IN THE CIRCUIT COURT OF THE SECOND JUDICIAL CIRCUIT
IN AND FOR LEON COUNTY, FLORIDA

BLACK VOTERS MATTER CAPACITY BUILDING INSTITUTE, INC., et al., Plaintiffs, v. CORD BYRD, in his official capacity as Florida Secretary of State, et al., Defendants.	Case No. 2022-ca-000666

EXPERT REPORT OF DR. MARK OWENS

March 10, 2023

Summary

I have been asked by the counsel for the defendant to evaluate the U.S. Congressional District map enacted by the State of Florida. This evaluation considers the factors of the Fair Districts Amendment to the Florida Constitution and the geographic distribution of the state's population. This analysis will identify the geographical dispersion of partisan voters. The analysis will also assess if race and ethnic groups (defined as Black and Hispanic) are politically cohesive within regions identified by the Plaintiffs. Finally, I analyze the compactness of districts identified by the Plaintiffs in relation to each district plan.

The Plaintiffs' argument is conditional on how the minority population is defined within a given region of the state. The changing characteristics applied to define a community of interest reflect the diversity of Florida's communities in Central Florida and the disparate locations of Black residents in North Florida. Therefore, my evaluation of the arguments to challenge the enacted congressional map rest on traditional redistricting principles.

District boundaries in Florida had to be changed in substantial ways this decade. Florida's population grew by 2,736,877 individuals (14.6%) between the Census in 2010 and 2020.[1] Reapportionment brought one additional seat to Florida for representation in the U.S. House of Representatives. Any map that equalizes populations across districts and follows the traditional principles of compactness and equal protection have to balance the different levels of growth

[1] America Counts Staff. 2021. "Florida: 2020 Census." State Profiles: 2020 Census, America Counts: Behind the Numbers. United States Census Bureau. August 25, 2021. https://www.census.gov/library/stories/state-by-state/florida-population-change-between-census-decade.html
Perry, Marc and Luke Rogers, and Kristie Wilder. 2022. "New Florida Estimates Show Nation's Third-Largest State Reaching Historic Milestone." America Counts: Stories Behind the Numbers. United State Census Bureau. December 22, 2022. https://www.census.gov/library/stories/2022/12/florida-fastest-growing-state.html

experienced in the Big Bend, Jacksonville, Orlando and Tampa Bay regions. Realities of Florida's political geography include Democratic precincts that are substantially concentrated in adjacent communities and Republican precincts are also in adjacent less populated areas.

Aggregate measures of statewide competitiveness do not capture the nuance of the changing political geography in a state that is growing rapidly. This report identifies how distant and disparate politically cohesive communities are from one another in the greater Orlando area, Tampa-St. Petersburg, and North Florida region. This review also offers estimates of candidate preference for groups of voters to assess whether Hispanic and Black voters in Florida have the same preferences. The consideration of these factors of the state's political geography and the traditional redistricting practices present in the enacted congressional district plan affirm, my opinion as to the balance the Enacted Map provides for representation in the state.

The congressional districts in the Enacted Map have a better average compactness score better on all three measures (Reock, Polsby-Popper, and Convex-Hull). Most important to my analysis is that the standard deviation of each district's compactness score is smaller with the Enacted Plan than the last district map (Benchmark Plan) and the Proposed Plan (Plaintiff Demonstration). This is an advantage, because districts in the Enacted Map are more compact and standardized across the entire state to reflect Florida's political geography.[2]

[2] The Enacted Map has the highest average Reock score of 0.46 for all districts and a standard deviation of 0.12. The Benchmark Map has an average Reock score of 0.44 and standard deviation of 0.13. The proposed Map has an average Reock score of 0.443 and standard deviation of 0.15. The Enacted Map also has the highest average Polsby-Popper score of 0.43 for all districts and a standard deviation of 0.10. The Benchmark Map has an average Reock score of 0.36 and standard deviation of 0.13. The Proposed Map has an average Reock score of 0.388 and standard deviation of 0.13. Lastly, the Enacted Map has the highest average Convex-Hull score of 0.81 for all districts and a standard deviation of 0.08. The Benchmark Map has an average Convex-Hull score of 0.78 and standard deviation of 0.09. The Proposed Map has an average Convex-Hull score of 0.79 and standard deviation of 0.09.

The report is organized to assess whether voters have an equal opportunity to elect the candidate of their choice. I will focus my attention to whether candidate success is dependent on race or other factors. In that process, I will also draw attention to the regional variation in how a minority population is defined by the Plaintiffs.[3] It is for this reason that I offer an election level analysis of each demographic group, which shows that Hispanic voters have significantly different preferences from Black and non-Hispanic White voters. Additionally, recent election results show clear evidence that political characteristics in the state are changing. These patterns are also at odds with the Plaintiffs' criticism of the Enacted Map.

My conclusion is that the Enacted Map offers fair representation for the state under the following conditions. Minority voters can elect their candidates of choice, when the communities of minority voters are large and compact. The Enacted Map reduced the division of political geographies like cities and counties when compared to the previous map. The Enacted Map does this by following traditional redistricting practices and responding to the shifts in population and voting patterns in the past decade.

Qualifications and Expertise

I am a tenured associate professor of Political Science at The University of Texas at Tyler. In the seven years I have taught at UT Tyler, I have taught courses on Congress, voting behavior, state politics, and research methods at the undergraduate and graduate level. I have authored numerous journal articles on legislative politics and social behavior, which can be found in in *American Political Research*, *Legislative Studies Quarterly*, *Social Sciences Quarterly*, and other

[3] The Plaintiffs join Black and Hispanic voters in the Orlando and Tampa-St. Petersburg areas to try to achieve a minority district. This would be meaningful, if there was strong cohesion among Black and Hispanic voters in the two regions of the state.

academic journals. I also co-authored a recent book, *Battle for the Heart of Texas*, about the changing preferences of voters in Texas and the increasing civic engagement of Hispanic voters. A full list of my qualifications and publications are available in my CV as Exhibit A.

