

Expert Rebuttal of Anthony E. Fairfax

to the

Declaration of Andy Davis

January 26, 2022

A. Introduction

I have been retained by counsel to determine whether it is possible to draw an Illustrative Plan with additional majority-Black House districts in the State of Arkansas. This additional report serves as a response to Mr. Andy Davis' report (dated January 19, 2022), which evaluated my initial December 29, 2021 expert report and Illustrative Plan.

B. Background

The Arkansas Board of Apportionment ("BOA" or "Board"), comprised of the Governor, the Secretary of State, and the Attorney General, is charged with redrawing the boundaries of the state's 100 House of Representatives districts ("HDs") following each federal decennial Census.

The BOA adopted its final plan for the state House (the "Board Plan") on November 29, 2021. It filed the plan with the Secretary of State on the same day, and the plan became effective under Arkansas law on December 29, 2021.

On December 29, 2021, I submitted a preliminary expert report for this case that presented my finding that the minority population in the State of Arkansas was sufficiently large and geographically compact to constitute five additional majority-Black districts. On January 19, 2022, Mr. Davis submitted his evaluation of my preliminary expert report (the "Davis Declaration").

C. Summary of Andy Davis' Findings and Response

The Davis Declaration and Defendants' opposition brief make several claims pertaining to the districts proposed in my Illustrative Plan. I have considered the issues raised by Mr. Davis and Defendants' brief. As explained more fully below, it remains my expert opinion that five additional majority-Black House districts can be drawn consistent with the redistricting policies established by the BOA and the requirements of federal law.

A summary of the issues raised by Mr. Davis and the Defendants' brief includes the following:

Defendants allege that House District 5 is non-compact and racially gerrymandered. The Davis Declaration also claims that this district is underpopulated, splits multiple cities and school districts, and splits a precinct, potentially along racial lines.

Defendants allege that House District 16 is non-compact. The Davis Declaration also claims that the district improperly combines Arkadelphia and Pine Bluff into the same district despite the cities having no apparent commonality, splits school districts, creates long drive times within the district, and would require a representative of the district to drive outside the district to go from Arkadelphia to Pine Bluff.

Defendants allege that House District 12 is non-compact. The Davis Declaration also claims there is a high population deviation, critiques the district as not following a "major highway or navigation system," claims Helena-West Helena should have been contained within the district,

notes split school districts, and claims that split cities would reduce the voting power of the county.

Defendants allege that House District 48 is non-compact. The Davis Declaration faults the district for splitting the Philips County seat out of the district, claims there is no highway connection within the district, posits that a representative would have to drive through House District 12 to get to parts of House District 48, and claims that the proposal would place the current incumbent in another district.

Defendants allege that House District 55 is racially gerrymandered. The Davis Declaration claims that the district has an odd shape, notes that the district crosses over an interstate highway, and argues it failed to add a couple of precincts that would reduce the population deviation of the district.

As described below, none of these districts is racially gerrymandered or impermissibly non-compact. Moreover, many of the other issues raised by the Davis Declaration are not among the principles identified by the BOA as the bases upon which the redistricting plans would be considered, analyzed and adopted. Additionally, a close examination shows that the Illustrative Plan continues to perform better on the key redistricting principles identified by the BOA, and the Board Plan suffers from many of the same purported deficiencies identified by Mr. Davis.

I will now present the “claims” Mr. Davis made concerning initial report and certain districts in the Illustrative Plan, and provide my responses to each.

D. Response to Mr. Davis’ Claims Regarding Illustrative Plan’s District 5

Claim: “District 5 is overpopulated by 2.97% and the adjacent districts are all underpopulated . . . Why not balance the numbers to achieve one vote one person? Other surrounding districts, including Districts 3, 8, 16, and 19, are all also underpopulated.”¹

The Board of Apportionment’s redistricting criteria² (the “BOA Guidelines”) for one person, one vote states: “One person, one vote: balancing of each of the legislative districts every ten years, after the Federal Census, so that they are “substantially equal” (generally +/-5% deviation).”

The BOA Guidelines set +/- 5% of the ideal population size as the acceptable range for the districts. All of the House districts in the Illustrative Plan, including HDs 3, 8, 16, and 19, are within the BOA Guidelines’ standard for one person, one vote.

In addition, it appears that the Board Plan has removed a House district from a location where population lagged in growth compared to the rest of the state and placed it in a higher growth area; specifically, the Board Plan removes a district in the southern part of the state and adds a district to the Benton County area. For the Illustrative Plan, I decided not to do so to enable me to meet the BOA Guidelines’ goal of keeping incumbents within separate districts.

¹ Davis Decl., ¶ 10.

² <https://arkansasredistricting.org/about-the-process/redistricting-criteria-and-goals/>

If I removed a district in the southern area of the state, the remaining districts would easily be able to divide up the population with one fewer district in the region. In the Illustrative Plan, I prioritized keeping all incumbents within a district over reducing population deviation even further, beyond the acceptable range set by the BOA and permitted by federal law. It is also important to remember that this is an Illustrative Plan that is only one of many configurations; I am confident that an alternative plan could be created by removing a district in the south or nearby region, thus leading to lower population deviations in this southern area of the state, while still adding five majority-Black districts if the BOA determined that reducing population deviation was more important than preventing the matching of incumbents.

Claim: “The cities of Magnolia, El Dorado, and Camden are all split. The boundary of El Dorado is split into three different districts: Districts 6, 5, and 7.”³

Splitting multiple cities is fairly common in redistricting plans. When developing a statewide legislative plan, there are occasions where cities are split by two or more districts to prioritize other traditional redistricting criteria. Indeed, the BOA Guidelines seek to minimize the number of split cities, but do not preclude splitting cities across multiple districts where appropriate in consideration of the other redistricting priorities.

That said, the Illustrative Plan splits fewer cities than the Board Plan at issue here, as well as the 2011 and 2001 redistricting plans.⁴ The Board Plan has multiple midsize to small cities that are split by several districts. On the high end, the Board Plan splits Fayetteville into seven districts (HDs 18, 19, 20, 21, 22, 23, and 25). Even a small city like Fairfield Bay, with a population of only 2,108 people, was split by three districts (HDs 41, 42, and 43) in the Board Plan.

Also, there are several districts within the Board Plan that split three or more cities—for example, HDs 8 (4 splits), 10 (3 splits), 11 (3 splits), and 16 (7 splits). The Board Plan also has a district that is in the same vicinity as HD 5 in the Illustrative Plan that has five split cities (HD 98).

Splitting cities is fairly common and largely unavoidable, and is not and should not be enough to disregard a particular district or plan.

Claim: “District 5 splits multiple school districts. Most notable is the El Dorado School District is split into three different House districts, Districts 6, 5, and 7.”⁵

First, the BOA Guidelines do not include any requirement that school districts be kept intact. Second, like municipal boundaries, it is difficult to keep every school district wholly contained within a House district. Once again, the Board Plan has several school districts that are split between multiple House districts. Overall, the Board Plan splits 183 school districts.⁶ As with the split cities, there are school districts that are split in the Board Plan that are in the same vicinity of HD5 in the Illustrative Plan. Under the Board Plan, Harmony Grove School District is split

³ Davis Decl., ¶ 11.

⁴ See Fairfax December 29, 2021 Expert Report, ECF 2-7, at Appendix C (city split reports), and Appendix B to this report.

⁵ Davis Decl., ¶ 12.

⁶ See Communities of Interest Cities report from the original Fairfax December 29, 2021 Expert Report

across seven districts (HDs 29, 82, 83, 89, 90, 96, and 98). Other split school districts include: the Drew Central School Districts, split between four districts (HDs 93, 94, 95, and 96); the Bauxite School District, split between three House districts (HDs 29, 82, and 92); and the Beebe School District, split between four House districts (HDs 57, 58, 59, and 60).

Splitting multiple school districts within a plan is fairly common and largely unavoidable. School district splits are not and should not be a reason to disregard a particular district or plan.

Claim: “The illustrative map District 5 includes portions of three major south Arkansas cities, but not all of any of them. All three cities are split into multiple House districts. In terms of representation, this means that none of the cities have a single representative to be their champion in the capitol. Rather, all three cities will have one representative that will need to try and balance the issues of constituents in each city even if they are different. Each city will also have a second or third representative who primarily represents the more rural portions of their county and two other counties.”⁷

As previously covered in the response above, splitting some cities is common and often unavoidable. There is a BOA Guideline related to minimizing city splits, but a plan including several splits cities is not disqualifying. This is evidenced by the Board Plan, which has more city splits than does the Illustrative Plan. Having multiple representatives for portions of a particular city is fairly common and would also occur under the Board Plan.

Claim: “The area of Union County and El Dorado included in District 5 has a VAP Black of 50.07%. This includes the three rural precincts that have been split on census block lines as well as a split of a precinct that is entirely in the El Dorado municipal boundary. A precinct split in a municipal boundary may be necessary to adjust population numbers. However, in this case, it is the only split in the city. If this split is eliminated, then the VAP of the Union County precincts in District 5 falls from 50.07% to 49.53% based on the Board’s data.”⁸

The implication of this claim is that a precinct was split with a racial-predominated intent with the white population left out of HD 5. This is not the case. The split in El Dorado was to follow a major road that, when split, makes the district more compact. This is a common tradeoff when drawing legislative districts in accordance with traditional redistricting criteria.

Another example of splitting a precinct in favor of compactness can be seen by looking at another area, Magnolia. In Magnolia, under the Illustrative Plan, a precinct (Ward 2) was also split to follow a major road to make the district more compact. In Magnolia, the split precinct left additional Black population out of HD 5. The Magnolia precinct portion that was removed also contains more population than the El Dorado precinct (333 persons versus 446). This split criticized by the Davis Declaration was made to prioritize compactness, not to boost the minority population. Moreover, if the BOA determined that prioritizing avoiding the precinct split over improving compactness was desired, I am confident that the split precinct in El Dorado could be made whole, and HD 5 could be reconfigured in other ways to retain its majority-Black status.

⁷ Davis Decl., ¶ 13.

⁸ Davis Decl., ¶ 16.

Claim: “One goal of the Board of Apportionment was to minimize new ballot creation by county clerks—recognizing the amount of effort that takes, the reduced time to work due to the delayed data release, and the changes the electorate must adjust to (new voting precinct, for instance). It is notable that to reach El Dorado and include parts of it in District 5, the map splits three precincts in Union County outside of the El Dorado Municipal Boundary. The precincts have populations of 362, 674, and 1,689. It is especially egregious in the two smaller populated districts.”⁹

Minimizing political subdivisions, including precincts, is one goal of the BOA Guidelines. Sometimes it is necessary to split a precinct, however, to achieve other traditional redistricting goals. As with other precinct splits, each of the mentioned precincts was split in the Illustrative Plan to make HD 5 more compact. Notably, the Board Plan splits almost three times the number of precincts as the Illustrative Plan. The Board Plan splits 282 precincts while the Illustrative Plan splits only 98.

HD 5 could be drawn in several alternative ways. In particular, Mt Holly, Lisbon, Ward 1, and Ward 3 precincts could be made whole with an addition of a slight modification to HD 5. The resulting district would be more compact while maintaining its status as a majority-Black House district (*see* Figure 1 below). This change to HD 5 would improve compactness scores, bringing the metrics to .33, .15, .54 for Reock, Polsby-Popper, and Convex Hull, respectively. The Any Part Black Voting Age Population (“APBVAP”) would be 52.95%, and the Black Citizen Voting Age Population (“BCVAP”) for the modified district would be 50.02%.

