinking was that there was a need for a Black representative that could better serve the Black communities' interest by using leverage by negotiating an agenda, and placing the needs of all, over the specific needs and issues of the Black community. Congressman Scott intervened and derailed an agreed-upon plan for the drawing of City Council districts in Newport News, under the Department of Justice purview at that time. The City of Newport News was one of the last cities in the United States to integrate its school system.

The local NAACP, former Councilwoman and Mayor, Virginia Democratic Party's Vice Chair Jessie Rattley's public hearing consensus and the Newport News Republican Party all agreed on six single member districts in Newport News with the mayor elected at large. At the time, the mayor was selected by the council. The intervention resulted in three districts (south, central and north) with 2 members each with the mayor elected at large in Newport News which has not always served the Black communities' interest, as anticipated in the 1980s. Congressman Bobby Scott, former Councilmember Charles Allen (now deceased), and local civil rights Attorney Oscar Blayton, we were told, met with the Justice Department officials who were waiting for the public hearing and community meeting outcome. They derailed the agreed on single member district plan.

Today's maps remind us of that same fight from the 1980s, in Newport News and around Hampton's school board seats district lines. Asking the Black community to once again place our issues behind and aside,
reminds me of when I was told early on that the Virginia Democratic Party would concentrate on the needs of the middle-class White Virginians. It was the impact of the then Democratic Leadership Council that
was not in the Democratic Party, but an unofficial effort formed outside of the Party to move the Party to the center. Much of that strategy in moving the Party to the center to break the Republican stronghold
then as it is now undermines the needs of Black Virginians and other protected groups.

During the 1980s until now, I have served as a member, executive committee member, founder or President of many organizations including Newport News' Neighborhood Council 24-34A Inc, (civic organization); Hampton's Coalition for Justice, (statewide civil rights); YWCA of the Virginia Peninsula, board member under 30 and in the 2000s; Candidate for Democratic Nomination, 2nd Congressional District, Virginia 2018, (Certified as a Independent-Ballot Controversy); Democratic Nominee, \(2^{\text {nd }}\) Congressional District, Virginia (2016); Progressive Democrats of America 2016; 2016 Bernie Sanders for President National Delegate the Democratic National Convention; Rev. Al Sharpton's National Action Network, Virginia Representative ; Founding Board Member of The Newport News Community Free

Clinic; Save Our Southeast; Restore Inner City Peace (cease fire); as well as continuing to work with numerous candidates for local, state, and national office, including my own runs for city council, the Virginia House of Delegates, \(95^{\text {th }}\) District and Congress. I have been on the frontline fighting child hunger, gentrification, police shootings, coal dust environmental racism, police brutality, mass incarceration and fighting for voting rights, small businesses, entrepreneurs, inner city and rural economic development, real local police accountability commissions for each city or county, industrial development, removal of Confederate monuments, jobs, prison reform and affordable housing. These are all issues along with kitchen table issues that can be directly impacted by like minded neighborhood and community focused elected representatives in Virginia at all levels of public office. This is not a new fight. It is an important fight for the very essence proclaimed by the Emancipation Proclamation that took until the 1960s to reach much of Hampton Roads.

Section 2 of the Voting Rights Act prevents "a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). Such a "denial or abridgment" occurs if "the political processes leading to nomination or election in the State or political subdivision are not equally open to participation" by members of a protected class "in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b).

If approved, the Special Master's maps will reduce the number of Senate Districts to two, and the number of House Districts to five. Reducing majority-African American voting districts by more than half harms Virginia's Black Americans. But again, members of the Court, this is not a new story for Black Virginians.

Yes, I have highlighted the City of Newport News. But again, let us now forget the Emancipation Proclamation some 158 years ago and the harm of not freeing all Black Virginians in now West Virginia, including Berkley, Accomac, Northampton, Elizabeth City, York, Princess Ann, and Norfolk, including the cities of Norfolk and Portsmouth in 1863.

Transcript of the Proclamation

January 1, 1863

A Transcription

By the President of the United States of America:
A Proclamation.

Whereas, on the twenty-second day of September, in the year of our Lord one thousand eight hundred and sixty-two, a proclamation was issued by the President of the United States, containing, among other things, the following, to wit:
"That on the first day of January, in the year of our Lord one thousand eight hundred and sixtythree, all persons held as slaves within any State or designated part of a State, the people whereof shall then be in rebellion against the United States, shall be then, thenceforward, and forever free; and the Executive Government of the United States, including the military and naval authority thereof, will recognize and maintain the freedom of such persons, and will do no act or acts to repress such persons, or any of them, in any efforts they may make for their actual freedom.
"That the Executive will, on the first day of January aforesaid, by proclamation, designate the States and parts of States, if any, in which the people thereof, respectively, shall then be in rebellion against the United States; and the fact that any State, or the people thereof, shall on that day be, in good faith, represented in the Congress of the United States by members chosen thereto at elections wherein a majority of the qualified voters of such State shall have participated, shall, in the absence of strong countervailing testimony, be deemed conclusive evidence that such State, and the people thereof, are not then in rebellion against the United States."

Now, therefore I, Abraham Lincoln, President of the United States, by virtue of the power in me vested as Commander-in-Chief, of the Army and Navy of the United States in time of actual armed rebellion against the authority and government of the United States, and as a fit and necessary war measure for suppressing said rebellion, do, on this first day of January, in the year of our Lord one thousand eight hundred and sixty-three, and in accordance with my purpose so to do publicly proclaimed for the full period of one hundred days, from the day first above mentioned, order and designate as the States and parts of States wherein the people thereof respectively, are this day in rebellion against the United States, the following, to wit:

Arkansas, Texas, Louisiana, (except the Parishes of St. Bernard, Plaquemines, Jefferson, St. John, St. Charles, St. James Ascension, Assumption, Terrebonne, Lafourche, St. Mary, St. Martin, and Orleans, including the City of New Orleans) Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia, (except the forty-eight counties designated as West Virginia, and also the counties of Berkley, Accomac, Northampton, Elizabeth City, York, Princess Ann, and Norfolk, including the cities of Norfolk and Portsmouth[)], and which excepted parts, are for the present, left precisely as if this proclamation were not issued.

And by virtue of the power, and for the purpose aforesaid, I do order and declare that all persons held as slaves within said designated States, and parts of States, are, and henceforward shall be free; and that the Executive government of the United States, including the military and naval
authorities thereof, will recognize and maintain the freedom of said persons.
And I hereby enjoin upon the people so declared to be free to abstain from all violence, unless in necessary self-defence; and I recommend to them that, in all cases when allowed, they labor faithfully for reasonable wages.

And I further declare and make known, that such persons of suitable condition, will be received into the armed service of the United States to garrison forts, positions, stations, and other places, and to man vessels of all sorts in said service.

And upon this act, sincerely believed to be an act of justice, warranted by the Constitution, upon military necessity, I invoke the considerate judgment of mankind, and the gracious favor of Almighty God.

In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington, this first day of January, in the year of our Lord one thousand eight hundred and sixty three, and of the Independence of the United States of America the eighty-seventh.

By the President: ABRAHAM LINCOLN
WILLIAM H. SEWARD, Secretary of State National Archives
I ask that you reject these maps in the name of a just life that can only be defined for me by Bible law, because of a liberation theology that was ingrained in me early at age nine when I recall playing hopscotch on my grandmother's sidewalk on 31st Street in Newport News, Virginia. I ran in the house for a cool glass of water passing the television reporting that Dr. Martin Luther King had been killed. I looked up at my grandmother more than once who was seasoning the chicken to fry in the brown paper bag and making hot rolls. Seemingly not phased, the First Gravel Hill Baptist Church Deaconess, Caroline Melinda Rowlett Hill, simply said to me "remember he said that he may not make it there with us". My grandmother had boarded the bus in Newport News, Virginia to attend the "March on Washington in 1963". She had heard Dr. King's " I Have a Dream Speech." As a kid that day in April 1968, I became a part of the "us" in the movement and understood that others had to carry on the fight. We are our brother's keeper and we must possess a righteous anger when people are not treated fairly. This practical wisdom involves what I call a "perpetual sensitivity" to what a situation requires even when it is important to speak to the unequal use of government policies.

Is the promise of a promised land the same for all people? And who are the people? Your decisions in accepting or rejecting these maps will determine who the people are. Do we not have a right to be represented by people who are among us. It is beyond a civil right, it is a human right.

My Virginia Powhatan Confederacy family sought refugee in Black Virginia houses of worship so as not to perish, as a result of the creation of the British Proclamation and line of demarcation in the Western part of the State of Virginia in 1763. That too was a line drawn to "choose the people", a line that was drawn to keep the colonists east and Native Americans west. This Royal Proclamation of 1763 was very unpopular and angered the colonists. They felt the British wanted to keep an eye on them. By 1840, tens of thousands of Native Americans had been driven off of their land in the southeastern states and forced to go West in the Trail of Tears including my ancestors.

Finally, I ask that this Court recognize the relevance of ancient biblical laws, the foundation of our legal system, dating back to the "chosen people" in the Old Testament and the promise of a promise land in the covenant theology of the Book of Genesis and the Book of Deuteronomy. You will determine the "chosen people" and control the promise of the promise land for Black Virginians in your decision here in the State of Virginia, the home of the first representative government in British North America in what came to be known as the "new world".

My hope is that you follow the 563 Commandment. Judge righteously. (Leviticus 19:15).

Miss Shaun Brown
1 Beatrice Drive

Hampton, VA 23666

757-849-4095
```

From: \im Call
To: Redistricting
Subject: Additional Comment re Congressional District Map
Date: Sunday, December 19, 2021 10:36:08 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

On December 11, I submitted comments and a congressional district map which built on the work of the special masters. Today I would like to submit a second CD map (12-19) which takes a slightly different approach. It is my hope that one or both of these maps can be helpful to the court and the special masters.

Both maps use the District Builder app and have good compactness scores. They were drawn to better create Communities of Interest (COI)s while preserving "majority minority" districts. They keep the Richmond area in two rather than three districts and keep Charlottesville and all of Albermarle together in District 5. The 12-19 map also keeps Roanoke, Roanoke Co and Salem together in District 9. A significant feature of the 12-19 map is that it keeps all 11 incumbent representatives in their home districts with a majority of their old voters. While this should never be a major goal of redistricting, I view it as a good thing when voters have the chance to vote for or against their current representatives-as long as redistricting is done adhering to legal requirements and without sacrificing other goals such as preserving COIs.

Following is a link to my 12-19-21 map:
https://app.districtbuilder.org/projects/b284e014-d907-4245-8751-0605612bca75
James Call
Alexandria, Va
Sent from my iPad
\begin{tabular}{ll} 
From: & Cassandra Terrell \\
To: & Redistricting \\
Subject: & Redistricting Battlefield District of Spotsylvania \\
Date: & Sunday, December 19, 2021 10:51:07 PM \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
- Please redraw these districts and include the entirety of the BATTLEFIELD District of Spotsylvania county with DISTRICT 27 and Fredericksburg. Our interests as growing suburb of Fredericksburg would be served. Being placed in a district that will focus on serving the needs of rural Virginians would be a gross mistake and disservice to Battlefield District citizens.
Cassandra Terrell, resident
\begin{tabular}{ll} 
From: & \(\underline{\text { Linda Cole }}\) \\
To: & \(\underline{\text { Redistricting }}\) \\
Cc: & \(\underline{\text { Linda Cole }}\) \\
Subject: & Comments on House Districts 69 and 71 \\
Date: & Sunday, December 19, 2021 11:10:02 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,
I write in opposition to separating the Grove area of James City County from the City of Williamsburg. Lower JCC and the City have a long history dating back to the foundation of Middle Plantation (Williamsburg's earliest name).

The 69th includes a portion of Gloucester County, which should not be separated from the rest of the county. There are no commonality between the western side of the York River and the eastern side.

The 71st puts the City of Williamsburg in the same district of Providence Forge and extremely rural area running up Route 5 towards Richmond. Again, the City has no commonality with this region.

The Commonwealth has 95 counties and 38 independent cities. There are 100 delegates. Why is it so hard to merge the cities with a nearby county into 100 districts? These folks already are sharing services and governance.

Thank you for the opportunity to comment.
Sincerely yours,
Linda L. Cole
6119 S. Mayfair Cir
Williamsburg, VA 23188
\begin{tabular}{ll} 
From: & \(\underline{\text { Linda Cole }}\) \\
To: & \(\underline{\text { Redistricting }}\) \\
Cc: & \(\underline{\text { Linda Cole }}\) \\
Subject: & Comments on Senate Districts 23 and 24 \\
Date: & Sunday, December 19, 2021 11:23:26 PM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

To whom it may concern:
I am writing in opposition of including the City of Poquoson into District 24 instead of District 23. Poquoson has more in common with Hampton than with James City County and the City of Williamsburg. Many people living in Poquoson work at the NASA facility in Hampton. The citizens of Poquoson shop mostly along Victory Blvd not Merchants Square. Poquoson and Hampton both have issues with recurring flooding. Please include Poquoson in Senate District 23.

Also, there are 95 counties and 38 independent cities in the Commonwealth. There are 40 Senate Districts. Why can't 3-4 counties and cities be combined in one district were there is commonality among the citizenry?

Thank you for the opportunity to comment.
Sincerely yours,
Linda L. Cole
6119 S Mayfair Cir
Williamsburg, VA 23188
\begin{tabular}{ll} 
From: & William Banis \\
To: & Redistricting \\
Subject: & Proposed Second Congressional District Map \\
Date: & Sunday, December 19, 2021 11:45:33 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Honorable Muriel-Theresa Pitney, Clerk
Supreme Court of Virginia
P.O. Box 1315

100 N. Ninth Street
Richmond, VA 23219-1315

\section*{Re: Proposed Second Congressional District Map}

Dear Ms. Pitney:
I have been a strong proponent of nonpartisan redistricting to counter the negative effects of partisan gerrymandering and to bring rationality to the drawing of political maps. That said, the rationality of the proposed Second Congressional District Map is lacking. It violates both the Compactness/Contiguity and the Community of Interest Principles.

I see no reason to include the mainly landlocked and rural southside jurisdictions of Southampton County, City of Franklin, Isle of Wight, or City of Suffolk. Adding these jurisdictions to the Second Congressional District creates a district that is neither compact nor contiguous. For example, the distance from Captains Cove, Virginia 23356 on the Eastern Shore, to Great Bridge in Chesapeake, VA, to Suffolk, to Franklin, to Ivor and to Rushmere, Virginia 23430 is more than 200 miles and would take more than 4 hours of driving time. The \(J\)-shape of the proposed district resembles a gerrymandered map. The unrelated, non-contiguous rural areas have little in common with the core, interdependent of Norfolk and Virginia Beach.

Norfolk and Virginia Beach are interdependent communities of interest in terms of geography, their economies, military bases and threats from climate change. The water is the prime geographic feature of these two communities of interest - the Atlantic Ocean, the Chesapeake Bay and rivers such as the Elizabeth, Little Creek, Lynnhaven, Lafayette and many inland waterways. All of these waterways link the area and their thriving military, industrial, and tourism uses in both of these adjoining cities. Military bases include huge U.S. Navy installations - Naval Station Norfolk, Joint Expeditionary Base and Naval Air Station Oceana; the Air National Guard at Camp Pendleton; Fort Story Army/Navy joint base; and the Dam Neck Naval Base. The military bases in Norfolk and Virginia Beach bring a large population of active-duty military members and veterans and their families who live in
both cities. In addition, many private companies support active military, veterans, and their families. For example, the private shipbuilding/repair companies along the Norfolk waterfront of the Elizabeth River serve both military and private customers. Furthermore, tourism attracted to Waterside/Town Point Park, the zoo, the Chesapeake Bay and at the Virginia Beach Oceanfront and other beaches, supports restaurants, hotels, retail and entertainment venues. If there is any question about the interdependency of Norfolk and Virginia Beach, simply attempt to navigate the morning and evening rush hours between the two cities. Norfolk and Virginia Beach as interdependent communities of interest should share and anchor the Second Congressional District.

In addition, sea-level rise caused by global warming is affecting the entire region with special urgency for both military installations and residential neighborhoods in Norfolk and Virginia Beach. These cities, along with the Eastern Shore, need to be represented with a single voice in Congress.

In contrast, the largely landlocked and unrelated non-contiguous rural areas of Franklin, Southampton, Isle of Wight and Suffolk do not belong in the Second District. Their inclusion in the crooked J-map is not geographically, commercially or socially necessary. The proposed map is regressive and would do little to advance Congressional representation for the citizens of the current Second Congressional District.

Thank you for your consideration.

Respectfully yours,
William Banis
2300 Nettleford Way
Virginia Beach, VA 23453
847-815-5222
wbanis@gmail.com
```

From: Dianna RICHARDSON
To: Redistricting
Subject: Virginia State Senate District 4
Date: Monday, December 20, 2021 3:18:34 AM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TO: Virginia Supreme Court
RE: Move Blacksburg, VA to Senate District 4
Redistricting occurs only once every ten years, so the results of how communities are assigned for political representation impact citizens' lives for a long time. Thank you for all your hard work on this redistricting effort. I appreciate how difficult this task has been, but difficulty does not obviate the need to make the best decisions possible for Virginia citizens.

I live in Montgomery County just outside Blacksburg, VA. From past experiences with redistricting, I know how it feels to be gerrymandered into a district where my political needs are not met. It disenfranchises a person to be placed with communities that are dissimilar as for as legitimate and tangible needs. I am humbly asking for maps to be drawn so that I will have a state senator who will represent the needs of real people who live and work in communities that have similar interests.

I am respectfully requesting that you move the town of Blacksburg into District 4 which reflects the strong community of interest by Roanoke/Salem and Blacksburg. Doing so will allow population equality among the district as well as increasing compactness.

Blacksburg and Roanoke/Salem form a community of interest in several important ways, specifically medical, educational, and transportation. Virginia Tech is the driver of education and research in what would otherwise be the small town of Blacksburg, and in many ways, this makes Blacksburg similar to the much larger cities of Roanoke/Salem. VT has campuses in both Roanoke and Blacksburg, in effect turning the region into a large metropolitan area. Virginia Tech's Fralin Biomedical Research Institute is part of the Carilion partnership and is located at Roanoke's medical facilities. Already in place in the I-81 corridor is the Smart Way Express, a bus service for students and faculty. Also, the airport in Roanoke has Blacksburg in the name, identifying it as a transportation hub for the aforementioned BlacksburgRoanoke/Salem metropolitan area. Soon, there will also be train service between the New River Valley and the Roanoke Valley.

For all these reasons, it is clear that Blacksburg and Roanoke/Salem are a community of interest. In the future, they will be even more closely aligned. Therefore, their political representation should match the interests of the citizens who live here.

Respectfully,
Dianna Richardson
1431 Breckenridge Dr. Blacksburg, VA 24060 dirich111@comcast.net 540-250-3344
\begin{tabular}{ll} 
From: & Dianna RICHARDSON \\
To: & Redistricting \\
Subject: & House of Delegates District 41 \\
Date: & Monday, December 20, 2021 3:20:55 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{To: Virginia Supreme Court}

Re: House of Delegates District 41
Redistricting occurs only once every ten years, so the results of how communities are assigned for political representation impact citizens' lives for a long time. Thank you for all your hard work on this redistricting effort. I appreciate how difficult this task has been, but difficulty does not obviate the need to make the best decisions possible for Virginia citizens.

I live in Montgomery County just outside Blacksburg, VA. Please allow me a few sentences about my past bad experiences with district planning. I know how it feels to be gerrymandered into a district where my political needs are not met. Even though I am less than a quarter mile from the Blacksburg town line heading toward Giles County, my community was lopped from the surrounding area and placed in a district with Salem, VA with which I have few or no common interests. One of my HOD representatives even told me that my Blacksburg community issues were of little importance to him because he mainly represented Salem and Roanoke County. I have included this background information because I am afraid I will be in danger of something similar happening for the next ten years if the maps are adopted as presented.

The two towns of Christiansburg and Blacksburg and the city of Radford are the heart of the New River Valley. If you lived here, you would realize that they form a community of interest. Blacksburg and Christiansburg are growing together along U.S. Route 460, and in a few years, the entire eight-mile stretch from Blacksburg to Christiansburg will be one massive community. More and more housing is being built all the time and the shopping area currently extends along the entire 460 route. There are three institutions of higher education, namely Virginia Tech, Radford University, and New River Community College-Christiansburg campus located in the three population centers. There is much cooperation and sharing of programs among these institutions, and their educational objectives, challenges, and needs are very much in sync. These educational institutions truly are communities of interest for the students attending, and those students' interests do not need to be divided. In the same vein, these three institutions are employment centers, and the Virginia Tech Corporate Research Center additionally hires people who live in Radford and Christiansburg as well as Blacksburg. In terms of transportation, these three communities are tied together by bus services currently, but soon, will also be served by Amtrak that will
have a station halfway between Blacksburg and Christiansburg and a short distance from Radford.

It makes no sense to separate Blacksburg from Christiansburg and Radford, putting it into a very rural district with Craig County and a large part of Roanoke County. The aspirations and needs of these rural areas are not congruent with Blacksburg. I respectfully request that you reassess your map drawing for District 41.

Thank you,
Dianna Richardson
1431 Breckenridge Dr.
Blacksburg, VA 24060
dirich111@comcast.net
540-250-3344
\begin{tabular}{ll} 
From: & Nicholas Proffitt \\
To: & Redistricting \\
Subject: & Comments on Chesapeake Maps \\
Date: & Monday, December 20, 2021 5:30:05 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Congressional- Thank you for not lumping any portion of Chesapeake, which is firmly part of Hampton Roads, in with Richmond. The current split in Chesapeake between the 2nd and 3rd makes sense however, it would be better if you could move the Greenbrier Middle, Cypress, and Westover precincts into the second. This would unite the Greenbrier section of Chesapeake and eliminate the current neighborhood splits between the 2nd and 3rd.

State Senate- Swap the Parkways precinct and the Deep Creek precinct between SD 18 and SD 19. This would eliminate split neighborhoods while helping to better preserve communities of interest. The Chesapeake portion of SD 18 should be split with the Eastern portion being in a district with Norfolk rather than Portsmouth.

State House- Both the South Norfolk and Indian River communities in Northeast Chesapeake are unnecessarily split between HD 91 and HD 92. South Norfolk and Indian River should both be kept whole in a Delegate District.

Thank you,

\section*{Nicholas Proffitt}

Chesapeake Resident
\begin{tabular}{ll} 
From: & LP Welch \\
To: & Redistricting \\
Cc: & David Suetterlein \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 6:00:56 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Ladies and Gentlemen,.
We don't need long, nonsensical districts to achieve some racial, ethnic, religious, age, height, or weight constituent "balance". Districts should be tightly compact. We choose to live in an area because we like the area and generally posses the same values and interests.

While Roanoke and Blacksburg (where I was fortunate enough to attend college) may be geographically close, the interests of a now liberal college town and clear-thinking Roanokers are dissimilar. We don't need any district modeled after one extending from Richmond to the Chesapeake Bay area.