I have also provided expertise during this redistricting cycle on three occasions. I helped a non-profit organization in the state of Oklahoma prepare districting plans of state and federal legislative offices for public submission. I submitted a racially polarized voting analysis report in the case *Black Voters Matter Capacity Building Institute, Inc., et al. v. Laurel Lee* in the state of Florida last year. I also provided a racially polarized voting analysis report in the case *Palmer et al. v. Hobbs* in the state of Washington. My compensation to prepare and write this report is $350 per hour. My compensation is not reliant on the opinions offered herein.

Data

The data used for this report comes solely from the bce.csv file provided from the expert report for the Plaintiff and the Census block file ("Block20_PL.txt") at floridaredistricting.gov. I appended to the dataset the equivalency file of the Demonstration map provided by the Plaintiffs' expert ("Blockfile Equivalent of Demonstration Map.csv"). I joined the datasets together to make one comprehensive dataset titled "flredist" to ensure the process of generating the estimates would remain consistent with what was previously submitted by Dr. Ansolabehere.

Method of Ecological Inference

Ecological inference is an approach that uses aggregate data (like precincts) to make inferences about individual behavior. It is used in the natural sciences, business, and social sciences to estimate accurate measures of probability. The key is the ability to control for multiple

dimensions, like those listed above in the description of the model. Voter participation and preferences often vary by race.[4]

This is valuable when we cannot meaningfully interact with the research subjects. However, the key to accomplishing this task is a standardized structure of the aggregate data. Because the analysis is grounded in analyzing a geographic area nested within another, my estimates do not predict the behavior of an individual – they only speak to the behavior of people who are in a similar context. As an analogy, think about how pollsters anonymize individual surveys to explain an aggregate population. The key to knowing whether everyone is treated equally is to look at the aggregate effects.

This report offers numerous Ecological Regression estimates by election, to measure if groups of voters have cohesive support for candidates and how it varies across time in the Orlando, Tampa-St. Petersburg, and North Florida areas. The model is constructed to control for the proportion of each group of voters within the citizen voting age population and how many voters in a geographic area participated in the election in order to estimate the share of each group of voters who supported the Democratic candidate. This process matches the method of the Plaintiffs' expert, but does not aggregate data across elections, which overrepresents observations from the 2018 statewide elections in one metric (five of eight took place in 2018).

This analysis follows a logical path. If a set of precincts have more Hispanic voters than non-Hispanic White voters and the Democratic candidate receives more votes from areas where the Hispanic population is more concentrated, we can measure the probability Hispanic voters prefer the Democratic candidate. However, if a Republican candidate for another office also

[4] Grofman, Bernard and Michael Migalski. 1988. "Estimating the Extent of Racially Polarized Voting in Multicandidate Elections." *Sociological Methods & Research* 16 (4): 427-54.

appeals to Hispanic voters, we are less certain that the public is cohesive in its voting. Examining these patterns of voting history was a reaction to moments when support from Black voters for a Democratic candidate was much higher if the candidate was a Black Democrat. Historically a pattern of electoral victories by white Democrats confounded the public, given the high proportion of Black residents in a community and the support they consolidated behind one candidate. The root of the reason Black Democrats received lower levels of support, than contemporary white Democrats, was the support they received from white voters. The voting behaviors of Black Democrats and white Democrats historically followed a pattern of racially polarized voting and not partisan polarized voting. The clear impact these types of voting behaviors had on representation led the Supreme Court to introduce the Gingles test as guidance to indicate if district plans are racially discriminatory, even if they were not intended to be. A community of interest should be in a similar district if it is cohesive in its support for a candidate and if the community of interest that has similar preferences lives close to one another.

Florida's Political Geography & Competitiveness

Measures of political competitiveness that compare seat-share to vote-share operate on the assumption that political preferences will be similar in local communities that are adjacent to one another. For example, more populated areas that support Democratic candidates should elect more Democratic candidates because there are more districts to assign to the area. The Plaintiffs' expert asserts the efficiency gap (seat-share) and declination (relative vote-share) are the best measures of partisan bias. The calculated measures of symmetry between individual votes and aggregate percentages assume each district has the potential to capture a similar set of communities. These calculations are secondary, in that they must occur after maps are drawn to follow traditional redistricting principles. Population growth does not always occur in a balanced way, where

Democratic (blue) enclaves might regularly reside within red counties and the two have similar populations. This interpretation does not match Florida's human geography, especially when regions of the state have different shares of the total population. In Florida, communities that support Democratic candidates do so at much higher rates. Often, these communities are not adjacent to one another. An unintended effect of the current population distribution in the state is that representative districts may not naturally be 50/50 splits.

A more appropriate analysis of partisan fairness should account for the variation in voter preferences within communities of the state. This considers who already lives in a political jurisdiction. The easiest way to control for how similar a community is to others in the state is to standardize a measure of the distance of the community from the state average.

Moran's I is a statistical measure of spatial autocorrelation between adjacent geographic areas.[5] A matrix is built to compare the adjacent voting districts to see how similar each one is to its neighbors. The measures below in Table 1 reflect the correlation between the vote share of the Republican candidate in a voting district, as well as the total deviation of the district from its neighbor. A measure close to 1 is interpreted as a positive relationship as local voting patterns are closely associated with an adjacent community. This consistent finding is associated a reality of human geography where Democratic communities are geographically close to other Democratic communities, but not close to Republican communities.

[5] Chen, Jowei and Jonathan Rodden. 2013. "Unintended Gerrymandering: Political Geography and Electoral Bias in Legislatures." *Quarterly Journal of Political Science* 8: 239-269.

Table 1: Global Moran's I of Florida's voting districts in 2016, 2018, and 2020.