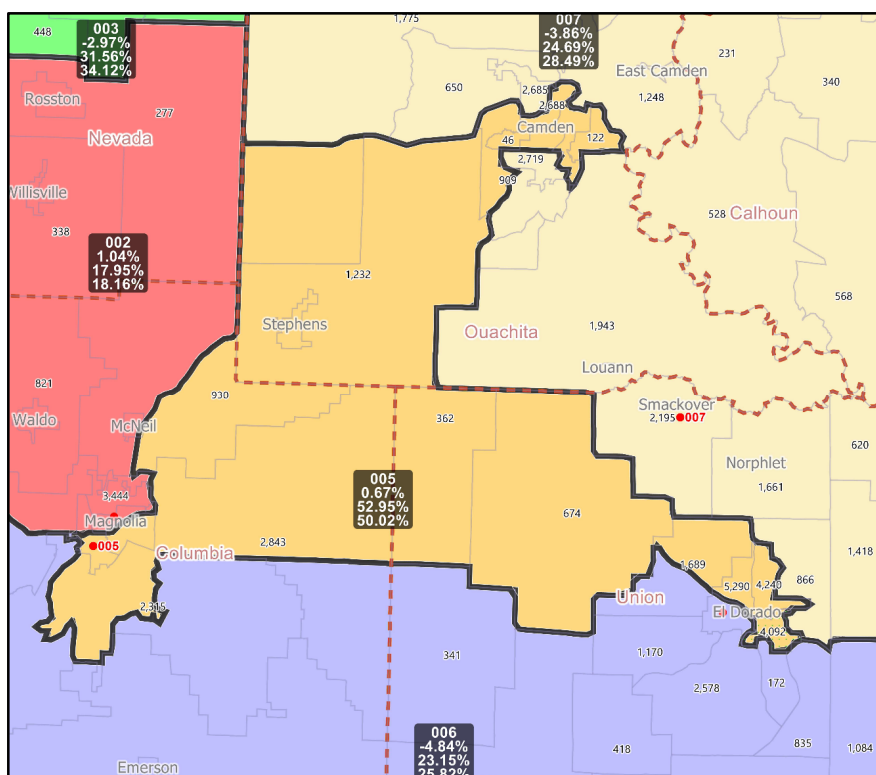


Figure 1 – Alternative Illustrative HD5 with Additional Whole Precincts

⁹ Davis Decl., ¶ 15.

E. Response to Mr. Davis' Claims Regarding Illustrative Plan's District 16

*Claim: "Plaintiffs' proposed District 16 is underpopulated by 1,293, or -4.29%"*¹⁰

As noted above, all of the House districts in the Illustrative Plan, including HD 16, are within the BOA Guidelines range of population deviation of +/-5%.

*Claim: "[Plaintiffs' proposed HD 16] splits Arkadelphia by assigning the two southernmost precincts to District 16. Splits Pine Bluff by assigning a random-looking, non-compact shape of precincts to District 16. The population of Pine Bluff has been split into six House districts. As discussed above with regard to Plaintiffs' proposed Illustrative Plan for District 5, in terms of representation, this would mean that none of the cities would have a single representative to be their champion in the capitol."*¹¹

As described above, for statewide legislative plans, there are occasions where cities are split by two or more districts. To reiterate, the Illustrative Plan splits fewer cities and into fewer pieces than the Board Plan.

The Board Plan has multiple midsize to small cities that are split by several districts, including Fayetteville, which is split by seven districts (HDs 18, 19, 20, 21, 22, 23, and 25). Even a small city like Fairfield Bay, with a population of only 2,108 people, was split by three districts (HDs 41, 42, and 43) in the Board Plan. These city splits within the Board Plan would similarly result in numerous cities lacking "a single representative to be their champion in the capitol."

*Claim: "Splits Pine Bluff and Arkadelphia school districts among others in the unincorporated areas. Overall, the map splits the Arkadelphia School District into three House districts."*¹²

As previously mentioned, there is no requirement in the BOA Guidelines to keep school districts whole, and it is difficult to keep school districts wholly contained within a House district while meeting the redistricting principles in the BOA Guidelines. Moreover, the Board Plan has several school districts that are split by multiple House districts. The worst example is Harmony Grove School District, which is split across seven districts (HDs 29, 82, 83, 89, 90, 96, and 98).

*Claim: "Most any Arkansan would say that Arkadelphia and Pine Bluff are dissimilar communities. Pine Bluff is considered the metropolitan capital of the Arkansas southeast, a hub for the row crop industry in much of the Arkansas Delta. On the banks of the Arkansas Delta, it is suited for barge traffic of commodities coming up from the Mississippi. Arkadelphia, by contrast, is considered a central town of the Arkansas southwest, sitting on I-30 halfway between Little Rock and Texarkana."*¹³

Rather than addressing any BOA Guideline or traditional redistricting principle, this critique is based on apparent perceptions of the character of certain regions and cities. Regardless, the Davis Declaration is incorrect that Arkadelphia and Pine Bluff are dissimilar. In fact, the cities

¹⁰ Davis Decl., ¶ 18.

¹¹ Davis Decl., ¶ 19.

¹² Davis Decl., ¶ 20.

¹³ Davis Decl., ¶ 21.

have a number of common socioeconomic attributes. For instance, although Arkadelphia and Pine Bluff have different racial makeup, they are more similar to each other in several socioeconomic characteristics (*see* Table 1) than either is to the rest of the state:

- Both cities are younger than the rest of the state
- Both cities have a higher poverty rate than the rest of the state
- Both cities have a lower proportion of married couples with children than the rest of the state
- Both cities' median household incomes are lower than the state's
- Both cities have more renters than the rest of the state
- Both cities' median housing values are lower than rest of the state
- Both have lower percentages of homes built after 2010 than the rest of the state
- Both have higher percentages of households receiving food stamps and SNAP benefits than the rest of the state

Table 1 – Socioeconomic Comparison Between Arkansas, Arkadelphia, and Pine Bluff

City/State	White	Black	Median Age	Poverty All Persons%	Married Couples w/ Children%
Arkadelphia	60.74%	32.28%	23.90	29.02	21.06%
Pine Bluff	20.28%	76.57%	35.50	26.81	13.67%
Arkansas	76.72%	15.32%	38.10	17.05	27.04%
City/State	Med HH Inc	Median Housing Values	Occupied Rent%	Housing Units Built After 2010	HH_W/Food Stamp/ SNAP benefits
Arkadelphia	\$33,133	\$121,200	61.32%	7.5%	15.73%
Pine Bluff	\$34,723	\$75,500	47.20%	7.5%	23.66%
Arkansas	\$47,597	\$127,800	34.42%	16.4%	12.05%

Source: U.S. Census Bureau 2019 5-Yr American Community Survey

Claim: “Arkadelphia is in timber country on the banks of the Ouachita River that is more suited for anglers, boaters, and tourism. Arkadelphia is the lake region of the southwest, just south of the Ouachita Mountains and Lake DeGray, Lake Ouachita, and Lake Hamilton. There is not a geographic feature or highway connecting the two cities. There is not a major east west route that would enable a representative from one town to easily traverse to the other. Google Maps shows both the most direct and the fastest routes between the two cities to be outside of the district, and the drive would take an hour and a half, which is a lot for one district in a State with 100 of them, especially in light of the fact that the two farthest points in the entire State from each other (diagonally opposite corner to opposite corner) are only 5 hours apart.”¹⁴

First, minimizing drive time is not a BOA Guideline nor a traditional redistricting principle. The inclusion of major roads throughout the district is also not a requirement under the BOA Guidelines or traditional redistricting principles, and is also often not feasible depending on the geography of a particular region. Verifying the analysis that Mr. Davis performed using Google Maps does show a drive time from Pine Bluff to Arkadelphia of approximately one-and-a-half hours. However, Google Maps estimates that in HD 62 in the Board Plan (another majority-Black district), it would take approximately two hours and twenty minutes to go from its northernmost city of Wheatley to the southernmost Arkansas City.

Claim: “I evaluated what the population of the district would be if Arkadelphia and Clark County (the three precincts most extreme west of the district) were removed. This results in a population that is too low—15%. Let us add population in Cleveland and Jefferson Counties where the district already shares a split with other districts and is more like the southeast Arkansas community. Many more precincts are needed in Cleveland and Jefferson counties (the parts of Jefferson County currently in their District 11), including most precincts around the City of Pine Bluff, all of the City of Rison (Cleveland County), and all the precincts in Cleveland County east of Rison. The result is a variance of -3.16% and a VAP Black of 47.15%.”¹⁵

It is unclear what Davis seeks to show in this scenario. Removing precincts in most redistricting plans can yield a significant decrease in population. There are many districts in the Board Plan where the removal of three or fewer precincts would cause a population deviation of 15%. In fact, there are 25 precincts that have more than 5,000 persons. Removing just one of these precincts would reduce a district’s population by approximately 16%.

F. Response to Mr. Davis’ Claims Regarding Illustrative Plan’s District 12

Claim: “Plaintiffs’ proposed District 12 has a population variance of -4.98%, which is high and may be outside acceptable limits. It stretches from the Mississippi River to the border of Pulaski County without following a major highway or navigation system.”¹⁶

The Illustrative Plan’s District 12 complies with the BOA Guidelines for one person, one vote. The BOA Guidelines set the permitted population deviation at +/-5% of the ideal population,¹⁷ and federal courts have held that a 10% overall plan deviation is acceptable.¹⁸ While it may be

¹⁴ Davis Decl., ¶ 21.

¹⁵ Davis Decl., ¶ 24.

¹⁶ Davis Decl., ¶ 26.

¹⁷ <https://arkansasredistricting.org/about-the-process/equal-population/>

¹⁸ See *Gaffney v. Cummings*, 412 U.S. 735 (1973).

preferable for a district to follow a major highway, as noted above, this is not included in the BOA Guidelines. Complying with the criteria in the BOA Guidelines requires drawing district lines that do not follow highways.

Claim: “Also, particularly egregious, proposed District 12 splits the municipal center of Phillips County out of the unincorporated areas of Phillips County (assigning Helena-West Helena to District 48) and assigns that unincorporated area to a district dominated by Pine Bluff, which is three counties away with little community connection.”¹⁹

During the redistricting process, there are many times that a county’s major city is not contained within the district that contains the remainder of the county. Preventing this from happening is practically an impossibility given the one person, one vote requirement and the other principles in the BOA Guidelines.

This is evidenced by a similar situation in the Board Plan. The Board Plan’s HD 98 contains all of Clark County except for the cities of Arkadelphia and Caddo Valley and surrounding areas (see Figure 3). Arkadelphia is the largest city in Clark County, with approximately half of the county population (10,380 persons of 21,446), and is economically critical to the county. In the Board Plan, Arkadelphia is split out of Clark County and instead contained within HD 90. As an alternative, the Board Plan could have included Arkadelphia and Caddo Valley in HD 89, thereby wholly containing Clark County in the district, by dropping Pike County (10,171 persons) from the district. However, the Board decided differently.

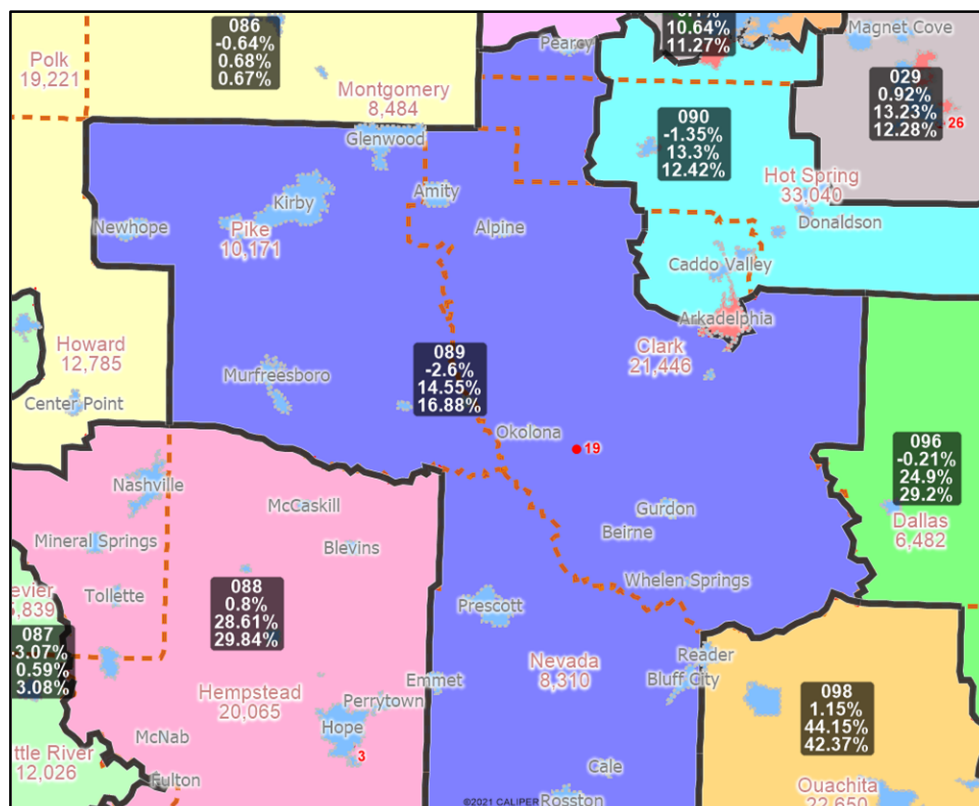


Figure 3 - Board Plan HD89

¹⁹ Davis Decl., ¶ 26.