Please stop the nonsense. Thanks.
JP Welch
\begin{tabular}{ll} 
From: & Julie King \\
To: & Redistricting \\
Subject: & Redistricting \\
Date: & Monday, December 20, 2021 7:33:30 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I approve the changes.
Julie King
Williamsburg
```

From: Catherine Fletcher
To: Redistricting
Subject: redistricting/comments on Special Masters" maps
Date: Monday, December 20, 2021 7:53:15 AM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Court Representative,
My name is Catherine Fletcher and I am a voter from Norfolk. I am writing regarding the redistricting maps drawn by the Special Masters and presented on Dec. 8.

First let me say that, as a citizen, I have been pleased by the greater transparency in the redistricting process offered by the commission than in the previous method where the maps were drawn by the General Assembly. I thank the commission for their efforts.

Regarding the maps drawn by the court-appointed Special Masters, I realize these maps have come about due to deadlock in the commission. I respect the expertise of Dr. Grofman and Mr. Trende. However, I am concerned about several issues with the new maps:
--They split up communities of common interest across the commonwealth-e.g. the military community was split into US House District 2 and 3 in Hampton Roads; suburban communities in Chesterfield County were redrawn into rural communities to their south and west (proposed District 5) rather than paired with similar communities in Henrico; this works in opposition to previous public comments, in which Virginians voiced interest in keeping our communities together.
--They place two Black state senators, L. Louise Lucas (D-Portsmouth) and Lionell Spruill (D-Chesapeake) in the same new district and may be a violation of the Voting Rights Act.
--They create disadvantages and undercut minority representation in areas in Northern Virginia and southeastern Virginia where the census notes the commonwealth’s population grew most, chiefly non-white voters.
--They leave Reps. Spanberger and Luria out of their own districts and threaten the incumbency of Rep. Wexton. This creates the possibility of leaving Virginia with no female incumbents in Congress. As a woman, this worries me greatly in the current political climate.

I voice my support for the proposed Farkas Map, outlined in the materials by the Elias Law Group, as an alternative. That map apportions our population equitably and preserves communities of interest. It also preserves the incumbency of the congresswomen.

Thanks very much for your time. Should you need to reach me, please contact me at the above email address.

Sincerely,
Catherine Fletcher
\begin{tabular}{ll} 
From: & Patricia Condle-Boyd \\
To: & Redistricting \\
Subject: & Proposed redistricting changes to the 69th and 71st districts \\
Date: & Monday, December 20, 2021 7:57:05 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I would like to express my disagreement about the proposed redistricting of districts 69 and 71 for the following reasons. My husband and I believe people vote because they feel vested in the issues of the communities and surrounding geographic areas where they live. If as they say "you don't have any skin in the game," you may lose many voters who will feel that their votes don't matter if you split these districts as the proposed changes indicate. Williamsburg is tied to the Peninsula culturally, economically, academically, socially, historically, and environmentally. To tie us to Richmond and Gloucester through arbitrary political districting does not make a strong case unless this decision is based on something sinister and underhanded. It is deplorable to me as a retired political science teacher to watch this happen. Shame on the proposers of such a plan. It doesn't make sense.

Respectfully submitted,
Patricia Condle Boyd and Donald Boyd

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Public comments submitted by Tamara Hinton, Staunton City resident to redistricting@vacourts.gov

I strongly oppose breaking Augusta County in half and separating its two independent cities from District 2. Staunton, Waynesboro, and all of Augusta County should be retained in District 2 as communities of interest, public school districts, regional school divisions, watersheds, economic development partnerships, cultural heritage and agriculture. These communities are strengthened by sharing representation in one Senate district and it would represent a significant loss to change that. Senator Hanger has represented this area well and has been a great champion for our communities.

\section*{Sincerely,}

\section*{Tamara Hinton}

Comments submitted to the Virginia Supreme Court regarding redistricting
December 19, 2021
By Tony DeTora, Stafford County voter

This comment responds to three of the newly proposed districts:
- New Congressional District 7 (all of Prince William, Manassas, Manassas Park, Fredericksburg City, Stafford and parts of Fairfax County and Spotsylvania),
- New State Senate District 29 (parts of Stafford and Prince William), and
- New House of Delegates District 23 (parts of Stafford and Prince William).

These districts do not represent communities of interest, and include a significant physical barrier, Marine Corp Base Quantico, creating a discontinuity between Prince William County in Northern Virginia to the north, and Stafford County in the Rappahannock Region to the south.

These districts should be cut at the Prince William-Stafford border, and the northern areas and southern areas redrawn into districts that better align with the interests on either side of that border.

\section*{Background}

The Special Masters inherited the eight regions identified by the University of Virginia's Weldon Cooper Center as a starting point. These regions presumably serve the Weldon Cooper Center well for their work, but for properly analyzing the communities of interest for these counties and cities, they fail to capture both the everyday lived experiences of people and boundaries shaped by a man-made feature, Marine Corp Base Quantico (MCBQ).

In some ways Stafford, Fredericksburg, and Spotsylvania share qualities with Northern Virginia, but not in the ways that most fundamentally matter to the communities on either side of the Prince WilliamStafford border, and specifically not in actual shared interests, programs, and services.

Pairing Prince William and points north with Stafford and points south, may be understandable, given the inherited starting material, but drawing them into the same districts is an error and should be corrected before the maps are finalized. These districts should be cut at the Prince William-Stafford border, which gives due respect to each county and its jurisdiction, and the northern areas and southern areas should be redrawn into districts that better align with the interests on either side.

The New 7th Congressional District presents a significant change for Stafford, Fredericksburg, and Spotsylvania from the current districts and from maps previously under consideration by the Commission. This new district fails to consider the long-standing relationships these localities hold with the counties surrounding them in the Rappahannock Region. As for Stafford's regional interests and affiliations, almost all are with communities to the east, south, or west rather than to the north.

The original error of lumping these localities into Northern Virginia for the New \(7^{\text {th }}\) Congressional District is compounded by the nesting feature, which is intended to consolidate representation of communities of interest. In this case, the nested Senate Districts and House of Delegates Districts deepen the error, multiplying the impact on these disconnected communities.

\section*{Contiguity and Geographic Barriers}

Prince William County and Stafford County are separated by a large Federally Managed Military Base known as Marine Corps Base Quantico (MCBQ). While this type of facility is not the typical geographic barrier, it is a very real one.

MCBQ runs almost the entire length of the border between Prince William and Stafford counties and provides more than 50,000 acres of separation between them. MCBQ inhibits many of the normal interactions between counties that cause them to have communal interests.

MCBQ is not generally accessed by the general public and offers the general public no traversing roads through the base. Therefore, naturally, this barrier has resulted in the development of significant differences in the culture and interests. MCBQ is a formidable social, cultural, and lifestyle barrier, preventing the kinds of interaction that can create a real shared community

\section*{Communities of Interest}

To be sure, there are interactions between the people of these counties and regions. I-95, Route 1 and the VRE trains connect the two counties like a bridge, or a mountain pass connects two areas across a mountain or large body of water. While some connections exist, they are much weaker and less important to Stafford and Prince William than their links with other neighboring counties and cities.

When Stafford works with its regional counterparts, it does not look north. And Prince William does not look south.

Stafford's "community of interest" is shared with Fredericksburg, Spotsylvania, Caroline, King George, sometimes Fauquier, Culpeper, and other counties in the Rappahannock Region. We share libraries, landfills, service districts, planning organizations, and a chamber of commerce with these other localities, but not with Prince William.

While Stafford is near Northern Virginia, and many of our citizens commute into Northern Virginia locations, Stafford is not part of the Northern Virginia culture. Stafford generally does not share Northern Virginia's regional interests, and Northern Virginia does not share Stafford's.

Most of the stable Stafford population is either those who grew up here, or those who moved here specifically to get away from Northern Virginia. Most of the transient population is made up of military families who move to the region for a few years for work at MCBQ, or Dahlgren, or the Pentagon, or Fort A.P. Hill, or one of the other installations between Richmond and Washington D.C.

We can examine Stafford County's view of communities of shared interests. Reviewing the Stafford County website, the following ten items are linked on the "Schools and Regional Groups" section (https://staffordcountyva.gov/government/schools and regional groups/index.php ), providing Stafford's most important regional affiliations:
1. Stafford Schools - limited to Stafford.
2. Central Rappahannock Regional Library (CRRL) - a regional library system that includes the City of Fredericksburg, and Stafford, Spotsylvania, King George, Louisa, and Westmoreland counties.
3. Fredericksburg Area Metropolitan Planning Org. (FAMPO) - FAMPO's mission is "to assist with the development of regional transportation plans for the Fredericksburg area." FAMPO is staffed and funded through the George Washington Regional Commission (GWRC). (see below for more on GWRC)
4. Fredericksburg Regional Transit - serves bus lines in the City of Fredericksburg, and Stafford and Spotsylvania counties.
5. George Washington Regional Commission - GWRC "facilitat[es] local government cooperation in addressing, on a regional basis, problems of greater than local significance, and provides a broad array of services for the benefit of the 372,000 residents of Planning District 16 . Our current areas of focus include economic development, environmental services, human services (including homeless services support), affordable housing, transportation demand management, and rural and urban transportation planning." Planning District 16 is composed of the City of Fredericksburg, and Stafford, Spotsylvania, King George, and Caroline counties.
6. Germanna Community College - Community college serving the City of Fredericksburg, Stafford, Spotsylvania, Orange, and Culpeper counties.
7. University of Mary Washington - Virginia public university, with a main campus in the City of Fredericksburg, with a campus in Stafford County, and with a campus in King George County.
8. Rappahannock Area Health District - Virginia Department of Health district that provides medical, environmental, and public health services to residents of the City of Fredericksburg, and Caroline, King George, Spotsylvania, and Stafford counties.
9. The R-Board (Landfill and Recycling) - a regional solid waste management board which serves the City of Fredericksburg, and Stafford County.
10. Virginia Railway Express (VRE) - the VRE is a commuter rail service with two service corridors: Spotsylvania County to Washington D.C. and Bristow (Prince William County) to Washington D.C. VRE is co-owned by two regional transportation commissions: the Potomac and Rappahannock Transportation Commission (PRTC), and the Northern Virginia Transportation Commission (NVTC). PRTC provides for public rail and bus systems for Prince William County, Manassas city, and Manassas Park city, and public rail for the City of Fredericksburg, Stafford, and Spotsylvania counties.

Of the nine regional groups important enough to be listed on the Stafford County government website, only one group includes Prince William County. That group (VRE) is only half-owned by the PRTC. Stafford, Fredericksburg, and Spotsylvania counties only participate in half (rail service) of the PRTC activity.

Additional research yields more examples:
11. Region 7 of the Virginia Association of Counties (VACo)

12. Virginia Department of Transportation (VDOT) Fredericksburg District.

\section*{- Fredericksburg District}

Fredericksburg is made up of 14 counties, spanning from Stafford to Spotsylvania on the western end to Mathews and Gloucester on the eastern border.

More than 5,200 miles of roadway run through this district.
This includes almost 800 miles of primary roads, more than 4.300 miles of secondary road, and more than 46 miles of interstate roadways.

\section*{Fredericksburg District}

87 Deacon Road
Fredericksburg Virginia, 22405
540-899-4288
Marcie Parker, P.E., district engineer

13. GO Virginia Region 6


15. Virginia Department of Juvenile Justice

\section*{COURT SERVICE UNITS (CSU)}


In almost every case of a regional service, district, or area, Stafford County is fully split from Prince William County and the rest of Northern Virginia at MCBQ. This is not an accident. This is not a weird artifact. It is reality. These are physically separated entities with separate interests, and despite a few similarities, mostly superficial, the two are not communities of shared interest.

A detailed analysis of Prince William County would yield that they do not consider Stafford County, or other points south, to be communities of interest, peer counties, or part of Northern Virginia.

Prince William County is part of the Northern Virginia culture. That culture includes Alexandria, Arlington, Fairfax County, Fairfax City, Manassas, Manassas Park, and Loudon. Many of us moved to Stafford specifically to get away from that culture in our home lives. Even those of us who can't fully cut ourselves off from it in our professional lives. Even Prince William's form of local government differs from Stafford's because it serves their interests in ways that certainly wouldn't serve ours.

One particularly stark demonstration is seen in local print media. I subscribe to my local paper, the Free Lance Star, centered on Fredericksburg and also covering Stafford, Spotsylvania, King George, Caroline, Orange, and other regional counties. The Prince William Times serves Prince William. They ran an article this week on the redistricting maps and could not even be bothered to include the Stafford portions of the proposed districts (or current districts) in their maps:


It is important to the people of Stafford County to have their representatives share their actual interests. As we've seen, Prince William and Stafford might be better classified as "communities of disinterest."

\section*{Conclusion}

Under the proposed map, the New 7th Congressional District would include Prince William, Manassas, Manassas Park, Fredericksburg City, Stafford, and parts of Fairfax County and Spotsylvania. This New 7 \({ }^{\text {th }}\) Congressional District should be cut at the Prince William-Stafford border, and the northern areas and southern areas redrawn into districts that better align with the interests on either side of that border.

Under the proposed map, the New \(29^{\text {th }}\) State Senate District would include part of Prince William County and part of Stafford County. This New \(29^{\text {th }}\) State Senate District should be cut at the Prince WilliamStafford border, and the northern areas and southern areas redrawn into districts that better align with the interests on either side of that border.

Under the proposed map, the new \(23^{\text {rd }}\) House of Delegates District would include part of Prince William County and part of Stafford County. This New \(23^{\text {rd }}\) House of Delegates District should be cut at the Prince William-Stafford border, and the northern areas and southern areas redrawn into districts that better align with the interests on either side of that border.
\begin{tabular}{ll} 
From: & \begin{tabular}{l} 
bvr@reagan.com \\
To:
\end{tabular} \\
Subject: & Redistricting \\
Date: & Monday, December 20, 2021 8:05:00 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Ms Alisa W Padden,
The proposed redistricting map that will combine central Virginia districts with northern
Virginia will eliminates equal representation of voters in central Virginia. Northern Virginia is dominated by the democrat party therefore creating disenfranchisement of conservative voters in the current 5th district. This division is unfair and must not be used.

Thank you ,
William Van Ryn
\begin{tabular}{ll} 
From: & \(\frac{\text { Kevin Nelson }}{\text { To: }}\) \\
Subject: & Redistricting \\
Date: & DISAPPROVAL OF THE REDI STRICTING MAPS PROPOSED BY THE COURT'S SPECIAL MASTERS \\
& Monday, December 20, 2021 8:14:38 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

My name is Kevin G. NeIson. I live in Midlothian, Precinct 504, in Chesterfield County. I relocated to central Virginia in 2014 when I was appointed President of Porvair Filtration Group, Inc., a leading manufacturer of sophisticated, highly engineered filtration products for the aerospace, nuclear, chemical process, bioscience, and semiconductor industries. My wife and I chose to live in Midlothian due to its proximity to Richmond, as we often attend sporting events at the local universities as well as the concerts and theatrical events the city offers. In 2016, after considering other states, I decided to keep our rapidly-growing business in central Virginia and opened our brand-new, state-of-the-art North American headquarters here. I made this decision in consideration of our existing workforce, our ability to attract new employees from the local colleges, access to I-95, I-85, and I-64, and easy access to the Richmond International airport.

I object to the new redistricting map proposed by the Special Masters. Splitting Midlothian away from greater Richmond and the rest of Chesterfield County makes no sense, and it is contrary to the "Communities of Interest" standard. Their plan puts us in a new House of Delegates 72nd district with people living in rural counties whose priorities do not revolve around our urban concerns, not to mention issues that Porvair and other manufacturing companies face, such as supply chain problems, hiring skilled engineering and manufacturing labor, and infrastructure and logistics concerns.

For the reasons listed herein, I request that preferential consideration be given to the Farkas map as an alternative redistricting plan.

\section*{Regards,}

\section*{Kevin G. Nelson}

3542 Highbridge Dr.
Midlothian, VA 23113

\section*{Remarks by Michael McClary for the Redistricting Public Hearing before the Supreme Court of Virginia, December 15, 2021, and Revised Comments for Subsequent Consideration for Potential Revisions to the Work of the Special Masters, submitted on December 20, 2021}
- My name is Michael McClary, and I am a native Virginian, having lived my entire life here, except when I was away in the Army. I would like to thank the honorable justices for giving me the opportunity to comment on the work of the Special Masters in revising Virginia's Congressional and General Assembly districts after the commission failed so miserably.
- I am a West Point graduate, a Vietnam combat veteran, and a retired Federal senior executive. I grew up in the Piedmont and I have lived in Central Virginia for 35 years and in Culpeper County for the past 12.
- I commend the Special Masters for their very admirable work, but I believe there are still many issues that must be addressed.
- Many others have spoken and have written quite eloquently about what has been done to Henrico, Chesterfield, Spotsylvania, Louisa, and Albemarle Counties.
- In discussing their methodology, the masters mention the word "Culpeper" only once, and "Piedmont" only twice. We in Culpeper are horrified to know that others consider us part of "Northern Virginia." The current \(7^{\text {th }}\) Congressional District is not mentioned at all. It's as though we never existed. Central Virginia has been a community of interest for many, many years, and now it has been completely eliminated and scattered among other proposed districts with which it has little in common.
- Loudon County, the megalopolis anchor of the proposed \(10^{\text {th }}\) Congressional District is essentially a part of that northern region that is completely focused on the federal city of Washington, DC.
- The rest of us pride ourselves on our rural heritage, and our focus on agriculture, timber, natural resources, and our small-town environments.
- Loudon County's mostly urban population numbers more than 413,000 - more than twice the combined populations of Fauquier, Rappahannock, Culpeper, Madison, Orange, and Greene Counties, and the rural portions of Albemarle and Spotsylvania Counties that have been allocated to the new \(10^{\text {th }}\) District.
- This, and its number of registered voters dwarf the entirety of the rest of the district, thereby effectively disenfranchising the rest of us.
- We have nothing in common with Loudon County. We don't go to Loudon County for anything. Instead, we almost always, and exclusively, go to Charlottesville or Fredericksburg for shopping, dining, healthcare, services, and recreation. Loudon, far to the north, is in a galaxy far, far away.
- Locally, in past elections, the Town of Culpeper and Culpeper County have had 16 different ballots because of the way the county has been split up among 3 Senate districts and 2 House of Delegates districts. It creates a nightmare for our Registrar of Elections every time we go to the polls.
- In this iteration, the planners had the good sense to put all of Culpeper County into one Senate district. They should do the same for the House of Delegates. The Rappahannock and Rapidan Rivers form natural boundaries of a single community of interest, and that is the Culpeper County community that surrounds the town of Culpeper. That's where we all go to shop, dine, and participate in community events and recreational opportunities. We share many common holidays and celebrations with Madison and Orange, often participating in each other's events. Not so much with Rappahannock, Fauquier and Greene Counties.
- It would make more sense to me to include the entirety of Culpeper County in the new House of Delegates District 62 , and move Greene County to District 55 , as it is very closely associated with Charlottesville and Albemarle County, not the counties to its north.
- Finally, and crucially, in this day and age, it is simply unacceptable to revise our districts with the effect of disadvantaging all three of Virginia's women members of its Congressional delegation, and in particular, completely removing Congresswoman Abigail Spanberger from the present \(7^{\text {th }}\) Congressional District, and the 10 -county constituency for which she has been working so arduously for the past four years. Not only that, but she has also become quite well regarded by members of both sides of the aisle for working effectively and in a bipartisan basis.

Her legislative accomplishments have been significant, and she has become renowned for the effectiveness of her district services to \(7^{\text {th }}\) District residents. To gerrymander her out of her district is simply outrageous.
- I join with the other speakers in urging the Supreme Court to reconsider the dismantling of our \(7^{\text {th }}\) Congressional District. Geography doesn't vote, people vote. I thank the Court for the opportunity to comment on this important process.
\begin{tabular}{ll} 
From: & Barbara Woodlee \\
To: & Redistricting \\
Subject: & Second District \\
Date: & Monday, December 20, 2021 8:36:34 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I urge your reconsideration of changes made to the Second District. I believe we should maintain our military community as it now exists, a community that is critical to the economic well-being of our region. Our Chesapeake Beach neighborhood borders Naval Station Little Creek, who works with us on recurring flooding among other issues. Our collective voices have been impactful in resolving problems.

I am concerned, also, about the impact of redistricting on women leaders, as we work to increase our participation in such key roles. We have enjoyed highly effective leadership in the Second District, which we value greatly.

Again, I urge your reconsideration. Thank you for the opportunity to comment.

Barbara Woodlee
4808 Zivo Court
Virginia Beach, Virginia 23455
barbarawoodlee@gmail.com
\begin{tabular}{ll} 
From: & Major Security \\
To: & Redistricting \\
Cc: & Lones Michael; Lones Chief Mike; Clerk Hurt Town; Brumfield Ellen \\
Subject: & Town of Hurt VA Redistricting Recommendation \\
Date: & Monday, December 20, 2021 8:36:36 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

My name Mike Jones and I serve as the Deputy Town Manager and the Director of Public Safety \& Emergency Management for the Town of Hurt Va. We are a community that is coming "back to life" and economic development and regional cooperation is extremely important to our present and our future. We have been the victims many times of failed gov't policies in the past that gutted the economic heart of our community and essentially ignored us.
The plan that you have included us in takes away so many good things including the cooperation, collegiality and the community of like interests that is so vital to our survival.
The localities that you have lumped together have no common interest in Hurt or northern Pittsylvania County. They have shown no interest in us in the past. The Town of Hurt has rebounded thanks to new Hurt centered town leadership, supported by the leadership and staff of Pittsylvania County and the residents of the our town and county. We also pay taxes to Pittsylvania County in addition to town taxes.
Your plan takes our political influence out if our community of like interests and places us with strangers when it comes to knowing our needs, wants and limitations .
Staying in our current district will serve us and our partners with a combined economic and leadership team that is looking to help make Hurt the shining star of Northern Pittsylvania county.
Your plan dilutes snd fragments our abilities to manage our own destiny and places us into a district where we are essentially strangers.
Please leave us alone and let us stay in our current district that will allow us to continue improving the lives of our citizens and the viability of a town that was near death. We have worked very hard to get where we are know and we have established strong and effective team relationships with our county.
We do not want or need to be placed into a district that will not serve the interests of our citizens, our Town and our county. Putting us in the proposed district fractures all the work we done to bring Hurt back to life. No one has asked our opinions about this change and that is one thing that a small town struggles with - being heard by Richmond.
Please strongly consider "leaving us in our district that is working for us" and don't place us into a district that we have nothing in common with. We are geographically separated by the Staunton River as well as community culture and cooperative county government. Our efforts to attract business \& industrial interests are well served by what we have now.
Simply put, the proposed plan to put us into a new district that we have little ties or history working together will greatly damage our Town.
Thank you for serious considering our very real concerns and don't undo years of our efforts to bring our town back.

Sincerely,
Mr. Michael A. Jones, M. S.
Deputy Town Manager \& Director of Public Safety \& Emergency Management for the Town of Hurt VA. 804-350-1672
\begin{tabular}{ll} 
From: & Richard Bell \\
To: & Redistricting \\
Subject: & Approve the maps. \\
Date: & Monday, December 20, 2021 8:37:33 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I can think of no perfect plan for redistricting that would leave all citizens, voters or politicians completely happy or even in total agreement with one another. At best, drawing new district lines can only achieve more fairness than continued gerrymandering designed to preserve political careers. If Virginians truly want an impartial map drawn then approval of the maps drawn by these two masters is likely the closest you will get.

As a former delegate who served a decade in a gerrymandered district I am not afraid to say that I believe the term "non partisan" no longer applies; "impartial" seems much more practical and more likely to accomplish. That, of course, will require sacrificing some sacred cows. I encourage you to accept the maps as drawn, and wish you much success in your endeavor.

Sincerely,
Thew Honorable Richard P. "Dickie" Bell
Former Delegate - 20th House District
\begin{tabular}{ll} 
From: & sarafitz@aol.com \\
To: & Redistricting \\
Subject: & Thanks for your dedication to a fair and transparent process \\
Date: & Monday, December 20, 2021 8:45:53 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
ANY LINKS OR DOWNLOADING ANY ATTACHMENTS ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{To the Supreme Court:}

As the comment period for the redistricting process draws to a close, I want to commend the members of the Court for the commitment they have shown to a new, fairer, more transparent redistricting process for the Commonwealth of Virginia.

I have worked on redistricting reform for close to 15 years. Many of us were disappointed when the new redistricting commission broke down over partisan lines. But I have been pleased by the approach taken by both the retired appeals court judges who appointed the citizen commission members, as well as the decisions of the Supreme Court since the Court was required to take over the process. Although many persons argued that redistricting would inevitably take a partisan tilt if it ended up in the hands of the Court, you have dispelled that notion with your conscientious rejection of overly partisan nominees for special master, and your participation in public hearings and review of public comments.

Recent election results demonstrate that Virginia is still a very competitive state politically. Its geography and historic political boundaries also make it more challenging to redistrict than some states. It will, in the end, be impossible to please everyone. Arguably, several previous rounds of political gerrymandering created districts that were so indefensible that setting the boundaries straight again will inevitably lead to incumbents facing incumbents, and other legislators choosing to retire rather than to move. I, for one, would be very sorry if Virginia were to lose the three talented Congresswomen it currently has, but I also recognize that the protection of districts in which they can win is not a valid criteria for drawing maps. However, promoting competition where the potential for competition exists, preserving communities of interest
and jurisdictional boundaries, and drawing districts that are compact and contiguous ARE all appropriate goals.

We will have another decade to consider whether we should approve a new constitutional amendment to create a redistricting commission that is less partisan and more independent of the legislature than the one we put in place. The Court itself may have some views on this. In the meantime, thank you for doing your part to make this year's process certainly fairer and more transparent than it has been in the past.

Sara Fitzgerald
Falls Church, Virginia
\begin{tabular}{ll} 
From: & Bob McDonnell \\
To: & Redistricting \\
Cc: & Bob McDonnell \\
Subject: & Redistricting map comments \\
Date: & Monday, December 20, 2021 8:47:30 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

\section*{Supreme Court of Virginia}

100 North Ninth Street, 5" Floor
Richmond, Virginia 23219-1315

\section*{Dear Madame Clerk:}

Protecting and enhancing the voting power of historic minorities in this country is a very important public policy goal. Protecting the American franchise of "one person one vote" is also important. Reducing hyper partisan gerrymandering is an important aspiration of an increasing number of Virginians. It is a factor I considered when vetoing initial redistricting legislation proposed by my own Republican controlled legislature a decade ago.

I write to reply briefly to the filing of the Elias Law Group in this matter. Marc Elias is a Democratic election law attorney who has represented such prominent Democratic candidates as Terry McAuliffe and Hillary Clinton. Mr. Elias is the leader of a national Democratic Party effort to influence the outcomes of state redistricting processes through lawsuits and he has been heavily engaged in redistricting in Virginia in the past.

In 2014, Mr. Elias brought a lawsuit challenging Virginia's previous House of Delegates map as an unconstitutional racial gerrymander. After several years of litigation, he succeeded in obtaining a court order requiring the redrawing of a dozen state House districts which ultimately reduced the Black voting-age population (BVAP) in each. Three Black delegates lost their races for reelection last month running in districts that were redrawn as a result of Mr. Elias’s lawsuit. Adopting his recommended changes to the special masters' proposed congressional map could further reduce Black representation, currently 2 of 11, in the Commonwealth.

Mr. Elias submitted his proposed congressional map on behalf of James Farkas, who was Elias's client in another lawsuit challenging Virginia's previous congressional map. That litigation also succeeded forcing a redrawing of maps, which ended in the elimination of the Commonwealth's only majority-minority congressional district. The pattern and message is clear: This Court should avoid creating any majority-minority
congressional districts, or Mr. Elias will bring a legal challenge using the same plaintiff as last time. Mr. Elias professes a concern that the special masters' proposal will harm minority communities even as he proposes an alternative map featuring zero majority-minority districts. The last time a court accepted Mr. Elias's contentions concerning redistricting in Virginia, Black incumbents lost. This Court should reject Mr. Elias's recommendations or risk Virginia's Black representation in the U.S. Congress diminishing as was seen in the House of Delegates.

Virginia's Black voting-age population stands at approximately 20 percent of its total voting-age population. Given this number, one would expect about two congressional districts featuring a BVAP exceeding 50 percent on a map drawn pursuant to neutral redistricting principles. The special masters’ proposal includes two districts with BVAP exceeding 40 percent (the Third and Fourth Districts) but none in which Black voters constitute an outright majority of voters. One might slightly increase the BVAP in these two districts to get them over 50 percent in order to increase the likelihood that Black representatives will be elected, but Mr. Elias urges a different approach.

Mr. Elias recommends complete changes to the special masters’ proposal, claiming that it is clear that "their first and predominant consideration . . . was race." Elias Letter at 19. Yet the special masters' proposed Third and Fourth Districts do not differ that much demographically from their current iteration, which Mr.
Elias admits "has proven more than sufficient for the Black communities in those districts to elect the candidates of their choice." Id. at 4. The special masters have proposed a plan in which the Fourth District would have a BVAP of 45.3 percent and the Third a BVAP of 44.5 percent, as compared to 40 and 47.2 respectively on the current map. In other words, the special masters have created two "minority opportunity" congressional districts in which black voters constitute a plurality but not a majority of voters.

Mr. Elias's plan substantially reduces the BVAP of the Third District and leaves the BVAP of the Fourth relatively unchanged, creating a map that could lead to reduced minority representation in Congress. Mr. Elias proposes reducing the black votingage population in the Third District by more than five percentage points to less than 42 percent, while failing to raise BVAP higher than 40 percent in the Fourth (as compared to the special masters' proposed gain of more than five percentage points in that district). To simplify: The special masters propose two districts with BVAPs around 45 percent, and Mr. Elias proposes two districts that are both closer to 40 percent. Mr. Elias apparently seeks to reduce Black voting power in order to expand Black representation, which does not seem logical.

These proposed changes are not made any more explicable with reference to communities of interest. Mr. Elias recommends carving the heavily Black City of Norfolk out of the Third District and placing it with Virginia Beach in the adjacent Second. The last Virginia congressional map that placed the entire City of Norfolk
in the same district as Virginia Beach was the one adopted by the General Assembly in 1981, indicating that several generations of Virginia elected officials in both parties have interpreted their communities of interest differently. He also persists in trying to draw the district lines in Hampton Roads on a north-south basis, when it is clear by looking at the orientation of interstate highways and patterns of settlement in the region that the real divisions between communities of interest run east-west. The special masters' proposal recognizes this reality by using the Hampton Roads Beltway as the natural dividing line between the Second and Third Districts. Mr. Elias seeks to create communities of interest because he arbitrarily believes that a Black voting-age population around 45 percent in two districts is too high.

None of this would matter if not for the fact that Mr. Elias's proposed changes could have an adverse impact on Black representation in Congress. As mentioned, Mr. Elias's previous lawsuit succeeded in getting a dozen House of Delegates districts redrawn with lower BVAPs to rectify an alleged racial gerrymander. The districts were redrawn to make them less Black, and then, in the most recent election, three black delegates running for reelection in those districts were defeated-one-fifth of all the black members currently serving in the House. Black representation could decrease again if that process and logic were repeated for the Congress.

While only future elections will show whether the special masters' proposal would expand Black representation, a Black delegate lost her race this year after Mr. Elias's lawsuit dropped her BVAP from 58\% to 47\%. It is obvious that Mr. Elias's proposal could sacrifice Black elected officeholders. Reducing the Black voting-age population in certain districts to the 40-42 percent range substantially increases the chance that Black members will not be elected. It is especially true when it follows the retirement of a well-known person like Rep. Bobby Scott. Mr. Elias's plan unfortunately seems to be an attempt to use allegations of racial gerrymandering to force the Court to approve what is actually a partisan gerrymander.

The Virginia Constitution, as overwhelmingly amended by the people of Virginia in 2020, requires map drawers to "provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." Va. Const. Art. II, § 6. It is clearly practicable to create a Third and Fourth District in which Black voters are sufficiently numerous to elect the candidates of their choice, as demonstrated by the current map and affirmed by the special masters' proposal. The Constitution also prohibits the adoption of maps that, "when considered on a statewide basis, unduly favor or disfavor any political party." Va. Code Ann. § 24.2-304.04(8). Mr. Elias's gerrymandered map, which would result in the creation of only three Republican-leaning districts (27\%) in a state in which the Republican candidate received over 50 percent of the vote in the most recent statewide election, clearly runs afoul of this requirement. Therefore, this Court should maintain a Black voting-age population of greater than 40 percent in both
districts-and potentially raise the BVAP to near 50 percent, given the results of the most recent state election-rather than subjecting Virginia's Black voters to another of Mr. Elias's risky partisan electoral plans.

Thank you very much for your consideration.
Sincerely,
Robert F. McDonnell
Former Governor of Virginia

Robert F. McDonnell
Former Governor of Virginia
3333 Virginia Beach Boulevard
Suite 24
Virginia Beach Va 23452
804-929-5321(c)
757-340-8001(w)
rfmva09@gmail.com
\begin{tabular}{ll} 
From: & Lynn Walthall \\
To: & Redistricting \\
Subject: & Response to Public Comment Period \\
Date: & Monday, December 20, 2021 8:49:01 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

This comment concerns congressional redistricting.
Northern Virginia, particularly Tysons Corner and the area's outer western and southern portions, is projected to grow even more in the coming years. The special masters’ solution to that seems to be to expand their geographic area to include
rural areas to the south or, in the case of Tysons Corner, to its more suburban west. This will have the effect of diluting votes as these areas grow. We should have a greater number of smaller districts throughout the state for these densely populated areas, and save the sprawling ones for the rural areas.

Respectfully,
Lynn and Jeff Walthall
9228 Bailey Lane
Fairfax VA 22031 (who will have our votes diluted by Tysons Corner)
\begin{tabular}{ll} 
From: & Carol Roth Brum \\
To: & Redistricting \\
Subject: & Redistricting concerns \\
Date: & Monday, December 20, 2021 8:53:31 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

To the redistricting masters:

I am a constituent in the current 2nd Congressional District of Virginia and have a number of concerns regarding the recently altered configuration of my district. I will briefly outline the three most critical concerns below:
1) Living in East Beach, Norfolk, I have become increasingly aware of the military and environmental links between the Virginia Beach oceanfront on the Atlantic and the Chesapeake Bay beachfront in Norfolk. By splitting representation, our area loses consistency of advocacy in these two critical areas of federal support. (One military base in particular, Little Creek Joint Expeditionary base actually spans both Norfolk and Virginia Beach counties and waterfront accesses.)
2) Eliminating the residency of the current 2nd district elected representative also negatively affects the impact of their advocacy for the military as well as environmental concerns, as seniority in committee appointments offers a stronger voice on behalf of the district and Virginia as a whole.
3) In looking at the reconfigured districts, it appears one would have to travel through an entirely different district in order to reach one portion of the newly outlined 2nd from the other. My understanding of your intentions was that this is exactly the kind of awkward configuration we were trying to avoid.

I urge the masters to reconsider their current determination of the 2nd district and allow for one representative to be the advocate for the above mentioned areas in Washington.

Sincerely,
Carol Roth
9730 28th Bay St.
Norfolk, VA 23518

Sent from my iPad
\begin{tabular}{ll} 
From: & Nancy Payne \\
To: & Redistricting \\
Subject: & COMMENTS \\
Date: & Monday, December 20, 2021 9:05:13 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

TO: SPECIAL MASTERS: 2nd DISTRICT 12-20-2021 8:AM
FROM: Nancy Sloan Payne, 6258 Circle Dr., Chinco. IsI. Va 23336
For past 30 yrs this has been my permanent, voting address.
Ph\# 757-990-0703 email: rpayne20@verizon.net
COMMENTS: DISAPPROVE OF PROPOSED REDISTRICTING PLAN

WHY?
* CURRENT DISTRICT 'works'- -no need to disrupt lives with this proposal. Covid -19 pandemic plus general economic downturn has ALL of us at super high stress level; don't add more!
* CURRENT DISTRICT'S military and veteran population base would experience dramatic, negative change in profile and common interests- -not good for them nor area in general.
* CURRENT DISTRICT'S permanent population and those who come into the area to work,example: military personnel, need to have same state/federal representatives to support and advocate for their best interests.
NOTE: Your notice dates to respond to proposed plan arrived at a very busy, personal time for many: holiday celebrations, college students arriving home to bond with families and friends, etc. What could have made this decision so important that it HAD TO BE DONE in month of December? Or was scheduling done on purpose for obvious reasons? What ever the reason, makes one question lack of 'common sense' used when preparing your calendar of deadlines.
\begin{tabular}{ll} 
From: & Lonathan Scheerer \\
To: & Redistricting \\
Subject: & Comment on proposed HOD 69/71 \\
Date: & Monday, December 20, 2021 9:06:56 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Va redistricting commission:

I am writing to comment on the proposed new districts in the 69th and 71st. I live in Hampton Roads (Williamsburg). The new district does not place Williamsburg with Hampton Roads, but rather extends into the Richmond area. This isn't an appropriate match for Williamsburg, which is very much part of the Hampton Roads community (jobs, residents, health care services). Please revise to keep Williamsburg as a part of with Hampton Roads.

Warm regards,
Jonathan Scheerer
Resident of Williamsburg
\begin{tabular}{ll} 
From: & Geary, Daniel \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 9:07:54 AM
\end{tabular}

\section*{EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Please ensure the voting integrity of the Roanoke and New River Valley (Virginia District 19) by implementing a redistricting plan that makes the district compact and continuous.

Drawing up the voting district in this way will best serve the people of Virginia. A contiguous and compact voting district for the Roanoke and New River Valley would be consistent with the both the United States Constitution and the Constitution of the State of Virginia.

Thank you,

Daniel J. Geary, Ph.D.
\begin{tabular}{ll} 
From: & David \& Sharon Brockman \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 9:18:18 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Districts should be as compact as possible. Vocal Blacksburg Democrats should not determine our representation in Montgomery County.

Sincerely,
Sharon Brockman
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Lola Warren } \\
To: & Redistricting \\
Subject: & Districts 69 and 71 \\
Date: & Monday, December 20, 2021 9:19:07 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The proposed district lines between Districts 69 and 71 make no sense, other than political gains for one party over another. All the area surrounding Williamsburg must be in the same district as the city itself. Our children go to school in a James City County Williamsburg school system, our social, religious, community, entertainment, and commercial activities are in common. We share the same city mailing address: Williamsburg. We must be able to vote based on those common interests, not on the whim of a political party's quest for power, which often results in people in power having no actual connection to those in their district.

I was hoping that this redistricting would be one of integrity and impartiality, based on reasonable assessment of where people live and congregate, not on political gain.

Lola Warren
4323 Creek View E, Williamsburg, VA 23188
\begin{tabular}{ll} 
From: & Scheerer, Jonathan R \\
To: & Redistricting \\
Date: & Monday, December 20, 2021 9:28:53 AM
\end{tabular}

\title{
EXTERNAL EMAIL \\ THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS
}

Dear redistricting committee,
I am having trouble understanding the 69th HOD district. It fragments the Southern part of Williamsburg and heads across the York river to carve out a slice of Gloucester. All of Williamsburg should be kept together with Hampton Roads. Gloucester is on a different peninsula and in a different county. It makes more sense to try to place all of Williamsburg into the 69th. As far as I can tell this is the only district to span the York or James river.

Jonathan Scheerer
Williamsburg resident
```

From:
To:
Subject:
Date:

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Date: Mon, Dec 20, 2021 at 7:52 AM
Subject: VA Redistributing Concerns and Submitted Public Comments

## Public comments submitted by Carole Hinton, Augusta County resident to redistricting@vacourts.gov

I strongly oppose breaking Augusta County in half and separating its two independent cities from District 2. Staunton, Waynesboro, and all of Augusta County should be retained in District 2 as communities of interest, public school districts, regional school divisions, watersheds, economic development partnerships, cultural heritage and agriculture. These communities are strengthened by sharing representation in one Senate district and it would represent a significant loss to change that. Senator Hanger has represented this area well and has been a great champion for our

## communities.

## Sincerely, <br> Carole Hinton

| From: | Bookie Boland |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Opposition to Proposed Redistricting of VA-02 |
| Date: | Monday, December 20, 2021 9:37:02 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I urge that this proposal be rejected for the following reasons:

## Military

Military and veteran populations that are essential to the socio-economic strength of Hampton Roads should not be split in the congressional districts.