	Moran's I Vote Share (95% CI)	Moran's I Average Deviation (95% CI)
2020 election, Trump/Pence vs. Biden/Harris	0.78 (0.76, 0.81)	0.66 (0.63, 0.69)
2018 election, DeSantis/Nuñez vs. Gillum/King	0.75 (0.73, 0.78)	0.59 (0.56, 0.62)
2016 election, Trump/Pence vs. Clinton/Kaine	0.77 (0.75, 0.80)	0.61 (0.58, 0.64)

Figures 1A, 1B, and 1C below, shows the voting districts across the state. The communities are shaded based on the vote share for the Republican candidate, so Democratic communities closer to 0 appear as blue. The height of each plot is the amount the vote share in the voting district deviates from the average Republican vote share in all voting districts. Therefore, if a blue spike is visible, it is voting differently from its neighbors and is favoring Democratic candidates. Raised red areas are voting more Republican than the average community. In each of the most recent elections, the figures clearly show a geographic concentration of Democratic communities in distant parts of the state. The magnitude local Democratic communities deviate from the average state candidate preference is much higher than Republican voting communities.

The Benchmark map was implemented prior to the 2016 election. Figure 1A shows the areas where larger than normal vote shares for Donald Trump and Hillary Clinton came from. The plot shows voting districts across the state where blue dots rise from areas of pink, not purple. These Democratic voting districts are different from their neighbors and do not occur throughout the state in areas that are adjacent to one another.

The next plot, Figure 1B, presents the same analysis during the 2018 election for Governor. The map of Florida looks similar to the 2016 version, but there are now taller red towers in Southeast Florida. Then in Figure 1C, the voting districts appear remarkably similar to the other

two maps. The geographic dispersion of intensely Democratic voting districts is a reality of Florida's present demography. Attempts to join those local communities to reduce partisan bias would require surgical precision to divide political communities that are more similar to the state's average partisanship in local areas. That would violate the traditional redistricting practices that the Fair Districts Amendment intends to preserve.

Figure 1A: Deviation of Trump-Clinton Vote by Voting District, Relative to All Voting Districts. Colors shaded by Trump Vote Share.

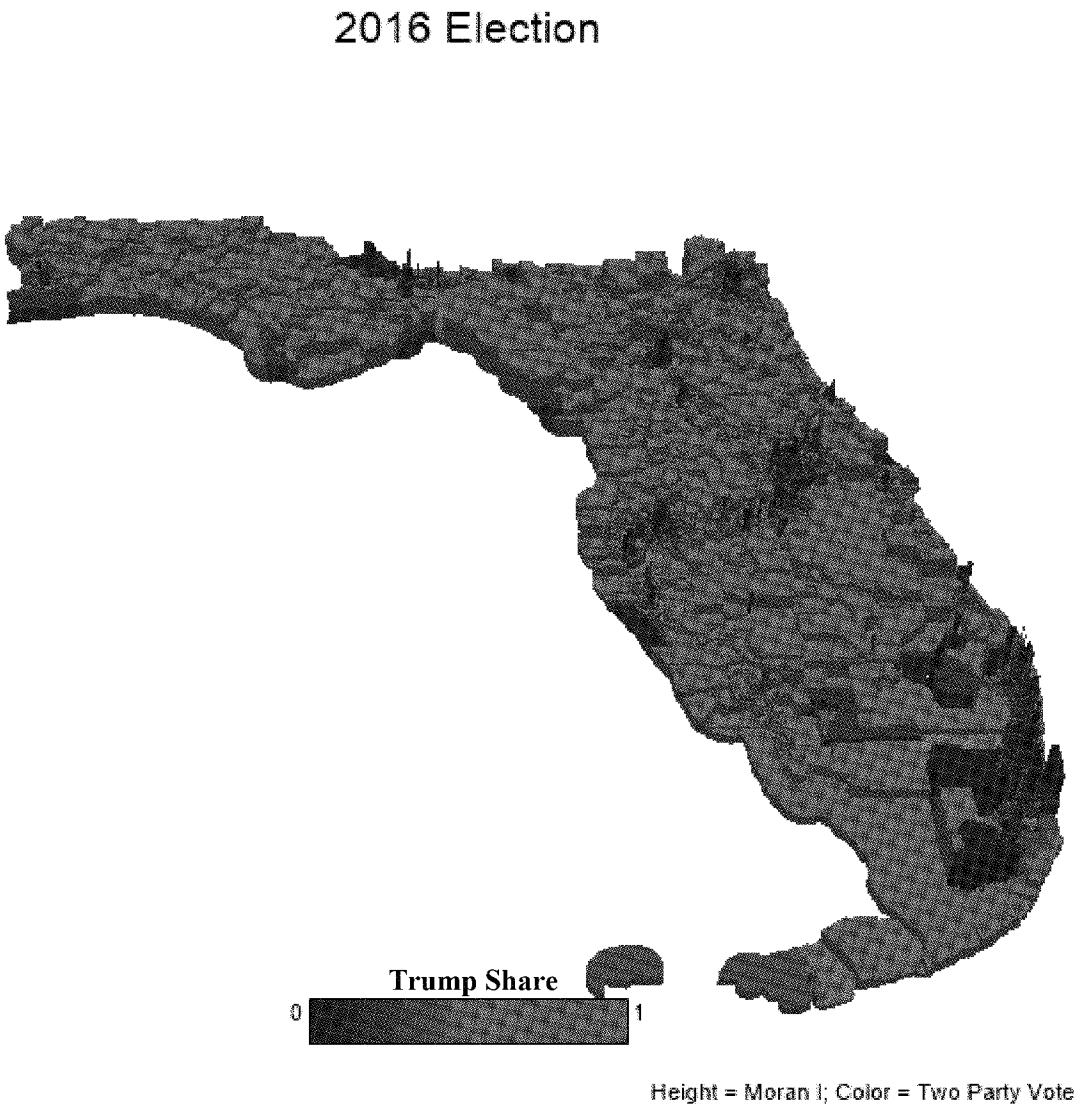


Figure 1B: Deviation of DeSantis-Gillum Vote by Voting District, Relative to All Voting Districts. Colors shaded by DeSantis Vote Share.