*Claim: “[Proposed HD 12] splits the municipal boundaries of Pine Bluff and the school district boundaries for Pine Bluff Dollarway, Helena-West Helena, and DeWitt, among others.”*²⁰

As mentioned previously, avoiding city splits and wholly containing school districts within each House district is extremely difficult. Thus, many times municipal boundaries and school districts must fall in two or more districts to meet other redistricting goals. This is borne out by the Board Plan, which splits more cities and school districts than the Illustrative Plan.

*Claim: “This district also splits Pine Bluff. However, the district population inside of the incorporated boundary of the city is 10,320, or approximately one-third, of the voting power of the entire district that spans three counties in addition to Jefferson County, which is the home county of Pine Bluff.”*²¹

As described in the above sections, splitting some cities that are relatively large is not uncommon for a statewide legislative plan. Indeed, the Board Plan splits more cities than the Illustrative Plan.

G. Response to Mr. Davis’ Claims Regarding Illustrative Plan’s District 48

*Claim: “As stated, the way Districts 12 and 48 (Doc. No. 2-7 at 86) are drawn split the county seat and city center of Phillips County out of the district with the unincorporated area of the county and pair them with a much larger population in Jefferson County.”*²²

This was addressed in the section above discussing District 12.

*Claim: “Also very egregious is the lack of reasonable connection from Helena-West Helena to the rest of District 48. While the district is all contiguous in colors on the map, there is no highway connection from Helena to District 48 that does not exit District 48. A representative of District 48 from Helena would have to travel through District 12 to get access the remainder of their district.”*²³

Although there may not be any major highways, there are streets that connect Helena-West Helena to HD 48 in Lee County. It is often not possible to draw a district with major highways that connect all parts of a district. Neither the BOA Guidelines nor traditional redistricting principles require a district to have a self-contained highway system.

Claim: “Also notable in District 48 is the population base. Helena-West Helena is in a separate county from all other precincts in District 48; however, at 9,589, it has a greater population than all of Lee County to the north. The VAP Black in Helena-West Helena alone is 72.77% (Black only data). The population of Helena (9,589) is also larger than the population of Marianna, Clarendon, and Augusta combined. Each of these cities is the county seat of their respective counties. But their combined vote could be lower than the vote of a city (Helena) that is not even

²⁰ Davis Decl., ¶ 27.

²¹ Davis Decl., ¶ 28.

²² Davis Decl., ¶ 30.

²³ Davis Decl., ¶ 31.

in a district with its own county. The population of Helena-West Helena is even greater than the population of those three counties and Brinkley combined.”²⁴

As previously mentioned, to meet other redistricting goals, it is common to place one or more cities in adjacent districts. The Board Plan also includes several examples of this.

*Claim: “Lastly, the current representative of Helena-West Helena is resident of Marvel, Arkansas. Under Plaintiffs’ proposed plan, he would be drawn into District 12, therefore removing him from the core of his district and placing him in a district which has a population center that is closer to Little Rock than it is to his home county.”*²⁵

Avoiding the pairing of incumbents is one of the BOA Guidelines, and the Illustrative Plan performs far better than the Board Plan on this metric (two incumbents paired versus 11 incumbents paired, respectively).²⁶ Aside from that goal, it is uncommon and not required to consider other effects a proposed plan may have on a particular incumbent. Ensuring an incumbent maintains representation of a particular district is neither a BOA Guideline nor a traditional redistricting principle.

H. Response to Mr. Davis’ Claims Regarding Illustrative Plan’s District 55

*Claim: “District 55 in Plaintiffs’ Illustrative Plan (Doc. No. 2-7 at 93) is an extremely oddly shaped district. It is only one precinct wide nearly the entire length of the district that runs from Missouri to Mississippi. The east boundary is the Mississippi River. And the west boundary is a jagged line following precinct lines. In this area of the State, the most and maybe only geographic feature recognizable to all voters is I-55. The District 5 boundary crosses back and forth across I-55 in a manner that voters will not be able to follow, and for nearly its entire length, is simply a narrow strip.”*²⁷

These critiques of the shape of HD 55 are easily explained by the presence of the Mississippi River. Coastal or river-based districts that extend along the water usually have lower compactness measures than other districts.²⁸ Many times, river districts like HD 55 are slender land areas that lie along the waterway and include the meandering and jagged shorelines that accompany standard geographies on the water.

The slender long land area lowers the compactness measurements, specifically dispersion measurements such as Reock. Also, the boundaries of jurisdiction may impact compactness measures for districts. The meandering coastal lines along the Mississippi River increase the perimeter and lower compactness scores, such as Polsby-Popper.

An example of the effect of a coastal district on compactness can be seen in Board Plan’s parallel district, HD 34. HD 34 has the fourth-lowest compactness measurement (out of the 100 districts)

²⁴ Davis Decl., ¶ 32.

²⁵ Davis Decl., ¶ 33.

²⁶ See Fairfax December 29, 2021 Expert Report, ECF 2-7, at ¶ 38.

²⁷ Davis Decl., ¶¶ 34, 35.

²⁸ See Duchin, Moon & Tenner, B. E., *Discrete Geometry for Electoral Geography* (August 15, 2018), available at <https://arxiv.org/abs/1808.05860>.

in the Board Plan when measured under Reock and Polsby-Popper. It has the worst compactness measure for Convex Hull.

In 2011, the parallel district (HD 55) had a similar configuration and similarly low compactness measurements. HD 55 in 2011 had the sixth-lowest compactness measure for Reock, the third-lowest for Polsby-Popper, and the seventeenth-lowest for Convex Hull. Even in 2001, HD 55, with a similar configuration, had the fourth-lowest compactness measure for Reock and the fifth-lowest for Polsby-Popper and Convex Hull.

The critique that HD 55 crisscrosses I-55 similarly misses the bigger picture. While the Board Plan follows the interstate along a straight line, it does so by splitting multiple precincts. It is important to note that the BOA's splitting of multiple precincts and following the interstate along a straight line adds to this lowering of the compactness measures. However, HD 55 in the Illustrative Plan uses whole precincts. These irregular-shaped precincts along the western edge of the district lower the compactness score for HD 55. Further, the precincts themselves encompass land on both sides of the interstate; the Illustrative Plan merely follows those precinct lines rather than split through them to accommodate a road, as the Board Plan does.

Also, it is notable that the three precincts that cross over the interstate in Mississippi County (precincts 54 and 46) in the Illustrative Plan are majority White and were added to increase the thickness of HD 55, and thus its compactness.

Contrary to the claims in the Davis Declaration, the Illustrative Plan's HD 55 is not unusual and actually carries forward a district configuration that is similar to the 2011 and 2001 plans. Both the 2011 and the 2011 plans crossed Interstate 55 (*see* Figures 4 to 6).

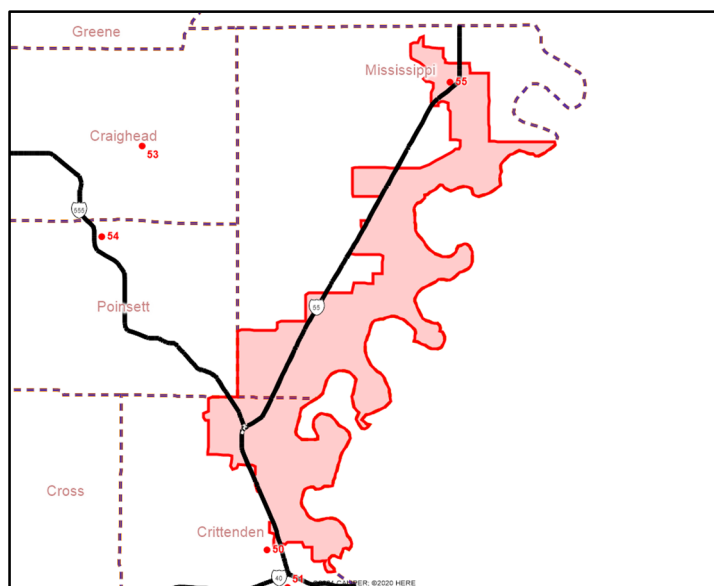


Figure 4 – Illustrative HD 55

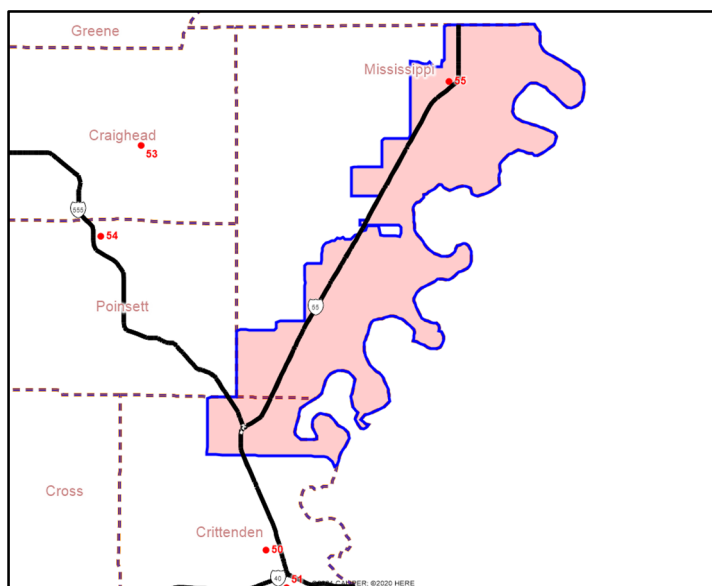


Figure 5 – 2011 Plan HD 55

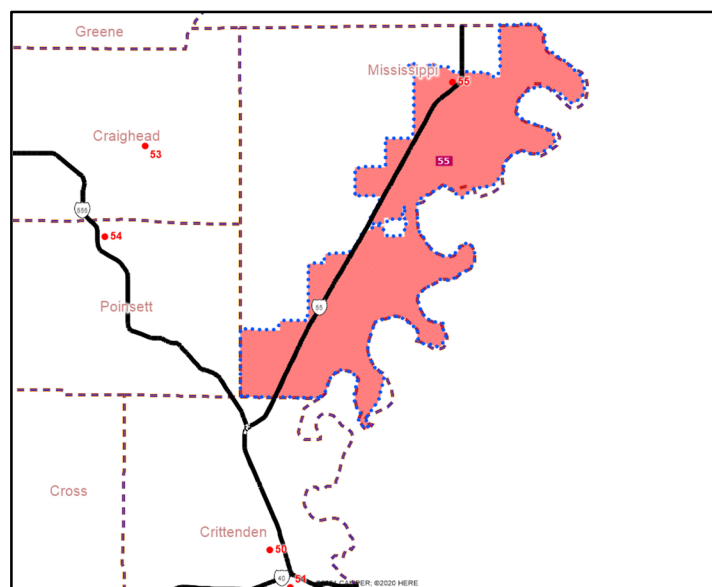


Figure 6 – 2001 Plan HD 55

Claim: “The most egregious shape in District 55 is its most northern point, which nearly cuts two precincts of District 54 from itself. Only one highway connects these two separate sections of District 54. The distance from the northern edge of District 55 to the state line is 1.25 miles. There are three census blocks across that span with a total population in those blocks of zero people. District 54 sits both east and west of District 55. In other words, the really thin piece of District 54 that stretches over District 55 to grab the precincts to its east is only 1.25 miles wide, and no one lives there.”²⁹

The northern corner of HD 55 was drawn so the district can wholly contain, and avoid splitting, the city of Blytheville. An alternative option could be to split Blytheville closer to what is

²⁹ Davis Decl., ¶ 36.

presented in the 2011 plan. This should not impact the continued creation of a majority-Black district with the slight modification of other areas of the district.