Naval Station Norfolk, Fleet Forces in Norfolk, as well as Air Station Oceana in Virginia Beach work so closely together and have active duty servicemembers who live in both localities. They deserve to have the same federal representation in order to best advocate for their interests.

## Environmental

The ocean view and waterfront parts of Norfolk and Virginia Beach specifically should be together in federal representation due to their shared environmental concerns.
$\bullet$
Reports by leading environmental scientists that the sea level could rise by several feet along our shores by the end of the century should be raising serious alarm.
Beyond the human cost of that disastrous possibility, the economic and infrastructural damage such a change could inflict on these communities is unthinkable.

## Contiguity/Compactness

The district is shaped like a "crooked J" that is not functionally contiguous. Due to the Great Dismal Swamp, constituents would have to drive through a majority of the 3rd district to get from one end of the 2nd to the other.
-
By putting Suffolk/Isle of Wight back in the 3rd, you get a more compact district in the 2nd and don't disrupt the compactness of the 3rd.
-
It takes longer to drive from Southampton County to the Virginia Beach District Office than it does to a District Office in Newport News.

The special masters intended to adhere to functional congruity however they focused more in minimizing county splits. There should be a balance that doesn't disenfranchise voters in the Hamptons Roads districts.

Respectfully yours,
James F. Boland
4236 Battery Road
Virginia Beach, VA 23455

| From: | Gary Poindexter |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA House District 48 |
| Date: | Monday, December 20, 2021 9:41:40 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Honorable Members of the Virginia Supreme Court and Special Masters:
On behalf of my constituents in the Town of Hurt, and additionally on behalf of the entire Hurt voting precinct in far northern Pittsylvania County, I am reaching out to you concerning the boundary between the proposed Virginia Legislative Districts 48 and 52 (House of Delegates).

If the proposed new districts are established in their current form, then this one precinct will become "isolated" in a sense from most of Pittsylvania County and instead be represented in Richmond by a Delegate whose core constituency lies in Campbell and Bedford Counties. The result will be a "remote island effect," for lack of a better expression, imposed on Hurt precinct voters collectively.

Economic development and education (which we all know are interrelated), are two areas of significant concern to us under the current proposal.

Over the last few years, Hurt has worked diligently with Pittsylvania County and City of Danville (and thus their elected officials) to create the Staunton River Regional Industrial Facility Authority (SRRIFA) for the purpose of revitalizing a local economy that was taken to the brink of ruin with the loss of legacy industries such as furniture, textiles, tobacco, and others. SRRI FA, which specifically works to develop the Southern Virginia Multimodal Park in Hurt, needs to avoid major upheavals to the local political landscape -- at least for the foreseeable future -- to ensure/maximize functionality.

SRRIFA broke ground earlier this year on its first project, and other prospects are showing encouraging signs. Redistricting of its territory into that of two other counties who have limited incentive and vested interest, especially at this critical time, would not constitute a prudent course of action for the Staunton River Region.

In regards to public education, there is one school (J ohn L. Hurt Jr. Elementary) located in the Hurt precinct. If it is redistricted as drawn, then that school community would have its concerns fall under the purview of a legislator from two other counties, while most of the remainder of the Pittsylvania County school division would continue to be represented by its Chatham-based Delegate who is knowledgeable of and committed to specific local issues.

Given these concerns and potentially others, I respectfully urge you to reconsider and adjust the boundary to maintain the Hurt precinct in its rightful place, which is the new District 48, not District 52 .

I thank you sincerely for your time and attention to this matter.
Appreciatively,

## Gary Poindexter

## Councilmember, Town of Hurt, Virginia

Finance Committee Chair
Member, Community Development \& Public Relations Committee
Secondary Science Educator, Pittsylvania County Schools

Email: gary.poindexter@townofhurtva.gov
Cell/Text: 4344854279

| From: | Carole Hinton |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public comments submitted by Carole Hinton, Augusta County resident |
| Date: | Monday, December 20, 2021 9:41:44 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I strongly oppose breaking Augusta County in half and separating its two independent cities from District 2. Staunton, Waynesboro, and all of Augusta County should be retained in District 2 as communities of interest, public school districts, regional school divisions, watersheds, economic development partnerships, cultural heritage and agriculture. These communities are strengthened by sharing representation in one Senate district and it would represent a significant loss to change that. Senator Hanger has represented this area well and has been a great champion for our communities.

Sincerely,
Carole Hiinton

| From: | Lynn Mitchell |
| :--- | :--- |
| To: | Redistricting |
| Subject: | State Senate District |
| Date: | Monday, December 20, 2021 9:42:05 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

RE: State Senate District - Augusta County
FROM: Lynn R. Mitchell, Augusta County resident (currently State Senate District 24 / House of Delegates District 20)

Concerns with the current redistricting map for Augusta County:

1) Staunton and Waynesboro are part of the state senate district encompassing Augusta County; indeed, Augusta's seat of government is in Staunton. The three localities work together with shared entities that work with and help residents in the area, and would be better represented as one Senate district.
2) The redrawn map puts three incumbent state senators together in the district which would result in losing two of them, a tremendous loss of institutional knowledge.

Thank you for the opportunity to voice my concerns.

| From: | Stephen Ketcham |
| :--- | :--- |
| To: | Redistricting |
| Subject: | 12/7/2021 redistricting proposal |
| Date: | Monday, December 20, 2021 9:42:18 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Special Masters,
I am writing from Portsmouth.
Portsmouth is an African American majority community. I note from your redistricting proposal that you are redrawing two adjacent State Senate boundaries from which current African American Senators serve. This appears to be a denial of a specific racial group, in the whole, to elect representatives of their choice.

Similarly, your proposal combines areas represented by Portsmouth's current congressman, who is African American, with the residence of his party colleague in the US House of Representatives. This may well have the effect of abridging African American representation in Congress on the whole, as your proposed 2nd Congressional district appears as if you drew it to strip my congressman of his current party colleague.

Please recognize the citizens of Portsmouth, and work carefully to avoid abridging African American voting rights in any way.

Respectfully,
Stephen Ketcham
414 Crawford Street
Portsmouth, VA 23704

| From: | LLOYD WOOD |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Maps |
| Date: | Monday, December 20, 2021 9:42:36 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Roanoke County, City of Roanoke and the City of Salem should be together. The Cities of Blacksburg and Christianburg should be in a separate district. The Democratic whining should be ignored as the purpose of redistributing is to have regional districts that are not spread out. Thanks for your efforts.

Sent from my iPad

| From: | Victoria Cochran |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Southwest Virginia Redistricting |
| Date: | Monday, December 20, 2021 9:43:04 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

It is imperative that the commission maintain the communities of interest that exist between Radford, Blacksburg and Roanoke City. In addition to transportation communities of interest, via bus lines and train travel the 460 bypass and I81, there is a strong economic connection in which people from these areas engage significantly in employment, shopping, fine dining and commercial/banking and legal transactions. Those of us 'on top of the mountain' head North to Roanoke, rarely South for commercial transactions. Large centers of employment in all three localities share the majority of employees from within these three areas. The most significant connection, and one that would be severed under a mapping strategy that separates Roanoke City and the Blacksburg/Radford area, is the myriad educational ties among Virginia Tech, Radford University and the Carilion medical complex.
These communities are inextricably bound together and deserve cohesive representation in government.
Thank you for taking this comment into consideration.
Please acknowledge receipt.
Victoria Cochran
2175 Maple Lane
Blacksburg Virginia 24060
540-392-4101
victoria@victoriacochran.com
Get Outlook for Android

| From: | Lessica Bennett |
| :--- | :--- |
| To: | Redistricting |
| Subject: | maps for senate districts 4 and 5 |
| Date: | Monday, December 20, 2021 9:45:06 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
I believe Senate Districts 4 and 5 are poorly drawn. Blacksburg, Christiansburg, and Roanoke should be in one district. There are many ways these regions are connected. The Smartway Bus has stops in these three localities daily, including to the train station and the airport. The Virginia Tech Medical School and Fralin Biomedical Institute have locations in both Blacksburg and Roanoke. There is also the Roanoke-Blacksburg Technology Council. Blacksburg has little in common with the rural counties in the district you are proposing. If it is not possible to have Blacksburg, Christiansburg, and Roanoke in the same district, then at least Blacksburg and Roanoke should be in the same district.

Thank you.
Jessica Bennett
Blacksburg

| From: | Dominic Patafie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on the Special Masters Maps |
| Date: | Monday, December 20, 2021 9:46:40 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Justices of the Court,
I have submitted my own comments for the record, and watched the testimony of many others who spoke to different concerns, whether valid or contrived, that they had with the maps.

One issue I have with the maps that were released by the special masters, is that while on the top they look to be like acceptable maps, around the edges when you dig deeper these maps actually do a lot to decrease the quality or representation afforded to all residents of our Commonwealth.

A benefit to having the legislature draw the maps, opposed to out-of-state special masters, is the members of the legislature have close connection with their communities.

I think the court should do everything it can to listen to experts on Virginia when it comes to adjusting the special maps. One of the Virginia experts many people have been saying should have an input is Ben Tribbett.

Ben posted very good comments on twitter (screenshots attached) and I wanted you all to have the chance to look them over and consider his comments when it came to map adjustments.

You can view his comments at
https://twitter.com/notlarrysabato/status/1472926722790424576?s=21

Dominic Patafie
McLean, VA

Ben Tribbett
@notlarrysabato

## You have until 11 am to make comments for the special masters to consider. Here are my thoughts on the draft maps. (Thread)

© Senator Scott Surovell @ @ssurovell • 2d
Redistricting public comment period CLOSES in 2 days so get your comments in ASAP to redistricting@vacourts.gov if you want them read or take 2 min online on the maps themselves! Senate - virginiaredistricting.org/legdistricting... House - virginiaredistricting.org/legdistricting... Congress - virginiaredistricting.org/legdistricting...



Ben Tribbett @notlarrysabato.43m
That was a great example of a backfire though as the special masters didn't seem to know enough about Virginia to see they were splitting the key military communities apart that have always shared Congressional reps. Saw lots of testimony on it, so hopefully they fix it.


## Ben Tribbett @notlarrysabato.42m

In regards to the new 7th CD- the special masters should decide what it actually is. They poorly drew a PWC centered district and a 95 centered district. They should pick one or the other and draw around that. Haymarket to Fredericksburg is dumb.

1


2



Ben Tribbett @notlarrysabato • 31m
Finally, the new Fredericksburg seat should actually be greater Fredericksburg, keep it simple when possible.
Q 1

0

2


Ben Tribbett @notlarrysabato • 28m
In the House, I see a lot of comments around Falls Church that seem to be fake outrage as @ChazNuttycombe pointed out last night. Falls Church has historically been with Arlington, they even share a court system, and it is drawn correctly there.
> (tiv) Chaz Nuttycombe @ChazNutty... 16 h Weird thing here on the redistricting interactives for VA in the Falls Church area.
> Tons of spam on the House map, barely anything on the State Senate

$\uparrow \downarrow$
0
2


## Dominic Patafie

Twitter- LinkedIn (336) 594-9054

| From: | im Hinton |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Public comments submitted by Jim Hinton Augusta County resident |
| Date: | Monday, December 20, 2021 9:48:00 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I strongly oppose breaking Augusta County in half and separating its two independent cities from District 2. Staunton, Waynesboro, and all of Augusta County should be retained in District 2 as communities of interest, public school districts, regional school divisions, watersheds, economic development partnerships, cultural heritage and agriculture. These communities are strengthened by sharing representation in one Senate district and it would represent a significant loss to change that. Senator Hanger has represented this area well and has been a great champion for our communities.

Sincerely,
Jim Hinton

| From: | Warren Hall |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Gerrymandering map |
| Date: | Monday, December 20, 2021 9:48:10 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am unalterably opposed to politically-motivated redistricting ("gerrymandering") of voting precincts. I have lost faith in local, regional and national governmental decisions as no political decision has been "for the people" in the last dozen years if not more.

It is time to sweep all elected non-representatives from office and begin anew.
Vote NO on politically-sanctioned gerrymandering.

| From: | Mark Geduldig-Yatrofsky |
| :--- | :--- |
| To: | Redistricting |
| Subject: | 2021 Redistricting in Virginia |
| Date: | Monday, December 20, 2021 9:48:48 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Honorable Chief Justice and Justices of the Supreme Court of Virginia:
As a citizen and voter of the commonwealth for more than half a century, I have followed legislative redistricting for a least the last four iterations. I was somewhat hopeful that our latest effort would yield more equitable results than its predecessors, but I had concerns that the structure of the independent commission charged with drawing legislative boundaries would result in stalemate. Also, the presence of equal numbers of incumbent legislators and regular citizens on the body was antithetical to any semblance of independence from political influence.

The "court of last resort" stage in which the redistricting effort finds itself at this late date holds the promise, however, of producing what I would consider a fair outcome. The methodology applied to the task by the Special Masters removed the thumbs of self-interested legislators from the scale of justice and applied geographic and demographic data in what to my eye appears an unbiased manner. Although I as a voter with no political party allegiance believe that the controlling statute should have taken cognizance of the fact that I and others like me are an important part of the political landscape, I consider the work product of the Special Masters superior to what the previous approaches to redistricting created.

In reviewing other commentary on the proposal before you, I have noted sympathetically certain concerns from regular citizens about separations of select communities of interest. If substantiated by fact and remediable without a major unraveling of the larger portion of the redistricting tapestry, I would urge you to accommodate those constituencies. On the other hand, concerns from legislators about having to compete in the new state order with members of their own parties to retain their seats should be treated as the cost of doing business in a more equitable environment. At times the greatest service to the community consists of getting out of the way of progress.

Please let me know if you need additional information.

Yours truly,
Mark Geduldig-Yatrofsky, PO Box 50141, Portsmouth, VA 23703-0141, 757
967-7298

| From: | Noah Peters |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Redistricting Maps |
| Date: | Monday, December 20, 2021 9:55:07 AM |
| Attachments: | DRA_2020_-_2021-12-20_09.41.48.png |
|  | VA 10th.png |
|  | VA 4th district.png |
|  | VA 6th.png |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

My comment on the congressional map is as follows:
The Special Masters' proposed map needlessly splits Albemarle County. Albemarle and Greene are both part of the Charlottesville metro area and media market, and should be kept together in the 5th District.

To replace the lost population, Warren, Clarke and Page counties should be added to the 10th. Warren and Clarke are both part of the D.C. metropolitan area/media amarket. In addition, this would remove the need for any county splits in the 10th besides Spotsylvania. And it would eliminate the need to split Roanoke City from Roanoke County, which separates a community of interest.



While the Special Master's report claimed that it was not possible to draw a compact majorityminority district in the Richmond area that is above 33\% African American, this appears to have been incorrect. The proposed 4th district below is 38\% African American VAP, about the same as the current 4th (41\%), and would serve as an effective VRA district while remaining a compact, Richmond-centered district.


My overall proposed map is below. It is extremely compact and eliminates the split communities of interest in the Special Master's proposed map (that is, Charlottesville, Richmond, and Roanoke).
https://davesredistricting.org/join/fbe68086-0147-4ffd-9d6b-3fc0d5af9990


[^39]Respectfully,

## Noah B. Peters

11405 Mactavish Heights
Fairfax, VA 22030
(434) 466-4641

| From: | Missy Cotter Smasal |
| :--- | :--- |
| To: | Redistricting |
| Subject: | VA02 |
| Date: | Monday, December 20, 2021 9:56:39 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
I'm a Navy veteran and resident of Virginia Beach and am writing to ask you to keep Military and veteran populations together as a community of interest. We are essential to the socio-economic strength of Hampton Roads and should not be split into different congressional districts. Virginia Beach and Norfolk not only have veteran communities in common, but we move between the communities regularly.
Naval Station Norfolk, Fleet Forces in Norfolk, as well as Air Station Oceana in Virginia Beach work so closely together and have active duty servicemembers who live in both localities. We deserve to have the same federal representation in order to best advocate for their interests.

Thank you for your consideration.

Missy Cotter Smasal

| From: | Hamp II, Michael G. |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comment on Proposed Redistricting: House District 36 and Senate Districts 2 and 3 |
| Date: | Monday, December 20, 2021 9:58:03 AM |

## EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Donald W. Lemons, Chief Justice, the Honorable Justices of the Supreme Court of Virginia, and Special Masters,

The City of Waynesboro objects to the proposed House and Senate redistricting proposals. Noting our belief that the Staunton, Augusta, Waynesboro region is, at least locally, regarded as a community of shared interests, the City encourages the Masters to review the plan and would favor a plan that recognizes the common and shared interests of the two cities and Augusta County. The local governments work regionally provide key services and facilities such as the regional landfill, regional jail, social services, juvenile detention, Office on Youth. Further, the region more closely identifies and coordinates with counties and municipalities to the north on initiatives such as Go Virginia, the SAW MPO and the Workforce Development Board. The regional and cooperative work occurring among the localities relies, to some extent on coordination with and support from State Senator and House of Delegates member. As drawn the SAW region is split among two House districts. Divisions increase if the Harrisonburg and Rockingham localities are included. The configuration not support coordinated governance between the Commonwealth and the localities. Waynesboro's municipal leadership also objects to the reconfiguration of the second and third Senate districts.

Respectfully Submitted by Mike Hamp, City Manager on behalf of the City Council.

| From: | Gail Christie |
| :--- | :--- |
| To: | Redistricting |
| Subject: | Comments on the new Congressional Maps affecting Chesterfield and Henrico |
| Date: | Monday, December 20, 2021 10:01:16 AM |

## EXTERNAL EMAIL

## THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I have deep concerns about the way the maps drawn by the Special Masters split the communities of interest in the Richmond suburbs of Henrico and Chesterfield County into three different voting districts, in an apparent direct contradiction of their mandate. Two of these districts would now be anchored by heavily rural populations, with which we have little in common. There are strong economic ties between these two suburban regions, including the shared GRTC transportation network and a shared regional health care system. All three of the major health care providers, which are among the largest employers in the Richmond area, have patient care facilities in all three locations. I have personally used VCU Health providers in Richmond, Henrico, and Chesterfield in the past year. Many residents of these counties work in the other, or in Richmond, using highways that readily connect them. We have common interests of regional development and transportation that are not shared with the more rural areas into which we have been redistricted. We are diverse communities whose voices and racial composition are being diluted by this split. As a resident of Chesterfield County for 37 years, my community of interest includes the city of Richmond - where I commuted to work for 35 years - as well as Henrico - where I shop, use the park system, frequent entertainment venues, and have medical and financial services providers. There are numerous social and cultural ties connecting the Richmond suburbs in these two counties and the city of Richmond. Many retail and restaurant locations in both suburbs are frequented by residents of the other. The Richmond theatre community includes performance venues in Chesterfield and Henrico. My two favorite music venues are in Henrico. Chesterfield, Henrico, and Richmond share a Governor's School. Shalom Farms, which is the largest provider of fresh produce to Feed More, Central Virginia’s food bank, grows the bulk of their produce - over 500,000 servings on a site in Midlothian which is then distributed to families in need in Richmond, Henrico, and Chesterfield. My church belongs to a social justice network, RISC, which is comprised of congregations in Richmond, Henrico and Chesterfield that have actively engaged in the past several years on issues of housing, education, unemployment, student mental health, and gun violence prevention - with specific projects in Richmond, Henrico, and Chesterfield. The interests of these suburban communities west of Richmond will not be served by the proposed maps, which effectively take away our voice.

Sincerely yours,
Gail Christie
3509 Walkers Ferry Road
Midlothian, VA 23112
gail.e.christie@gmail.com
804 744-6175

```
From: Andrew Rose
To:
Subject:
Redistricting
Comments on VA 69th and 71st House Districts - Williamsburg
Date:

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Thank you for your work on this important redistricting effort.
I would like to offer comments on important problems with the existing maps on for the 69th and 71st districts. My main comment is that Williamsburg should not be moved into the 71st, as it does not have shared interest with Richmond suburbs or Upper Peninsula rural communities.

Williamsburg needs to remain in the 69th district, as it should not be separated from James City County. JCC and Williamsburg our really one mutual community that rely on many of the same services and have a shared economy.

Furthermore, Williamsburg has been separated from lower James City County, including Grove, in the current draft map. The history of the African American community in the Historic Triangle links the City and Grove in essential ways. Separating these two areas severs that historical link and shared community history and contemporary experience.

Thank you for your consideration.
Sincerely,
Andrew M. Rose
110 Willow Drive
Williamsburg VA 23185
```

From: Allan Brum
To: Redistricting
Subject: redistricting concern
Date: Monday, December 20, 2021 10:12:06 AM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Redistricting masters:
I live in the current 2nd Congressional District of Virginia, and I"m extremely concerned about the recently suggested and altered configuration of my district. Here's what worries me:

I live in Norfolk, where much of the military and it's bases are. That military presence is an enormous part of the economic lifeblood of our district. Those bases are located across Virginia Beach and Norfolk...we dearly need to have consistent representation, to coordinate advocating for the needs of our military and also the many thousands of people who depend economically on their presence. By splitting representation, our area loses that ability, and may cost us federal support.

Another critical reason not to split our district up as suggested relates to the environment, which is a critical concern for me. We depend on the health of our ocean and Chesapeake Bay, and need someone representing us who resides in this district and who has a vested stake in the environmental health of where we both live. The new map jeopardizes this increasingly critical issue.

The weird "J" shape configuration of the revised 2nd district would require driving through a large portion of the 3rd district to re-enter the 2nd...It is my belief that this sort of non-contiguous separation is exactly what redistricting is supposed to avoid.

I STRONGLY urge the special masters to reconsider their current map of the 2nd district and PLEASE allow for ONE representative to be the advocate for our economic and environmental future.

Thank you,
Allan Brum
9730 28th Bay St.
Norfolk, VA 23518
\begin{tabular}{ll} 
From: & Ellen Clements \\
To: & Redistricting \\
Subject: & Proposed District Maps Comments \\
Date: & Monday, December 20, 2021 10:13:15 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning. I am writing to challenge the latest redistricting map for the Congressional Districts. In particular, I feel that the 2nd District has been changed drastically which will affect the mutual communities of interest in our cities.
- There are large populations of military families and bases in the current district which share concerns that are best served by the same Congressional Representative.
- The coastal communities have environmental concerns that again are shared and benefit from working on solutions together. This is a major concern with catastrophic consequences if not dealt with immediately.
- I live in Virginia Beach on the border of Norfolk. Many of the residents in both of these communities live in one area and work in the other. It just makes sense that one person serves as their representative in Congress.
- Culturally speaking, Norfolk and Virginia Beach share similar interests in the Arts community with their museums, concert venues, and theaters.
- From what I have read, the new redistricting map splits up minority populations unfairly. In 2021, we should be putting racism behind us and moving forward to a just and equal representation in our government.

Please reconsider this map and restore the 2nd District to a more just and sensible representation of this area of Virginia. Thank you.

Sincerely,
Ellen J Clements
740 Rochelle Arch
Virginia Beach, VA 23464
757-650-1788
Disapprove of Redistricting Map as it is proposed
\begin{tabular}{ll} 
From: & Brittany Rose \\
To: & Redistricting \\
Subject: & Public comments regarding proposed redistricting plan \\
Date: & Monday, December 20, 2021 10:20:03 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Good morning,
Thank you for the work that the Court and the special masters have already put into the critically important and complex process of legislative redistricting. My name is Brittany Rose and I reside in the western portion of Henrico County here in the Richmond suburbs. I have provided public comment on every single map that was proposed by the redistricting commission, and I appreciate being given the opportunity on Friday to address you and your work. These comments are slightly expanded to include a few items that I was not able to fit within my 3 minutes of testimony.

As with many others from the Richmond suburbs and broader central Virginia region who have already testified and provided feedback on the interactive website, I have very serious concerns with how our region has been split apart in the proposed Congressional maps. The current proposal would carve my portion of western Henrico County, which is currently in CD7, into CD1 with largely rural counties stretching all the way to the eastern shore. It feels very much as though my community has been treated as simply a way to increase population in a district for another, disparate portion of the commonwealth. The Richmond suburbs, including Henrico and Chesterfield, share very real and tangible connections - economically, socially, through public transport infrastructure, and in many more ways that you have already heard about. Another example I would like to share is how our region is tied together through the provision of health services. When I have sought medical care for my children through the VCU health system over the course of the past year, we have been seen by providers at the main hospital in the City of Richmond, at satellite offices in Henrico, and as recently as Monday at a facility in Chesterfield. To split these three geographically close and inexorably tied localities into three separate Congressional districts (CD1, CD4, and CD5) simply does not make sense by any measure of what constitutes a community of interest.

I strongly support the approach taken towards CD7 in the Farkas Congressional maps that were proposed on Thursday evening. This proposal does a far superior job of recognizing central Virginia as a region with shared interests - particularly with the east/west orientation of CD7 as they have proposed compared to the north/south orientation of the current CD7 or the effective drawing and quartering of the Richmond region in the court's draft maps.

Regarding the state level redistricting, I have mixed feelings about the proposed maps for the House of Delegates where I would be drawn into district 57 comprised of part of western Henrico and eastern Goochland counties. On one hand, I appreciate that the court's proposal would not split up the significant Asian population in my area of Henrico as the current maps do and as many of the commission's proposed maps would have done. One the other hand, I have a concern about how the western portion of Henrico County has been split into four separate districts - two (HD58 and HD80) are comprised of just Henrico residents. In the other
two proposed districts, including mine - HD57 and HD59 - parts of western Henrico County are paired with neighboring rural counties. As with the proposed congressional districts, I feel that my community in western Henrico County has been split apart primarily to add population to surrounding rural counties instead of respecting our collective community of interest in Henrico.

Regarding the state Senate maps, I very much appreciate the fact that my portion of Henrico County would be drawn into a SD16, a district that is fully comprised of Henrico County. In fact, although Henrico would be split into three Senate districts instead of the current two under the current proposal, two of the three would be comprised fully of Henrico residents and the third would include similar communities outside of Henrico. This is the sole proposal in which I feel Henrico County has been fully recognized and maintained.

I request that you instruct the special masters to incorporate the input into the plan that they submit to you for your final consideration. Thank you for your time and for inviting and utilizing public comment on the legislative maps.

Sincerely, Brittany Rose
\begin{tabular}{ll} 
From: & Mary Alice Barksdale \\
To: & Redistricting; Mary Alice Barksdale \\
Subject: & Redistricting plan \\
Date: & Monday, December 20, 2021 10:26:37 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The New River Valley, particularly Blacksburg, Radford, and Christiansburg should be grouped together as representative of the New River Valley in each of the redistricting designs. This is an existing community of interest, and should not be connected with any parts of Roanoke/Salem. We have both university-related and non university-related interests that are in concert. The New River Valley should be celebrated as a true compact community of interest. Our mountainous rural environment surrounding the New River is a significant feature of the state of Virginia and we deserve recognition and encouragement in all state decision making processes.
Respectfully, Mary Alice Barksdale, 618 7th St., Radford, VA, 540-818-8620

December 20, 2021
Clerk of the Supreme Court of Virginia
Re: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A (comments on proposed redistricting map of Chesterfield County)

To Whom It May Concern,
Chesterfield County has been for my family a single community, its residents linked by shared government, shared opportunities, problems and solutions, shared transportation arteries, school opportunities, employers, shared networks of medical care and other services, shopping opportunities...much like a sprawling city. Our 37 years in Chesterfield has always felt like an experience within one community-living in 2 of its neighborhoods, sharing the upbringing of our 3 children with county schools, supporting our church, appreciating arts and recreational opportunities, mostly along a 5 mile stretch of Hull Street Rd. Yet the proposed map splinters those 5 miles into 3 districts. Our community should "remain whole" to a greater degree than the proposed map allows and shouldn't arbitrarily be split multiple times.

Our county is increasingly politically "competitive," another value that must be defended in new maps. This competitiveness has been quite evident in races up and down the ballot, and I believe electoral competition is essential for responsive government. Yet, rather than preserving this increasing competition for future House races, the new map splits Chesterfield into 3 noncompetitive districts.

Chesterfield is also now racially and culturally diverse. This matters greatly to us, to our church and its justice-seeking mission. With more than \(40 \%\) non-white voters in the 2020 census, Chesterfield's diversity could have been honored by creating minority "opportunity districts"-another value that should be defended in new maps--where one constituency could have an amplified voice by allying with other groups. Instead, by chopping up the county into vertical slices, the proposed map "packs" much of our minority vote into a single House district (76). This may have been an oversight, but it appears to go against the letter and spirit of our new redistricting laws, smacking of racial gerrymandering.