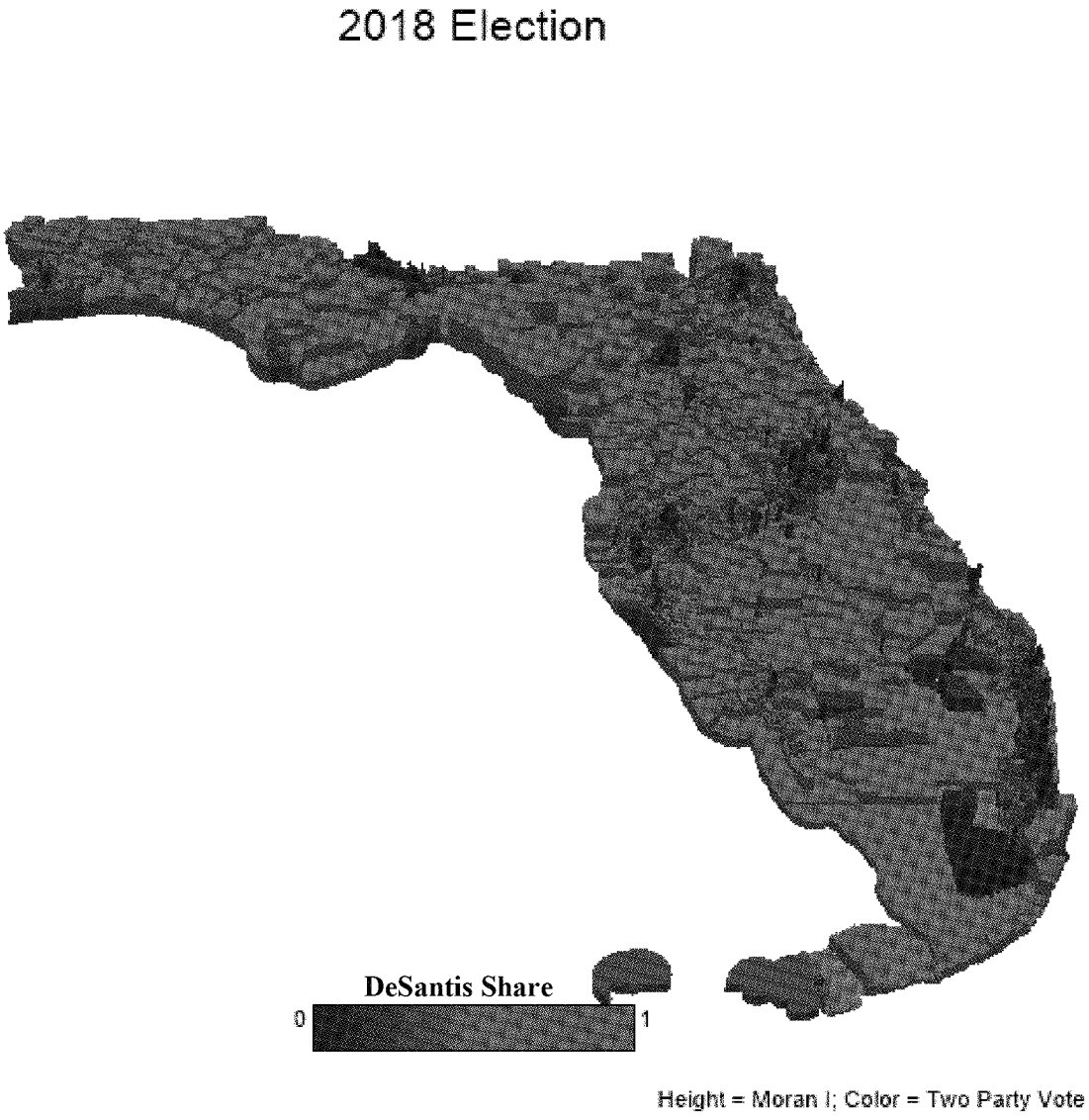
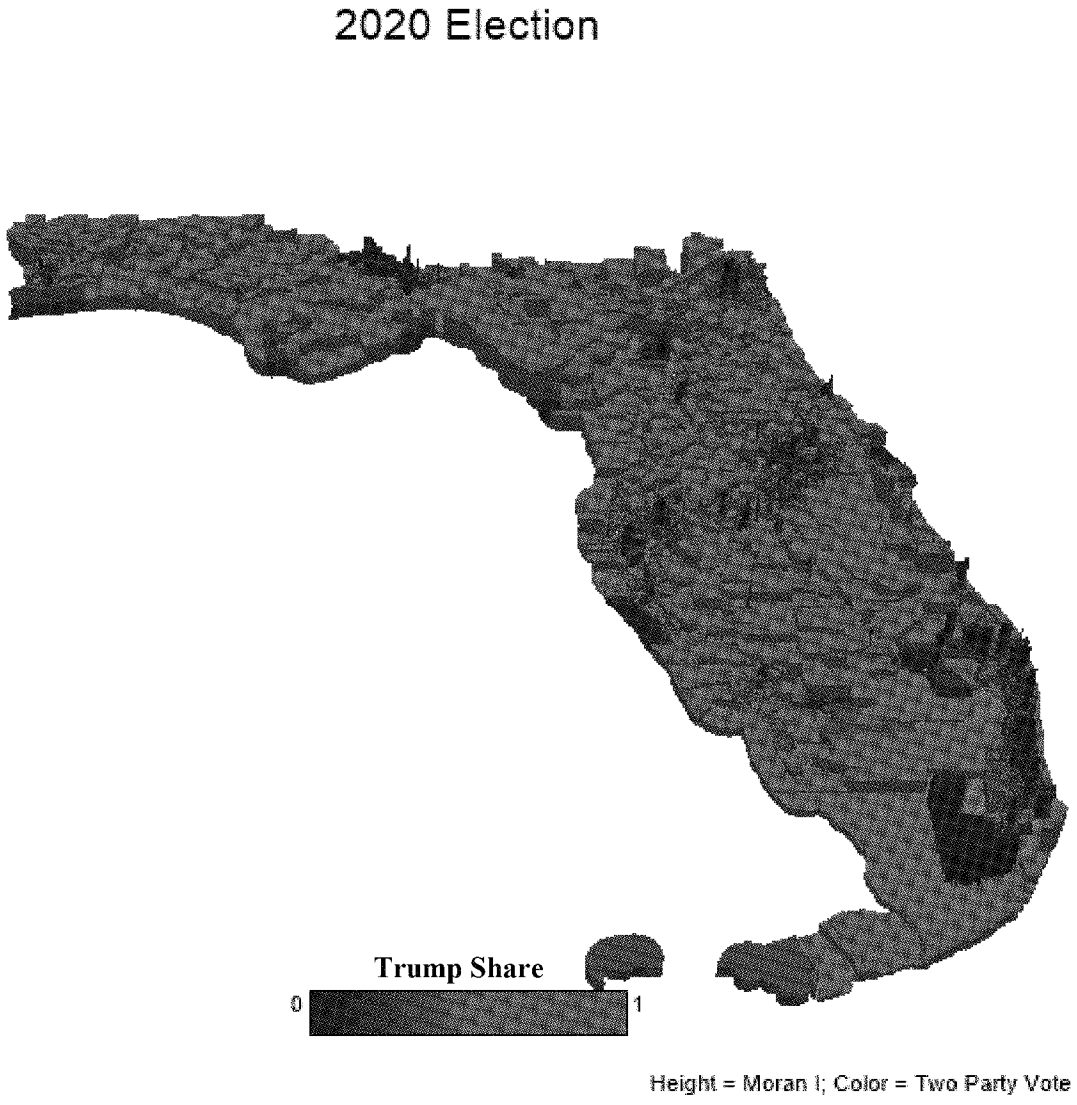