*Claim: "Considering that District 55 is underpopulated by 1,072 with a -3.56% variance, and District 54 is overpopulated by 1,462 with a 4.85% variance, why isolate these two precincts of District 54 to the east of District 55? The combined population of these two precincts in question is 1,875. If these two precincts are moved into District 55, then 55 has an improved variance of 2.67% and 54 has improved variance of -1.37% and no longer has two nearly disconnected precincts. This improves compactness."*³⁰

First, the variances in the Illustrative Plan are within the acceptable population variance under the BOA Guidelines and well below the 10% variance allowed by federal courts. Second, the difference between the 2.57 and -3.6% from the ideal population size is approximately 1%, which is not substantially different. Last, practically any majority-Black district that is approximately 50% Black has a precinct that, when included or removed, will lower it below the 50% majority threshold.

I. Conclusion

First, as a general comment, the Davis Declaration critiques the Illustrative Plan on many bases that are not relevant under the BOA Guidelines or federal law. While the BOA Guidelines require minimizing the splits of political subdivisions, they do not address decreasing the drive time through a district, ensuring that major highways exist in all districts, or guaranteeing that a particular representative will not have to drive outside his or her district to reach another portion of it.

This is not to diminish the importance of those issues. In fact, as noted above, the Illustrative Plan performs better on both the criteria under the BOA Guidelines and many of the additional concepts raised by Mr. Davis. The BOA Guidelines, traditional redistricting principles, and federal law impose a number of requirements on a map drawer, which sometimes means sacrificing other desirable aspects of a potential district or plan to ensure compliance with the actual redistricting requirements.

In sum, the Illustrative Plan meets all of the redistricting criteria established by the BOA, does better than the Board Plan on most of those criteria, and even does better than the Board Plan on many of the ancillary issues raised by the Davis Declaration.

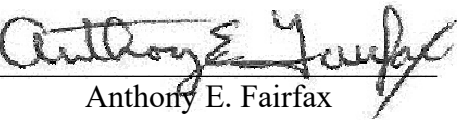
Furthermore, the Illustrative Plan is only one of many examples of plans that can be developed. There are modifications, some only slight, that could be made to the districts in the Illustrative Plan to address many of the concepts raised by Mr. Davis while still achieving the same number of majority-Black districts.

Despite Mr. Davis' claims, I continue to be of the opinion that the Black population in the State of Arkansas is sufficiently large and geographically compact to constitute sixteen majority-Black single-member House districts that would likely be able to elect their candidates of choice.

³⁰ Davis Decl., ¶ 37.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 26, 2022


Anthony E. Fairfax

Appendix A

Board of Apportionment House Plan City Split Examples

Board of Apportionment House Plan School District Split Examples

User: Tony Fairfax

Plan Name: AR HD BOA Final

Plan Type: House Districts

Communities of Interest (Landscape, 11x8.5)

Sunday, January 23, 2022

11:05 PM

City/Town	District	Population	%
Arkadelphia AR	089	0	0.0
Arkadelphia AR	090	10,380	100.0
Caddo Valley AR	090	595	100.0
Fairfield Bay AR	041	161	7.6
Fairfield Bay AR	042	1,228	58.3
Fairfield Bay AR	043	719	34.1
Fayetteville AR	018	8,497	9.0
Fayetteville AR	019	6,187	6.6
Fayetteville AR	020	25,834	27.5
Fayetteville AR	021	29,499	31.4
Fayetteville AR	022	20,013	21.3
Fayetteville AR	023	2,745	2.9
Fayetteville AR	025	1,174	1.3

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

City/Town **-- Listed by District**

Population %

District 018

Fayetteville AR (part)	8,497	9.0
District 018 Totals	8,497	

District 019

Fayetteville AR (part)	6,187	6.6
District 019 Totals	6,187	

District 020

Fayetteville AR (part)	25,834	27.5
District 020 Totals	25,834	

District 021

Fayetteville AR (part)	29,499	31.4
District 021 Totals	29,499	

District 022

Fayetteville AR (part)	20,013	21.3
District 022 Totals	20,013	

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

	Population	%
<i>District 023</i>		
Fayetteville AR (part)	2,745	2.9
District 023 Totals	2,745	
<i>District 025</i>		
Fayetteville AR (part)	1,174	1.3
District 025 Totals	1,174	
<i>District 041</i>		
Fairfield Bay AR (part)	161	7.6
District 041 Totals	161	
<i>District 042</i>		
Fairfield Bay AR (part)	1,228	58.3
District 042 Totals	1,228	
<i>District 043</i>		
Fairfield Bay AR (part)	719	34.1
District 043 Totals	719	

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

	Population	%
<i>District 089</i>		
Arkadelphia AR (part)	0	0.0
District 089 Totals		
<i>District 090</i>		
Arkadelphia AR (part)	10,380	100.0
Caddo Valley AR	595	100.0
District 090 Totals	10,975	

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

Summary Statistics

Number of City/Town not split	1
Number of City/Town split	3
Number of City/Town split in 2	1
Number of City/Town split in 3	1
Number of City/Town split in 4	0
Number of City/Town split in 5	0
Number of City/Town split in 6	0
Number of City/Town split in 7	1
Total number of splits	12

User: Tony Fairfax

Plan Name: AR HD BOA Final

Plan Type: House Districts

Communities of Interest (Landscape, 11x8.5)

Sunday, January 23, 2022

11:12 PM

School Districts	District	Population	%
Bauxite School District	029	1,478	21.5
Bauxite School District	082	3,469	50.5
Bauxite School District	092	1,928	28.1
Drew Central School District	093	380	6.2
Drew Central School District	094	5,790	93.8
Drew Central School District	095	1	0.0
Drew Central School District	096	0	0.0
Harmony Grove School District	029	4,142	70.8
Harmony Grove School District	082	861	14.7
Harmony Grove School District	083	847	14.5
Harmony Grove School District	089	87	1.9
Harmony Grove School District	090	0	0.0
Harmony Grove School District	096	1,342	29.8
Harmony Grove School District	098	3,070	68.2

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

School Districts**-- Listed by District**

Population %

District 029

Bauxite School District (part)	1,478	21.5
Harmony Grove School District (part)	4,142	70.8

District 029 Totals 5,620***District 082***

Bauxite School District (part)	3,469	50.5
Harmony Grove School District (part)	861	14.7

District 082 Totals 4,330***District 083***

Harmony Grove School District (part)	847	14.5
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District 083 Totals 847***District 089***

Harmony Grove School District (part)	87	1.9
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District 089 Totals 87

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

	Population	%
<i>District 090</i>		
Harmony Grove School District (part)	0	0.0
District 090 Totals		
<i>District 092</i>		
Bauxite School District (part)	1,928	28.1
District 092 Totals		
1,928		
<i>District 093</i>		
Drew Central School District (part)	380	6.2
District 093 Totals		
380		
<i>District 094</i>		
Drew Central School District (part)	5,790	93.8
District 094 Totals		
5,790		
<i>District 095</i>		
Drew Central School District (part)	1	0.0
District 095 Totals		
1		

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

	Population	%
<i>District 096</i>		
Drew Central School District (part)	0	0.0
Harmony Grove School District (part)	1,342	29.8
District 096 Totals	1,342	
<i>District 098</i>		
Harmony Grove School District (part)	3,070	68.2
District 098 Totals	3,070	

Communities of Interest (Landscape, 11x8.5)

AR HD BOA Final

Summary Statistics

Number of School Districts not split	0
Number of School Districts split	3
Number of School Districts split in 2	0
Number of School Districts split in 3	1
Number of School Districts split in 4	1
Number of School Districts split in 5	0
Number of School Districts split in 6	0
Number of School Districts split in 7	1
Total number of splits	14

Appendix B

2001 House District Plan City Split

2001 House District Plan Compactness Measures

User: Tony Fairfax

Plan Name: AR 2001 House Plan

Plan Type: State House Districts

Communities of Interest (Landscape, 11x8.5)

Tuesday, January 25, 2022

4:14 PM

Census Place	District	Population	%
0500250	060	27	100.0
0500580	027	2	1.5
0500580	029	89	89.5
0500580	031	9	9.0
0500700	073	3	100.0
0500940	015	7	100.0
0500970	083	424	100.0
0501030	014	8	100.0
0501060	091	55	100.0
0501150	011	50	100.0
0501210	083	17	28.5
0501210	084	43	71.5
0501270	058	3	100.0
0501360	023	52	100.0
0501457	054	4	100.0
0501540	020	0	0.2
0501540	023	8	99.8
0501870	020	209	100.0
0501990	012	5	100.0
0502380	002	207	100.0
0502470	082	140	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0502590	061	179	100.0
0502590	070	0	0.0
0502680	051	6	100.0
0502740	057	42	100.0
0502860	048	975	100.0
0503040	095	180	49.8
0503040	098	181	50.2
0503280	049	239	100.0
0503280	058	0	0.0
0503430	008	6	100.0
0503640	063	3,492	74.0
0503640	066	0	0.0
0503640	067	1,229	26.0
0503940	055	11	100.0
0504030	072	801	100.0
0504090	027	391	95.8
0504090	028	0	0.0
0504090	029	17	4.2
0504180	076	266	100.0
0504420	005	34	99.9
0504420	007	0	0.1
0504540	091	21	100.0
0504600	049	227	100.0
0504720	058	38	100.0
0504840	098	18,557	94.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0504840	099	6	0.0
0504840	100	1,190	6.0
0504900	085	51	100.0
0504960	061	54	100.0
0505260	021	136	100.0
0505290	027	2	0.0
0505290	028	7,000	93.4
0505290	029	495	6.6
0505320	096	20	0.2
0505320	098	85	0.6
0505320	099	12,971	98.5
0505320	100	91	0.7
0505440	085	114	100.0
0505560	091	179	100.0
0505740	094	4,010	100.0
0505740	095	0	0.0
0505920	060	24	100.0
0505980	086	23	100.0
0506040	080	28	100.0
0506340	055	5	100.0
0506610	076	35	100.0
0506700	073	93	100.0
0506730	022	8	100.0
0507030	003	25	100.0
0507150	091	3	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0507210	061	0	0.0
0507210	084	29	100.0
0507270	005	67	100.0
0507330	055	521	50.3
0507330	077	515	49.8
0507450	003	76	100.0
0507540	062	28	100.0
0507630	074	162	100.0
0507720	084	108	100.0
0508260	058	22	100.0
0508290	004	17	100.0
0508440	067	246	100.0
0508665	082	46	100.0
0508950	051	110	100.0
0509100	076	87	100.0
0509460	029	2,565	100.0
0509550	004	23	100.0
0509790	081	0	0.0
0509790	086	107	100.0
0509880	055	31	100.0
0510300	015	0	0.0
0510300	042	0	0.0
0510300	048	6,262	100.0
0510360	020	84	100.0
0510450	051	56	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0510480	003	27	100.0
0510570	071	83	100.0
0510600	007	42	100.0
0510720	005	221	43.3
0510720	007	290	56.7
0510780	038	116	100.0
0510900	058	54	100.0
0511410	076	184	99.8
0511410	077	0	0.2
0511500	015	200	100.0
0511830	019	18	100.0
0511890	060	31	100.0
0511920	074	41	100.0
0512190	067	0	0.0
0512190	084	36	100.0
0512280	072	25	30.4
0512280	082	57	69.6
0512340	099	4,228	98.4
0512340	100	71	1.6
0512520	083	747	100.0
0512820	099	9	2.4
0512820	100	378	97.6
0513120	067	150	100.0
0513300	067	294	100.0
0513472	080	299	54.7