Thank you for considering these concerns.
Herschell Emery
3509 Walkers Ferry Rd
Midlothian, VA 23112
\begin{tabular}{ll} 
From: & Lames Harder \\
To: & Redistricting \\
Subject: & Redistricting in the NRV \\
Date: & Monday, December 20, 2021 10:42:14 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I want to write and comment about the Supreme Court of Virginia's first proposal for the House of Delegates and Senate redistricting.

I believe that the New River Valley will be poorly impacted by both maps. In the Senate, it makes sense to pair Blacksburg, Radford and Roanoke together. These areas have similar economies and also the tie between Virginia Tech and Roanoke is such an important driver of this area's growth. Pairing most of Blacksburg with a district that includes Tazewell, Wytheville and Marion doesn't make sense and feels like a partisan attempt to split up a Democratic area. Even more important is the HoD proposal, Radford and Blacksburg have so many similarities that make sense to combine for a single HoD seat. They are both university towns, with deep connection to the NRV. Please keep Radford and Blacksburg together in a single district!

Best,
James Harder
1108 Highland Circle
Blacksburg, VA 24060
\begin{tabular}{ll} 
From: & LRS \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 10:45:25 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern: I am a citizen of Roanoke County, Town of Vinton. I do not support separating the town of Vinton from the rest of the Roanoke Valley and lumping it in with communities from which it is geographically and socially isolated, seemingly for political purposes. In general, Congressional districts should be geographical. They should combine communities that are geographically close and socially knit together. This also intrinsically avoids re-drawing district boundaries to favor certain political entities or parties and also avoids segregating districts by race, as has been attempted in the past. Therefore, I strongly support keeping Vinton together with the other communities in the Roanoke Valley and NOT grouping it with communities as far removed as Staunton, which otherwise would have no connection with Vinton.

Constituents John R. and Amy L. Saunders
(1) ffite af the (Tity © © muncil

\section*{}

\author{

}

December 20, 2021

Supreme Court of Virginia 100 N. \(9^{\text {th }}\) Street
Richmond, Virginia 23219
To Whom It May Concern,
I am reaching out to express my concern regarding the Congressional District Maps proposed by the Special Masters as part of the Virginia redistricting requirements. Specifically, I would like to address Congressional Districts 2 and 3.

I have lived in Norfolk all 43 years of my life, and have served on the Norfolk City Council, representing Ward 5 since 2010. Ward 5 borders Virginia Beach and includes entrance gates in Norfolk to the Joint Expeditionary Base - Little Creek. Ward 5 also includes all of the main gates into Naval Station Norfolk. In addition, Ward 5 also includes just over six miles of Norfolk waterfront on the Chesapeake Bay and includes water entrances to the Joint Expeditionary Base. Serving Norfolk citizens these last 12 years, gives me a unique perspective when discussing communities of interest.

I can appreciate the Special Masters working to keep boundaries as compact as possible which is evident in the proposed \(3^{\text {rd }}\) Congressional District. However, the elongated \(2^{\text {nd }}\) Congressional District is not compact, and by moving military installations located in Norfolk out of this district, it splits communities of interest in Hampton Roads.

Military and veteran populations that are essential to the socio-economic strength of Hampton Roads should not be split in the congressional districts. Naval Station Norfolk, Fleet Forces in Norfolk, as well as Air Station Oceana in Virginia Beach work so closely together and have active duty servicemembers who live in both localities. They deserve to have the same federal representation to best advocate for their interests. Norfolk communities in Ocean View which is in Ward 5 and those bordering Naval Station Norfolk and Little Creek overlap with Virginia Beach as a community of interest. Many of the residents here cross city lines regularly for work and have more in common with Virginia Beach than other neighborhoods and localities that will be in the proposed new \(3^{\text {rd }}\) Congressional District. Isle of Wight \& Suffolk which would now be in the new \(2^{\text {nd }}\) Congressional District share more economically and culturally with Portsmouth in the 3rd than they do with Virginia Beach.

December 20, 2021
Page Two

The Ocean View and waterfront parts of Norfolk and Virginia Beach specifically should be together in federal representation due to their shared environmental concerns. Reports by leading environmental scientists state that sea level could rise by several feet along our shores by the end of the century should be raising serious alarm. Beyond the human cost of that disastrous possibility, the economic and infrastructural damage such a change could inflict on these communities is unthinkable.

It is clear to me that the Special Masters prioritized not splitting localities at the expense of splitting communities of interest in Hampton Roads. If this is allowed to proceed, I am concerned about the diluted representation our military installations and population will have in Congress.

Sincerely,


Thomas R. Smigiel Jr.
Councilman Ward 5

\section*{McLean Citizens Association}


The Voice of McLean for Over 100 Years

Post Office Box 273
McLean, Virginia 22101
December 20, 2021
Dear Justices and Special Masters,
I am writing on behalf of the McLean Citizens Association (MCA), which represents area households to local and state governmental bodies through a 40-member board of directions. We have served the interests of the Greater McLean community since 1914 and is the oldest civic association in Fairfax County.

We have reviewed the proposed redistricting maps for the Virginia Senate, Virginia House of Delegates, and Congress and are concerned that the Greater McLean community is split between neighboring districts in each proposal. While we understand many constitutional and statutory provisions are considered, for our purpose, these maps fail to preserve a community of interest (COI). The Greater McLean community shares a strong sense of "place" in orientation to our schools as well as public services, including police and fire protection, libraries, senior centers, and park facilities, of which these boundaries ignore.

The memoranda submitted by the Special Masters notes, "we acknowledge there are likely other communities of interest of which we are not aware. We look forward to receiving the commentary... of the public to help improve the map in this regard." We indeed hope for the maps to be improved upon and ask your consideration in keeping our historic Great McLean community together.

Thank you for your time and efforts on behalf of the Commonwealth.
Respectfully,


Robert H. Jackson
President
\begin{tabular}{ll} 
From: & Penny Livesay \\
To: & Redistricting \\
Subject: & Don"t lump Giles County with Blacksburg, please \\
Date: & Monday, December 20, 2021 10:54:48 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I oppose the plan to lump rural Giles county together with prosperous, rapidly growing Blacksburg. Having lived for more than a decade in Blacksburg and now for more than 20 years in Eggleston, I can assure you that the two do not form a rational community of interest. Giles County needs sustainable economic development, public transportation options for the isolated rural poor, and more resources to address a severe and worsening epidemic of addiction that both arises from and fuels the lack of hope and opportunity here. (For example, there is a desperate need for affordable housing for those recovering from addiction).

Giles County has great natural beauty and agricultural interests, both of which need to be preserved and developed sustainably to support local communities - for instance, with its access to the Appalachian Trail and the New River, it has great potential for expanded ecotourism that would preserve our natural resources and provide long-term economic opportunities in the community.
Giles County needs a representative who will recognize and work for its unique interests and for its residents. Blacksburg has a more affluent and on average more educated population whose demands would, I fear, likely drown out Giles County's urgent but differing needs. Instead, I believe Blacksburg and Roanoke form a far more rational community of interest and are much more reasonably paired in the same district. There are very strong economic and transportation links between the two, and VT has already expanded its campus to Roanoke by placing the Carilion School of Medicine there; they did not choose to bring that campus and its attendant jobs to Giles County.
I have spent the past five years running a children's book donation project, Open Book for the New River Valley, which works with numerous community partners such as Head Start, New River Valley Community Services, and the Giles Co. Health Department, and attend the Giles Co. focus group, which brings together representatives from these and many other organizations, as well as law enforcement, which has taught me much about the needs of our local communities. Please don't eviscerate our county's ability to work for its own interests by placing us in the same district with thriving, prosperous Blacksburg.

Sincerely,
Laura P. Livesay
\begin{tabular}{ll} 
From: & \(\underline{\text { Liam Barlow }}\) \\
To: & Redistricting \\
Subject: & Public Comment \\
Date: & Monday, December 20, 2021 10:56:20 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To whom it may concern,

During my 4 years at Virginia Tech and in Blacksburg, I had the privilege to work on 3 campaigns for the House of Delegates in the current HD12. Despite being a brutal gerrymander that split the campus of Virginia Tech in half, this district saw multiple competitive elections. However, the newly proposed HD41, instead of better uniting communities of interest, divides Virginia Tech and Radford into separate districts while connecting Virginia Tech to communities even further away with even less in common. Speaking as a \(3 x\) organizer in this region, I can attest that this district, while nominally competitive, is unlikely to change hands this decade as drawn. I encourage the Court and special masters to once again unite Blacksburg with Radford while keeping Tech's campus whole. The resulting district will be highly competitive and give a chance for Virginia's youth- from either party- to influence who represents them in the General Assembly.

With Thanks and Happy Holidays,
William Barlow
Virginia Tech Alumnus '21
Resident of Blacksburg, VA

Dear Justices of the Supreme Court,

As President of the Greater Wilton Woods Citizens Association, I'm asking you to reconsider the proposed changes to the existing \(43^{\text {rd }}\) and \(44^{\text {th }}\) districts (the newly proposed \(16^{\text {th }}\) and \(17^{\text {th }}\) districts). The proposed changes will dilute our neighborhood voice in the Virginia legislature. By not considering community boundary lines and Fairfax County School District Pyramids lines the proposed changes cause unnecessary community splits in my area.

\section*{Boundary of the Greater Wilton Woods Citizens Association}


The Clermont precinct (423) and the Mt. Eagle precinct (408) should be included in in the new district 17. The new District 17 should mirror the current District 43 and to balance that, the new District 16 should mirror the current District 44.

Thank you and I hope you will consider and implement my comments.

Lawrence Dempsey
President, Greater Wilton Woods Citizens Association
\begin{tabular}{ll} 
From: & \(\underline{\text { Karen Mask }}\) \\
To: & Redistricting \\
Subject: & Proposed map comments \\
Date: & Monday, December 20, 2021 11:02:25 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Chief Justice and Justices of the Virginia Supreme Court,
Thank you for the opportunity to address the Court on Friday, December 17, 2021 regarding the proposed congressional map. I am providing my written comments as a follow up to my public testimony for the record.

Thank you,
Karen Mask

Good afternoon. My name is Karen Mask and I am a resident of Chesterfield County. To the Supreme Court Justices - thank you for allowing me the opportunity to address the Court today. Thank you also to the Court's Special Masters and administrative staff for their work during this process.

My family and I relocated to the Richmond metro area from Atlanta, Georgia in the summer of 2015. As we researched the various localities prior to our move, we discovered that the City of Richmond, Henrico County, and Chesterfield County were thriving intertwined communities that afforded great housing, employment, healthcare, and economic flexibility for families like ours. Ultimately, we bought a house in Chesterfield County so our sons could attend the county's excellent public schools. We have established healthcare relationships with providers in Chesterfield, Henrico, and even in Charlottesville. We are employed in Richmond and Henrico and, lastly, shop and enjoy entertainment venues in all four localities l've mentioned.

This background highlights the first issue I have with the December 8 Map - the map
tears apart Central Virginia communities of interest; including the Richmond,

Henrico, and Chesterfield corridor and the I-64 corridor from Western Richmond to Charlottesville. We must do better.

Secondly, the December 8 Map packs Black voters into congressional districts 3 and 4, effectively weakening the strength of the Black vote in the region. The 2020 Census demonstrated significant minority population growth in Virginia and the voices of these minority voters deserve to be heard. We must do better.

Thirdly, the December 8 Map disproportionately adversely affects the three Congresswomen currently serving Virginia and, subsequently, the constituencies they serve. My constituency, the current 7th congressional district, would be spread across 5 congressional districts in the new map. Similar disruptions to incumbent constituencies - meaning the communities who are served together under our current maps - would occur across the state, such as in the Hampton Roads area. Those responsible for redistricting have a duty to produce new maps that meet legal requirements while minimizing change. We must do better.

It has been suggested that there isn't a way to keep central Virginia communities together in the redistricting process. I respectfully disagree. The Farkas Map presented to the Court addresses the concerns l've outlined today, resulting in a fair map that complies with federal and state law. Specifically, the Farkas Map:
-
creates compact districts which maintain communities of interest while minimizing change
-
protects the voting strength of Virginia's growing minority population and
equally distributes voters across the 11 congressional districts
We must do better. The Farkas Map better addresses the redistricting needs of Virginia and I urge the Court to consider the Farkas Map in its deliberations. Thank you for your time.
\begin{tabular}{|c|c|}
\hline From: & Lerry Sovich \\
\hline To: & Redistricting \\
\hline Subject: & redistricting \\
\hline Date: & Monday, Dec \\
\hline \multicolumn{2}{|l|}{EXTERNAL EMAIL} \\
\hline \multicolumn{2}{|l|}{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS} \\
\hline
\end{tabular}

The proposal to remove Norfolk from the 2nd district smacks of
Gerrymandering. Virginia Beach and Norfolk have similar environments and concerns and should not be separated.

Jerry Sovich

Clerk of the Supreme Court of Virginia
Re: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A (comments on proposed Senate redistricting map of Chesterfield County)

To Whom It May Concern,
By separating Chesterfield County, Henrico County and Richmond, the proposed map treats these communities as if they are not in fact a highly integrated "community of interest," its residents linked by opportunities, highway systems, employment opportunities, medical care and other services, shopping, arts and recreation.

As part of this community, Chesterfield County, where my family has lived for 37 years, is increasingly politically "competitive" and a new Senate map should preserve this positive quality that makes government more responsive to voters. Yet, rather than preserving this increasing competition, the proposed separation of Henrico, Chesterfield and Richmond from each other reduces competition. The effect becomes even more extreme with the further subdivision of both Henrico and Chesterfield along north-south lines, splitting each into noncompetitive districts.

Chesterfield is also now racially and culturally diverse. This matters greatly to us, to our church and its justiceseeking mission. With more than \(40 \%\) non-white voters in the 2020 census, Chesterfield's diversity could have been honored by creating minority "opportunity districts"-another value that should be defended in new maps-where one constituency could have an amplified voice by allying with other groups. Instead, by chopping up the county into vertical slices, the proposed map "packs" much of our minority vote into a single Senate district (15). The West-East subdivision of Henrico has the same undesirable impact on that county.

Thank you for considering these concerns.
Herschell Emery
3509 Walkers Ferry Rd
Midlothian, VA 23112
\begin{tabular}{ll} 
From: & \(\underline{\text { Nancy Lazier }}\) \\
To: & \(\underline{\text { Redistricting }}\) \\
Cc: & \(\underline{\text { nancy lazier }}\) \\
Subject: & Comments on redistricting \\
Date: & Monday, December 20, 2021 11:26:09 AM
\end{tabular}

EXTERNAL EMAIL

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

As a resident of Virginia Beach for 46 years I've watched Virginia Beach change from a bedroom community of Norfolk to the largest city in the state. It is apparent that the Norfolk and Va Beach communities share the same interests and challenges. Our mutual military presence makes it easier for our legislators to address our concerns. The 2nd CD should continue to encompass Va Beach and Norfolk so we can more forward with what's in the best interests to support our military, wives, and children. Additionally we face the same new climate/ environmental challenges. Therefore please allow the 2nd Congressional District to remain intact.
\begin{tabular}{ll} 
From: & ppotts@verizon.net \\
To: & Redistricting \\
Subject: & Support for House/Senate Maps \\
Date: & Monday, December 20, 2021 11:27:06 AM
\end{tabular}
\begin{tabular}{|l|l} 
EXTERNAL EMAIL & \\
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON \\
ANY LINKS OR DOWNLOADING ANY ATTACHMENTS \\
\hline Dear Virginia Supreme Court:
\end{tabular}

I am writing to support the House and Senate maps created by the Special Masters. The borders do an excellent job representing communities of interest in Arlington while keeping our representation compact. Keeping communities of interest together, such as the Rosslyn-Ballston metro corridor, Halls Hill, and Green Valley, will keep our diverse community strong and represented. In addition, including Falls Church City along with Arlington also makes sense given we already share our judicial functions and several constitutional officers. Both the House and Senate maps accomplish this goal.

I urge the Supreme Court to adopt without change the proposed House and Senate maps that respect the unique and individual communities of interest in Arlington and Falls Church.

Respectfully,

Paula Potts
604 A N Tazewell St
Arlington, VA 22203

COUNTY OF PRINCE EDWARD, VIRGINIA

December 20, 2021


Post Office Box 382
I I I N. South Street, \(3^{\text {rd }}\) Floor

\section*{VIA EMAIL@REDISTRICTING@VACOURTS.GOV}

Ms. Muriel-Theresa Pitney, Clerk of the Court
Supreme Court of Virginia
100 North 9th Street, \(5^{\text {th }}\) Floor
Richmond, Virginia 23219
Dear Ms. Pitney:
I write on behalf of the Board of Supervisors of the County of Prince Edward, Virginia, as we wish to provide input and express several concerns regarding the proposed Redistricting maps for the establishment of voting districts for the Virginia General Assembly.
1. The redistricting maps, as proposed, have split the County of Prince Edward between two Senate Districts and two House of Delegates Districts. For a small rural community, this separates our community of interest essentially in four different directions. By carving up our county into four dissimilar General Assembly districts, Prince Edward County's voice in the Virginia General Assembly is minimalized.
2. The current House of Delegates map could make it virtually impossible for the County of Prince Edward to meet the equal population requirement for state legislative districts. As currently drawn, the Prince Edward County population included in House District 56 totals 2,890 people. The optimum population for our eight local election districts is 2,716 . This is a deviation of 174 people, or \(6.41 \%\). Two issues come into play using the current map:
a. The U.S. Supreme Gourt has held that local election districts are subject to the-substantially equal population standard. The County of Prince Edward should have populations that are substantially equal to each other, with a plus or minus five percent deviation from the ideal district population. The current map creates a \(+6.41 \%\) deviation for the County's District 2 (Lockett); and
b. Section 24.2-307 of the Code of Virginia, 1950, as amended, reads: "Each precinct shall be wholly contained within a single congressional district, Senate district, House of Delegates district, and election district used for the election of one or more members of the governing body or school board for the county or city." If the current House of Delegates map is approved, the County is locked into keeping local District 2 (Lockett) as drawn in order to meet the requirements of the Section 24.2-307. This puts the County in violation of the substantially equal population standard.

While the Board of Supervisors unanimously opposes the injurious subdivision of our county by the draft plan, pragmatically, we would ask the Court, at a minimum, to consider one change to the House of Delegates districts map. Moving one Prince Edward County Census Block (we provide the attached map highlighting an example of a block that could be moved) from House District 56 to House District 50 (from local District 2 into local District 3) will cure the local issues outlined above and enable the County of Prince Edward to comply with the substantially equal population standard and the requirements of Section 24.2-307 of the Code of Virginia.

The County of Prince Edward is most appreciative of this opportunity to provide input and we thank the Court, in advance, for its consideration of our input and concerns. We stand ready to answer questions and provide additional information, if needed.


Attachment
Copy: Prince Edward County Board of Supervisors
Election
Districts

Highlighted Census
Block \#511479303012000

\title{
Linited States \(\mathfrak{S e n a t e}\)
}

December 20, 2021
Ms. Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 N. 9th Street, 5th Floor
Richmond, VA 23219
Dear Ms. Pitney:
We are writing to offer comment on the Special Masters' proposed Congressional Districts Map released on December 7, 2021. While the intention of the proposed map was to balance a number of competing considerations to create fairer maps, the result instead places the heavy weight of change on the three women in the delegation.

In 2009, there were no women representing Virginia at the federal level. Although Virginia had previously elected two women to the House of Representatives, a woman did not join our delegation again until 2011 and we did not have multiple women serving in our delegation until 2019. The three women in our delegation have served with distinction since being elected and now advocate for the interests of their districts and Virginia on key committees in Congress.

Although the proposed map makes some changes to each of Virginia's eleven Congressional Districts, the most impactful geographic changes occur in the three districts currently represented by women. The women representing Virginia's second and seventh districts would no longer live in the districts that they have now been elected twice to represent under these proposed maps. Additionally, Virginia's tenth district- also represented by a woman - was significantly redrawn.

This is not intended to be a partisan critique of the proposed maps. We are submitting these comments because we believe it is possible to spread the burden of changing district lines across the entire delegation rather than asking the women in our delegation to shoulder a disproportionate burden. Thank you for your consideration.

Sincerely,


Mark R. Warner
United States Senator


Tim Kaine
United States Senator
\begin{tabular}{ll} 
From: & David Suetterlein \\
To: & Redistricting \\
Subject: & Redistricting: Do not needlessly split Roanoke Valley; NRV; or Augusta \\
Date: & Monday, December 20, 2021 11:36:26 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Justices,
Districts should be compact so citizens can have greater access to their legislators. The same partisan voices that inflicted the 2011 Senate gerrymander on our region want to again needlessly slice and dice the Roanoke Valley, New River Valley, and Staunton for partisan goals. These are different communities as represented by their different advocacy organizations, education systems, hospitals, and commuter habits.

Advocacy Organizations
Business interests have collectively organized in these distinct communities as the Roanoke Regional Chamber of Commerce; the Montgomery County Chamber of Commerce; and the Greater Augusta Regional Chamber of Commerce. The NAACP has three distinct branch chapters serving these regions including the Roanoke Branch NAACP; the Montgomery County - Radford City - Floyd County NAACP; and the Staunton NAACP. The local governments of Roanoke City, Roanoke County, the City of Salem, and the Town of Vinton collectively advocate with others through the Roanoke Valley-Alleghany Regional Commission; Montgomery County, Radford, Blacksburg and Christiansburg are all part of the New River Valley Commission; and Staunton is part of the Central Shenandoah Planning District Commission. Charities are similar organized in these regions with the United Way having three distinct chapters in each of these three communities.

\section*{Education}

Virginia's K-12 school systems are almost exclusively organized by county and city and splitting jurisdictions usually means splitting local school communities. Even at the community college level these are distinct communities. Community college students from Roanoke County, Roanoke City, Salem, and Vinton attend Virginia Western Community College; Montgomery County, Radford, Christiansburg, and Blacksburg students attend New River Valley Community College; and Staunton students attend Blue Ridge Community College

Hospitals
Roanoke County, Roanoke City, Salem, and Vinton are served by Carilion's Roanoke Memorial Hospital and HCA's LewisGale Hospital. Montgomery County, Radford, Blacksburg, and Christiansburg are served by the Carillion New River Valley Medical Center and HCA's LewisGale Hospital Montgomery. Staunton is served by Augusta Health.

Commuter Habits
The picture of these communities is also reinforced by the Weldon Cooper's March 2018 report, Virginia Locality-to-Locality Commuting Data.
Roanoke County's top commuting partners are Roanoke City, Salem, and Botetourt County. Roanoke City's top commuting partners are Roanoke County, Salem, Botetourt County, and Franklin County.
Salem's top commuting partners are Roanoke County and Roanoke City.
Montgomery County's top commuting partner is Pulaski.
Radford's top commuting partners are Montgomery and Pulaski.
Staunton's top 7 commuting partners do not include any community south of Augusta County.
When joining with like-minded citizens, seeking education, seeking healthcare, or going to work it's clear that the Roanoke Valley, New River Valley, and Staunton area have distinct, recognizable communities.

The legislative districts serving citizens in these regions should be drawn compactly to increase access to their legislators and not needlessly divided for partisan purposes.

Thank you for your consideration,
David Suetterlein
\begin{tabular}{ll} 
From: & Tommy Tomlin \\
To: & Redistricting \\
Subject: & Special Masters Map for the Virginia Senate \\
Date: & Monday, December 20, 2021 11:47:23 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The Special Masters' plan continues the split with the Counties of Lancaster, Northumberland, Richmond and Westmoreland from the 2010 redistricting.
Prior to 2010 redistricting these counties comprising the "Northern Neck of Virginia" and had been represented by Senator Richard Stuart, John Chicehect and Paul Mann which goes back for my voting lifetime(I am 64 currently).

These counties have been connected to various regional government bodies just as long or even longer. They are part of the 15th Judicial District, the Northern Neck Planning Commission \#17, Three Rivers Health Department, Northern Neck Technical Center, and the Middle Peninsula-Northern Neck Counseling Center(CSB).

These counties have an extensive number of common interests and long term connections. Splitting these counties apart hurts regional cooperation and joint plans.

I respectfully request that these counties remain intact and together as they did prior to the 2010 redistricting process.

Respectfully submitted,
Thomas H. Tomlin
61 Shalango Drive,
Heathsville, VA 22473
Northumberland County
\begin{tabular}{ll} 
From: & Cheryl Brooks \\
To: & Redistricting \\
Subject: & I oppose the new re-districting of Vinton VA \\
Date: & Monday, December 20, 2021 11:48:43 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
I am a citizen of the Town of Vinton of Roanoke County. I do not support separating the town of Vinton from the rest of the Roanoke Valley and lumping it in with communities from which it is geographically and socially isolated, seemingly for political purposes. In general, Congressional districts should be geographical. They should combine communities that are geographically close and socially knit together. This also intrinsically avoids re-drawing district boundaries to favor certain political entities or parties and also avoids segregating districts by race, as has been attempted in the past.
I strongly support keeping Vinton together with the other communities in the Roanoke Valley and NOT grouping it with communities as far removed as Staunton, which otherwise would have no connection with Vinton.
Thank you
Cheryl Brooks
641 Ramada Rd, Vinton, VA 24179

Clerk of the Supreme Court of Virginia
Re: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A (comments on proposed Congressional redistricting map for Chesterfield County)

To Whom It May Concern,
As long-time residents of Chesterfield County, my family has experienced Greater Richmond as a single "community of interest" where shared opportunities, problems and solutions link diverse groups in countless positive ways. The proposed map fails to acknowledge the vital connections and shared interests of Chesterfield County, Henrico County and Richmond. By splitting our area apart along north-south lines, the proposed map dis-integrates our community. Worse yet, the map for Chesterfield then quite strangely links our community's districts with rural communities to the West. Clearly this does not create coherent Senate districts around voters with shared interests, needs, concerns!

Furthermore, this mis-match reduces "competitive" districts in Chesterfield, which has become increasingly competitive. Competitive districts were supposed to be valued in the new maps, as they encourage responsive government. By joining of our community to rural ones to redraw our maps, the new map sacrifices competition and representation for both urban and rural communities.

Thank you for considering these concerns.
Herschell Emery
3509 Walkers Ferry Rd
Midlothian, VA 23112
\begin{tabular}{ll} 
From: & Pia Pell \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 11:54:45 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please do not gerrymander the Roanoke and New River Valley districts. Districts should remain compact for voting.
Pia Pell
VA resident
\begin{tabular}{ll} 
From: & Lane Dowrick \\
To: & Redistricting \\
Subject: & comments on proposed maps for HOD-72 and US-5 \\
Date: & Monday, December 20, 2021 11:56:32 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

I am writing to comment on the proposed VA House of Delegate \#72 map as well as the US Congressional District \#5. I am a resident of Midlothian precinct \#504, currently in US District \#7 and the VA House of Delegates District \#68. I urge you to revisit the consequences of separating Midlothian (particularly in HOD Map District \#72) from our true communities of interest in Chesterfield and the greater Richmond area.

I have been working, along with many others, to strengthen the public transportation services provided by the Greater Richmond Transit Company (GRTC) in the greater Richmond Metro area, in order to help people in the Metro area, especially the many who don't own cars, to access employment and vital services. I have served as a community volunteer since 2013, representing my church (located in the city of Richmond), along with RVA Rapid Transit, a non-profit organization advocating for public transportation in the Richmond Metro area. I fear the proposed US map \#5 and VA map \#72 would diminish our voices as advocates for the vital maintenance and extension of the public transportation system in the counties of Chesterfield and Henrico if we were represented by officials who would be focused on the very different transportation challenges of their rural constituents in Powhatan, Amelia, and Nottoway counties. Thank you for considering my comments.

\author{
Jane Dowrick \\ 10936 Live Oak Court \\ Midlothian, VA 23113 \\ 804-334-0117 Mobile
}
\begin{tabular}{ll} 
From: & Lohn Gregoire \\
To: & Redistricting \\
Subject: & Public Feedback Regarding Redistricting Map for Virginia \\
Date: & Monday, December 20, 2021 11:59:46 AM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Sir/Madam,
I would like to take this opportunity to provide public feedback regarding the redistricting map of Va. presented by the courts. My comments focus on districts 69 and 71.

They are as follows:
1. Williamsburg has been separated from lower J ames City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower James City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
3. The 69th district picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County. This makes no sense and should be removed from the 69th district.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities. This needs to be rectified and remain in the Hampton Roads geography.

To make this make map more balanced and fairer, it is my recommendation to add Williamsburg back into the 69th and remove the portion of Gloucester from the 69th.

Looking at the redistricting map of Va. overall, there are several glaring deficiencies, including-

The December 8 Map fails to achieve population equality while fully abandoning a modest change approach. The December 8 Map appears to impermissibly use race as a predominant factor.
The December 8 Map fails to respect communities of interest.
I believe the Farkas Map accounts for Virginia's population changes while ensuring compliance with federal and Virginia law. The Farkas Map provides equally
apportioned districts that are compact, share common community interests, and protect the voting power of Virginia's increasing racial and ethnic minority populations, consistent with all applicable laws and legal precedent. The Farkas Map achieves the goals that are more fully and consistent than the Special Masters' December 8 Map. It is my recommendation to use the Farkas Map as a template moving forward in this process.

The Virginia Supreme Court has an opportunity to come up with a plan for redistricting that will be a beacon for the rest of the country to emulate. Do not waste this opportunity or fall short of your responsibility to do what is best for this great state.

Thank you for your time and attention to this email.
J ohn Gregoire
3282 Newland Court
Toano, Va. 23168
\begin{tabular}{ll} 
From: & \multicolumn{1}{l}{ Loe Reynes } \\
To: & Redistricting \\
Subject: & Not in favor of the proposed redistricting plan \\
Date: & Monday, December 20, 2021 12:00:26 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Dear Sirs,
I am Joseph Reynes. I live at 401 Warren Crescent, Norfolk Virginia 23507. You can reach me at my e-mail jreynesf16@aol.com or phone 757-719-0323. I am against the proposed redistricting plan as currently laid out.
I would like to voice my displeasure and non-support for the proposed redistricting plan put forward. As a retired veteran of 35 years service and a 12 plus year resident of Virginia this proposed redistricting is not just biased in is unfair to veterans who serve their country and chose this area to live.
This plan will break the military and veteran populations that are essential to the socio-economic strength of the Hampton Roads area disadvantaging those who have served our country and continue to serve.
As an independent I was also disappointed that this plan unfairly targets three sitting women representatives and three register democrats in what is called fairness. The single act of placing these representatives out of their current districts places them at a disadvantage and does not represent the fairness of our forefathers. I could understand a split between parties and gender. But this appears to be a targeted messages against all women and democrats when we as a nation need to looking towards how we heal and understand our differences.
Bottom line: I do not agree or support the proposed redistricting plan as current laid out. We need to fix the current challenges to fairness but this plan does not do that and is even worse than what we have now. We need a bipartisan effort that includes, both parties and independents to make that happen.