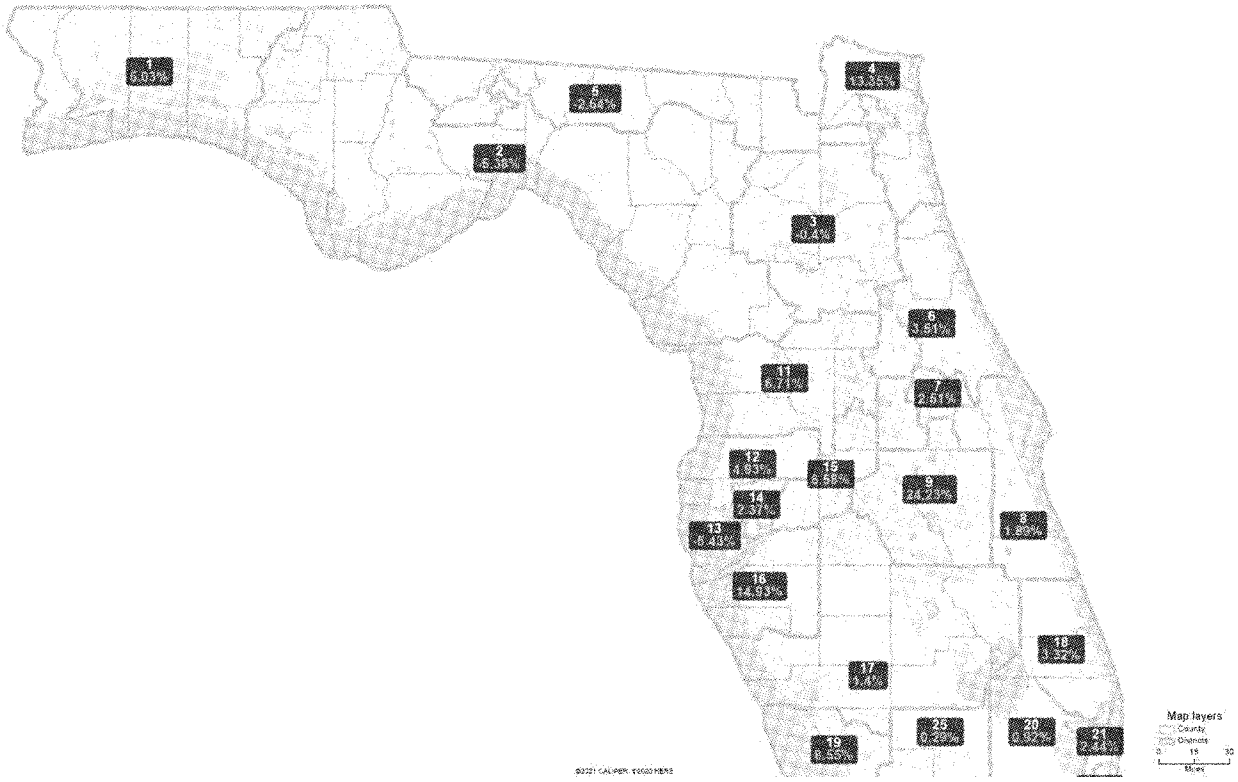
Figure 1C: Deviation of Trump-Biden Vote by Voting District, Relative to All Voting Districts. Colors shaded by Trump Vote Share.



Population Growth & Need for the 28th District

In Figure 2, the percentage displayed below each district number indicates how far a district's population was from having the same population as every other district in the state. Deviations from a district's ideal population reflects the variation in population growth across the state. Any redistricting map must equalize the population in a U.S. Congressional District map, just like the map implemented by the Florida Supreme Court and the Enacted Map in 2022. One distinct difference in the most recent process was the state's responsibility to add a new 28th congressional district. The mid-decade map that was implemented after the Fair Districts Amendment did not have to do this.

Figure 2: Florida's Congressional Map (2016 to 2021) with 2020 Census Population



The state's growth led to six districts with populations below the ideal population of 769,221 residents under the prior map. Three districts were in North Florida (CD-2, CD-3, and CD-5), one in Central Florida (CD-13), and two in South Florida (CD-24 and CD-27). The three underpopulated Districts 2, 3, and 5 shared boundaries with one another and each shared a boundary with overpopulated districts in CD-1 and CD-4. The population in Northwest Florida's CD-4 grew more than 13%, which was the largest in the region but not in the state. The districts

with more growth during the prior decade included CD-9 (24%), CD-16 (15%), and CD-10 (14%) in Central Florida.

The 2022 midterm election resulted in the arrival of six new U.S. Representatives to Congress in January 2023. The new Representatives, four Republicans and two Democrats, were all elected in open seats (no incumbent in the race). The Republican share of the congressional delegation grew, because a Latina candidate won in the 13th District (previously represented by a non-Hispanic White Democrat).