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0513472	082	247	45.3
0513540	057	19	100.0
0513570	087	19	100.0
0513750	005	157	100.0
0513990	051	36	100.0
0514140	069	637	100.0
0514260	070	332	100.0
0514500	069	92	100.0
0514770	073	12	100.0
0514860	036	339	100.0
0514950	051	23	100.0
0515100	059	120	100.0
0515190	042	107	0.8
0515190	045	7,738	54.5
0515190	046	6,355	44.8
0515190	060	0	0.0
0515310	061	95	100.0
0515460	079	76	100.0
0515490	081	460	100.0
0515550	051	19	100.0
0515700	022	33	100.0
0515790	015	27	100.0
0515940	054	18	100.0
0516240	009	119	100.0
0516930	071	92	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0517140	023	23	100.0
0517290	047	105	100.0
0517320	061	125	100.0
0517380	061	89	100.0
0517410	079	16	100.0
0517740	100	217	100.0
0518010	079	26	100.0
0518100	023	7	100.0
0518160	077	48	100.0
0518370	084	29	100.0
0518490	021	197	100.0
0518520	009	0	0.0
0518520	012	32	100.0
0518550	014	42	100.0
0518640	014	23	100.0
0518790	014	53	100.0
0518850	086	57	100.0
0518940	058	184	100.0
0518970	023	30	100.0
0519450	019	12	100.0
0519600	070	52	100.0
0519990	011	68	100.0
0519990	012	0	0.0
0520200	083	221	100.0
0520230	077	53	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0520320	054	131	100.0
0520440	007	18	100.0
0520470	027	3,330	100.0
0520830	053	1,011	99.8
0520830	054	2	0.2
0520920	074	41	100.0
0520950	013	15	100.0
0521070	006	1,336	99.9
0521070	007	1	0.1
0521190	089	404	100.0
0521430	093	0	0.0
0521430	097	686	97.8
0521430	099	0	0.0
0521430	100	15	2.2
0521580	004	18	100.0
0521610	003	38	99.5
0521610	020	0	0.5
0521730	015	76	100.0
0521820	047	83	100.0
0522120	077	319	100.0
0522180	012	33	100.0
0522240	091	279	100.0
0522360	082	40	100.0
0522450	086	10	100.0
0522660	059	108	23.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0522660	070	362	77.0
0523140	051	13	100.0
0523170	088	2,357	100.0
0523290	088	9,795	25.1
0523290	089	1,813	4.7
0523290	092	27,215	69.9
0523290	093	9	0.0
0523290	094	0	0.0
0523290	097	124	0.3
0523320	008	27	100.0
0523680	086	44	100.0
0523800	056	10	100.0
0524010	086	38	100.0
0524220	008	104	100.0
0524250	002	57	100.0
0524430	051	123	27.1
0524430	052	332	72.9
0524550	062	0	0.0
0524550	063	20,702	27.7
0524550	064	25,681	34.4
0524550	065	28,234	37.8
0524550	066	2	0.0
0524550	067	0	0.0
0524550	083	43	0.1
0524640	002	30	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0524670	009	12	100.0
0524700	030	244	100.0
0524700	031	0	0.0
0524760	060	6	100.0
0525030	071	46	100.0
0525060	014	19	100.0
0525180	026	59	100.0
0525360	003	5	100.0
0525750	095	514	100.0
0525780	004	15	100.0
0525900	049	37	100.0
0526050	081	637	100.0
0526110	095	80	100.0
0526290	100	225	100.0
0526440	049	14	100.0
0526710	042	350	4.3
0526710	043	7,828	95.7
0526800	086	7	100.0
0526980	012	11	100.0
0527010	021	30	100.0
0527040	054	9	100.0
0527310	023	44	100.0
0527670	089	1,752	100.0
0527700	077	91	100.0
0527730	011	36	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0527790	011	43	100.0
0527970	022	166	100.0
0528270	042	0	0.0
0528270	043	2,657	99.6
0528270	044	9	0.4
0528360	100	220	100.0
0528510	047	421	100.0
0528600	091	92	100.0
0528660	088	1,345	100.0
0528720	079	5	100.0
0528780	062	0	0.0
0528780	067	643	100.0
0528810	059	302	100.0
0528990	049	20	100.0
0529020	058	17	100.0
0529080	071	13	100.0
0529140	020	11	100.0
0529200	020	73	100.0
0529230	047	50	100.0
0529290	062	38	100.0
0529500	009	68	100.0
0529650	008	48	100.0
0529920	080	71	100.0
0529920	082	0	0.0
0530310	008	10	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0530400	056	67	100.0
0530460	085	893	100.0
0530490	062	43	100.0
0530520	069	48	100.0
0530640	028	1,950	100.0
0530700	022	26	100.0
0530790	061	14	100.0
0530880	052	13	100.0
0530940	014	76	100.0
0530940	015	0	0.0
0531090	059	294	100.0
0531150	070	66	100.0
0531180	013	266	100.0
0531390	018	0	0.0
0531390	019	0	0.0
0531390	027	164	100.0
0531540	008	18	100.0
0531900	057	14	100.0
0532080	059	19	100.0
0532140	050	276	100.0
0532200	099	67	6.0
0532200	100	1,059	94.0
0532257	080	240	100.0
0532257	082	0	0.0
0532470	090	5	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0532710	047	373	100.0
0532800	051	13	100.0
0533190	003	253	100.0
0533310	021	63	100.0
0533370	071	328	98.0
0533370	082	7	2.0
0533375	054	6	100.0
0533400	024	7,367	46.2
0533400	025	8,584	53.8
0533400	030	13	0.1
0533482	030	1,998	72.3
0533482	031	767	27.7
0533490	060	29	100.0
0533580	073	108	100.0
0533760	052	74	100.0
0533820	015	14	100.0
0533850	011	7	25.0
0533850	014	22	75.0
0533910	057	13	100.0
0533940	062	16	100.0
0533970	090	42	100.0
0534090	008	48	100.0
0534150	073	24	99.6
0534150	080	0	0.4
0534720	058	11	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0534750	039	1,201	4.6
0534750	042	100	0.4
0534750	043	3,316	12.6
0534750	044	21,679	82.4
0534750	048	2	0.0
0534900	090	7	100.0
0535040	054	88	100.0
0535140	054	19	100.0
0535170	009	4	100.0
0535500	092	38	0.8
0535500	093	4,497	99.2
0535650	055	14	100.0
0535710	074	2,711	7.6
0535710	075	30,648	85.4
0535710	076	2,542	7.1
0536040	049	160	100.0
0536130	007	36	100.0
0536310	077	20	100.0
0536430	050	644	100.0
0536550	015	77	100.0
0536670	066	1,575	100.0
0536880	010	31	100.0
0537240	079	10	100.0
0537300	069	75	100.0
0537660	079	49	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0537720	052	7	100.0
0537780	076	176	100.0
0537930	024	1,225	87.0
0537930	026	183	13.0
0538050	081	214	100.0
0538110	013	150	100.0
0538170	012	23	100.0
0538290	069	148	100.0
0538890	067	148	100.0
0539010	077	101	100.0
0539040	086	11	100.0
0539310	019	16	100.0
0539370	056	47	100.0
0539460	086	16	100.0
0539520	059	17	100.0
0539640	004	41	100.0
0539670	013	11	100.0
0539970	087	69	100.0
0540120	096	2,380	51.7
0540120	098	2,215	48.1
0540120	099	11	0.2
0541000	027	1	0.0
0541000	029	0	0.0
0541000	031	1,514	1.1
0541000	032	21,958	15.9

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0541000	033	27,776	20.1
0541000	034	22,644	16.4
0541000	035	27,404	19.8
0541000	036	6,777	4.9
0541000	037	25,049	18.1
0541000	038	5,327	3.9
0541090	021	122	100.0
0541270	069	83	100.0
0541420	015	188	100.0
0541450	026	33	100.0
0541630	007	8	100.0
0541720	094	8,090	98.0
0541720	095	164	2.0
0542170	055	40	100.0
0542260	073	65	100.0
0542350	039	942	98.2
0542350	040	18	1.8
0542410	003	19	100.0
0542500	057	51	100.0
0542560	079	9	100.0
0542770	012	70	100.0
0543070	003	9	100.0
0543100	005	40	100.0
0543220	049	26	100.0
0543280	051	18	39.4