Sincerely,

Joseph Reynes
Maj Gen USAF (RET)
Jreynesf16@aol.com
757-719-0323
401 Warren Crescent
Norfolk Virginia, 23507
Sent from my iPad
\begin{tabular}{ll} 
From: & Lawrence Knorr \\
To: & Redistricting \\
Subject: & Testimony Letter \\
Date: & Monday, December 20, 2021 12:03:23 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Your Honors, Virginia Redistricting Special Masters, and fellow Virginians,

My name is Lawrence Knorr, my wife, Karen, and I live in Midlothian, Va. We moved here in 2005 to continue my employment with DuPont, which has a large manufacturing and R\&D facility in the Richmond city area. I found this was very common where I worked and lived; people working in and by the city and living in the surrounding smaller communities in Chesterfield and Henrico. Our first night here we and our young son, Daniel, went to a Flying Squirrels baseball game at the Richmond Diamond. The first of many trips there. Within a short period of time he began playing on the FC Richmond Travel soccer team and I became active in the Richmond Dive club. We learned about and started participating in the many cultural events, festivals, activities, and opportunities associated with being close to the city; concerts, heritage festivals, outdoor activities associated with the James River...

Over the years we have enjoyed and benefited from living close to Richmond, and Richmond has benefited from the many people like us who don't live there, but are close by and give of our time, talent, and treasure to activities and causes we care about and can marshal around due to their being a center of gravity which the city's size, breadth and diversity enables. Similarly, our local community benefits from the people who gain their economic security from employment in the city. We shop nearby and support local merchants, invest in our homes and neighborhoods raising property values and allowing higher funding of schools and support to our local community services and charities. Its clear this is our community of interest, and its a win win and our elected representatives should have squarely in the center of their responsibilities and priorities.

Our elected representatives need to put their energies into enhancing and growing this mutually beneficial relationship between Chesterfield, Henrico, and the city of Richmond; actively attracting potential new employers while aiding with legislation to keep the city attractive to current and potential future ones. They also need to understand the needs and realities of the surrounding communities that end up providing much of the people resources needed to successfully operate businesses. The communities need to stay attractive as places to live in to attract the talented people who the companies need. We've all seen what happens when a significant employer leaves an area; large numbers of house sales that need to happen quickly, property values decline, and the whole community is negatively impacted. We need coherent, unified legislative representation that can only be realistically provided by having the same person represent our full community of interest. I believe this is a key reason the communities of interest criteria is a key provision of the redistricting effort.

The current redistricting maps further divide the communities of interest of Chesterfield, Henrico and Richmond beyond what is required by the guiding criteria. If accepted, I will live in a voting district that is more gerrymandered than before, largely dominated by rural voters who do not share my same community of interest, needs and desires. I urge you to keep these areas together as much as possible.

It is crucial at this period in time when the foundations of democracy, our voting and election processes, are under attack that this redistricting be done extremely well. I understand this has been very contentious, a large amount of effort has been spent, and there are many special interests, barriers, and realities. It is now to the courts to decide. I urge you to do what in your heart of hearts you know is right, even if it is not the path of expediency. You are the final decider because there is confidence that we are still a country that operates under the rule of law, and you will. This is too important to not have it done very well; for us now, and for our future. I urge you to be open to all avenues to get us to the desired end result, regardless of where they come from. Your service is very appreciated, as is this opportunity to present to you.

Muriel-Theresa
Pitney
Supreme Court of
Virginia
Street, 5th Floor
1315

\section*{Clerk of Court}

100 North Ninth
Richmond, Virginia 23219-

Dear Madam Clerk:

My name is Shaun Brown, I am a lifelong resident, born and raised in Virginia, attending Brown University, The London School of Economics and St.Hilda's College, Oxford University. I urge this Court to reject the voting maps submitted by the Special Masters because they sharply limit the number of majority-Black Senate and House Districts throughout Virginia.

My first experience with speaking out and fighting the lawsuits and backroom negotiations to dilute the vote of Black Virginians started when I graduated and returned home from Brown University in 1980 soon becoming one of the youngest members of the Democratic Party's Central Committee representing Newport News. On the Peninsula, the City of Newport News, led the way for single member districts at the local level. That set the tone for a single member district fight for House of Delegate seats that would insure not just Black representation but Black representation that reflected the neighborhood, socio-economic and class issues of the community. More than just securing a Black face, the neighborhood and community consensus, was to insure a Black face that was tied to the community. At that time there were several vibrant civic and community organizations throughout the City of Newport News, not just in the Black community. This issue of the type of Black representation was a problem for the House of Delegate, State Senator, now Congressman Bobby Scott who fought against us in favor of multi-member House of Delegate Districts. The thinking was that there was a need for a Black representative that could better serve the Black communities' interest by using leverage by negotiating an agenda, and placing the needs of all, over the specific needs and issues of the Black community. Congressman Scott intervened and derailed an agreed-upon plan for the drawing of City Council districts in Newport News, under the Department of Justice purview at that time. The City of Newport News was one of the last cities in the United States to integrate its school system.

The local NAACP, former Councilwoman and Mayor, Virginia Democratic Party's Vice Chair Jessie Rattley's public hearing consensus and the Newport News Republican

Party all agreed on six single member districts in Newport News with the mayor elected at large. At the time, the mayor was selected by the council. The intervention resulted in three districts (south, central and north) with 2 members each with the mayor elected at large in Newport News which has not always served the Black communities' interest, as anticipated in the 1980s. Congressman Bobby Scott, former Councilmember Charles Allen (now deceased), and local civil rights Attorney Oscar Blayton, we were told, met with the Justice Department officials who were waiting for the public hearing and community meeting outcome. They derailed the agreed on single member district plan.

Today's maps remind us of that same fight from the 1980s, in Newport News and around Hampton's school board seats district lines. Asking the Black community to once again place our issues behind and aside, reminds me of when I was told early on that the Virginia Democratic Party would concentrate on the needs of the middle class White Virginians. It was the impact of the then Democratic Leadership Council that was not in the Democratic Party, but an unofficial effort formed outside of the Party to move the Party to the center. Much of that strategy in moving the Party to the center to break the Republican stronghold then as it is now undermines the needs of Black Virginians and other protected groups.

During the 1980s until now, I have served as a member, executive committee member, founder or President of many organizations including Newport News'Neighborhood Council 24-34A Inc, (civic organization); Hampton's Coalition for Justice, (statewide civil rights); YWCA of the Virginia Peninsula, board member under 30 and in the 2000s; Candidate for Democratic Nomination, 2nd Congressional District,Virginia 2018, (Certified as a Independent-Ballot Controversy); Democratic Nominee, \(2^{\text {nd }}\) Congressional District, Virginia (2016); Progressive Democrats of America 2016; 2016 Bernie Sanders for President National Delegate the Democratic National Convention; Rev. Al Sharpton's National Action Network, Virginia Representative ; Founding Board Member of The Newport News Community Free Clinic; Save Our Southeast; Restore Inner City Peace (cease fire); as well as continuing to work with numerous candidates for local, state, and national office, including my own runs for city council, the Virginia House of Delegates, \(95^{\text {th }}\) District and Congress. I have been on the frontline fighting child hunger, gentrification, police shootings, coal dust environmental racism, police brutality, mass incarceration and fighting for voting rights, small businesses, entrepreneurs , inner city and rural economic development, real local police accountability commissions for each city or county, industrial development, removal of Confederate monuments, jobs, prison reform and affordable housing. These are all issues along with kitchen table issues that can be directly impacted by like minded neighborhood and community focused elected representatives in Virginia at all levels of public office. This is not a new fight. It is an

\section*{important fight for the very essence proclaimed by the Emancipation Proclamation that took until the 1960s to reach much of Hampton Roads.}

Section 2 of the Voting Rights Act prevents "a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). Such a "denial or abridgment" occurs if "the political processes leading to nomination or election in the State or political subdivision are not equally open to participation" by members of a protected class "in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice." Id. § 10301(b).

If approved, the Special Master's maps will reduce the number of Senate Districts to two, and the number of House Districts to five. Reducing majority-African American voting districts by more than half harms Virginia's Black Americans. But again, members of the Court, this is not a new story for Black Virginians.

Yes, I have highlighted the City of Newport News. But again, let us now forget the Emancipation Proclamation some 158 years ago and the harm of not freeing all Black Virginians in now West Virginia, including Berkley, Accomac, Northampton, Elizabeth City, York, Princess Ann, and Norfolk, including the cities of Norfolk and Portsmouth in 1863.

\section*{Transcript of the Proclamation}

January 1, 1863
A Transcription
By the President of the United States of America:

\section*{A Proclamation.}

Whereas, on the twenty-second day of September, in the year of our Lord one thousand eight hundred and sixty-two, a proclamation was issued by the President of the United States, containing, among other things, the following, to wit:
"That on the first day of January, in the year of our Lord one thousand eight hundred and sixty-three, all persons held as slaves within any State or designated part of a State, the people whereof shall then be in rebellion against the United States, shall be then, thenceforward, and forever free; and the Executive Government of the United States, including the military and naval authority thereof, will recognize and maintain the freedom of such persons, and will do no act or acts to repress such persons, or any of them, in any efforts they may make for their actual freedom.
"That the Executive will, on the first day of January aforesaid, by proclamation, designate the States and parts of States, if any, in which the people thereof, respectively, shall then be in rebellion against the United States; and the fact that any State, or the people thereof, shall on that day be, in good faith, represented in the Congress of the United States by members chosen thereto at elections wherein a majority of the qualified voters of such State shall have participated, shall, in the absence of strong countervailing testimony, be deemed conclusive evidence that such State, and the people thereof, are not then in rebellion against the United States."

Now, therefore I, Abraham Lincoln, President of the United States, by virtue of the power in me vested as Commander-in-Chief, of the Army and Navy of the United States in time of actual armed rebellion against the authority and government of the United States, and as a fit and necessary war measure for suppressing said rebellion, do, on this first day of January, in the year of our Lord one thousand eight hundred and sixtythree, and in accordance with my purpose so to do publicly proclaimed for the full period of one hundred days, from the day first above mentioned, order and designate as the States and parts of States wherein the people thereof respectively, are this day in rebellion against the United States, the following, to wit:

Arkansas, Texas, Louisiana, (except the Parishes of St. Bernard, Plaquemines, Jefferson, St. John, St. Charles, St. James Ascension, Assumption, Terrebonne, Lafourche, St. Mary, St. Martin, and Orleans, including the City of New Orleans) Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia, (except the forty-eight counties designated as West Virginia, and also the counties of Berkley, Accomac, Northampton, Elizabeth City, York, Princess Ann, and Norfolk, including the cities of Norfolk and Portsmouth[)], and which excepted parts, are for the present, left precisely as if this proclamation were not issued.

And by virtue of the power, and for the purpose aforesaid, I do order and declare that all persons held as slaves within said designated States, and parts of States, are, and henceforward shall be free; and that the Executive government of the United States, including the military and naval authorities thereof, will recognize and maintain the freedom of said persons.

And I hereby enjoin upon the people so declared to be free to abstain from all violence, unless in necessary self-defence; and I recommend to them that, in all cases when allowed, they labor faithfully for reasonable wages.

And I further declare and make known, that such persons of suitable condition, will be received into the armed service of the United States to garrison forts, positions, stations, and other places, and to man vessels of all sorts in said service.

And upon this act, sincerely believed to be an act of justice, warranted by the Constitution, upon military necessity, I invoke the considerate judgment of mankind, and the gracious favor of Almighty God.

In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.
Done at the City of Washington, this first day of January, in the year of our Lord one thousand eight hundred and sixty three, and of the Independence of the United States of America the eighty-seventh.

By the President: ABRAHAM LINCOLN
WILLIAM H. SEWARD, Secretary of State
National Archives
I ask that you reject these maps in the name of a just life that can only be defined for me by Bible law, because of a liberation theology that was ingrained in me early at age nine when I recall playing hopscotch on my grandmother's sidewalk on 31st Street in Newport News, Virginia. I ran in the house for a cool glass of water passing the television reporting that Dr. Martin Luther King had been killed. I looked up at my grandmother more than once who was seasoning the chicken to fry in the brown paper bag and making hot rolls. Seemingly not phased, the First Gravel Hill Baptist Church Deaconess, Caroline Melinda Rowlett Hill, simply said to me "remember he said that he may not make it there with us". My grandmother had boarded the bus in Newport News, Virginia to attend the "March on Washington in 1963". She had heard Dr. King's " I Have a Dream Speech." As a kid that day in April 1968, I became a part of the "us" in the movement and understood that others had to carry on the fight. We are our brother's keeper and we must possess a righteous anger when people are not treated fairly. This practical wisdom involves what I call a "perpetual sensitivity" to what a situation requires even when it is important to speak to the unequal use of government policies.

Is the promise of a promised land the same for all people? And who are the people? Your decisions in accepting or rejecting these maps will determine who the people are. Do we not have a right to be represented by people who are among us. It is beyond a civil right, it is a human right.

My Virginia Powhatan Confederacy family sought refugee in Black Virginia houses of worship so as not to perish, as a result of the creation of the British Proclamation and line of demarcation in the Western part of the State of Virginia in 1763. That too was a line drawn to "choose the people", a line that was drawn to keep the colonists east and Native Americans west. This Royal Proclamation of 1763 was very unpopular and angered the colonists. They felt the British wanted to keep an eye on them. By 1840, tens of thousands of Native Americans had been driven off of their land in the southeastern states and forced to go West in the Trail of Tears including my ancestors.

Finally, I ask that this Court recognize the relevance of ancient biblical laws, the foundation of our legal system, dating back to the "chosen people" in the Old Testament and the promise of a promise land in the covenant theology of the Book of Genesis and the Book
of Deuteronomy. You will determine the "chosen people" and control the promise of the promise land for Black Virginians in your decision here in the State of Virginia, the home of the first representative government in British North America in what came to be known as the "new world".

My hope is that you follow the 563 Commandment. Judge righteously. (Leviticus 19:15).

Miss Shaun Brown
1 Beatrice Drive
Hampton, VA
23666
757-849-
4095
\begin{tabular}{ll} 
From: & Viju Singh \\
To: & Redistricting \\
Subject: & Proposed Redistricting Maps \\
Date: & Monday, December 20, 2021 12:05:27 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Respected Justices, I am writing to you very disappointed with the proposed redistricting maps whether they are for Congressional districts or Virginia House of delegates and senate. I live in Midlothian, shop in Chesterfield \& Henrico, our Hindu Temples are in Henrico, Chesterfiled and Goochland and I have volunteered in City of Richmond schools for many years. In short, Central Virginia area is integral to my living. By lumping Midlothian with rural 5th district, my family has nothing in common with that district. The proposed maps will harm regional cooperation related to Central Virginia in developing infrastructure, transportation(GRTC), education and many other cultural ties that exist now. The new maps will further divide rather than unite communities of common interests and have unintended consequences of Virginians losing confidence in electoral systems.

The redistricting must be done by keeping communities of interest together at the same time having contiguous and compact districts. It has been done before and can be done again.
Thank you.
Mrs. Vijaylaxmi Singh
11531 Nicholas trace Court
Midlothain, VA 23113
804-272-4622


\title{
THE FARMVILLE AREA CHAMBER OF COMMERCE forward, together
}

December 20, 2021

\author{
VIA EMAIL @, REDISTRICTING@VACOURTS.GOV \\ Ms. Muriel-Theresa Pitney Clerk of the Court \\ Supreme Court of Virginia \\ 100 North 9th Street, 5th Floor \\ Richmond, Virginia 23219
}

Dear Ms. Pitney:

I am writing on behalf of the Farmville Area Chamber of Commerce located in Prince Edward County, Virginia. We would like to offer input and express concerns regarding the proposed Redistricting maps for the establishment of voting districts for the Virginia General Assembly.

The redistricting maps, as proposed, have divided the County of Prince Edward by both Senate Districts and House of Delegate Districts. This separates our rural community, and divides the community into different directions, minimizing the County's voice in the Virginia General Assembly.

The current House of Delegates map will make it difficult for Prince Edward County to meet population requirements for state legislative districts. The current map potentially places Prince Edward County in deviation of the ideal district population.

We would ask the court to change the current draft plan by moving one Prince Edward County Census Block from House District 56 to House District 50, from local District 2 into local District 3. We believe this will allow the County of Prince Edward to comply with the substantial equal population standard and maintain the County's voice in the Virginia General Assembly.

The Farmville Area Chamber of Commerce is grateful for the opportunity to provide input and we thank the court for its consideration.

Respectfully,

Anne Tyler Paulek
Anne Tyler A Paulek
Farmville Area Chamber of Commerce
Executive Director
Post Office Box 361
Farmville, VA 23901
director@farmvilleareachamber.org
www.farmvilleareachamber.org
\begin{tabular}{ll} 
From: & faye-hsln.62@verizon.net \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 12:14:59 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: The Honorable Justices of the Virginia Supreme Court
Our address in Henrico County is currently in Congressional District 7. Under the proposed redistricting plan we would be in C.D. 4. If it is not feasible for all of Henrico to be in the same district, we would like the portions of Henrico that are currently in district 7 to be included in new C.D. 1.

We are currently in Senate District 12. Under the proposed plan we would be in S.D. 14. We would like to see the boundary of proposed S.D. 16 moved farther east to incorporate our address.

We are currently in House District 72 but would be in proposed H.D. 80. We would like to see the boundary of proposed H.D. 57 moved farther east to incorporate our address.

Thank you for your consideration of our requests.
Faye Weems
2505 Pershing Avenue, Henrico, 23228
\begin{tabular}{|c|c|}
\hline From: & Ethan Darrow \\
\hline To: & Redistricting \\
\hline Subject: & Redistricting M \\
\hline Date: & Monday, Decem \\
\hline \multicolumn{2}{|l|}{EXTERNAL EMAIL} \\
\hline \multicolumn{2}{|l|}{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS} \\
\hline
\end{tabular}

Making the 5th district more manageable makes sense. The old 5th district was larger than the state of NJ. Having an area that large did not allow proper representation by a single individual.

Ethan Darrow
PO BOX 72
Faber, VA 22938

Have a great day!
```

From: \ames Scott
To: Redistricting
Subject: Redistricting.
Date: Monday, December 20, 2021 12:18:34 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Court:
I believe the proposed House of Delegates map needs significant modification, especially in House of Delegates Districts 69 and 71, the two districts that would include all of Williamsburg and J ames City County. Delegate Mike Mullin has recently moved to the 69th. Williamsburg is included in the 71st. Redistricting will make both House of Delegates districts very Republican if they aren't changed.
1. Williamsburg has been separated from lower James City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower James City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
2. The 69th moves across the York River and picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities.

Regarding the state senate map, I request that Poquoson be put in the 23rd District (Hampton) for the following reasons:
1. It would preserve the community of interest that exists between Hampton and Poquoson. They have a shared geography as the Peninsula's two Atlantic-facing localities.
2. Both Poquoson and Hampton sit on the Back Bay River.
3. In 2019 the court adopted a special master-recommended House of Delegates District that consolidated parts of Hampton and Poquoson into one district.
4. Redrawing Districts 23 and 24 as suggested would put more of Newport News into the same district, minimizing splits in counties and cities.
5. The Newport News-Williamsburg Airport would be in the same district as Newport News and Williamsburg!

Thank you for your consideration.
J ames A. Scott
Williamsburg, VA 23188
\begin{tabular}{ll} 
From: & annettemariebruce \\
To: & Redistricting \\
Subject: & House districts 69 and 71 \\
Date: & Monday, December 20, 2021 12:21:15 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Please leave Grove in theWilliamsburg in the same area district. Grove benefits from this economically.. This poor community cannot be "lost" in another district.
Please keep lower james city county with williamsburg.
Thank you.
Annette Bruce, James city county resident

Sent from my Verizon, Samsung Galaxy smartphone
\begin{tabular}{ll} 
From: & S Simpson \\
To: & Redistricting \\
Subject: & Fwd: 7th, 10, 10th \& 11th Congressiona Districts \\
Date: & Monday, December 20, 2021 12:25:37 PM \\
Attachments: & image.png
\end{tabular}

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Subject: 7th, 10th \& 11th Congressiona Districts
To: The Justices of the Virginia Supreme Court and the Special Masters:
Overall the proposed Congressional maps reflect a logical, rational approach that is consistent with the applicable criteria. A few minor adjustments would address many of the criticisms submitted to the Court. A proposed map is pasted below and can be found at https://districtr.org/plan/94818.

First, to address the many concerns raised by the citizens of Albemarle and Charlottesville and the areas surrounding Charlottesville, move the southerner border of the 10th District north to the Green and Orange County lines. This proposed 10th District is marked in the Gray Blue color.

Second, to address the many concerns raised by citizens in northern Spotsylvania County and the area surrounding Fredericksburg, move those northern Spotsylvania precincts from the 10th to the 7th Congressional District as reflected on the map pasted below and at the URL. This proposed 7th District is marked in the Light Green color.

Third, to accommodate the population impact of these two changes in the 10th District, move the eastern border of the 10th District at Loudoun County east to the Reston Parkway and the intersection of Reston Parkway and Wiehle Avenue, and east from Loudoun to Utterback Store Road as shown on the map pasted below and at the URL. This western portion of Fairfax County is closely aligned with the eastern portion of Loudoun County, and Reston Parkway, Wiehle Avenue and Utterback Store Road serve as natural defined boundaries.

Fourth, to ensure population balance for the proposed 11th District, move the southern boundary of the 11th District into Prince William County to incorporate Lake Ridge and Woodbridge which are closely connected in community of interests to the rest of the 11th District. The Prince William County Parkway forms a natural defined southern boundary for most of this District. This proposed 11th is marked in the Yellow color.

Fifth, to ensure population balance for the proposed 7th District, extend the boundary of the 7th District to include King George County and Caroline County. This change would also address some of the concerns raised that more of central Virginia should be included in the 7th.

Sixth, there are no changes to the Special Masters' proposed 8th District.

Seventh, there would need to be similar minor adjustments to the 1st and 5th to balance populations.

In summary, these proposed changes address many of the citizens' concerns, are balanced from a population perspective, are consistent with the communities of interests, and reflect the same political competitive balance as the Special Masters' maps.

Respectfully submitted.

```

From: Vihstadt, John
To: Redistricting
Subject: VIRGINIA SUPREME COURT PROPOSED STATE GENERAL ASSEMBLY DISTRICTS
Date: Monday, December 20, 2021 12:27:41 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Supreme Court:

As an Arlington County voter, I am writing to support adoption of the Special Masters' proposal for the new State Senate and House of Delegates Districts as published.

The Masters worked free of the usual political considerations such as residency of current members and partisan complexion of localities. For perhaps the first time, incumbents have not been able to choose their voters, which almost everyone acknowledges has contributed to the toxic partisanship and polarization plaguing both the Commonwealth and our country. The districts do a fine job of keeping communities of interest together, including in Arlington (e.g., those living along Columbia Pike, in the Metro Corridors and with our diverse communities from Halls Hill to Green Valley to Johnson Hill).

It also makes perfect sense to include together the City of Falls Church with Arlington County, given the commonality of the two jurisdictions' court systems and certain Constitutional officers (e.g., Commonwealth's Attorney, Clerk of the Court).

Finally, I will note that as a former Independent member of the Arlington County Board (2014-2018), I saw close-up the negative effects of the current districts for both chambers, orchestrated by Republicans in the House of Delegates and Democrats in the State Senate. Some members of the General Assembly have paid limited to no attention to the residents of the far-flung appendages that comprise their districts. Lines that would make a circus contortionist blush foster both cynicism and confusion among even wellinformed citizens and can be a form of voter suppression in and of itself.

\title{
Please accept the work of the Special Masters and do right by every resident of our great Commonwealth. Adopt their work as proposed.
}

Respectfully,

\author{
John Vihstadt \\ Member, Arlington County Board (2014-2018) \\ 1800 North Jefferson Street \\ Arlington, Virginia 22205 \\ KROOTH \\ \&ALTMAN
}

\author{
John Vihstadt, Esq. \\ Krooth \& Altman LLP | 1850 M St NW, Suite 400, Washington, DC 20036 \\ Ph: 202-293-8200 | Email: jvihstadt@krooth.com | Website: www.krooth.com |
}

\section*{CONFIDENTIALITY NOTE:}

This electronic mail transmission, along with any accompanying documents, contains information from the law firm of Krooth \& Altman LLP which is confidential, and/or legally privileged. The information is intended only for the use of the intended named recipient. If you are not the intended named recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents of this emailed information is strictly prohibited and that this email should be returned to this firm immediately and deleted and destroyed by you. In this regard, if you have received this email in error, please notify us immediately.

\section*{Memo on Special Masters Congressional Districts DEC 20}

To: Virginia Supreme Court
Fm: Richard Galt Zimermann, Jr.
1226 Brookside Landing, Chesapeake, VA 23320-2826, richardzimermann@verizon.net cell: 703-946-7543
Dt: December 20, 2021
A concrete critique of each of the 11 Congressional districts follows in four pages. Page 4 continues with criteria explained to evaluate each one. Reference Virginia Redistricting Commission website Citizen Map \#164 for Eleven Compact Congressional Districts.

\section*{Congressional Districts VA-8 and VA-11.}

The Master Memo VA-8 fails several standards of good districting. 1) The Arlington locality is divided unnecessarily. 2) It divides the community of interest among residents self-identifying themselves as living "inside the beltway" and in the Realtor industry "beltway neighborhoods" in urban school zones adjacent outside the pavement perimeter. 3) It violates a district of like habitat by refusing concentric additions of adjacent school zones in favor of a jutting southward mass of suburbia and forested parkway drive south to the Mount Vernon estate.
- The Master Memo district has spikes outside the Beltway at Merrifield and at North Springfield that can be justified by attendance zones for the Pine Spring Elementary School (E.S.) and the North Springfield E.S. Both irregular boundaries can be encompassed by a compact expansion of the "Beltway neighborhoods" Congressional District (Realtor term) by adding adjacent PreK-5 attendance zones uniformly in compact groups of one or two at a time, thus presenting a relatively smooth district boundary.

Likewise at least three (3) nested State Senate districts fail best practices:
1) SD-40, the Arlington locality is divided unnecessarily. It alone can support its own Virginia Senator with 215,785 residents, with an excess of 22,857 to spare.
2) These 'overage' numbers can be ceded to Alexandria's SD-39 in a core formed by the Census Blocks of Abingdon Elementary School that lie west of the National Cemetery. Falls Church can become the core urban center for a compact SD-37, east of Fairfax City to reform it.
3) The Princeton Gerrymandering Project criteria for measures of compactness FAIL at Master Memo SD-37, because the Memo scores it less than the Princeton standard 0.3600 for 40 Virginia districts by 0.3060 Reock against juts and by 0.2548 Polsby-Popper against fingerling-tendrils (the Memo conflates its unexplained, but too-low bar for a poor score limit in 11 districts, then incomprehensively lowers it for 40 districts ( \(40>11\) ), violating conventional statistical methodology).

The Master Memo VA-11 fails several standards of good districting.
1) It fails to keep the community of interest in urban western Fairfax County and adjacent urban eastern Loudoun County, tied by their commutes to the NoVa DC Metro MSA. Loudoun County east of Leesburg has an urban population density around Ashburn of upwards of 1000-3000 persons per square kilometer, as does adjacent Fairfax in the same MSA. More on this in the VA-10 critique.
2) The Memo fails to contemplate the Fairfax self-drawn cultural boundary along its divide north-south along US-50. Compatible and corresponding communities of interest can be found among school attendance zones for public Pre-K-5, Middle, and High Schools, all falling to either side of the urban highway.
3) The Memo district sloughs off the westernmost of the "Dulles Corridor" as it divides the COI found now and expanding soon in adjacent Fairfax and Loudoun County. They have like densities of 1000-3000+ per sq km , unlike west of Leesburg in Loudoun County with rural densities of \(1-100+\) per sq km . The COI uses the Dulles Access Freeway and the Ashburn Greenway Toll Road. The existing SILVER Metro Line opens Phase

II in MAY 2022 to connect western Fairfax's Reston, the Dulles Airport, and eastern Loudoun's Ashburn Station.

\section*{Congressional Districts 6 and 9 (Appalachia, Shenandoah Valley)}

The Master Memo VA-6 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for both Reock test 0.2213 against juts and Polsby-Popper 0.2220 test against fingering-tendrils. It also fails the self-referenced and statistically unexplained Memo "low" score for 11 districts, 0.2500 or lower.
1) The Memo district breaks apart three independent urban COIs as defined by the Census, and confirmed by Virginia locality Planning District commuting reports.
- The Winchester MSA commutes 1-2 hours east into NoVa DC Metro, VA-7 to Ashburn and the Dulles Corridor, I-66 into northern Fairfax, and Amtrak nearby Harpers Ferry into DC Union Station for Metro connections elsewhere into NoVa.
- The Harrisonburg MSA - Staunton MSA commute 1-2 hours to adjacent Charlottesville MSA with 6 weekday bus connections between them, and I-64 Commuter Rail connects Charlottesville, Staunton, Lexington and Covington (see Va Redistricting Commission Citizen Map\#164, "11-Compact Congressional Districts").
- The Roanoke MSA communities of interest are broken apart two ways. a) Roanoke City and Salem City are divided from all of Roanoke County along I-81, b) the adjacent Blacksburg MSA along I-81.
2) The urban locality in Roanoke County is split unnecessarily for the Memo's self-reported nostalgia unconnected to the 2020 population or today's COIs. The Memo references the "pre-Civil War" maps of the "Shenandoah Valley", the northern Great Valley. That explanation FAILS to justify drawing a district that breaks up the urban settlement concentrated in the Roanoke Valley and the south Great Valley of Virginia, now over three times the size of that surrounding Winchester and Harry Byrd, Sr.'s apple orchards.
3) The Memo VA-6 jumps the Blue Ridge to snatch the "Southside" Martinsburg into its Shenandoah (sic) Valley district, breaking the COI between Martinsburg MSA and adjacent Danville MSA along US-58 within the Dan River watershed.