Orange County, Seminole County, and Volusia County: CD-7 and CD-10

Florida's Seventh Congressional District includes all of Seminole County and the southern portion of Volusia County. The district's shape closely reflects the CD-7 in Senate Plan 8019 and clearly follows major roads that connect the county east to west. Splitting Volusia County into two districts accomplished two goals. Seminole County is completely within CD-7 and the city of Port Orange in Volusia County is also completely within CD-7. Moreover, and in contrast to assertions of the Plaintiffs' expert, I do not find sufficient support that the precincts from Volusia County added to CD-7 were selected to favor one political party at the expense of any traditional redistricting principle.

According to the 2020 Census, Volusia County's population was 553,543. The pace of the coastal county's population growth was slightly less than the state average. Whereas, adjacent counties to Volusia, like Flagler and Lake County added population at a rate above the state average. The mid-decade redistricting map implemented by the Florida Supreme Court placed Volusia County within one district, but this had not been done in 2011 and the updated decennial population numbers show districts around Volusia County needed to get smaller.

Natural boundaries within Volusia County separate populous cities within the county. The Tiger Bay State Forest and Deep Creek Preserve in the center of the county separates Deltona from Daytona Beach. The dispersion of the half-million residents is large and distant enough where a substantial portion of Volusia County's population could match Seminole County's population of 470,856 to ensure two compact and equal populated districts. This is why it is difficult to argue that populations in Volusia County are geographically compact.

Dr. Ansolabehere's analysis contrasts northern Orange and southern Volusia County, but is silent about the crossover voting that occurred in Seminole County in recent elections. Seminole County shows almost equal support for both parties. In 2018, Rep. Stephanie Murphy (Asian American – D) received 106,343 votes (54%) in Seminole County during her first bid for reelection. Just this past year, Cory Mills (white – R) received 98,276 votes (54%) in Seminole County in an open seat election while Governor Ron DeSantis captured 102,191 votes in Seminole County on the same ballot. Voters in the same county shifted their preference from Democratic to Republican in a midterm election.

A comparison of election outcomes under Benchmark CD-7 (2018) and Enacted CD-7 (2022) also shows a similar symmetry in partisan support that voters outside of Seminole County were supportive of the leading candidate. In 2022, Cory Mills received 64.5% support from Volusia County voters in CD-7 (2022). This is the same level of support that 64.5% support from Orange County voters in CD-7 (2018) gave to Rep. Stephanie Murray (D). As the district changed, new voters supported the Republican candidate in the short-term at the same time voters in Seminole County also supported the Republican candidate. Moreover, the symmetry of the vote

shares also indicates that no additional partisan favor created by the map that did not previously exist.[6]

My analysis looks at past voting behavior in CD-7 using ecological regression across multiple elections to understand the dynamics of this politically competitive area. The observed shift in two-party vote share between incumbent and Asian American Stephanie Murphy (2018) and non-Hispanic white candidate Cory Mills (2022) occurred within Seminole County and the surrounding areas. This trend, as a majority of Seminole County voters supported a Democrat for the first time since 1948, may be best explained by candidate evaluations rather than an artifact of redistricting.[7] The estimates show Black and Hispanic voters in CD-7 do not support the Democratic Party at the same rate. Additionally, non-Hispanic White voters in CD-7 do not overwhelmingly vote to defeat the Democratic candidate.

Lack of Cohesion Among Black and Latino Voters in the Orlando Area (CD-7, CD-10)

The broader shift in final vote tallies we saw in CD-7 match estimates of candidate preference by groups of voters that are changing election to election. The tables for CD-7 and CD-10 for district plans identified as the Benchmark, Enacted, and Plaintiff proposal. These tables provide ecological regression estimates to determine if Hispanic, Black, and non-Hispanic white voters support Democratic candidates in the same manner. What we see is that in all cases Hispanic voters have been significantly less supportive of Democratic candidates than Black voters. The separation between the two is greater in the Benchmark, Enacted, and Proposed versions of CD-10.

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[6] Refer to section B.2 on page 30. Also see the official election results by county: https://results.elections.myflorida.com/Index.asp?ElectionDate=11/6/2018&DATAMODE=

[7] Soto, Justin and Asher Wildman. 2020. "Seminole County Turns Blue for Presidential election for First Time in Decades." Spectrum News 13, November 4, 2020. Accessed: https://www.mynews13.com/fl/orlando/decision-2020/2020/11/04/seminole-county-turns-blue-for-presidential-election-for-the-first-time-in-decades

Non-Hispanic White voters are not showing extreme block voting in Enacted CD-7. Non-Hispanic White voters have become more Democratic in this area over the decade. This indicates crossover, which is not to defeat the preference of the minority population. The estimates are also closely in line with all of the other options that keep Seminole County as the center of the district. During the same time period affinity for the Democratic Party among Hispanic voters has eroded in the Benchmark and Proposed maps.

Table 2: Estimated Support for the Democratic Candidate in Congressional District 7, using Ecological Regression

	Election	Benchmark	Enacted	Proposed
Hispanic	President 2020	71% (69.5, 72.6)	71% (68.7, 72.5)	69% (67.4, 71.2)
	Senate 2018	74% (72.4, 76.0)	74% (71.7, 75.6)	73% (70.6, 74.8)
	Governor 2018	77% (75.2, 79.0)	75% (72.9, 77.0)	75% (73.1, 77.5)
	Election	Benchmark	Enacted	Proposed
	AG 2018	74% (72.4, 76.1)	71% (68.8, 72.9)	72% (69.8, 74.3)
	CFO 2018	75% (73.4, 77.1)	72% (69.8, 73.9)	73% (71.0, 75.3)
	Agr Com 2018	76% (74.5, 78.1)	73% (70.5, 74.5)	74% (72.1, 76.5)
	President 2016	78% (76.3, 79.9)	69% (67.2, 71.2)	75% (72.8, 77.1)
	Senate 2016	71% (69.7, 73.1)	64% (62.1, 66.1)	69% (67.0, 71.0)
NH Black	President 2020	80% (77.7, 81.6)	84% (83.0, 85.2)	83% (81.9, 85.3)
	Senate 2018	83% (80.9, 85.3)	89% (87.9, 90.1)	87% (84.9, 88.7)
	Governor 2018	86% (83.6, 88.3)	91% (90.0, 92.3)	89% (87.4, 91.5)
	AG 2018	84% (81.3, 86.1)	89% (88.0, 90.3)	87% (84.9, 89.0)
	CFO 2018	84% (81.5, 86.2)	90% (88.7, 91.0)	87% (85.2, 89.1)
	Agr Com 2018	85% (82.5, 87.1)	90% (88.4, 90.7)	88% (86.1, 90.1)