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0543280	052	28	60.6
0543310	084	44	100.0
0543370	073	15	100.0
0543460	004	94	42.7
0543460	005	126	57.3
0543610	026	601	100.0
0543670	082	35	100.0
0543820	077	175	100.0
0543880	062	53	100.0
0544120	052	123	100.0
0544150	055	7	100.0
0544180	053	3,726	98.3
0544180	054	65	1.7
0544210	056	76	100.0
0544240	079	32	100.0
0544300	090	36	100.0
0544420	013	41	100.0
0544600	041	6,702	98.9
0544600	042	72	1.1
0544750	042	385	99.3
0544750	045	3	0.7
0544780	080	31	100.0
0545080	071	143	100.0
0545170	022	130	100.0
0545200	060	64	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0545500	062	8	100.0
0546040	021	81	100.0
0546100	073	14	100.0
0546190	011	3	100.0
0546400	076	130	100.0
0546580	009	1	0.3
0546580	010	300	99.7
0546670	009	9	100.0
0546730	072	91	100.0
0546910	051	18	100.0
0546970	060	246	100.0
0547030	084	29	100.0
0547300	087	55	100.0
0547390	081	1,982	100.0
0547450	030	120	100.0
0547540	071	156	100.0
0547690	022	32	100.0
0547900	071	79	100.0
0548020	047	54	100.0
0548200	083	658	100.0
0548290	023	31	100.0
0548560	021	159	100.0
0549010	073	47	100.0
0549580	058	412	100.0
0549820	079	6	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0550000	082	62	99.2
0550000	086	0	0.8
0550030	022	22	100.0
0550060	007	66	100.0
0550240	009	204	100.0
0550450	015	289	0.7
0550450	036	4	0.0
0550450	038	21	0.1
0550450	039	7,572	17.6
0550450	040	23,935	55.6
0550450	041	9,941	23.1
0550450	042	449	1.0
0550450	043	846	2.0
0550810	091	104	100.0
0551060	078	950	100.0
0551060	079	0	0.0
0551080	003	1	100.0
0551290	022	17	100.0
0551350	002	15	100.0
0551410	073	5	100.0
0551500	079	0	0.2
0551500	080	27	99.8
0551530	020	22	100.0
0551560	061	58	100.0
0552160	085	35	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0552430	060	72	100.0
0552580	055	111	27.3
0552580	077	294	72.7
0552880	071	152	100.0
0552880	082	0	0.0
0552940	003	8	100.0
0552970	083	613	100.0
0553150	051	60	100.0
0553240	058	17	100.0
0553390	078	9,632	100.0
0553390	079	1	0.0
0553480	084	127	100.0
0553510	012	11	100.0
0553555	027	972	49.0
0553555	036	1,012	51.0
0553600	057	55	100.0
0553900	003	3	100.0
0553990	057	24	100.0
0554140	079	23	100.0
0554200	098	1,411	100.0
0554620	026	52	100.0
0554650	060	12	100.0
0554680	003	39	100.0
0554710	060	137	100.0
0555130	079	124	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0555280	086	61	100.0
0555310	010	28	0.1
0555310	011	160	0.7
0555310	016	16,869	72.6
0555310	017	6,184	26.6
0555310	018	3	0.0
0555580	071	41	100.0
0555610	024	3,423	94.6
0555610	025	24	0.7
0555610	030	172	4.8
0555970	061	42	100.0
0556270	072	64	100.0
0556480	060	29	100.0
0556540	080	206	100.0
0556600	079	7	100.0
0556720	073	35	100.0
0556750	012	12	100.0
0556990	061	0	0.0
0556990	068	3,803	100.0
0557050	073	3	100.0
0557080	019	5	100.0
0557125	095	599	100.0
0557170	087	81	100.0
0557230	019	30	100.0
0557260	020	185	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0557890	086	27	100.0
0557950	047	9	10.7
0557950	059	73	89.3
0558160	067	0	0.5
0558160	084	49	99.5
0558250	073	56	99.9
0558250	080	0	0.1
0558280	080	31	100.0
0558400	005	69	100.0
0558490	079	31	100.0
0558580	018	140	100.0
0558880	012	1	100.0
0559180	079	0	0.6
0559180	080	28	99.5
0559480	010	75	100.0
0560020	026	254	100.0
0560110	024	2,979	99.5
0560110	030	15	0.5
0560380	051	4	100.0
0560410	094	8,702	22.5
0560410	095	1,124	2.9
0560410	096	23,242	60.0
0560410	098	268	0.7
0560410	099	5,383	13.9
0560590	052	34	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0560770	059	248	100.0
0561040	003	112	100.0
0561460	083	5	100.0
0561640	058	6	100.0
0561670	061	0	0.0
0561670	068	13,123	100.0
0561940	012	9	100.0
0561970	079	7	100.0
0562030	086	7	52.9
0562030	090	6	47.1
0562060	090	4	100.0
0562150	082	68	100.0
0562210	028	0	0.0
0562210	029	976	100.0
0562240	082	113	100.0
0562900	015	249	100.0
0562900	018	0	0.0
0562960	084	13	100.0
0563020	049	0	0.0
0563020	050	5,325	100.0
0563110	073	4	100.0
0563470	027	247	99.9
0563470	031	0	0.1
0563470	035	0	0.0
0563710	019	72	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0563740	011	3	100.0
0563800	039	1,233	6.3
0563800	040	3,647	18.6
0563800	042	2	0.0
0563800	043	14,688	75.1
0563980	070	70	100.0
0564280	071	0	0.0
0564280	082	55	100.0
0564370	097	2,004	100.0
0564370	100	1	0.0
0564730	007	137	100.0
0564910	073	16	100.0
0565480	086	3	100.0
0565900	019	24	100.0
0566080	089	199	0.5
0566080	092	2	0.0
0566080	093	19,601	47.0
0566080	094	21,362	51.2
0566080	095	149	0.4
0566080	097	404	1.0
0566080	099	17	0.0
0566200	100	51	100.0
0566320	004	58	100.0
0566440	010	118	100.0
0566860	005	81	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0567250	073	61	100.0
0567370	008	18	100.0
0567490	014	127	100.0
0567520	084	49	100.0
0567550	079	5	100.0
0567730	072	96	100.0
0567760	100	95	100.0
0567940	086	26	100.0
0568060	053	65	100.0
0568330	018	0	0.0
0568330	036	1,222	100.0
0568360	058	15	100.0
0568660	004	18	100.0
0568810	001	23,384	99.6
0568810	002	95	0.4
0569050	008	30	100.0
0569230	010	12	77.4
0569230	012	3	22.6
0569350	008	9	100.0
0569500	021	33	100.0
0569740	093	0	0.0
0569740	097	1,334	100.0
0569830	019	0	0.0
0569830	028	2,376	100.0
0569830	029	0	0.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0570010	056	154	100.0
0570100	058	66	100.0
0570220	019	63	95.0
0570220	027	0	0.6
0570220	028	3	4.3
0570340	058	10	100.0
0570430	054	220	100.0
0570540	046	75	23.4
0570540	047	245	76.6
0570700	056	50	100.0
0570760	014	5	100.0
0571390	086	10	100.0
0571480	063	3	0.1
0571480	065	143	2.5
0571480	066	5,451	97.2
0571480	083	14	0.3
0571510	022	5	100.0
0571900	055	14	100.0
0571960	047	350	100.0
0572140	082	33	100.0
0572230	011	9	100.0
0572320	056	4	100.0
0572350	005	65	100.0
0572380	062	119	100.0
0572890	073	313	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0573130	048	1,270	100.0
0573310	008	109	100.0
0573370	003	25	100.0
0573550	012	2	100.0
0573940	056	44	100.0
0574000	058	8	100.0
0574270	009	332	100.0
0574330	090	15	100.0
0574360	087	121	54.6
0574360	088	100	45.4
0574450	013	133	100.0
0574540	053	4,818	91.4
0574540	054	455	8.6
0574660	049	21	100.0
0574840	051	59	100.0
0574930	020	6	100.0
0575170	017	149	31.0
0575170	018	332	69.0
0575500	022	45	100.0
0575560	051	0	0.5
0575560	052	17	99.5
0575570	083	1	0.7
0575570	084	110	99.3
0575740	080	9	100.0
0575770	003	40	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place	District	Population	%
0575860	009	31	100.0
0575890	012	20	100.0
0575920	055	50	100.0
0575980	002	38	100.0
0576010	010	14	100.0
0576010	012	0	0.0
0576190	087	73	100.0
0576250	002	31	100.0
0576730	018	0	0.0
0576730	027	747	100.0
0576820	046	1,087	100.0
0576970	018	107	99.8
0576970	036	0	0.2
0577090	057	176	100.0
0577330	086	54	100.0
0577600	086	16	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Census Place**-- Listed by District**

Population

%

District 001

0568810 (part)	23,384	99.6
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District 001 Totals**23,384*****District 002***

0502380	207	100.0
0524250	57	100.0
0524640	30	100.0
0551350	15	100.0
0568810 (part)	95	0.4
0575980	38	100.0
0576250	31	100.0

District 002 Totals**473**

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 003</i>		
0507030	25	100.0
0507450	76	100.0
0510480	27	100.0
0521610 (part)	38	99.5
0525360	5	100.0
0533190	253	100.0
0542410	19	100.0
0543070	9	100.0
0551080	1	100.0
0552940	8	100.0
0553900	3	100.0
0554680	39	100.0
0561040	112	100.0
0573370	25	100.0
0575770	40	100.0
District 003 Totals	680	
<i>District 004</i>		
0508290	17	100.0
0509550	23	100.0
0521580	18	100.0
0525780	15	100.0
0539640	41	100.0
0543460 (part)	94	42.7
0566320	58	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
0568660	18	100.0
District 004 Totals	284	
<i>District 005</i>		
0504420 (part)	34	99.9
0507270	67	100.0
0510720 (part)	221	43.3
0513750	157	100.0
0543100	40	100.0
0543460 (part)	126	57.3
0558400	69	100.0
0566860	81	100.0
0572350	65	100.0
District 005 Totals	860	
<i>District 006</i>		
0521070 (part)	1,336	99.9
District 006 Totals	1,336	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 007</i>		
0504420 (part)	0	0.1
0510600	42	100.0
0510720 (part)	290	56.7
0520440	18	100.0
0521070 (part)	1	0.1
0536130	36	100.0
0541630	8	100.0
0550060	66	100.0
0564730	137	100.0
District 007 Totals	598	
<i>District 008</i>		
0503430	6	100.0
0523320	27	100.0
0524220	104	100.0
0529650	48	100.0
0530310	10	100.0
0531540	18	100.0
0534090	48	100.0
0567370	18	100.0
0569050	30	100.0
0569350	9	100.0
0573310	109	100.0
District 008 Totals	427	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 009</i>		
0516240	119	100.0
0518520 (part)	0	0.0
0524670	12	100.0
0529500	68	100.0
0535170	4	100.0
0546580 (part)	1	0.3
0546670	9	100.0
0550240	204	100.0
0574270	332	100.0
0575860	31	100.0
District 009 Totals	780	
<i>District 010</i>		
0536880	31	100.0
0546580 (part)	300	99.7
0555310 (part)	28	0.1
0559480	75	100.0
0566440	118	100.0
0569230 (part)	12	77.4
0576010 (part)	14	100.0
District 010 Totals	578	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 011</i>		
0501150	50	100.0
0519990 (part)	68	100.0
0527730	36	100.0
0527790	43	100.0
0533850 (part)	7	25.0
0546190	3	100.0
0555310 (part)	160	0.7
0563740	3	100.0
0572230	9	100.0
District 011 Totals	379	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 012</i>		
0501990	5	100.0
0518520 (part)	32	100.0
0519990 (part)	0	0.0
0522180	33	100.0
0526980	11	100.0
0538170	23	100.0
0542770	70	100.0
0553510	11	100.0
0556750	12	100.0
0558880	1	100.0
0561940	9	100.0
0569230 (part)	3	22.6
0573550	2	100.0
0575890	20	100.0
0576010 (part)	0	0.0
District 012 Totals	232	
<i>District 013</i>		
0520950	15	100.0
0531180	266	100.0
0538110	150	100.0
0539670	11	100.0
0544420	41	100.0
0574450	133	100.0
District 013 Totals	616	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 014</i>		
0501030	8	100.0
0518550	42	100.0
0518640	23	100.0
0518790	53	100.0
0525060	19	100.0
0530940 (part)	76	100.0
0533850 (part)	22	75.0
0567490	127	100.0
0570760	5	100.0
District 014 Totals	375	
<i>District 015</i>		
0500940	7	100.0
0510300 (part)	0	0.0
0511500	200	100.0
0515790	27	100.0
0521730	76	100.0
0530940 (part)	0	0.0
0533820	14	100.0
0536550	77	100.0
0541420	188	100.0
0550450 (part)	289	0.7
0562900 (part)	249	100.0
District 015 Totals	1,127	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 016</i>		
0555310 (part)	16,869	72.6
District 016 Totals	16,869	
<i>District 017</i>		
0555310 (part)	6,184	26.6
0575170 (part)	149	31.0
District 017 Totals	6,333	
<i>District 018</i>		
0531390 (part)	0	0.0
0555310 (part)	3	0.0
0558580	140	100.0
0562900 (part)	0	0.0
0568330 (part)	0	0.0
0575170 (part)	332	69.0
0576730 (part)	0	0.0
0576970 (part)	107	99.8
District 018 Totals	582	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 019</i>		
0511830	18	100.0
0519450	12	100.0
0531390 (part)	0	0.0
0539310	16	100.0
0557080	5	100.0
0557230	30	100.0
0563710	72	100.0
0565900	24	100.0
0569830 (part)	0	0.0
0570220 (part)	63	95.0
District 019 Totals	240	
<i>District 020</i>		
0501540 (part)	0	0.2
0501870	209	100.0
0510360	84	100.0
0521610 (part)	0	0.5
0529140	11	100.0
0529200	73	100.0
0551530	22	100.0
0557260	185	100.0
0574930	6	100.0
District 020 Totals	590	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 021</i>		
0505260	136	100.0
0518490	197	100.0
0527010	30	100.0
0533310	63	100.0
0541090	122	100.0
0546040	81	100.0
0548560	159	100.0
0569500	33	100.0
District 021 Totals	821	
<i>District 022</i>		
0506730	8	100.0
0515700	33	100.0
0527970	166	100.0
0530700	26	100.0
0545170	130	100.0
0547690	32	100.0
0550030	22	100.0
0551290	17	100.0
0571510	5	100.0
0575500	45	100.0
District 022 Totals	484	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 023</i>		
0501360	52	100.0
0501540 (part)	8	99.8
0517140	23	100.0
0518100	7	100.0
0518970	30	100.0
0527310	44	100.0
0548290	31	100.0
District 023 Totals	195	
<i>District 024</i>		
0533400 (part)	7,367	46.2
0537930 (part)	1,225	87.0
0555610 (part)	3,423	94.6
0560110 (part)	2,979	99.5
District 024 Totals	14,994	
<i>District 025</i>		
0533400 (part)	8,584	53.8
0555610 (part)	24	0.7
District 025 Totals	8,608	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 026</i>		
0525180	59	100.0
0537930 (part)	183	13.0
0541450	33	100.0
0543610	601	100.0
0554620	52	100.0
0560020	254	100.0
District 026 Totals	1,182	
<i>District 027</i>		
0500580 (part)	2	1.5
0504090 (part)	391	95.8
0505290 (part)	2	0.0
0520470	3,330	100.0
0531390 (part)	164	100.0
0541000 (part)	1	0.0
0553555 (part)	972	49.0
0563470 (part)	247	99.9
0570220 (part)	0	0.6
0576730 (part)	747	100.0
District 027 Totals	5,856	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 028</i>		
0504090 (part)	0	0.0
0505290 (part)	7,000	93.4
0530640	1,950	100.0
0562210 (part)	0	0.0
0569830 (part)	2,376	100.0
0570220 (part)	3	4.3
District 028 Totals	11,329	
<i>District 029</i>		
0500580 (part)	89	89.5
0504090 (part)	17	4.2
0505290 (part)	495	6.6
0509460	2,565	100.0
0541000 (part)	0	0.0
0562210 (part)	976	100.0
0569830 (part)	0	0.0
District 029 Totals	4,142	
<i>District 030</i>		
0524700 (part)	244	100.0
0533400 (part)	13	0.1
0533482 (part)	1,998	72.3
0547450	120	100.0
0555610 (part)	172	4.8