The Master Memo VA-9 fails several standards of good districting.
1) Although an appeal is made to "geographical constraints" at the Mountain Plateau and the Great Valley of Virginia, the Memo district unaccountably refuses the COI of adjacent Blacksburg MSA and Roanoke MSA localities as documented by the Census and confirmed in Virginia Planning District commuting reports for the associated localities.
2) Likewise, the Memo district leaps over the Blue Ridge Mountains to ignore adjacent Valley MSA communities of interest, despite imagined "geographical constraints" imposed by the north-flowing Shenandoah River into the Potomac River at Harpers Ferry, nearby the commuter rail connection into DC, to break up the COI of adjacent "Southside" MSAs at Martinsburg and Danville, Virginia.
3) The Memo district is apparently not compact because it is too rectangular. This will be manifest on inspection by using the Brennan Center for Justice test adopted against 'sausage district' gerrymandering, the Length-Width test.
- The VA-9 district could achieve substantially more 'compactness' by any measure, were it to turn north at I81 to encompass more of the Blacksburg MSA-Roanoke MSA community of interest documented in the Virginia "Southwest" cultural region reported by the Cooper- Institute of the University of Virginia, previously adopted with bi-partisan majorities by the Virginia Redistricting Commission. The Court should require its Special Masters to follow the guidelines passed by the Redistricting Commission as binding, according to its charter remit by the General Assembly for the purpose in redistricting by the 2020 Census.

\section*{Districts 2 and 3 (Hampton Roads and Virginia Beach)}

The Master Memo VA-2 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for both Reock test 0.2320 against juts and Polsby-Popper 0.2111 test against
fingering-tendrils. It also fails the Memo's self-referenced and statistically unexplained "low" score for 11 districts, 0.2500 or lower (a 'hurdle' is not adjusted upwards for maps with larger numbers of districts measured).
1) The Memo district splits a continuous 400 -year and now current COI on the shores of the Chesapeake Bay, confirmed in Virginia Planning District commuting reports.
2) It splits off the South Hampton Roads from adjacent MSA cities, diluting like URBAN habitat with rural extremes with only "partisan" preferences in common. Less the north-facing Cape Henry Shore on the Chesapeake Bay, north of Virginia's First Landing Park and the Lafayette River, Virginia Beach, Norfolk, and eastern Chesapeake City adjacent those other two South Hampton Roads cities have sufficient numbers to populate its own compact Congressional District.
3) The Memo VA-02 is NOT compact, it makes a fish-hook turn east, to jut south of the James River and burrow over 80-mi. into the Dismal Swamp (no clams) and beyond into Southside Virginia.

The Master Memo VA-3 fails several standards of good districting.
1) The Memo district artificially unites cities that do not have a majority of their populations commuting across the James River. 2020 Hampton Roads commuting data shows the largest numbers travel from Virginia Beach to Norfolk (77,000/day), second is Hampton to Newport News (32,671/day), third is Chesapeake to Norfolk (26,336/day), all without crossing the James River.
2) The Memo VA-3 breaks away the Lower Peninsula with a COI north to Williamsburg and suburban James County, to separate it from COI by locality commuting with the Middle Peninsula, along with fishery and maritime connections with the Eastern Shore and the Northern Neck among localities with Chesapeake Bay shoreline.

\section*{Districts 4 and 5 (Richmond and Southside)}

The Master Memo VA-4 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for the Polsby-Popper 0.2111 test against fingering-tendrils. The district is visibly elongated from above the James River to the Carolina Line, so it has become suspect of failing the Brennan Center adopted Length-Width test for compactness; it deserves measurement as do all Virginia districts for 2020.
1) The Memo district breaks urban Richmond, eastern Henrico County and Hanover County apart from their north-of-the-James River MSA communities of interest.
2) The Memo VA-4 again divides an urban county at Henrico separating large numbers of Virginia residents from any benefit from "respecting locality boundaries". In this case, urban Henrico has a population of 334,389 versus the also divided rural Southampton County with 18,570 , or a ratio of \(18: 1\) disadvantage urban locality COI.

The Master Memo VA- 5 fails several standards of good districting. This Memo district is unique in dividing urban locality districts at three points of the compass, and one Southside MSA communities of interest.
1) The Memo district to the east breaks the urban locality boundaries of Chesterfield County and the south Richmond City MSA adjacent in Chesterfield County.
2) To the north, it breaks the urban locality boundary of Albemarle County in the Charlottesville MSA.
3) To the west, it breaks the urban locality boundary of Bedford County in the Lynchburg MSA.
4) To the south, it breaks the adjacent urban cores in the Danville MSA and the Martinsville MSA.

\section*{Districts 1, 7, and 10 (North Tidewater and outer Northern Virginia)}

The Master Memo VA-1 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for the Reock 0.3198 test and the Polsby-Popper 0.3138 test against fingering-tendrils. The district is visibly elongated from the Chesapeake Bay in the east to the upper Piedmont foothills of the Blue Ridge Mountains, so it has become suspect of failing the Brennan Center adopted Length-Width test for compactness; it deserves measurement as do all Virginia districts for 2020.
1) The Memo-district breaks the Richmond MSA community of interest with western Henrico and Hanover County.
2) Memo VA-1 divides the urban locality in Henrico County of 334,389 without dividing any comparable population in compensation among rural localities in this district, or anywhere on the Congressional District map.

The Master Memo VA-7 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for the Polsby-Popper 0.2593 test against fingering-tendrils. The district is visibly massively jutting west of the I-95 and commuter rail corridor, so it is suspect of failing the Brennan Center adopted Length-Width test for compactness; it should be measured as do all Virginia districts for 2020.
1) The Memo district divides an urban locality by slicing off the eastern portion of Fairfax County.
2) Memo VA-7 notes a "ringed approach" to the NoVa DC Metro MSA "would be a trivial task", and that would best suit the nonpartisan Census MSA boundary drawn from Spotsylvania County (certainly Fredericksburg-adjacent) west to embrace the COI of adjacent commuting Winchester MSA.
3) See the Congressional District plan for compact four (4) compact Congressional districts in the Virginia Redistricting Commission Citizen Map \#164, "11-Compact Virginia Congressional Districts".

The Master Memo VA-10 fails several standards of good districting. It fails the Princeton Gerrymandering Project as under 0.3200 for the Polsby-Popper 0.2535 test against fingering-tendrils. The district is visibly elongated into a rectangle with massive juts running south and east of NoVa DC-Metro MSA, so it is suspect of failing the Brennan Center adopted Length-Width test for compactness; it should be measured as do all Virginia districts for 2020.
1) The Memo district divides an urban locality by slicing off the northern portion of Albemarle County.
2) Memo VA-10 cuts off the commuting COI of the Winchester MSA into the NoVa DC-Metro MSA.
3) Memo VA-10 cuts off Charlottesville surrounding Albemarle County with 6 buses/day to adjacent Staunton MSA, ten addition connections to Harrisonburg, and Augusta County.

FIVE District Criteria: Create districts with communities of interest based on Virginia's 2020 settlement: I. Map districts of adjacent localities with similar commuting patterns. II. Map districts of like residential habitat. III. Map districts of authentic, locally defined cultural community, IV. Map districts nesting small into larger districts. V. For each kind of district, map each district accrual compactly from an initial settlement core of greatest density.
I. Redistrict adjacent localities that are consistent with a nonpartisan uniform national standard and confirmed in the commuting reports made by Virginia Planning Districts for each locality in the state. These are linked by the residents' reported commuting patterns for commercial and social purposes, reflecting changes since the last census as updated MSAs, the Metro- and Micropolitan Statistical Areas.
II. Redistrict by like residential habitat. Counties are no longer uniform in their settlement, but like communities of interest can be seen in patterns of settlement by its density. (A) urban with urban, (B) urban with suburban, (C) suburban with suburban, and (D) suburban with the much fewer living in exurban and rural habitat settlements.
III. Redistrict by authentic cultural community defined in the respected locality governments. Cities and Counties in Virginia uniformly organize attendance zones for PreK-5 schools with compatible cultures that enhance early childhood education. These boundaries can be nearly approximated by Census Blocks for statistical reporting. They should never be broken by any district boundary meant to mirror the people settled in a place.
IV. Redistrict by nesting smaller into larger districts: Delegate districts into State Senate districts and State Senate districts into Congressional districts to create a non-partisan electoral community of interest.
V. Redistrict compactly in equal populations as described by law, so as to reflect the reported \(70 \%\) of Virginians living in urban settlement in each legislature chamber. Meet academically statistical standards for Reock test against 'juts', Polsby-Popper test against 'fingerling-tendrils', and Length-Width test against 'sausages' in district shapes.
- Begin with an urban core for each kind of nested district, and accrue population concentrically and within locality boundaries to meet the district number for each of the three kinds of districts. For example, when adding each easterly settlement, then add another settlement north or south of like habitat to maintain a compact district at each iteration while drawing a district. Do not add multiple settlements in the same direction to create a 'sausage' district jumping habitats.
- Statewide, (a) do not divide (frack) any locality more than once in any kind of district, (b) do not divide small cities less than 50 square miles (Lynchburg and smaller), nor incorporated towns, college campuses, or historical districts, (c) excepting only the largest Fairfax County with over a million residents, and that into only three portions of like settlement (a) inside- and Beltway-adjacent, (b) north of US-50, and south of US50, following the local County's nearly uniform division of itself by its PreK-5, Middle School and High School attendance zones along US-50.

Muriel-Theresa Pitney
Clerk of Court
Supreme Court of Virginia
100 North Ninth Street
Richmond, Virginia 23219

RE,: Rules and Procedures for Implementing the Requirements of Article II, Section 6-A
To Whom It May Concern:
Pursuant to Rule 4(a) of the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A of the Constitution of Virginia, I am submitting the following comments and suggestions regarding the redistricting for the Virginia House of Delegates.

Based on the recently presented maps, I would like to highlight the importance of maintaining several districts as presented. Virginia's Latino community has very little political representation on the state and local levels and deserves opportunities to elect representatives who can be a voice for these communities. Proposed House District 20, 13, 19, 24, 14, 27, 03, 16, 25, 21, 23, 04, 17, and 77 all would have a Hispanic population of over \(20 \%\) which should be applauded. An additional 18 House Districts have Hispanic populations at over \(10 \%\) which proportionally represent the numbers shared by the recent effort. The demographic makeup of all of these districts should be maintained and a concentrated effort to bring other districts to proportional representation should be made where possible.

Similarly there are 16 proposed Senate Districts that showcase the proportional representation of the Hispanic community within Virginia. A similar effort should be made to bring additional proposed districts above the \(10 \%\) threshold.

Speaking to the proposed House districts that most directly impact me, I want to thank the map drafters for taking into consideration the three geographic communities that exist within Arlington - North, South, and development corridors - as these are three unique communities. However, residents of Falls Church have expressed their concern with being grouped with the proposed \(1^{\text {st }}\) District which many would agree with. Instead a portion of proposed district 6 could be added to district one to make up for the population difference and reduce the community differences. The spillover from proposed district 2 into Alexandria should also be addressed potentially by expanding district 3 west towards N Carlin Springs rd in areas of Buckingham. Overall this breakup of Arlington respects the unique diversity of proposed district 3 and the new urban renter-heavy developments of district 2.

Looking foxward to the final maps that respect the diversity of Virginia.
onathan Dromgoole
\(71012{ }^{\text {th }}\) Street NW
Arlington, VA 22202
```

From: Tara Durant
To: Redistricting
Subject: Redistributing
Date: Monday, December 20, 2021 12:30:34 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Chief Justice, Justices of the Supreme Court, and the Special Masters:

My name is Tara Durant, and I am the Delegate-elect for the current 28th District of the House of Delegates. I submit this comment together with Chief Charles Bullock, Tribal Chief of the Patawomeck Tribe in Stafford County. The proposed map of the Special Masters unintentionally splits lands leased by the Patawomeck Tribe and, as a result, fails to preserve a community of interest essential to the Tribe for social, cultural, and economic reasons. We ask that this community of interest be preserved in proposed House District 65 , where the current Tribal Center is located. Additional detail follows below:

As noted in the memorandum drafted by the Special Masters, the Statutory Criteria found in the Virginia Code specifically requires that "[d]istricts shall be drawn to preserve communities of interest. For purposes of this subdivision, a 'community of interest' means a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests. A 'community of interest' does not include a community based upon political affiliation or relationship with a political party, elected official, or candidate for office." See Va. Code § 24.2-304.04, part 5. The Special Masters memorandum specifically highlights the fact that the Special Masters may have unintentionally overlooked communities of interest, and, consequently, "look[ed] forward to receiving the commentary of this Court and of the public to help improve the map in this regard." See Memorandum of the Special Masters at 7. This comment highlights one important and discernible community of interest overlooked by the Special Masters.

The proposed map of the Special Masters splits the tribal land of the Patawomeck Tribe in Stafford County. Specifically, the Patawomeck Tribe leases two parcels of land from Stafford County. The first parcel is located at 638 Kings Highway, Fredericksburg Va. 22405, which is the location of The Patawomeck Indian Tribal Center, Museum, and Native Village. This Tribal Center will be opening to the public in June 2022. This parcel is located in the proposed House District 65.

The second parcel, The Patawomeck Memorial Band Park, is located on County Rd 608, Stafford Va. 22554. This property, located near Aquia Landing, will be the future reinterment site of their ancestral relatives' remains currently housed at the Smithsonian Indian Museum in Suitland, Maryland. This parcel is located in the proposed House District 64.

Finally, the tribal members reside primarily in Stafford county. As a community of interest, the Patawomeck Tribe would be best served with unity of representation in one District.

For the foregoing reasons, we ask that this community of interest be preserved in House District 65.

\section*{Sincerely,}

Tara Durant
Delegate-elect, House District 28

To: Delegate Mrs. Tara Durant HD 28 December 16, 2021 From: Chief Charles "Bootsie" Bullock
Patawomeck Indian Tribe of Virginia Inc.
Re: Proposed Redistricting
Honorable Mrs. Durant

I write to you to express my concern about the 2021 proposed Virginia redistricting. The Patawomeck Indian Tribe of Virginia is state recognized and based in Stafford County.

The Patawomeck Tribe leases two parcels of land from Stafford County. The first parcel that the Patawomeck Tribe has under lease is located at 638 Kings Highway Fredericksburg Va. 22405, which is the location of The Patawomeck Indian Tribal Center/Museum/Native Village. This Tribal Center will be opening to the public in June 2022.

The second parcel "The Patawomeck Memorial Band Park " has leased is located on County Rd 608 Stafford Va. 22554. This subject property, located near Aquia Landing, will be the future reinterment site of our ancestral relatives remains currently housed at the Smithsonian Indian Museum in Suitland Maryland.
"The first People of Stafford County", The Patawomeck Indian Tribe of Va. Has been dated to or around 1200-1300 AD.

Between 1935-1940 Judge William Graham and T. Dale Stewart of the U.S National

Museum/Natural History performed an archaeological exploration of the Indian town site of Patawomeck (44ST2 and 44ST1). This is the Patawomeck village visited by Capt. John Smith in 1608. The extensive recorded information is all archived in T. Dale Stewart's book "Archeological Exploration of Patawomeck: The Indian Town Site 44ST2 Ancestral to the One 44ST1 Visited in 1608 by Capt. John Smith".

The reclaiming of our deceased tribal members and very sacred artifacts will be complete once our Federal Recognition application approval process has been completed. At this point our ancestors will be returned to the native soil not far from where they were removed from some 80+ years ago.

I write these few lines to you with urgency, as the leader of the Patawomeck Indian Tribe of Va., it is very disturbing that the proposed redistricting plan will split the two leased parcels that the Patawomeck and Stafford share in agreement. Currently both are in the \(28^{\text {th }}\) district, the new proposal would place one in the \(64^{\text {th }}\) and one in the \(65^{\text {th }}\) districts. I do look forward to your reply and future correspondence of the status on this critical part of the Patawomeck Indian Tribe of Virginia's historical significance. Furthermore the Patawomeck Indian Tribe of Virginia is looking forward to becoming a great partner on many fronts with the great state of Virginia.

Respectfully,
Chief Charles "Bootsie" Bullock
\begin{tabular}{ll} 
From: & S Simpson \\
To: & Redistricting \\
Subject: & Fwd: 7th, 10, 10th \& 11th Congressiona Districts \\
Date: & Monday, December 20, 2021 12:32:22 PM \\
Attachments: & image.png
\end{tabular}

EXTERNAL EMAIL
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Subject: 7th, 10th \& 11th Congressiona Districts
To: The Justices of the Virginia Supreme Court and the Special Masters:
Overall the proposed Congressional maps reflect a logical, rational approach that is consistent with the applicable criteria. A few minor adjustments would address many of the criticisms submitted to the Court. A proposed map is pasted below and can be found at https://districtr.org/plan/94818.

First, to address the many concerns raised by the citizens of Albemarle and Charlottesville and the areas surrounding Charlottesville, move the southerner border of the 10th District north to the Green and Orange County lines. This proposed 10th District is marked in the Gray Blue color.

Second, to address the many concerns raised by citizens in northern Spotsylvania County and the area surrounding Fredericksburg, move those northern Spotsylvania precincts from the 10th to the 7th Congressional District as reflected on the map pasted below and at the URL. This proposed 7th District is marked in the Light Green color.

Third, to accommodate the population impact of these two changes in the 10th District, move the eastern border of the 10th District at Loudoun County east to the Reston Parkway and the intersection of Reston Parkway and Wiehle Avenue, and east from Loudoun to Utterback Store Road as shown on the map pasted below and at the URL. This western portion of Fairfax County is closely aligned with the eastern portion of Loudoun County, and Reston Parkway, Wiehle Avenue and Utterback Store Road serve as natural defined boundaries.

Fourth, to ensure population balance for the proposed 11th District, move the southern boundary of the 11th District into Prince William County to incorporate Lake Ridge and Woodbridge which are closely connected in community of interests to the rest of the 11th District. The Prince William County Parkway forms a natural defined southern boundary for most of this District. This proposed 11th is marked in the Yellow color.

Fifth, to ensure population balance for the proposed 7th District, extend the boundary of the 7th District to include King George County and Caroline County. This change would also address some of the concerns raised that more of central Virginia should be included in the 7th.

Sixth, there are no changes to the Special Masters' proposed 8th District.

Seventh, there would need to be similar minor adjustments to the 1st and 5th to balance populations.

In summary, these proposed changes address many of the citizens' concerns, are balanced from a population perspective, are consistent with the communities of interests, and reflect the same political competitive balance as the Special Masters' maps.

Respectfully submitted.


\title{
Ron B. Alpern
}

December 20, 2021

\section*{Supreme Court of Virginia}
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219-1315
Dear Honorable Justices of the Virginia Supreme Court, The Redistricting Special Masters, and The Clerk of the Court, I greatly appreciate this opportunity to offer comments on the impact of the three proposed redistricting maps on my Chesterfield County Midlothian - Precinct Robious \#504 community. Several of my neighbors have raised concerns about the maps, particularly the House of Delegate Map \#72. They highlight that the map fails to acknowledge how deeply our communities of interest as business owners, professionals (staffing major businesses educational institutions, as well as areas governments), church members and community activists align with Richmond, Henrico County, as well as other parts of Chesterfield. They underscore further that the social ties of their families rarely coincide with any of the towns in our new district, but rather with the greater Richmond metropolitan area.

I, however, want to address the shortcomings of these maps with respect to the standard of creating competitive districts. Over the last decade, Chesterfield and my precinct, in particular, witnessed changing demographics and significant shifts in political alignments. The hard work of many of my neighbors contributed to the current moment where our precinct is finally considered competitive and has contributed to the hard-fought efforts that culminated in the elections of Congresswoman Spanberger, Senator Hashmi, and Representative Adams. On the surface, while \(5^{\text {th }}\) District appears to be drawn in a contiguous fashion, the same cannot be said for the \(72^{\text {nd }}\) House of Delegates district. In the instance of Senate District 12, while it is boundaries also seem contiguous, it has been redrawn in such a manner to favor heavily Republicans as there no longer are votes from Henrico or parts of Richmond that had made this race so competitive in recent years.

Not only will we not be represented by the candidates we worked so hard to elect, in seems that the new maps confine my precinct to races that are likely to remain largely non-competitive well into the foreseeable future. I would assert that for my neighbors, and residents in other parts of Midlothian, however uneven the political terrain is in the districts in their current configuration, they did far more to boost confidence in the electoral system than the Special Masters' proposed maps.

I hope that attention can be drawn to, in particular, HOD map District \#72 that represents the most extreme example of the maps' shortcomings. Here Midlothian is misaligned with the rural counties of Powhatan, Amelia, and Nottaway. I encourage the Court to consider how the work of the Special Masters might be adjusted to avoid outcomes that seem to fall well short of honoring the competitiveness and communities of interest criteria that were to guide the redistricting effort.

I thank the Court, the Special Masters, and Court staff for their consideration and diligent efforts to fulfill their charge. I urge you, however, to take the additional time to ensure that the redistricting initiative meets your highest standards with respect to its impact on my neighborhood and others similarly affected in Midlothian.

Sincerely,


Ron B. Alpern

2950 Misty Ridge Court, Midlothian, VA 23113 / 804.929.2714 / ronalpern@gmail.com
\begin{tabular}{ll} 
From: & Marcia Davitt \\
To: & Redistricting \\
Subject: & Commentary on Redistricting \\
Date: & Monday, December 20, 2021 12:33:55 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To: Virginia Supreme Court
I am concerned about the proposed redistricting aimed at separating Blacksburg from Roanoke City. These communities have shared interests as well as comprising economic centers of activity. I join with others in requesting that you keep these two communities (Blacksburg and Roanoke City) together as one Senate district. The map currently shows Blacksburg joined to rural counties such as Tazewell, communities which share little in common. This kind of redistricting would make it difficult for Blacksburg and Roanoke City to have their interests properly represented in the Virginia Senate. It would make it difficult to elect a Democrat to office, a phenomenon that would make a travesty of democracy in this region. The proposed redistricting appears to copycat other efforts across the U.S. which are clearly partisan in nature and are intended to make it easier for Republicans to establish single-party rule.

Thank you for your consideration and for your attention to establishing a genuine democratic process in the state of Virginia.

Marcia Davitt, PhD.
Adjunct Instructor
Depts: History / Science, Technology, and Society
Virginia Tech
mdavitt@vt.edu
\begin{tabular}{ll} 
From: & \multicolumn{1}{c}{ S Simpson } \\
To: & \(\frac{\text { Redistricting }}{\text { Sth, 10th \& 11th Congressiona Districts }}\) \\
Subject: & Monday, December 20, 2021 12:33:56 PM \\
Date: & image.png
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Subject: 7th, 10th \& 11th Congressiona Districts
To: The Justices of the Virginia Supreme Court and the Special Masters:
Overall the proposed Congressional maps reflect a logical, rational approach that is consistent with the applicable criteria. A few minor adjustments would address many of the criticisms submitted to the Court. A proposed map is pasted below and can be found at https://districtr.org/plan/94818.

First, to address the many concerns raised by the citizens of Albemarle and Charlottesville and the areas surrounding Charlottesville, move the southerner border of the 10th District north to the Green and Orange County lines. This proposed 10th District is marked in the Gray Blue color.

Second, to address the many concerns raised by citizens in northern Spotsylvania County and the area surrounding Fredericksburg, move those northern Spotsylvania precincts from the 10th to the 7th Congressional District as reflected on the map pasted below and at the URL. This proposed 7th District is marked in the Light Green color.

Third, to accommodate the population impact of these two changes in the 10th District, move the eastern border of the 10th District at Loudoun County east to the Reston Parkway and the intersection of Reston Parkway and Wiehle Avenue, and east from Loudoun to Utterback Store Road as shown on the map pasted below and at the URL. This western portion of Fairfax County is closely aligned with the eastern portion of Loudoun County, and Reston Parkway, Wiehle Avenue and Utterback Store Road serve as natural defined boundaries.

Fourth, to ensure population balance for the proposed 11th District, move the southern boundary of the 11th District into Prince William County to incorporate Lake Ridge and Woodbridge which are closely connected in community of interests to the rest of the 11th District. The Prince William County Parkway forms a natural defined southern boundary for most of this District. This proposed 11th is marked in the Yellow color.

Fifth, to ensure population balance for the proposed 7th District, extend the boundary of the 7th District to include King George County and Caroline County. This change would also address some of the concerns raised that more of central Virginia should be included in the 7th.

Sixth, there are no changes to the Special Masters' proposed 8th District.

Seventh, there would need to be similar minor adjustments to the 1st and 5th to balance populations.

In summary, these proposed changes address many of the citizens' concerns, are balanced from a population perspective, are consistent with the communities of interests, and reflect the same political competitive balance as the Special Masters' maps.

Respectfully submitted.

\begin{tabular}{ll} 
From: & Lisa Centofanti \\
To: & Redistricting \\
Subject: & Redistricting Maps \\
Date: & Monday, December 20, 2021 12:37:50 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Virginia Court,
I believe that Vinton should be drawn with the rest of Roanoke County and not in a district tied to Staunton. The New River Valley, Roanoke Valley, and Staunton all have separate community college systems, are in different planning districts, have different hospitals, and the centers of gravity in distinct local economies. I don't believe that the Roanoke Valley should be artificially split between Staunton and the New River Valley when there are more than enough citizens for three distinct districts.

Thank you for your consideration,
Lisa Centofanti

A Voice for Virginia's Working Families

\title{
VIRGINIA AFL-CIO
}

5400 Glenside Drive, Suite E Richmond, Virginia 23228 Phone: (804) 755-8001 Fax: (804) 755-8005 E-Mail: info@va-aflcio.org

\author{
Doris Crouse-Mays, President
}

Date: December 20, 2021
To: Redistricting@vacourts.gov

\section*{Subject: Virginia Redistricting - Virginia AFL-CIO Public Comment}

Virginia AFL-CIO challenges this current redistricting process and the proposed maps. The goal was not to have court drawn maps, and it is with the current maps that we have failed not just the intended goal, but the people of Virginia from having a fair process and a fair result.

The maps as currently drafted split localities in a variety of ways across the state. Due to those splits, there are numerous decreases in minority representation, disparages military and veteran populations, leaves behind rural communities, and inconsideration of functional compacting and contiguity of some geographical locations, and an overall lack of economical, infrastructural, and cultural considerations.

The current maps as drawn can be seen as maps of convenience rather than maps that equitably and fairly represent the interests of our great Commonwealth's population.

It is our hope that the final drawing of the maps includes the necessary changes that will better serve and represent the people of the Commonwealth in actuality, and not in theory.

Thanks in advance for your consideration,


Jonathan L. Stone
2104 Grey Fox Lane
Virginia Beach, Virginia 23456
ilstonelaw@gmail.com
(757) 339-9348

December 20, 2021

Hon. Donald W. Lemons
Chief Justice
Virginia Supreme Court
P.O. Box 1315

100 North Ninth Street
Richmond, VA 23219-1315

\section*{Comment on Proposed Virginia Congressional Redistricting Map}

Dear Hon. Donald W. Lemons:
As a current resident and registered voter in the City of Virginia Beach, Virginia. I write to submit my official comment in disapproval of the current Virginia Congressional Maps prepared by the Special Masters appointed by the Virginia Supreme Court for the redistricting of the Virginia Congressional districts.

Although the special masters as a general rule appear to focus on and accomplish one of the primary goals of ensuring compactness while respecting traditional county and city political lines. Thereby ensuring the Congressional districts are draw in a manner where our elected officials are representing common communities of interest. For the Second Congressional District, in which I am a resident off for both the current and the proposed congressional lines, I am of the opinion the district is faulty in one primary and important way. The Proposed Second Congressional District has drawn out of the district the City of Norfolk. Norfolk and Virginia Beach as two areas with the largest concentration of military installations has many of the same economic and community interests. As a result, it would accomplish the purpose of the redistricting commission to redraw the lines ensuring that Norfolk and Virginia Beach are in the same congressional district. Whereas the current proposed Second Congressional District includes communities on its border such as Isle of Wight and Suffolk whose economic and community interest are more in line with the proposed \(3^{\text {rd }}\) or \(4^{\text {th }}\) congressional district.

Hon. Donald W. Lemons
Chief Justice
Virginia Supreme Court
December 20, 2021
Page 2

It is my opinion that the communities of Norfolk and Virginia Beach with similar military, economic, and community interests would be better served by a single representative in the U.S. House of Representatives.

Respectfully Submitted,

```

From: Tara Durant
To: Redistricting
Subject: Redistributing
Date: Monday, December 20, 2021 12:43:06 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Chief Justice, Justices of the Supreme Court, and the Special Masters:

My name is Tara Durant, and I am the Delegate-elect for the current 28th District of the House of Delegates. I submit this comment together with Chief Charles Bullock, Tribal Chief of the Patawomeck Tribe in Stafford County. The proposed map of the Special Masters unintentionally splits lands leased by the Patawomeck Tribe and, as a result, fails to preserve a community of interest essential to the Tribe for social, cultural, and economic reasons. We ask that this community of interest be preserved in proposed House District 65 , where the current Tribal Center is located. Additional detail follows below:

As noted in the memorandum drafted by the Special Masters, the Statutory Criteria found in the Virginia Code specifically requires that "[d]istricts shall be drawn to preserve communities of interest. For purposes of this subdivision, a 'community of interest' means a neighborhood or any geographically defined group of people living in an area who share similar social, cultural, and economic interests. A 'community of interest' does not include a community based upon political affiliation or relationship with a political party, elected official, or candidate for office." See Va. Code § 24.2-304.04, part 5. The Special Masters memorandum specifically highlights the fact that the Special Masters may have unintentionally overlooked communities of interest, and, consequently, "look[ed] forward to receiving the commentary of this Court and of the public to help improve the map in this regard." See Memorandum of the Special Masters at 7. This comment highlights one important and discernible community of interest overlooked by the Special Masters.

The proposed map of the Special Masters splits the tribal land of the Patawomeck Tribe in Stafford County. Specifically, the Patawomeck Tribe leases two parcels of land from Stafford County. The first parcel is located at 638 Kings Highway, Fredericksburg Va. 22405, which is the location of The Patawomeck Indian Tribal Center, Museum, and Native Village. This Tribal Center will be opening to the public in June 2022. This parcel is located

\section*{in the proposed House District 65.}

The second parcel, The Patawomeck Memorial Band Park, is located on County Rd 608, Stafford Va. 22554. This property, located near Aquia Landing, will be the future reinterment site of their ancestral relatives' remains currently housed at the Smithsonian Indian Museum in Suitland, Maryland. This parcel is located in the proposed House District 64.