	President 2016	84% (81.2, 85.9)	87% (85.8, 88.1)	88% (85.6, 89.6)
	Senate 2016	79% (76.7, 81.1)	86% (85.3, 87.5)	84% (81.8, 85.5)
NH White	President 2020	48% (46.8, 49.7)	37% (36.1, 38.4)	47% (45.5, 48.6)
	Senate 2018	47% (45.5, 48.8)	38% (36.7, 39.0)	46% (44.2, 47.6)
	Governor 2018	46% (44.3, 47.7)	37% (35.9, 39.4)	45% (43.1, 46.7)
	AG 2018	42% (39.9, 43.3)	34% (32.7, 35.2)	41% (38.7, 42.4)
	CFO 2018	43% (40.9, 44.3)	35% (34.3, 36.7)	42% (39.8, 43.3)
	Agr Com 2018	46% (43.9, 47.2)	38% (36.5, 38.8)	45% (42.8, 46.3)
	President 2016	43% (41.7, 45.0)	35% (34.0, 36.4)	43% (40.8, 44.3)
	Senate 2016	39% (37.1, 40.2)	35% (34.1, 36.5)	38% (35.9, 39.2)

Florida's 10th Congressional District is now represented by Representative Maxwell Frost (Latino Black Democrat). The Hispanic voters in Benchmark CD-10 and Enacted CD-10 have supported Democratic candidates at the same level. Black voters in Benchmark CD-10 and Enacted CD-10 also support Democratic candidates at a very high level. Both groups are cohesive to the Democratic Party, but with Hispanic voters showing less support than Black voters. The new district does not create a substantial shift of non-Hispanic white voters who are less supportive of Democratic candidates. Non-Hispanic white voters exhibit cross-over voting in frequent elections, the highest being in 2020. I report these numbers so they can be compared to other districts. My analysis and opinion are consistent with the outcome of the 2022 election when a Democratic candidate won the election.

Table 3: Estimated Support for the Democratic Candidate in Congressional District 10, using Ecological Regression

	Election	Benchmark	Enacted	Proposed
Hispanic	President 2020	67% (65.0, 69.2)	66% (64.1, 68.8)	67% (64.8, 69.6)
	Senate 2018	69% (69.7, 74.3)	73% (71.0, 75.8)	72% (69.0, 74.2)
	Governor 2018	75% (72.8, 77.6)	76% (73.0, 78.1)	75% (71.8, 77.4)
	AG 2018	73% (70.3, 75.2)	74% (71.2, 76.2)	72% (69.2, 74.8)
	CFO 2018	73% (71.1, 75.9)	74% (71.7, 76.7)	73% (69.9, 75.5)
	Agr Com 2018	74% (72.2, 76.9)	75% (72.8, 77.8)	74% (70.9, 76.4)
	President 2016	78% (75.5, 80.3)	81% (78.2, 83.3)	76% (73.1, 78.7)
	Senate 2016	69% (66.5, 71.4)	70% (67.9, 72.9)	68% (65.4, 71.0)
NH Black	President 2020	94% (92.6, 94.9)	97% (95.2, 99.1)	94% (92.9, 95.4)
	Senate 2018	96% (94.6, 97.2)	98% (96.0, 100)	96% (95.1, 98.7)
	Governor 2018	99% (97.1, 99.9)	100% (99.1, 104)	99% (97.7, 100.6)
	AG 2018	96% (94.2, 97.3)	99% (96.3, 100.8)	96% (95.0, 98.0)
	CFO 2018	97% (95.2, 98.1)	99% (97.2, 101.6)	97% (95.9, 98.9)
	Agr Com 2018	97% (95.3, 98.1)	99% (97.2, 101.6)	97% (95.9, 98.8)
	President 2016	97% (95.5, 98.5)	100% (97.2, 102)	98% (96.3, 99.3)
	Election	Benchmark	Enacted	Proposed
	Senate 2016	93% (92.1, 94.8)	96% (93.7, 98.2)	94% (92.6, 95.5)
NH White	President 2020	39% (37.9, 40.5)	33% (31.3, 34.8)	39% (37.2, 39.9)
	Senate 2018	43% (35.0, 27.6)	31% (29.7, 33.1)	36% (34.2, 37.1)
	Governor 2018	36% (34.1, 36.9)	30% (28.6, 32.1)	35% (33.4, 36.4)
	AG 2018	31%	27%	31%

	(29.9, 32.7)	(25.3, 28.7)	(29.3, 32.4)
CFO 2018	32% (31.0, 33.8)	28% (26.3, 29.6)	32% (30.4, 33.4)
Agr Com 2018	35% (34.1, 36.8)	30% (28.4, 31.8)	35% (33.4, 36.3)
President 2016	33% (31.9, 34.7)	27% (25.8, 29.2)	33% (31.5, 34.5)
Senate 2016	28% (26.8, 29.5)	25% (23.2, 26.7)	28% (26.1, 29.0)

The shapes of CD-7 and CD-10 in the Enacted Map are much closer to the state average of that plan in a map that has higher geographic compactness scores. The districts in the Proposed Map are substantially different in design from districts in a less compact map. In table 4A and 4B, I present the Reock, Polsby-Popper, and Convex-Hull measures of geographic compactness. The measures are designed to be interpreted so that a proportion closer to 1 indicates more compactness.