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
0560110 (part)	15	0.5
District 030 Totals	2,562	
<i>District 031</i>		
0500580 (part)	9	9.0
0524700 (part)	0	0.0
0533482 (part)	767	27.7
0541000 (part)	1,514	1.1
0563470 (part)	0	0.1
District 031 Totals	2,290	
<i>District 032</i>		
0541000 (part)	21,958	15.9
District 032 Totals	21,958	
<i>District 033</i>		
0541000 (part)	27,776	20.1
District 033 Totals	27,776	
<i>District 034</i>		
0541000 (part)	22,644	16.4
District 034 Totals	22,644	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 035</i>		
0541000 (part)	27,404	19.8
0563470 (part)	0	0.0
District 035 Totals	27,404	
<i>District 036</i>		
0514860	339	100.0
0541000 (part)	6,777	4.9
0550450 (part)	4	0.0
0553555 (part)	1,012	51.0
0568330 (part)	1,222	100.0
0576970 (part)	0	0.2
District 036 Totals	9,354	
<i>District 037</i>		
0541000 (part)	25,049	18.1
District 037 Totals	25,049	
<i>District 038</i>		
0510780	116	100.0
0541000 (part)	5,327	3.9
0550450 (part)	21	0.1
District 038 Totals	5,464	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 039</i>		
0534750 (part)	1,201	4.6
0542350 (part)	942	98.2
0550450 (part)	7,572	17.6
0563800 (part)	1,233	6.3
District 039 Totals	10,948	
<i>District 040</i>		
0542350 (part)	18	1.8
0550450 (part)	23,935	55.6
0563800 (part)	3,647	18.6
District 040 Totals	27,600	
<i>District 041</i>		
0544600 (part)	6,702	98.9
0550450 (part)	9,941	23.1
District 041 Totals	16,643	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 042</i>		
0510300 (part)	0	0.0
0515190 (part)	107	0.8
0526710 (part)	350	4.3
0528270 (part)	0	0.0
0534750 (part)	100	0.4
0544600 (part)	72	1.1
0544750 (part)	385	99.3
0550450 (part)	449	1.0
0563800 (part)	2	0.0
District 042 Totals	1,465	
<i>District 043</i>		
0526710 (part)	7,828	95.7
0528270 (part)	2,657	99.6
0534750 (part)	3,316	12.6
0550450 (part)	846	2.0
0563800 (part)	14,688	75.1
District 043 Totals	29,335	
<i>District 044</i>		
0528270 (part)	9	0.4
0534750 (part)	21,679	82.4
District 044 Totals	21,688	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 045</i>		
0515190 (part)	7,738	54.5
0544750 (part)	3	0.7
District 045 Totals	7,741	
<i>District 046</i>		
0515190 (part)	6,355	44.8
0570540 (part)	75	23.4
0576820	1,087	100.0
District 046 Totals	7,517	
<i>District 047</i>		
0517290	105	100.0
0521820	83	100.0
0528510	421	100.0
0529230	50	100.0
0532710	373	100.0
0548020	54	100.0
0557950 (part)	9	10.7
0570540 (part)	245	76.6
0571960	350	100.0
District 047 Totals	1,690	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 048</i>		
0502860	975	100.0
0510300 (part)	6,262	100.0
0534750 (part)	2	0.0
0573130	1,270	100.0
District 048 Totals	8,509	
<i>District 049</i>		
0503280 (part)	239	100.0
0504600	227	100.0
0525900	37	100.0
0526440	14	100.0
0528990	20	100.0
0536040	160	100.0
0543220	26	100.0
0563020 (part)	0	0.0
0574660	21	100.0
District 049 Totals	744	
<i>District 050</i>		
0532140	276	100.0
0536430	644	100.0
0563020 (part)	5,325	100.0
District 050 Totals	6,245	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 051</i>		
0502680	6	100.0
0508950	110	100.0
0510450	56	100.0
0513990	36	100.0
0514950	23	100.0
0515550	19	100.0
0523140	13	100.0
0524430 (part)	123	27.1
0532800	13	100.0
0543280 (part)	18	39.4
0546910	18	100.0
0553150	60	100.0
0560380	4	100.0
0574840	59	100.0
0575560 (part)	0	0.5
District 051 Totals	558	
<i>District 052</i>		
0524430 (part)	332	72.9
0530880	13	100.0
0533760	74	100.0
0537720	7	100.0
0543280 (part)	28	60.6
0544120	123	100.0
0560590	34	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
0575560 (part)	17	99.5
District 052 Totals	628	
<i>District 053</i>		
0520830 (part)	1,011	99.8
0544180 (part)	3,726	98.3
0568060	65	100.0
0574540 (part)	4,818	91.4
District 053 Totals	9,620	
<i>District 054</i>		
0501457	4	100.0
0515940	18	100.0
0520320	131	100.0
0520830 (part)	2	0.2
0527040	9	100.0
0533375	6	100.0
0535040	88	100.0
0535140	19	100.0
0544180 (part)	65	1.7
0570430	220	100.0
0574540 (part)	455	8.6
District 054 Totals	1,017	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 055</i>		
0503940	11	100.0
0506340	5	100.0
0507330 (part)	521	50.3
0509880	31	100.0
0535650	14	100.0
0542170	40	100.0
0544150	7	100.0
0552580 (part)	111	27.3
0571900	14	100.0
0575920	50	100.0
District 055 Totals	804	
<i>District 056</i>		
0523800	10	100.0
0530400	67	100.0
0539370	47	100.0
0544210	76	100.0
0570010	154	100.0
0570700	50	100.0
0572320	4	100.0
0573940	44	100.0
District 056 Totals	452	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 057</i>		
0502740	42	100.0
0513540	19	100.0
0531900	14	100.0
0533910	13	100.0
0542500	51	100.0
0553600	55	100.0
0553990	24	100.0
0577090	176	100.0
District 057 Totals	394	
<i>District 058</i>		
0501270	3	100.0
0503280 (part)	0	0.0
0504720	38	100.0
0508260	22	100.0
0510900	54	100.0
0518940	184	100.0
0529020	17	100.0
0534720	11	100.0
0549580	412	100.0
0553240	17	100.0
0561640	6	100.0
0568360	15	100.0
0570100	66	100.0
0570340	10	100.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
0574000	8	100.0
District 058 Totals	863	
<i>District 059</i>		
0515100	120	100.0
0522660 (part)	108	23.0
0528810	302	100.0
0531090	294	100.0
0532080	19	100.0
0539520	17	100.0
0557950 (part)	73	89.3
0560770	248	100.0
District 059 Totals	1,181	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 060</i>		
0500250	27	100.0
0505920	24	100.0
0511890	31	100.0
0515190 (part)	0	0.0
0524760	6	100.0
0533490	29	100.0
0545200	64	100.0
0546970	246	100.0
0552430	72	100.0
0554650	12	100.0
0554710	137	100.0
0556480	29	100.0
District 060 Totals	677	
<i>District 061</i>		
0502590 (part)	179	100.0
0504960	54	100.0
0507210 (part)	0	0.0
0515310	95	100.0
0517320	125	100.0
0517380	89	100.0
0530790	14	100.0
0551560	58	100.0
0555970	42	100.0
0556990 (part)	0	0.0