Finally, the tribal members reside primarily in Stafford county. As a community of interest, the Patawomeck Tribe would be best served with unity of representation in one District.

For the foregoing reasons, we ask that this community of interest be preserved in House District 65.

Sincerely,
Tara Durant
Delegate-elect, House District 28

To: Delegate Mrs. Tara Durant HD 28 December 16, 2021 From: Chief Charles "Bootsie" Bullock
Patawomeck Indian Tribe of Virginia Inc.
Re: Proposed Redistricting
Honorable Mrs. Durant

I write to you to express my concern about the 2021 proposed Virginia redistricting. The Patawomeck Indian Tribe of Virginia is state recognized and based in Stafford County.

The Patawomeck Tribe leases two parcels of land from Stafford County. The first parcel that the Patawomeck Tribe has under lease is located at 638 Kings Highway Fredericksburg Va. 22405, which is the location of The Patawomeck Indian Tribal Center/Museum/Native Village. This Tribal Center will be opening to the public in June 2022.

The second parcel "The Patawomeck Memorial Band Park " has leased is located on County Rd 608 Stafford Va. 22554. This subject property, located near Aquia Landing, will be the future reinterment site of our ancestral relatives remains currently housed at the Smithsonian Indian Museum in Suitland Maryland.
"The first People of Stafford County", The Patawomeck Indian Tribe of Va. Has been dated to or around 1200-1300 AD.

Between 1935-1940 Judge William Graham and T. Dale Stewart of the U.S National Museum/Natural History performed an archaeological exploration of the Indian town site of Patawomeck (44ST2 and 44ST1). This is the Patawomeck village visited by Capt. John Smith in 1608. The extensive recorded information is all archived in T. Dale Stewart's book " Archeological Exploration of Patawomeck: The Indian Town Site 44ST2 Ancestral to the One 44ST1 Visited in 1608 by Capt. John Smith''.

The reclaiming of our deceased tribal members and very sacred artifacts will be complete once our Federal Recognition application approval process has been completed. At this point our ancestors will be returned to the native soil not far from where they were removed from some 80+ years ago.

I write these few lines to you with urgency, as the leader of the Patawomeck Indian Tribe of Va., it is very disturbing that the proposed redistricting plan will split the two leased parcels that the Patawomeck and Stafford share in agreement. Currently both are in the \(28^{\text {th }}\) district, the new proposal would place one in the \(64^{\text {th }}\) and one in the \(65^{\text {th }}\) districts. I do look forward to your reply and future correspondence of the status on this critical part of the Patawomeck Indian Tribe of Virginia's historical significance. Furthermore the Patawomeck Indian Tribe of Virginia is looking forward to becoming a great partner on many fronts with the great state of Virginia.

Respectfully,
Chief Charles "Bootsie" Bullock
\begin{tabular}{ll} 
From: & Andrea Lewis \\
To: & Redistricting \\
Subject: & Map for VA \\
Date: & Monday, December 20, 2021 12:43:16 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

The VA Senate map for West Springfield doesn't make much sense. We are more similar to the neighborhoods in Burke and not really associated with neighbors on the east side of 395. It also doesn't make sense to put dividing lines through neighborhoods where families know each other as neighbors and/or through the elementary school systems. Please take a look at school districts, and larger boundaries in our area. Highways, Rivers and Current Elementary school boundaries should be taken into account when looking at Communities of Interest.
\begin{tabular}{ll} 
From: & \(\underline{\text { William Evers }}\) \\
To: & Redistricting \\
Cc: & Pat Evers Bill \& \\
Subject: & Redistricting Comments-Williamsburg, VA \\
Date: & Monday, December 20, 2021 12:44:10 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To Whom It May Concern:
Please see my comments below relating to redistricting:

> 1. Williamsburg has been separated from lower J ames City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower J ames City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
2. The 69th takes a head-scratching jog across the York River and picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities.

Thank you for the opportunity to express my opinion/concerns
Sincerely
William Evers
williep1952@gmail.com

Clerk of the Supreme Court of Virginia c/o Redistricting Special Masters
Supreme Court of Virginia
P.O. Box 1315

100 North Ninth Street, 5th Floor
Richmond, VA 23219
redistricting@vacourts.gov

December 20, 2021

Dear Special Masters Grofman and Trende:

I submit this letter on behalf of the Sikh American Legal Defense and Education Fund (SALDEF). In my previous letter, dated November 29, 2021, I outlined best principles for the inclusion of and the demographics of the Asian American and Pacific Islander (AAPI) community in Virginia, based on our experience advocating for our communities in the redistricting commission process.

My comments today are focused on the Congressional draft maps produced for public review. As SALDEF noted in our previous comments and submissions to the coalition, along with other diverse advocates, the AAPI community has grown in the state and their size and distribution is allowing them to elect representatives of their choosing, who consider and are responsive to their communities needs. Unfortunately, the distributed maps do not reflect the growth of the AAPI community and may, in fact, stymie their ability to receive adequate representation.

We join the many speakers at the two public hearings who expressed grave concern about the cracking of the western suburbs of Richmond. Henrico County is now \(9.1 \%\) Asian \({ }^{1}\),

1
https://www.census.gov/quickfacts/fact/table/chesterfieldcountyvirginia,henricocountyvirginia,US/PST0452 19
per the 2020 Census, with the vast majority of these AAPI residents arriving since the 2010 Census, fueling growth in the region. AAPI communities in Henrico are establishing new businesses, community centers, and houses of worship. Importantly, these communities also cross county and city lines to access established centers and houses of worship in Chesterfield County and the Greater Richmond area. Diverse areas like Henrico County \({ }^{2}\), in the new maps, are being pulled away from their neighbors and into districts that incorporate much less diverse parts of Western and Southern Virginia, as in the proposed new 1st district. The story repeats with Amelia \({ }^{3}\) County and with Chesterfield County, and with other Richmond suburbs that have grown increasingly diverse over the last decade, all being carved up and distributed across the new 1st and 5th Districts in the pursuit of satisfying numerical requirements.

It is the position of SALDEF that the carving up of greater Richmond, in the pursuit of numerical requirements, is a departure from the legal requirement in Article II, Section 6 of the Constitution of Virginia, which states: "Districts shall provide, where practicable, opportunities for racial and ethnic communities to elect candidates of their choice." \({ }^{44}\) The Virginia code expands further. Section 24.2-304.04(3) states that "no district shall be drawn that results in a denial or abridgement of the rights of any racial or language minority group to participate in the political process." \({ }^{5}\) The recasting of Henrico County into the new VA-5 forces its burgeoning AAPI population into a district that spans large areas of Virginia that are inconsistent with their demographics, values, and priorities. Thus, the new districts will likely have the effect of limiting the ability of the growing AAPI population, as well as Hispanic and Black population in the region, from being able to effectively participate in the political process and select representatives who are considerate of their needs and of their choosing, while concurrently

2
https://www.henricocitizen.com/articles/census-2020-henricos-asian-black-hispanic-populations-grow-thre e-chopts-boom-continues/
https://apnews.com/article/richmond-virginia-redistricting-congress-eaf77c9dcca50277d5c05ec4ecf2cb98
\({ }^{4}\) https://law.lis.virginia.gov/constitution/article2/section6/
5 https://virginiaredistricting.org/2021/Data/Public\%20Hearings/082321materials.pdf
dividing them from their larger community of interest. We strongly suggest that these areas be revisited by the special masters and the suburbs of Richmond remain in districts that incorporate the areas in which they live, work, and worship.

Thank you for your attention to this matter and your consideration of AAPI communities of interest as you draw new district lines. Should you have any further questions please feel free to contact me at kiran@saldef.org, or my colleagues Navdeep Singh at navdeep.singh@saldef.org and Jyot Singh at jyot.singh@saldef.org.

Sincerely,

Kiran Kaur Gill
Executive Director
\begin{tabular}{ll} 
From: & Barbara Diaz \\
To: & Redistricting \\
Subject: & redistricting \\
Date: & Monday, December 20, 2021 12:46:22 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

From: b.irishlass@msn.com
Sent: Monday, December 20, 2021 5:05 PM
To: redistricting@VAcourts.gov
Subject: Redistricting.

To the Court:
I believe the proposed House of Delegates map needs significant modification, especially in House of Delegates Districts 69 and 71, the two districts that would include all of Williamsburg and J ames City County. Delegate Mike Mullin has recently moved to the 69th. Williamsburg is included in the 71st. Redistricting will make both House of Delegates districts very Republican if they aren't changed.
1. Williamsburg has been separated from lower James City County, including Grove. The history of African Americans in the Historic Triangle links the City and Grove. For that reason, they should not be separated.
2. Lower J ames City County and Williamsburg rely on many of the same services in the Williamsburg area, such as transportation, healthcare, and social services.
2. The 69th moves across the York River and
picks up a small portion of Gloucester. This is a very different community and should be part of a district that is on the other side of the York River with the rest of Gloucester County.
3. The new maps put Williamsburg in the 71st District, which runs all the way to Providence Forge. Williamsburg has always been part of Hampton Roads. This puts Williamsburg with other communities that extend up into the Richmond area instead of keeping it with other Hampton Roads communities.

Regarding the state senate map, I request that Poquoson be put in the 23rd District (Hampton) for the following reasons:
1. It would preserve the community of interest that exists between Hampton and Poquoson. They have a shared geography as the Peninsula's two Atlantic-facing localities.
2. Both Poquoson and Hampton sit on the Back Bay River.
3. In 2019 the court adopted a special master-recommended House of Delegates District that consolidated parts of Hampton and Poquoson into one district.
4. Redrawing Districts 23 and 24 as suggested would put more of Newport News into the same district, minimizing splits in counties and cities.
5. The Newport News-Williamsburg Airport would be in the same district as Newport News and Williamsburg!

Thank you for your consideration.
Barbara A. Diaz
Williamsburg, VA 23188
\begin{tabular}{ll} 
From: & Nichole Sanders \\
To: & Redistricting \\
Subject: & redistricting--SCOVA \\
Date: & Monday, December 20, 2021 12:46:30 PM
\end{tabular}


Dear All,

I wanted to take a moment to thank you for keeping the City of Lynchburg as a Community of Interest during this round of map-making. We are pleased to see that our concerns were addressed.

Best wishes
Nichole Sanders
\begin{tabular}{ll} 
From: & \(\underline{\text { Sami Watson }}\) \\
To: & Redistricting \\
Cc: & Lasmine Leu \\
Subject: & Redistricting Suggestions \\
Date: & Monday, December 20, 2021 12:46:36 PM \\
Attachments: & 2021-22 Stamp Transparent.png \\
\hline
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Supreme Court of Virginia Justices,

I work for Hamkae Center, a nonpartisan Asian American community building organization based in Fairfax, Virginia. I would like to make the following suggestions based on feedback from Ilryong Moon, an Asian American resident of Fairfax County:

Please consider joining Loudoun County and Prince William County to make a new CD10. Then join the rest of the map makers' proposed CD10 and the rest of the map makers' proposed CD 7 with Charlottesville to create a new CD 7. This would help fix CD10's elongated shape. Loudoun County has more in common with Prince William County as they are both part of Northern Virginia, and they both have higher minority populations compared to the rural counties that the map makers have paired with Loudoun County in the proposed CD10. Putting Loudoun and Prince William in one Congressional District would help give minority populations a stronger chance of electing officials that they feel represent their communities' interests and values.

Since SD37's population deviation is \(2.03 \%\), please consider adding some of SD37's western precincts (north of Legato and east of Fair Lakes), such as the Monument precinct, to SD36. SD36 has a high Asian American population, so adding precincts from SD37 that have high Asian American populations to SD36 would be beneficial. Keeping Asian American populations together gives those populations a stronger chance to elect an official that they feel represents their communities' interests and values.

We hope you will take these points into consideration. Thank you for your time.

Best regards,
Sami Watson, Field Coordinator
Hamkae Center
--
Sami Watson | (she/her/they/them/)

Field Coordinator | Hamkae Center
Web | Facebook | Twitter | Instagram | Become a member!
W. 703.256.2208 | C. 540.894.7307

6715 Little River Turnpike, \#207, Annandale, VA 22003
13890 Braddock Road, \#309, Centreville, VA 20121
Our network: NAKASEC (NatI); \(\underline{\text { HANA Center (IL); MinKwon Center (NY); Woori Center (PA); Woori Juntos (TX) }}\)
Catalogue for Philanthropy Class of 2021-22

\begin{tabular}{ll} 
From: & David H. Stonehill \\
To: & Redistricting \\
Subject: & Written Comment by David H. Stonehill \\
Date: & Monday, December 20, 2021 12:47:31 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

David H. Stonehill
5605 Lake Sharon Drive
Glen Allen, VA 23060

December 20, 2021
Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
Supreme Court Building
100 North Ninth Street
Richmond, VA 23219

\section*{Public Comment regarding Virginia Redistricting}

Dear Ms. Pitney:
This Comment is submitted pursuant to the Rules and Procedures for Implementing the Requirements of Article II, Section 6-A. I am writing to comment upon the Special Masters' Congressional Redistricting Map which was released on December 8, 2021 (the Map). My specific interest is in reference to changes proposed for the Virginia Seventh Congressional District (VA-7).

I am an attorney, licensed in New York State, who has been a resident of Glen Allen, Virginia since January, 2021. Glen Allen is within Henrico County. Since 2001, I have been involved with voter protection and election law issues with organizations such as the New York Democratic Lawyers Council. I have previously testified at public hearings regarding Redistricting within New York State.

I have observed the current redistricting effort in Virginia with great interest, not just as a person with experience with government and politics but also from a Jewish perspective. I do not view the Map as being friendly to the concerns and needs of religious and racial minorities. For example, concentrating more black voters within the Fourth

Ms. Muriel-Theresa Pitney
Written Comment of David H. Stonehill
December 20, 2021
Page Two
Congressional District, mainly centered in Richmond, only reduces their numbers and political clout within neighboring districts such as VA-7.

I was particularly struck at the way two prominent Richmond metro counties, Chesterfield and Henrico, are separated regarding their Congressional Districts. The two counties are very much communities of interest with common bonds in numerous areas such as commerce, history and friendship. Dividing the two counties will weaken their united political power as important suburban districts. This will adversely affect their voice in such areas as transportation and economic development.

By linking Chesterfield and Henrico Counties with heavily rural Congressional Districts, the Map acts to suppress the importance of Richmond's suburbs. As beautiful as the rural areas are, suburban Richmond is not foremost on their inhabitants' issues. These constituents will therefore vote accordingly for Members of Congress who may not be friendly toward the suburbs.

The current VA-7 is a crucial swing District which contains a diverse group of voters and which in many ways represents the Commonwealth of Virginia. Taking the district and arbitrarily kicking it northward does not reflect the will of the people in a democracy. There is no underlying governmental interest to partition the Richmond suburbs and to suppress vital links between the residents and voters of Chesterfield and Henrico Counties.

Another area I want to address concerns the needs of minority areas as a component of the redistricting process. It is an axiom that minority areas will have a smaller political impact on governmental operations than more affluent communities. As a result of this, and keeping in mind the requirement to satisfy the doctrines of Equal Protection and Due Process, minority communities should be kept together as much as possible when Congressional lines are drawn. This is especially true regarding Chesterfield and Henrico Counties. The Map acts to dilute the minority vote in the Richmond suburbs. Utilization of the Map will result in minority constituents' needs being ignored or given a low priority. A political party which reflects the needs of minorities has a more difficult time getting its candidates elected because the poor and the wealthy often have different priorities for government. Being part of a minority can create a feeling of political

Ms. Muriel-Theresa Pitney
Written Comment of David H. Stonehill
December 20, 2021
Page Three
hopelessness and despair. If a person feels that he/she is being ignored by his/her elected officials, the person may very well withdraw from the political process completely. "Why bother to vote at all, nothing changes", the person may think.

It is true that minority communities do suffer lower turnout in elections than do affluent communities. This is a most insidious form of vote suppression indeed because it is done internally by the voter. The voter simply stops voting. This is really unacceptable in a modern democracy. A high level of political participation should be encouraged for all of our elections whether in a Presidential year or not. We must encourage all of our citizens to vote and to become engaged with their government in a meaningful way. This means showing leadership by giving people a reason to vote. A reason begins through the preservation of minority communities within a single VA-7 Congressional District for both Chesterfield and Henrico Counties respectively.

I urge this Court as well as the Special Masters to also reconsider the Map based upon the views of our citizens and friends who are expressing their interests through public hearings and by other written comments. The Court is engaged in an important mission and I wish you well.

Respectfully yours,
David H. Stonehill
\begin{tabular}{ll} 
From: & Sabina UJoe \\
To: & Redistricting \\
Subject: & Redistricting Comment on Supreme Ct of Va Draft Plan by Special Masters \\
Date: & Monday, December 20, 2021 12:47:52 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

While a heroic effort, the Special Masters' first draft Redistricting Maps have fundamental flaws crying out for improvement in the case of my present State Senate District 34 (proposed draft State Senate District 37); present State Delegate District 37 (proposed State Delegate District 11); and present U.S. House of Representatives District 11 (proposed U.S. House of Representative District 11).

The Special Masters' Memo of 12/7/21 ("Memo";"M") states that although they were instructed to prioritize first the 14th Amendment and then the Voting Rights Act, instead they began with the Statutory Criteria (Code Sec. 24.2-304.04) to draw districts they believe meet the constitution and statutory population requirements (Memo at p. 2). By so doing, they exalted simplified proxy criteria such as the statutory "deviations of population should be no more than 5 percent for legislative districts" and mistakenly suggest this is "bettering" the U.S. Supreme Court's \(10 \%\) deviation precedent guideline for state legislative districts as if, taken to mathematical extremes, a half percent deviation of population for legislative districts would be even better in meeting the fundamental spirit and meaning of the 14th Amendment right to "due process under the law to protect life, liberty, and property." This elevates a metric above the meaning of the 14th Amendment. It is possible that the reasonable flexibility permitted by a \(10 \%\) guideline may be a better fit to the factual spatial population distributions in some communities. Similarly, the Special Masters draft maps err by elevating the impotent metric of "compact" as-the-crow-flies polygons over any real attempt to identify certain communities of interest.

This sterile metric approach works against a better informed U.S. Supreme Court approach which is to recognize that "shared broadcast and print media, public transport infrastructure, and institutions such as schools and churches" are part of its definition of community of interest (M. at p. 6) Indeed the Special Masters recognize that this partial definition illustrates the existence of unique communities of interest (COI) like the Blue Ridge and Shenandoah Valley. In keeping with this better definition of a COI, I believe that any redistricting needs to recognize the diverse but vibrant community interest displayed in the neighborhoods surrounding central State 123 and major crossroads such as the east-west U.S. Hwy 50). Community of Interest does not require a homogeneity of population or dwelling type. Rather, the DIVERSITY characterizes the resident population and business/ cultural features along the Hwy 123 and Hwy 50 east that make it a unique Community of Interest.

Every urban planner knows (B.S. magna cum laude, Urban Life/Land Development major, thank you) that people don't fly like crows and so "compact" polygons are not necessarily indicative of a COI. Rather, major transportation arteries, common houses of worship and cultural interests, GMU students, senior citizens, multi-residential dwellers share a common interest in a multicultural small town way of life, complete with town festivals, local print media, outdoor parks and concerts, multi-ethnic population, schools and baby to grandparent
families. The vibrant, diverse COI on both sides of Hwy 123 and Hwy 50 east of Hwy 123 need redistricting that respects keeping together GMU, Fairfax City, central Fairfax County, Oakton, Vienna, Tyson, my Stonehurst neighborhood, Mantua, and Kings Park West.

Thank you,
Sabina U. Joe
9313 Marycrest Street
Fairfax, Va 22031
Tel. 703-273-3284

\section*{C. TODD GILBERT}

COMMITTEE ASSIGNMENTS:

December 20, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
100 N. 9th St., \(5^{\text {th }}\) Floor
Richmond, VA 23219

\section*{Dear Madam Clerk:}

The House Republican Caucus respectfully submits two maps for consideration by the Court and the Special Masters. Both maps follow the requirements of the United States Constitution, including the 14th Amendment, the Voting Rights Act of 1965, the Constitution of Virginia, the Code of Virginia, and other applicable federal and state constitutional and statutory provisions.

The first map was drawn independently from the Special Masters' and represents an ideal map that follows the above criteria. We respectfully commend it to the Court and the Special Masters for consideration.

The Second Map begins with the Special Masters' map and simply unpairs two incumbents with as few other moves as possible to effectuate the unpairing. As has been widely reported, the Special Masters' map pairs numerous incumbents (and in two cases triples them). Both incumbents identified in the Second Map live adjacent to another district that does not currently have a resident legislator. Rather than force them to physically move or run against a colleague, the Second Map would slightly move the district lines. We understand that if the Court accepts some or all of this map, it may accept reciprocal unpairing for Democrat legislators who are similarly paired.

Founding Father Roger Sherman expressed the importance of preserving the ability of sitting legislators to continue serving when he stated, "Nothing renders government more unstable than a frequent change of the persons that administer it." The House of Delegates is in session for only 60 days and experiences significant turnover - in the 2021 term, 70 members had been Delegates for fewer than ten years and 40 members had been Delegates for fewer than five. A map that unnecessarily pairs legislators hampers institutional knowledge and the stability of the House. We respectfully ask the Court to adopt some or all of the changes in this map.

Copies of the maps and the shape files are included with this submission. Thank you for your consideration.
Regards,

C. Todd Gilbert

House Minority Leader

Map \# 1
https://www.dropbox.com/t/lbrTgpDrOw0ezAJb
Map \# 2
https://www.dropbox.com/t/zkoYB8AZoKu9aP6A
\begin{tabular}{ll} 
From: & \(\frac{\text { Kelly Brennan }}{\text { To: }}\) \\
Subject: & Redistricting \\
Date: & New River Valley: Blacksburg/Christiansburg/Radford \\
& Monday, December 20, 2021 12:50:54 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

\section*{THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS}

Honorable Members of the Supreme Court,
As a native and 45+ year resident of Montgomery County, I believe the Special Masters missed the mark here in the New River Valley when drawing both House (HD 41 and 42) and Senate (S4 and 5) district lines.

As the Special Masters point out, Communities of Interest (COI) form the underpinnings of HD districts. The New River Valley (NRV), consisting of Floyd, Giles, Montgomery and Pulaski counties and the city of Radford, is a clearly defined and cohesive COI, both geographically and culturally. Characterized by substantial cooperation and integration of governmental, economic, and educational activity, Virginia Tech provides the anchor for our NRV community.

Currently, the NRV is bound within two HD districts and two Senate districts; the proposed map places us in four widely divergent HD, and two Senate districts that entirely excludes Floyd county. None of this makes sense from any standpoint.

From a strict population standpoint, the NRV contains 181,854 residents, enough for two contiguous and compact HD districts, though I am sorry to say, would require shifting anywhere from approximately 5,000 to 13,500 residents into adjacent districts. Still, I believe this is far preferable to what is both proposed and exists. Those folks on the periphery of the NRV could be integrated into district/s sensibly and with sensitivity to their interests.

Further, within this context, there is a highly integrated core population of Blacksburg, Christiansburg and Radford city with a population of 84,244 that could form a single HD; the remaining NRV population (minus the aforementioned residents) could then be served by the other HD.

Senate districts are not so clearly or easily drawn. That said, I believe we can do better by the residents of the NRV by linking them with the Roanoke Valley, with which we have many economic, educational and social ties. Further, governments in the two regions regularly cooperate on issues of transportation, public safety, and economic development. Coupling the NRV with counties much further to the west and with differing local needs simply doesn't make sense as in the proposed S5, nor does excluding Floyd county altogether.

The combined populations of the NRV and the Roanoke Valley is 404,140; nearly enough for two contiguous and compact districts with similar interests. The minutia is harder to cipher given the population distribution, yet seems far more sensible and serving of the populous than placing said residents in 4 geographically, economically and socially divergent Senate districts.

I do hope you will consider these recommendations, as I believe they would better serve the interests and needs of the citizens of the New River and Roanoke Valleys for years to come, than would the proposed districts.

Respectfully yours,
Kelly Brennan
4462 Sidney Church Road
Riner, VA 24149
\begin{tabular}{ll} 
From: & Michael Tabony \\
To: & Redistricting \\
Subject: & Communities of Interest. \\
Date: & Monday, December 20, 2021 12:52:31 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Judges,
The map as drawn completely ignores the mandate to respect communities of interest for much of the state. Please adjust it to maintain the communities of Charlottesville, Lynchburg, Roanoke, and Richmond. Charlottesville's community of interest is especially hacked up; that should be priority \# 1 .

Thank you,

Mike Tabony
```

From: Sabina U Joe
To: Redistricting
Subject: Fwd: Redistricting Comment on Supreme Ct of Va Draft Plan by Special Masters
Date: Monday, December 20, 2021 12:53:18 PM

```

\section*{EXTERNAL EMAIL}

\title{
THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON
} ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Attention: Ms. Sharon L. Abernathy
Please find my general comment submitted on the Redistricting below.
Thank you,
Sabina U. Joe
----------
Forwarded message
From: Sabina U Joe <bina.joe33@gmail.com>
Date: Mon, Dec 20, 2021 at 12:47 PM
Subject: Redistricting Comment on Supreme Ct of Va Draft Plan by Special Masters
To: <redistricting@vacourts.gov>

While a heroic effort, the Special Masters' first draft Redistricting Maps have fundamental flaws crying out for improvement in the case of my present State Senate District 34 (proposed draft State Senate District 37); present State Delegate District 37 (proposed State Delegate District 11); and present U.S. House of Representatives District 11 (proposed U.S. House of Representative District 11).

The Special Masters' Memo of 12/7/21 ("Memo";"M") states that although they were instructed to prioritize first the 14th Amendment and then the Voting Rights Act, instead they began with the Statutory Criteria (Code Sec. 24.2-304.04) to draw districts they believe meet the constitution and statutory population requirements (Memo at p. 2). By so doing, they exalted simplified proxy criteria such as the statutory "deviations of population should be no more than 5 percent for legislative districts" and mistakenly suggest this is "bettering" the U.S. Supreme Court's 10\% deviation precedent guideline for state legislative districts as if, taken to mathematical extremes, a half percent deviation of population for legislative districts would be even better in meeting the fundamental spirit and meaning of the 14th Amendment right to "due process under the law to protect life, liberty, and property." This elevates a metric above the meaning of the 14th Amendment. It is possible that the reasonable flexibility permitted by a \(10 \%\) guideline may be a better fit to the factual spatial population distributions in some communities. Similarly, the Special Masters draft maps err by elevating the impotent metric of "compact" as-the-crow-flies polygons over any real attempt to identify certain communities of interest.

This sterile metric approach works against a better informed U.S. Supreme Court approach which is to recognize that "shared broadcast and print media, public transport infrastructure, and institutions such as schools and churches" are part of its definition of community of interest (M. at p. 6) Indeed the Special Masters recognize that this partial definition illustrates
the existence of unique communities of interest (COI) like the Blue Ridge and Shenandoah Valley. In keeping with this better definition of a COI, I believe that any redistricting needs to recognize the diverse but vibrant community interest displayed in the neighborhoods surrounding central State 123 and major crossroads such as the east-west U.S. Hwy 50). Community of Interest does not require a homogeneity of population or dwelling type. Rather, the DIVERSITY characterizes the resident population and business/ cultural features along the Hwy 123 and Hwy 50 east that make it a unique Community of Interest.

Every urban planner knows (B.S. magna cum laude, Urban Life/Land Development major, thank you) that people don't fly like crows and so "compact" polygons are not necessarily indicative of a COI. Rather, major transportation arteries, common houses of worship and cultural interests, GMU students, senior citizens, multi-residential dwellers share a common interest in a multicultural small town way of life, complete with town festivals, local print media, outdoor parks and concerts, multi-ethnic population, schools and baby to grandparent families. The vibrant, diverse COI on both sides of Hwy 123 and Hwy 50 east of Hwy 123 need redistricting that respects keeping together GMU, Fairfax City, central Fairfax County, Oakton, Vienna, Tyson, my Stonehurst neighborhood, Mantua, and Kings Park West.

Thank you,
Sabina U. Joe
9313 Marycrest Street
Fairfax, Va 22031
Tel. 703-273-3284
```

From: Diana Crosswhite
To: Redistricting; Diana Crosswhite
Subject: Comment on Congressional District Proposed Map
Date: Monday, December 20, 2021 12:56:42 PM

```

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

To the Honorable Justices of the Supreme Court of Virginia From Diana Crosswhite, MUEP, Henrico County Resident

First, I tried commenting directly on the map and nothing happened. I tried using Google Chrome and Microsoft Edge.

I am a native Virginian. I was born in Abingdon, VA and lived there until I attended college at UVa in Charlottesville. After graduating with my Master's Degree in Urban and Environmental Planning, I moved to Richmond, VA to begin my work career. I first was employed in the private sector as an Associate Planner that worked with communities all across Virginia to implement projects under the Community Development Block Grant program. My most notable project was working with the City of Franklin after the flood from Hurricane Floyd. I left the private sector and have been employed by Virginia Housing since July 2002 and work in the Housing Choice Voucher program as the Policy and Training Manager. I say all of this because I feel my experience is valid to the conversation of redistricting and I did apply to be on the commission but was not chosen.

Data analysis and mapping are huge parts of my life and I fervently disagree with the Congressional Map proposed by the Special Masters. Although the SMs seemed to avoid any appearance of gerrymandering, I do not feel that they gave any consideration regarding the needs that different populations of the citizens of Virginia. I know you have received a lot of comments from people in the current 7th District, which is my district, who are outraged that you eliminated the district of a female Congressperson but my feelings on this are purely from a logical, data driven perspective. Including parts suburban Henrico with counties in the Northern Neck and Middle Peninsula makes absolutely no sense. The needs of these communities are completely different from the needs of inner Central Virginia. Proposed Districts 1, 2, 3, 4, 5, 6, and 9 need to be reconsidered. These areas need representatives in Congress that are focused on their specific issues and not competing with other parts of Virginia because of the economic and social issues. Middlesex County should not have to compete with the suburban Henrico county when it comes to projects that affect that costal county that has a low median income.

I hope that you, the Court and the Special Masters, will consider having some open work
sessions during the first weeks of January to work with the citizens of these areas to identify needs beyond population and geography. I was against the way the Redistricting Commission was formed because I knew this very problem was going to occur. I wholeheartedly believe the original proposal was much more in line with a true non-partisan commission but here we are. Please listen to the citizens and re-evaluate the maps that have been submitted for your consideration. I know there are any number of planners across Virginia that are more than willing to provide assistance should you need it.