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
0561670 (part)	0	0.0
District 061 Totals	656	
<i>District 062</i>		
0507540	28	100.0
0524550 (part)	0	0.0
0528780 (part)	0	0.0
0529290	38	100.0
0530490	43	100.0
0533940	16	100.0
0543880	53	100.0
0545500	8	100.0
0572380	119	100.0
District 062 Totals	305	
<i>District 063</i>		
0503640 (part)	3,492	74.0
0524550 (part)	20,702	27.7
0571480 (part)	3	0.1
District 063 Totals	24,197	
<i>District 064</i>		
0524550 (part)	25,681	34.4
District 064 Totals	25,681	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 065</i>		
0524550 (part)	28,234	37.8
0571480 (part)	143	2.5
District 065 Totals	28,377	
<i>District 066</i>		
0503640 (part)	0	0.0
0524550 (part)	2	0.0
0536670	1,575	100.0
0571480 (part)	5,451	97.2
District 066 Totals	7,028	
<i>District 067</i>		
0503640 (part)	1,229	26.0
0508440	246	100.0
0512190 (part)	0	0.0
0513120	150	100.0
0513300	294	100.0
0524550 (part)	0	0.0
0528780 (part)	643	100.0
0538890	148	100.0
0558160 (part)	0	0.5
District 067 Totals	2,710	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 068</i>		
0556990 (part)	3,803	100.0
0561670 (part)	13,123	100.0
District 068 Totals	16,926	
<i>District 069</i>		
0514140	637	100.0
0514500	92	100.0
0530520	48	100.0
0537300	75	100.0
0538290	148	100.0
0541270	83	100.0
District 069 Totals	1,083	
<i>District 070</i>		
0502590 (part)	0	0.0
0514260	332	100.0
0519600	52	100.0
0522660 (part)	362	77.0
0531150	66	100.0
0563980	70	100.0
District 070 Totals	882	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 071</i>		
0510570	83	100.0
0516930	92	100.0
0525030	46	100.0
0529080	13	100.0
0533370 (part)	328	98.0
0545080	143	100.0
0547540	156	100.0
0547900	79	100.0
0552880 (part)	152	100.0
0555580	41	100.0
0564280 (part)	0	0.0
District 071 Totals	1,133	
<i>District 072</i>		
0504030	801	100.0
0512280 (part)	25	30.4
0546730	91	100.0
0556270	64	100.0
0567730	96	100.0
District 072 Totals	1,077	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 073</i>		
0500700	3	100.0
0506700	93	100.0
0514770	12	100.0
0533580	108	100.0
0534150 (part)	24	99.6
0542260	65	100.0
0543370	15	100.0
0546100	14	100.0
0549010	47	100.0
0551410	5	100.0
0556720	35	100.0
0557050	3	100.0
0558250 (part)	56	99.9
0563110	4	100.0
0564910	16	100.0
0567250	61	100.0
0572890	313	100.0
District 073 Totals	874	
<i>District 074</i>		
0507630	162	100.0
0511920	41	100.0
0520920	41	100.0
0535710 (part)	2,711	7.6
District 074 Totals	2,955	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 075</i>		
0535710 (part)	30,648	85.4
District 075 Totals	30,648	
<i>District 076</i>		
0504180	266	100.0
0506610	35	100.0
0509100	87	100.0
0511410 (part)	184	99.8
0535710 (part)	2,542	7.1
0537780	176	100.0
0546400	130	100.0
District 076 Totals	3,420	
<i>District 077</i>		
0507330 (part)	515	49.8
0511410 (part)	0	0.2
0518160	48	100.0
0520230	53	100.0
0522120	319	100.0
0527700	91	100.0
0536310	20	100.0
0539010	101	100.0
0543820	175	100.0
0552580 (part)	294	72.7
District 077 Totals	1,616	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 078</i>		
0551060 (part)	950	100.0
0553390 (part)	9,632	100.0
District 078 Totals	10,582	
<i>District 079</i>		
0515460	76	100.0
0517410	16	100.0
0518010	26	100.0
0528720	5	100.0
0537240	10	100.0
0537660	49	100.0
0542560	9	100.0
0544240	32	100.0
0549820	6	100.0
0551060 (part)	0	0.0
0551500 (part)	0	0.2
0553390 (part)	1	0.0
0554140	23	100.0
0555130	124	100.0
0556600	7	100.0
0558490	31	100.0
0559180 (part)	0	0.6
0561970	7	100.0
0567550	5	100.0
District 079 Totals	427	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 080</i>		
0506040	28	100.0
0513472 (part)	299	54.7
0529920 (part)	71	100.0
0532257 (part)	240	100.0
0534150 (part)	0	0.4
0544780	31	100.0
0551500 (part)	27	99.8
0556540	206	100.0
0558250 (part)	0	0.1
0558280	31	100.0
0559180 (part)	28	99.5
0575740	9	100.0
District 080 Totals	970	
<i>District 081</i>		
0509790 (part)	0	0.0
0515490	460	100.0
0526050	637	100.0
0538050	214	100.0
0547390	1,982	100.0
District 081 Totals	3,293	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 082</i>		
0502470	140	100.0
0508665	46	100.0
0512280 (part)	57	69.6
0513472 (part)	247	45.3
0522360	40	100.0
0529920 (part)	0	0.0
0532257 (part)	0	0.0
0533370 (part)	7	2.0
0543670	35	100.0
0550000 (part)	62	99.2
0552880 (part)	0	0.0
0562150	68	100.0
0562240	113	100.0
0564280 (part)	55	100.0
0572140	33	100.0
District 082 Totals	903	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 083</i>		
0500970	424	100.0
0501210 (part)	17	28.5
0512520	747	100.0
0520200	221	100.0
0524550 (part)	43	0.1
0548200	658	100.0
0552970	613	100.0
0561460	5	100.0
0571480 (part)	14	0.3
0575570 (part)	1	0.7
District 083 Totals	2,743	
<i>District 084</i>		
0501210 (part)	43	71.5
0507210 (part)	29	100.0
0507720	108	100.0
0512190 (part)	36	100.0
0518370	29	100.0
0543310	44	100.0
0547030	29	100.0
0553480	127	100.0
0558160 (part)	49	99.5
0562960	13	100.0
0567520	49	100.0
0575570 (part)	110	99.3
District 084 Totals	666	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 085</i>		
0504900	51	100.0
0505440	114	100.0
0530460	893	100.0
0552160	35	100.0
District 085 Totals	1,093	
<i>District 086</i>		
0505980	23	100.0
0509790 (part)	107	100.0
0518850	57	100.0
0522450	10	100.0
0523680	44	100.0
0524010	38	100.0
0526800	7	100.0
0539040	11	100.0
0539460	16	100.0
0550000 (part)	0	0.8
0555280	61	100.0
0557890	27	100.0
0562030 (part)	7	52.9
0565480	3	100.0
0567940	26	100.0
0571390	10	100.0
0577330	54	100.0
0577600	16	100.0
District 086 Totals	517	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 087</i>		
0513570	19	100.0
0539970	69	100.0
0547300	55	100.0
0557170	81	100.0
0574360 (part)	121	54.6
0576190	73	100.0
District 087 Totals	418	
<i>District 088</i>		
0523170	2,357	100.0
0523290 (part)	9,795	25.1
0528660	1,345	100.0
0574360 (part)	100	45.4
District 088 Totals	13,597	
<i>District 089</i>		
0521190	404	100.0
0523290 (part)	1,813	4.7
0527670	1,752	100.0
0566080 (part)	199	0.5
District 089 Totals	4,168	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 090</i>		
0532470	5	100.0
0533970	42	100.0
0534900	7	100.0
0544300	36	100.0
0562030 (part)	6	47.1
0562060	4	100.0
0574330	15	100.0
District 090 Totals	115	
<i>District 091</i>		
0501060	55	100.0
0504540	21	100.0
0505560	179	100.0
0507150	3	100.0
0522240	279	100.0
0528600	92	100.0
0550810	104	100.0
District 091 Totals	733	
<i>District 092</i>		
0523290 (part)	27,215	69.9
0535500 (part)	38	0.8
0566080 (part)	2	0.0
District 092 Totals	27,255	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 093</i>		
0521430 (part)	0	0.0
0523290 (part)	9	0.0
0535500 (part)	4,497	99.2
0566080 (part)	19,601	47.0
0569740 (part)	0	0.0
District 093 Totals	24,107	
<i>District 094</i>		
0505740 (part)	4,010	100.0
0523290 (part)	0	0.0
0541720 (part)	8,090	98.0
0560410 (part)	8,702	22.5
0566080 (part)	21,362	51.2
District 094 Totals	42,164	
<i>District 095</i>		
0503040 (part)	180	49.8
0505740 (part)	0	0.0
0525750	514	100.0
0526110	80	100.0
0541720 (part)	164	2.0
0557125	599	100.0
0560410 (part)	1,124	2.9
0566080 (part)	149	0.4
District 095 Totals	2,810	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 096</i>		
0505320 (part)	20	0.2
0540120 (part)	2,380	51.7
0560410 (part)	23,242	60.0
District 096 Totals	25,642	
<i>District 097</i>		
0521430 (part)	686	97.8
0523290 (part)	124	0.3
0564370 (part)	2,004	100.0
0566080 (part)	404	1.0
0569740 (part)	1,334	100.0
District 097 Totals	4,552	
<i>District 098</i>		
0503040 (part)	181	50.2
0504840 (part)	18,557	94.0
0505320 (part)	85	0.6
0540120 (part)	2,215	48.1
0554200	1,411	100.0
0560410 (part)	268	0.7
District 098 Totals	22,717	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

	Population	%
<i>District 099</i>		
0504840 (part)	6	0.0
0505320 (part)	12,971	98.5
0512340 (part)	4,228	98.4
0512820 (part)	9	2.4
0521430 (part)	0	0.0
0532200 (part)	67	6.0
0540120 (part)	11	0.2
0560410 (part)	5,383	13.9
0566080 (part)	17	0.0
District 099 Totals	22,692	
<i>District 100</i>		
0504840 (part)	1,190	6.0
0505320 (part)	91	0.7
0512340 (part)	71	1.6
0512820 (part)	378	97.6
0517740	217	100.0
0521430 (part)	15	2.2
0526290	225	100.0
0528360	220	100.0
0532200 (part)	1,059	94.0
0564370 (part)	1	0.0
0566200	51	100.0
0567760	95	100.0
District 100 Totals	3,613	

Communities of Interest (Landscape, 11x8.5)

AR 2001 House Plan

Summary Statistics

Number of Census Place not split	413
Number of Census Place split	106
Number of Census Place split in 2	78
Number of Census Place split in 3	15
Number of Census Place split in 4	5
Number of Census Place split in 5	3
Number of Census Place split in 6	1
Number of Census Place split in 7	2
Number of Census Place split in 8	1
Number of Census Place split in 9	0
Number of Census Place split in 10	1
Total number of splits	274

User: Tony Fairfax

Plan Name: AR 2001 House Plan

Plan Type: State House Districts

Measures of Compactness Report

Sunday, January 23, 2022

1:12 PM

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09

District	Reock	Polsby-Popper	Area/Convex Hull
001	0.39	0.19	0.70
002	0.28	0.12	0.67
003	0.48	0.29	0.79
004	0.40	0.20	0.78
005	0.28	0.12	0.60
006	0.43	0.31	0.67
007	0.35	0.10	0.55
008	0.41	0.22	0.74
009	0.54	0.36	0.84
010	0.29	0.17	0.62
011	0.43	0.32	0.80

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09
District	Reock	Polsby-Popper	Area/Convex Hull
012	0.24	0.11	0.59
013	0.42	0.30	0.80
014	0.33	0.22	0.69
015	0.56	0.33	0.82
016	0.53	0.32	0.83
017	0.26	0.26	0.71
018	0.24	0.17	0.60
019	0.51	0.38	0.80
020	0.52	0.28	0.84
021	0.44	0.33	0.86
022	0.34	0.40	0.79
023	0.49	0.27	0.77
024	0.49	0.26	0.73
025	0.43	0.29	0.76

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09
District	Reock	Polsby-Popper	Area/Convex Hull
026	0.42	0.32	0.71
027	0.36	0.37	0.81
028	0.40	0.26	0.79
029	0.32	0.16	0.60
030	0.49	0.32	0.72
031	0.39	0.24	0.72
032	0.47	0.27	0.70
033	0.28	0.26	0.72
034	0.15	0.20	0.54
035	0.44	0.28	0.73
036	0.46	0.40	0.84
037	0.19	0.27	0.68
038	0.18	0.20	0.54
039	0.30	0.30	0.67

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09
District	Reock	Polsby-Popper	Area/Convex Hull
040	0.51	0.40	0.80
041	0.36	0.24	0.68
042	0.44	0.17	0.64
043	0.51	0.36	0.82
044	0.55	0.51	0.89
045	0.51	0.29	0.72
046	0.34	0.25	0.78
047	0.44	0.25	0.76
048	0.45	0.25	0.76
049	0.40	0.17	0.75
050	0.58	0.38	0.82
051	0.41	0.22	0.71
052	0.49	0.25	0.79
053	0.42	0.38	0.86

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09

District	Reock	Polsby-Popper	Area/Convex Hull
054	0.35	0.20	0.67
055	0.23	0.13	0.56
056	0.46	0.65	0.98
057	0.39	0.26	0.77
058	0.34	0.23	0.71
059	0.61	0.51	0.88
060	0.35	0.31	0.71
061	0.40	0.32	0.79
062	0.49	0.50	0.84
063	0.33	0.31	0.69
064	0.40	0.56	0.88
065	0.51	0.59	0.85
066	0.42	0.44	0.83
067	0.50	0.42	0.83

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09
District	Reock	Polsby-Popper	Area/Convex Hull
068	0.43	0.40	0.69
069	0.49	0.45	0.83
070	0.39	0.30	0.71
071	0.49	0.46	0.84
072	0.43	0.26	0.74
073	0.30	0.17	0.56
074	0.51	0.42	0.81
075	0.55	0.50	0.81
076	0.54	0.59	0.90
077	0.35	0.29	0.76
078	0.45	0.45	0.85
079	0.62	0.30	0.84
080	0.48	0.32	0.77
081	0.52	0.38	0.76

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09

District	Reock	Polsby-Popper	Area/Convex Hull
082	0.28	0.20	0.58
083	0.29	0.17	0.62
084	0.35	0.18	0.54
085	0.46	0.26	0.74
086	0.42	0.22	0.75
087	0.57	0.39	0.83
088	0.49	0.28	0.74
089	0.43	0.33	0.83
090	0.39	0.37	0.85
091	0.46	0.38	0.84
092	0.48	0.38	0.80
093	0.46	0.55	0.89
094	0.26	0.27	0.65
095	0.52	0.35	0.84

Measures of Compactness Report

AR 2001 House Plan

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.15	0.10	0.54
Max	0.62	0.65	0.98
Mean	0.42	0.31	0.75
Std. Dev.	0.10	0.11	0.09
District	Reock	Polsby-Popper	Area/Convex Hull
096	0.46	0.45	0.79
097	0.38	0.21	0.66
098	0.34	0.32	0.83
099	0.45	0.32	0.76
100	0.54	0.34	0.84

Measures of Compactness Report

AR 2001 House Plan

Measures of Compactness Summary

Reock	The measure is always between 0 and 1, with 1 being the most compact.
Polsby-Popper	The measure is always between 0 and 1, with 1 being the most compact.
Area / Convex Hull	The measure is always between 0 and 1, with 1 being the most compact.

Appendix C

House District 5 Modification of Illustrative Plan

User: Tony Fairfax

Plan Name: AR House Illustrative Rebuttal Test

Plan Type: AR HD Plan

Measures of Compactness Report

Friday, January 21, 2022

11:28 PM

	Reock	Polsby-Popper	Area/Convex Hull
Sum	N/A	N/A	N/A
Min	0.33	0.15	0.54
Max	0.33	0.15	0.54
Mean	0.33	0.15	0.54
Std. Dev.			

District	Reock	Polsby-Popper	Area/Convex Hull
005	0.33	0.15	0.54

Measures of Compactness Report

AR House Illustrative Rebuttal

Measures of Compactness Summary

Reock	The measure is always between 0 and 1, with 1 being the most compact.
Polsby-Popper	The measure is always between 0 and 1, with 1 being the most compact.
Area / Convex Hull	The measure is always between 0 and 1, with 1 being the most compact.