Respectfully,
Diana C. Crosswhite
\begin{tabular}{ll} 
From: & pamdmerger@1791.com \\
To: & Redistricting \\
Subject: & Public comment on redistricting map \\
Date: & Monday, December 20, 2021 12:58:26 PM
\end{tabular}

\section*{EXTERNAL EMAIL}

THIS MESSAGE ORIGINATED FROM AN EXTERNAL ADDRESS. USE CAUTION CLICKING ON ANY LINKS OR DOWNLOADING ANY ATTACHMENTS

Dear Ms. Padden,
I have lived in the Fifth District in Charlottesville, Virginia for fourteen years. Before that I lived in Northern Virginia for twenty-nine years. I live in Central Virginia, but the redistricing plan moves Charlottesville from the Fifth District, which is primarily in Central Virginia, to the Tenth District, which is primarily in Northern Virginia. I believe it extends all the way to Loudon County. Based on my experience in living in both Northern and Central Virginia, I believe the two populations have significant differences. Therefore, it doesn't seem logical to move Charlottesville to the Tenth District. For this reason, I believe I will be better represented if Charlottesville remains in the district that represents the values of Central Virginians.

Sincerely,
Patricia Van Ryn

TO: \(\quad\) Chief Justice and Justices of the Supreme Court of Virginia
FROM: Aaron Yohai, lifelong Braddock District, Fairfax County resident and local political committee chairman and volunteer
Submitted: 12:30PM 12/20/2021
Re: Proposed changes to special masters' draft redistricting maps for VA Delegates, Senate

\section*{INTRO}

Please accept my sincere gratitude for the great care and diligence in which the Court has solicited and heard commentary from the public about the newly proposed maps for Virginia legislative and congressional districts. I believe that all things considered, the special masters have performed admirably in drafting compact, equitable, and competitive districts for the House of Delegates and Senate of Virginia. Of course, as Virginia residents, it is incumbent upon the public to use this opportunity to consult with the Court on the details of these maps, especially with respect to communities of interest. Virginia, as you certainly know, is not a flat landscape, and though the draft maps are a fine start, the special masters did not quite capture the importance of certain local communities of interest with respect to the House and Senate districts. I provided my comment at the 12/17 public hearing, but in only 3 minutes I don't believe I could fully explain my recommendations. I will do so in greater detail in this written comment, instead. These maps, and the demographic data that I will provide to justify these changes, were created and retrieved in the MyDistricting Virginia online tool offered by the Virginia Redistricting Commission. Thank you for your attention to this.

Proposed Change: Wakefield Precinct to HD14


I recommend that Wakefield precinct in Annandale be moved from HD15 to HD14 to better represent the Annandale area. Annandale is a substantial census-designated area and ZIP code (22003) which shares many commercial and cultural gems of the region, including the performing arts center at Northern Virginia Community College Annandale Campus and culturally significant commercial centers and dining establishments. Wakefield precinct in particular shares much of the same school-attendance area as HD14, virtually all of Mantua, Ridgelea and Mill Creek Park to the north also attends Woodson high school, and Chapel precinct which is also HD14 under the draft map is half of the Wakefield Forest Elementary School attendance area, the other half being Wakefield precinct itself; they should not be arbitrarily separated.

Moving Wakefield precinct to HD14 would further unite the Annandale area along the significant thoroughfare of Little River Turnpike, and fully unite the Wakefield Forest elementary school attendance area. These neighborhoods share a strong sense of shared community. The map screenshot included with this message shows that combined with other common-sense changes, House Districts 14 (+.76\%) and 15 (-1.02\%) would be still very close to target population. HD14 would maintain its majorityminority status. Not pictured on this map screenshot, but included in the demographic readout of the districts, is the inclusion of the half of Woodburn precinct inside the beltway within HD13 to offset the increase in population from Wakefield precinct. This would create a recognizable dividing line between the two districts at Gallows Road, and HD13 would still be closer to target population (+2.16\%) than several other proposed House districts. Finally, neither of these small changes would upset the nesting principle as they would still be within Senate District 35.

Proposed Change: Robinson, Laurel, Bonnie Brae and Sideburn Precincts to HD11, SD37


\section*{Proposed Change: Robinson, Laurel, Bonnie Brae and Sideburn Precincts to HD11, SD37 (Cont'd)}

The present draft maps for House and Senate unfortunately divide the Kings Park West censusdesignated place between two House and two Senate districts. The drafts also did not capture the community of shared interest between these four precincts in the GMU area with the Fairfax campus and University Mall to its immediate north and further north with Fairfax City. This community has far more in common commercially and culturally with Fairfax City and GMU than it has with distant Centreville and Clifton, with which it is currently paired in HD10 and SD36, the only other precinct (Robinson) being arbitrarily included in HD15 and SD35. Instead, all four precincts should be included in the Fairfax City-centered districts of HD11 and SD37. This would unite the Kings Park West censusdesignated place and preserve this vital community of shared interest between that larger area and GMU-Fairfax City.

The impact on target population in HD11 and SD37 would be offset by another important change to the northwest, which I will explain in a different section. After all these changes are made, HD 11 (+.79\%) and SD37 (+1.81\%) would still be within target population range.

\section*{Proposed Change: Fairview Precinct to HD15 and SD35}

The Burke Centre census-designated place and homeowners association is a definite community of interest including a total of three precincts (Fairview, Terra Centre, and Burke Centre) that has unfortunately been divided into two House and two Senate districts under the draft maps. This is easily fixed by moving Fairview precinct to HD15 and SD15 from where it was previously (HD10 and SD36) with which it shares little interest or commercial ties. Burke Centre is one of two census-designated areas in the greater Burke ZIP-code (22015) which under this proposal would be fully unified in one House and one Senate district for the first time. The changes to target population of these districts are offset in my other proposed changes, which I have explained in the other sections of this proposal.


\section*{Proposed Change: Monument, Centerpoint and Penderbrook precincts to HD10 and SD36}

This final change not only offsets the adjustments to other districts by population, but better captures the commercial and transportation interests of this relatively new area of development around Fairfax Corner and Fair Oaks Mall, which includes Monument, Centerpoint, Penderbrook and Eagle View precincts. All share much closer economic and transportation ties with Centreville, along the Routes 66 and 29 Lee Hwy corridors, and with western Fairfax County communities represented within the new boundaries of SD36 along Routes 608 West Ox Road and 286 Fairfax County Parkway. The inclusion of these three precincts with their sister precinct of Eagle View in HD10 and SD36 would make the Senate district more compact, better represent the needs of these shared communities of interest, and also favorably improve the diversity of this region currently represented by this House and Senate district. The slight loss of compactness for HD11 and SD37 is regrettable, but it is more important that these communities be well-represented for their shared interests. The Fairfax County Board recognized this
shared interest when it moved Penderbrook precinct into Springfield magisterial district (includes
Centerpoint) and all three precincts moving to these new districts would form a neat and recognizable border with Fairfax City.


Aaron Yohai Proposal - Senate Districts Map (Fairfax County, Fairfax City)


Aaron Yohai Proposal - House Districts Map (Fairfax County, Fairfax City)


\section*{Summary:}
A. Wakefield Precinct - moves to HD14, remains in SD35
B. Robinson, Laurel, Sideburn, Bonnie Brae precincts - move to HD11, SD37
C. Fairview precinct - moves to HD15, SD35
D. Monument, Centerpoint, Penderbrook precincts - move to HD10, SD36

\section*{C. TODD GILBERT}

COMMITTEE ASSIGNMENTS:

December 20, 2021

Ms. Muriel-Theresa Pitney
Clerk of the Supreme Court of Virginia
100 N. 9th St.
Richmond, VA 23219

Dear Madam Clerk:
The House Democratic Caucus submitted two maps: the first is drawn "from scratch" (hereinafter "Democratic Map \#1") and the second makes modifications to the map crafted by the Special Masters (hereinafter "Democratic Map \#2"). Both maps are simply a power grab by the Democratic Party that opposed the bipartisan commission.

The first map is the aspirational map of the Democrats, and it represents their model plan. It should be rejected out of hand. Contrary to the assertion of the Democrats, it is in no way "balanced and fair."

First, it does not comply with maintenance of communities of interest. District \#64 stretches and winds from the bedroom community of Colonial Heights through rural communities to Smithfield. District \#88 stretches from the Fredericksburg suburbs in Spotsylvania to Greene County. District \#25 is split by the Blue Ridge mountains, and given that there is not even a road connection between the two parts, its delegate would have to go outside his / her district to drive from Page County to Madison County.

The winding nature of the districts is reflected in the map's compactness score that shows the districts are not compact - and they are less compact overall than the maps drawn by the Masters. This lack of compactness exposes the unbalanced and unfair basis for the Democratic maps. As one example of many, to unpair Delegate Rip Sullivan, District \#48 stretches across three jurisdictions, Fairfax County, Arlington, and Alexandria. (This of course is additionally not a community of interest.) Similarly, in addition to the District \#25 noted above, District \#100 connects the Eastern Shore with a portion of Norfolk which cannot be reached by bridge, and would require the delegate to drive through another district simply to meet with his constituents. Similarly gerrymandered districts abound in Democratic Map \#1.

The map's partisan intent is especially obvious from the pairings included therein. The map makes tortured efforts to unpair Democratic incumbents. See, for example, District \#31, where Delegate Guzman's residence is carefully carved out of District \#52 and placed in District \#31. Despite obviously knowing of the addresses of elected officials, the map pairs numerous Republican delegates and delegate-elects: (1) Delegate Will Morefield and Delegate Jeff Campbell in District \#3; (2) Delegate James Edmunds and Delegate Les Adams in District \#16; (3) Delegate Jay Leftwich and Delegate Barry Knight in District \#81, although there is an "empty" district \#78 adjacent; (4) Delegate Lee Ware and Delegate-elect Kim Taylor in District \#65; (5) Delegate Kathy Byron and Delegate Chris Head in District \#17; and (6) Delegate Joe McNamara and Delegate-elect Marie March in District \#6. This last is especially obvious, as Delegate McNamara's residence is less than 100 yards from the boundary for the new empty district \#8. The map also pairs Republican Delegate Emily Brewer and Democratic Delegate Clint Jenkins in District \#76, but District \#76 is a district
with a significant Democratic advantage as drawn. Indeed, the only apparent pairing of Democratic incumbents is District \#94, which currently contains Delegate Mike Mullin and Delegate Shelley Simonds, but Delegate Mullin has already announced his intention to move to Williamsburg, which is - conveniently - in an empty seat (District \#93). In short, the Democratic map would pair and thereby eliminate 7 Republican incumbents and not a single Democrat.

The true purpose of the map is to entrench an unassailable Democratic majority for the next decade, and this can be demonstrated by the scalpel-like precision of the districts drawn. From the Special Masters memorandum, we gather that the Special Masters used data from the 2017 Attorney General race without allocating Central Absentee voters to their individual precincts. Using this data, the median \(50^{\text {th }}\) and \(51^{\text {st }}\) most Democratic districts returned \(55.08 \%\) and \(54.77 \%\) in favor of Democrats, and this is notwithstanding the geographic advantage that the Special Masters noted for the Republicans. In other words, Democratic Map \#1 is much more politically disproportionate than the Special Masters' map. This can be more easily observed in the actual election results for the proposed districts. Although the Democratic statewide candidate obtained \(53.3 \%\) of the vote, he would have won a majority in 61 seats under the Democratic Map \#1. This map is a direct effort to ensure Democratic majorities.

In sum, Democratic Map \#1 does not comply with the map drawing criteria identified by the court and is simply a political effort by the Democratic party to overturn what Virginia voters placed in the Constitution. It should be rejected out of hand.

Democratic Map \#2 is intended to protect specific identified Democratic incumbents, sometimes at the expense of others, and to do it under the obviously false guise of promoting communities of interest. In doing this, Democrats seek to use their maps to choose the winners and losers in the next election. For example, to unpair Delegate David Bulova, two precincts are swapped between Districts 10 and 11, extending tendrils into each and making them both less compact. To unpair Delegate Vivian Watts, one precinct is moved from District 15 to District 14. To unpair Delegate Luke Torian, the already uncompact District 19 is extended even further, and the district is clearly not a community of interest as it extends from Mount Vernon to Woodbridge. The Map also modifies the boundary between Districts \#78 and \#79 in Richmond, which has the effect of moving Delegate Bourne into the same district as Delegate McQuinn.

Democratic Map \# 2 purports to address communities of interest, but Democratic Leadership who submitted the map would have the Court and Special Masters believe that the transfer of the handful of precincts just so happened to always unpair senior incumbents who had been paired in the Special Masters' map. Democratic Map \#2 would: 1) unpair the current Speaker who drafted the letter to the Special Masters; 2) unpair the current chair of the House Appropriations Committee; 3) unpair the current chair of the House Finance Committee; and 4) unpair the current chair of the House General Laws Committee. It would also move a member of the Black Caucus into a District with another member of the Black Caucus, ensuring the loss of at least one member of the Black Caucus.

This Court should reject the calculated and partisan efforts of the Democrats in these two plans, and it should not accept the efforts of the Democratic party to undermine the will of the people of the Commonwealth of Virginia.

For the foregoing reasons, the two maps submitted by the Democrats should be rejected.
Regards,

C. Todd Gilbert

House Minority Leader```


[^0]:    ${ }^{1}$ E.g., Legal Gerrymander Flip-Flop, Wall Street Journal, Oct. 21, 2021, available at https://www.wsj.com/articles/legal-gerrymander-flip-flop-oregon-redistricting-marc-elias-11634822303; Texas GOP tries to protect US House seats under new maps, Associated Press, September 27, 2021, available at https://apnews.com/article/donald-trump-elections-texas-voting-rights-5fc5c1b2bba3626cf1c4095f41518277; DIY Redistricting Allows Public to Draw Maps in More States, Pew Stateline, August 31, 2021, available at https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2021/08/31/diy-redistricting-allows-public-to-draw-maps-in-more-states

[^1]:    ${ }^{1}$ This is a significant caveat because of both spatial differences and election-to-election swings in Virginia. PGP's partisan-performance estimates are calculated by averaging precinct-level returns for three races: President 2016 (52.8\% Democratic of the two-party vote share), Governor 2017 ( $54.5 \%$ Democratic), and Senate 2018 ( $58.2 \%$ Democratic). The average two-party vote share for these races is 55.2\% Democratic, 44.8\% Republican. As a comparison, Dave's Redistricting App composite 2012-2020 election average has a statewide estimate of 54.0\% Democratic, 44.0\% Republican, 2.0\% other. As another comparison, the two-party vote shares in the recent governor's race are 49.0\% Democratic, $51.0 \%$ Republican in the most recent tabulation.

[^2]:    ${ }^{2}$ In our Python script, a county split is defined as a county that is divided between at least two districts. This definition does not give special treatment to combinations of splits within a county.

[^3]:    "The League of Women Voters of Virginia, a nonpartisan political organization, encourages informed and active participation in government, works to increase understanding of major public policy issues, and influences public policy through education and advocacy."

[^4]:    "No more apologies for a bleeding heart when the opposite is no heart at all. Danger of losing our humanity must be met with more humanity." -
    -Toni Morrison

[^5]:    Kay Slaughter
    1503 Short 18th Street
    Charlottesville, VA 22902
    434-971-5813
    katherineslaughter61@gmail.com
    t

[^6]:    "The League of Women Voters of Virginia, a nonpartisan political organization, encourages informed and active participation in government, works to increase understanding of major public policy issues, and influences public policy through education and advocacy."

[^7]:    ${ }^{1}$ Sam Shirazi, The U.K.'s Marbury v. Madison The Prorogation Case and How Courts Can Protect Democracy, 2019 U. Ill. L. Rev. Online 108, available at https://www.illinoislawreview.org/wp-content/uploads/2019/11/ Shirazi FINAL_.pdf.

[^8]:    Kenneth H. Sherwood
    804 Marly Ct
    Newport News, VA 23608
    757-660-2307/kensherwood@earthlink.net

[^9]:    Portion of Stafford County Election Districts Map - Celebrate by Del Webb is \#1 and Falls Run is \#2.

[^10]:    "No more apologies for a bleeding heart when the opposite is no heart at all. Danger of losing our humanity must be met with more humanity." -
    -Toni Morrison

[^11]:    ${ }^{1}$ The US territory of Puerto Rico has enjoyed a population of United States citizens larger than the smallest 20 states, the District of Columbia larger than that of the smallest [2] states; smaller territories include the US Virgin Islands in the Caribbean, and beyond the state of Hawaii, the Western Pacific Ocean include Guam, American Samoa, and Northern Mariana Islands. The Philippines voted its independence from the US in [1947] following territorial law enacted by the US Congress.
    ${ }^{2}$ Two relevant notes: (1) "The Greatest Generation" ratified the 1957 [Treaty] making the US an asylum nation for refugees and their families fleeing from religious or political persecution. (2) In 1798 Virginia "interposed" state government, the Jeffersonian-Republican "Spirit of ' 98 " campaign slogan, to petition Congress and sue the John Adams administration against arbitrary deportation to protect Virginian settlers who were French-speaking expatriates from Caribbean revolutions. They had taken up residence in port cities but mostly on the western Kentucky frontier. Virginia was protecting its own, as many had become state citizens to vote after a one-year residence, shorter than the 7 -year requirement for US citizenship at the time.

[^12]:    ${ }^{3}$ In a 1789 Union of states that required the voters for state Senate to have more property and establishment church membership (Congregationalists in Massachusetts, Episcopalians in South Carolina) the US Constitution embraced the largest democratic electorate allowed in each state among their various constitutions and statutes, so as to legitimize the new US Congress. The national government was to be rooted in the sovereign people as broadly as could be at the time, in each place ... and, meant to be improved upon over time.
    ${ }^{4}$ In accordance with requirements of federal and state laws that address racial and ethnic fairness..." the Equal Protection Clause of the US $14^{\text {th }}$ Amendment, and the Voting Rights Act of 1965 as amended and judicially interpreted.
    ${ }^{5}$ Generally speaking, 'majority-minority' districts have over $50 \%$ minority population; 'minority opportunity' districts over $40 \%$ minority population; 'minority competitive' districts over $30 \%$ minority population. 'Minority participation' districts have the right to register, vote, and reasonable access to cast a ballot, in the author's view. Some Courts have taken cognizance of "eligible voting population" of self-identified 'blacks' or 'multi-race' census populations when they are a super-majority of the 'minority' resident population in district with a history of

[^13]:    racially polarized voting. In Virginia, Northern Virginia and Richmond City have the lowest incidence of racially polarized voting (Self-identified Whites voting only for white candidates of their party, but not a black candidate of the same party on the same ballot.)
    ${ }^{6}$ Note the Virginia state and federal court cases.

[^14]:    ${ }^{7}$ Folks do not move into precincts to vote, they move into neighborhoods with their families. Redistricting adjusts legislatures to new numbers of their citizens in new settlements. Localities should redraw precincts to conform to new districts in nearly equal voting populations with equal access to cast ballots, machines, and poll workers.
    ${ }^{8}$ The Brennan Center for Justice at the New York University Law School publishes A Citizen's Guide to Redistricting by Justin Levitt. It provides a study and recommended guidelines for redistricting commission redistricting.

[^15]:    ${ }^{9}$ Sourcing provided as it becomes available, I use my own terms for now until I learn the NGS map key. ${ }^{10}$ The guiding intent for representing people in a democratic-republic is to (a) mirror their settlements in places (b) weighted by resident numbers in single-member districts. The legislature assembled is to reflect the composition of all the people in their places, NOT arbitrary places with people, not one sort of people in different places.

    - See litigation surrounding the court decisions "one-man-one-vote" doctrine that overturned previous Virginia General Assembly redistricting.
    - County incorporation in 1600s Virginia held nearly equal numbers of heads of household. That ENDED at 1676 Bacon's Rebellion of newly emancipated indentured servants and slaves freed at the Biblical 7years. The new regime added property requirements to vote and hereditary racial slavery. After the War of 1812 , voting expanded with militia members. But locality representation added non-voting slaves as property to boost eastern rural county "apportionment" in addition to counting free white populations. In early 1800s Virginia, this underrepresented urban, commercial, and industrial centers in the General Assembly.
    ${ }^{11}$ The centrality of urban populations as settlement and habitat of the residents to be represented in Virginia's legislature districts cannot be overemphasized for fair redistricting, because $70 \%$ of Virginians live in Census-reported "urban" areas. Rural voices are to receive the weight proportionate to their numbers of population, not as equal places to be disproportionately represented in the legislature.
    ${ }^{12}$ Most of the United States and most of Virginia live within MSAs. They are linked by the economic and social commuting reported for residents in each locality by Census Tract and Census Block. At the center of each MSA area are one or more "urban cores". Micropolitan Statistical Areas populations exceed 10,000 population, and Metropolitan Statistical Areas exceed 50,000.
    ${ }^{13}$ Major thoroughfares include Virginia state routes (VA-7), US highways (US-60), and Interstate highways (I-64).
    ${ }^{14}$ Federal and state court-approved tests include (a) Length-Width against elongated 'sausage' shapes urban-sliced gerrymanders, (b) Polsby-Popper against jagged juts, and (c) Reock against tendril-fingers.

[^16]:    ${ }^{16}$ From the total population for each district, this chart subtracts the "White" for each district to make a CHART column for racial "Minority" to sidestep any conflation in the races using "Hispanic" or "Latino".

[^17]:    1
    https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-census-decade. html
    2
    https://www.tysonsreporter.com/2021/08/13/fairfax-county-now-virginias-second-most-diverse-county-new -census-data-shows/
    https://www.insidenova.com/news/arlington/census-bureau-asians-make-biggest-gains-in-arlington-popul ation/article d6b11234-25eb-11ec-b4bf-bb55cd871233.html

[^18]:    ${ }^{4}$ https://www.apiavote.org/sites/default/files/2020-02/Virginia-2020.pdf
    ${ }^{5}$ https://insights.targetsmart.com/the-unprecedented-impact-of-the-aapi-vote-on-the-2020-election.html

[^19]:    ${ }^{10} \mathrm{https}: / / l a w . l i s . v i r g i n i a . g o v / c o n s t i t u t i o n / a r t i c l e 2 / s e c t i o n 6 / ~$
    ${ }^{11}$ https://virginiaredistricting.org/2021/Data/Public\%20Hearings/082321materials.pdf 12
    https://roanoke.com/news/state-and-regional/virginia-is-growing-more-diverse-population-growth-reserved -for-urban-and-suburban-areas/article 4c7d281d-a951-5244-829c-98db828d4fd7.html
    ${ }^{13}$ https://vpm.org/news/articles/26358/citizen-redistricting-map-in-virginia-drafted-with-help-from-gop

[^20]:    From: Ward Bourn wcbourn@mac.com
    Subject: TIME FOR SETTING RULES FOR LEGISLATIVE RE-DISTRICTING
    Date: October 16, 2021 at 1:59 PM
    To: oped@timesdispatch.com

[^21]:    Unfortunately, when Congressional districts were redrawn in 2016 and House Districts in 2019 using 2010 census data and not current precinct map lines, several split districts were created in Norfolk.

[^22]:    ${ }^{1}$ Virginia Dep't of Elections, 2021 November General Election Absentee Statistics, https://results.elections.virginia.gov/vaelections/2021\%20November\%20General/Site/Statistics/Absentee.html (Nov. 15, 2021).

[^23]:    * County staff has determined that the County could, on its own, in compliance with Va. Code § 24.2304.1(D) (permitting the locality to make adjustments not exceeding the lesser of 250 persons or five percent of the population of a district), make a third adjustment, identified as "\#1" on the accompanying overall map (Map 1), to eliminate one remaining split precinct issue, as the change would involve a population group of only 120 people. The area involved is bounded by Marlboro Road on the north, Hites Road on the east, Clark Road on the south, and Clark Road and Middle Road on the west, and entails 4 census blocks: 510690506002021, 510690506002020, 510690506002019 , and 510690506002018 . In the alternative, the County respectfully submits that Court could also simply move this area as well from House of Delegates District 32 to District 31, as the shift would still leave the deviation in population totals for Districts 31 and 32 less than in the Special Masters' proposed maps.

[^24]:    Joe Duffus
    JoeDuffus@outlook.com
    Mobile: (703) 609-3420

[^25]:    ${ }^{1}$ In this figure and the others figures below, the color fields show Senate districts with our proposed amendments, using the same district numbering as the Special Masters' draft map. The red lines indicate the boundaries drawn by the Special Masters that we have proposed changing. Submitted to the Court under separate cover are the shape files and block assignment files for the entire statewide Senate map with all of our proposed amendments.

[^26]:    ${ }^{2}$ Available at https://www.cityofchesapeake.net/communities/south-norfolk/community.htm
    ${ }^{3}$ Available at https://www.historicsouthnorfolk.com/2012/07/05/history-of-south-norfolk/
    ${ }^{4}$ Available at https://en.wikipedia.org/wiki/Portsmouth Invitational Tournament

[^27]:    ${ }^{5}$ Available at https://www.pilotonline.com/history/vp-nw-fz21-portsmouth-welcome-center-historical-art-20211126-rcd2xvckfndtrmscolukjets4u-story.html
    ${ }^{6}$ Available at https://www.virginiadot.org/projects/hamptonroads/route_17_arterial_preservation_plan.asp
    ${ }^{7}$ Available at https://businessdocbox.com/Logistics/115944865-Vtrans2040-multimodal-transportation-plan-corridors-of-statewide-significance-needs-assessment-eastern-shore-corridor.html
    ${ }^{8}$ Available at https://es.vccs.edu/about/projects-partnerships/odu/
    ${ }^{9}$ Available at https://odu.edu/news/news-archive/2008/05/WallopsSpaceportp 10208\#.YbUMfahKjmE

[^28]:    ${ }^{10}$ Available at https://www.zipdatamaps.com/counties/state/economics/map-of-public-school-free-reduced-lunch-program-participation-for-counties-in-virginia
    ${ }^{11}$ Available at https://southernspaces.org/2007/countryside-transformed-eastern-shore-virginia-pennsylvania-railroad-and-creation-modern-landscape/
    ${ }^{12}$ Available at https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1085\&context=masters-theses
    ${ }^{13}$ Available at
    https://www.vbgov.com/government/departments/planning/2016ComprehensivePlan/Documents/Fall\%202020\%20 Update/CHAPTER\%201_EntireChapterSections\%2012-14-20\%20MES.pdf

[^29]:    ${ }^{14}$ Available at https://www.suffolkva.us/593/Chapter-3-Land-Use-Growth-Management
    ${ }^{15}$ The Special Masters appear to have recognized this obligation. See Special Masters Memo at 22 ("Districts 13, 14 and 15 are minority opportunity districts. We forced ourselves to draw these districts within the constraints placed on other districts: Compactness, minimization of county splits and attention to communities of interest."). We also agree with the Special Masters that the relevant inquiry under the VRA is not the literal number of "minoritymajority districts" but rather the number of districts "where minority groups are able to elect their candidates of choice, either alone or in coalition with other groups." Id. at 26-27.

[^30]:    ${ }^{16}$ Available at https://www.virginiaredistricting.org/legdistricting/comments/plan/130/1
    ${ }^{17}$ Available at https://virginiaredistricting.org/2021/Data/Publications/palmer_schneer_rpv_report.pdf

[^31]:    ${ }^{18}$ Available at
    https://henrico.maps.arcgis.com/apps/InformationLookup/index.html?appid=5651e3877c5243a19215f9a7fc7a4dc5
    ${ }^{19}$ Available at https://www.arcgis.com/apps/mapviewer/index.html?layers=3a1fa38398a143b290099b65ea51d127
    ${ }^{20}$ Available at https://files.eric.ed.gov/fulltext/ED539486.pdf
    ${ }^{21}$ Available at https://en.wikipedia.org/wiki/Hermitage_High_School_(Virginia)
    ${ }^{22}$ Available at https://equity.richmond.edu/about/foundational-work/inclusive-excellence/report-pdfs/burying-ground-report.pdf
    ${ }^{23}$ Available at https://westhamgardenclub.com/our-club/

[^32]:    ${ }^{24}$ Available at https://parking.vt.edu/alternative/regional/blacksburg-roanoke-smart-way-shuttle.html
    ${ }^{25}$ Available at https://wfirnews.com/news/nrv-to-get-amtrak-service-roanoke-to-get-2nd-daily-train.
    ${ }^{26}$ Available at https://www.virginiaredistricting.org/2021/Data/ref/SubmittedComments/11-19-
    21\%20west $\% 20$ central $\% 20$ region $\% 20$ input.pdf
    ${ }^{27}$ Available at https://energy.virginia.gov/webmaps/GeologyMineralResources/

[^33]:    ${ }^{28}$ Available at https://www.lcps.org/cms/lib/VA01000195/Centricity/Domain/27213/StoneBridgeHS21-22.pdf
    ${ }^{29}$ Available at https://www.arcgis.com/apps/mapviewer/index.html?layers=3a1fa38398a143b290099b65ea51d127
    ${ }^{30}$ Available at https://www.virginiaredistricting.org/legdistricting/comments/plan/514/1

[^34]:    ${ }^{31}$ Available at https://www.loudoun.gov/DocumentCenter/View/152285/General-Plan---Combined-with-small-maps-bookmarked
    ${ }^{32}$ Available at https://www.loudountimes.com/news/more-chair-randall-says-people-in-eastern-loudoun-dont-understand-the-west/article e35a48ea-f05b-5cd6-be34-dc0530b3ba60.html
    ${ }^{33}$ Available at http://www.virginialiving.com/culture/a-tale-of-two-counties/

[^35]:    ${ }^{34}$ Available at https://www.spotsylvania.va.us/DocumentCenter/View/2119/Comprehensive-Plan-PDF
    ${ }^{35}$ Available at https://www.washingtonexaminer.com/vre-to-expand-into-spotsylvania-county\#.UHHSr66rgXg
    ${ }^{36}$ Available at https://www.washingtonpost.com/news/dr-gridlock/wp/2015/11/15/vre-spotsylvania-station-opens/

[^36]:    ${ }^{37}$ Available at https://www.virginiaredistricting.org/2021/Data/ref/SubmittedComments/11-19$\underline{21 \% 20 \text { northern } \% 20 \text { region } \% 20 \text { input.pdf }}$

[^37]:    ${ }^{38}$ Available at
    https://www.hrpdcva.gov/uploads/docs/7A Attachment_Virginia\%20Working\%20Waterfront\%20Master\%20Plan.p df

[^38]:    ${ }^{39}$ Available at https://www.arcgis.com/apps/mapviewer/index.html?layers=3a1fa38398a143b290099b65ea51d127

[^39]:    