Table 4A: District Changes in Orange, Seminole, and Volusia Counties

	Reock		Polsby-Popper	
	District	Pct. More or Less than State's Average Score	District	Pct. More or Less than State's Average Score
Enacted CD-7	0.453	- 2%	0.404	- 7%
Benchmark CD-7	0.559	+ 28%	0.370	+ 2%
Proposed CD-7	0.564	+ 27%	0.397	+ 2%
Enacted CD-10	0.375	- 19%	0.373	- 14%
Benchmark CD-10	0.514	+ 18%	0.450	+ 4%
Proposed CD-10	0.557	+ 26%	0.472	+ 22%

*The average Reock score for each district in the state was 0.464 in the Enacted Map, 0.436 in the Benchmark Map, and 0.443 in the Proposed Map. The average Polsby-Popper score for each district in the state was 0.434 in the Enacted Map, 0.362 in the Benchmark Map, and 0.388 in the Proposed Map.

Table 4B: Convex-Hull

	District	Pct. More or Less than State's Average Score
Enacted CD-7	0.825	+ 1%
Benchmark CD-7	0.809	+ 4%
Proposed CD-7	0.824	+ 4%
Enacted CD-10	0.751	- 0.8%
Benchmark CD-10	0.888	+ 15%
Proposed CD-10	0.869	+ 9%

*The state average Convex-Hull measure for each plan was 0.814 in the Enacted Map, 0.775 in the Benchmark Map, and 0.791 in the Proposed Map

Pinellas County and CD-13

The 13th Congressional District elected a Hispanic Female, increasing the number of Hispanic members of Congress elected from Florida. Figure 2 showed the district was underpopulated once the 2020 Census numbers were reported. This meant that while the district remained largely the same, it needed to add new communities.

In this section I use the same steps as before to provide estimates of political cohesion by race and ethnicity across multiple elections. The findings show a clear separation in the political preferences of Hispanic voters and Black voters in Pinellas County. Black voters overwhelmingly support the Democratic candidate, but populations are not large or compact enough to comprise a majority of a district along the Gulf Coast. Moreover, candidates supported by Black voters do not face consistent opposition as one-third of non-Hispanic White voters are estimated to support the Democratic candidate. In this diverse community it is possible that another definition of minority population could be used. However, Hispanic voters are split in their support for Democratic and Republican candidates regardless of race.

In Tampa and St. Petersburg, the performance of the Enacted map of districts for the U.S. Congress in the 2022 election does not show evidence of vote dilution. Prior to the 2022 election the Tampa area was represented by three non-Hispanic White representatives. The partisan

breakdown of these representatives was two Democrats and one Republican. After the election the region is now represented by one Hispanic Republican, a non-Hispanic White Democrat, and a non-Hispanic White Republican.

The data reveals Hispanic voter preferences are closer to non-Hispanic white voters than Black voters. The difference in support for the Democratic candidate between Hispanic and Black voters in prior elections under the Benchmark Map ranged between 48% and 42% in recent elections. The Plaintiffs' expert attempts to assume that all minority voters support the Democratic Party substantially and regularly. The voting pattern of each group, seen in the estimates below, bellies up that assertion.

Table 5: Estimated Support for the Democratic Candidate in Congressional District 13, using Ecological Regression

	Election	Benchmark	Enacted	Proposed
Hispanic	President 2020	51% (48.1, 53.3)	52% (49.3, 54.8)	51% (48.1, 53.1)
	Senate 2018	57% (54.3, 59.4)	55% (52.6, 57.9)	57% (54.1, 59.1)
	Governor 2018	57% (54.4, 59.9)	56% (53.5, 59.1)	57% (54.2, 59.5)
	AG 2018	52% (49.3, 55.0)	54% (51.6, 57.4)	52% (49.1, 54.7)
	CFO 2018	54% (51.7, 57.1)	55% (52.4, 58.0)	54% (51.4, 56.8)
	Agr Com 2018	58% (55.4, 60.5)	55% (53.6, 58.0)	58% (55.2, 60.2)
	President 2016	52% (49.3, 54.8)	54% (51.5, 57.3)	52% (49.4, 54.7)
	Senate 2016	52% (49.5, 54.7)	49% (46.2, 51.4)	52% (49.4, 54.4)
NH Black	President 2020	96% (94.9, 96.9)	99% (98.2, 100.0)	96% (95.0, 96.9)
	Senate 2018	99% (97.7, 99.7)	100% (100, 102.3)	99% (97.9, 99.8)
	Governor 2018	100% (100, 102)	100% (102, 105)	100% (100, 102)
	AG 2018	98% (97.2, 99.3)	100% (100.3, 102.7)	98% (97.3, 99.3)

CFO 2018	99% (98.0, 100.1)	100% (100.9, 103.2)	99% (98.1, 100.1)
Agr Com 2018	100% (98.6, 100.6)	100% (100.5, 102.7)	100% (98.7, 100.7)
President 2016	100% (98.6, 100.6)	103% (102, 104.3)	100% (98.7, 100.6)
Senate 2016	97% (95.8, 97.8)	98% (96.7, 98.8)	97% (95.9, 97.7)

NH White	President 2020	43% (41.3, 44.4)	33% (31.4, 34.5)	43% (41.3, 44.2)
	Senate 2018	46% (44.0, 47.2)	36% (34.5, 37.6)	45% (44.1, 46.9)
	Governor 2018	44% (42.4, 45.5)	35% (33.1, 36.3)	44% (42.1, 45.2)
	AG 2018	38% (36.0, 39.1)	30% (28.4, 31.7)	37% (35.8, 38.8)
	Election	Benchmark	Enacted	Proposed
	CFO 2018	42% (40.6, 43.6)	33% (31.8, 34.9)	42% (40.4, 43.3)
	Agr Com 2018	46% (44.9, 47.7)	37% (35.1, 38.1)	46% (44.5, 47.4)
	President 2016	42% (40.2, 43.2)	32% (30.2, 33.5)	42% (40.1, 43.0)
	Senate 2016	41% (40.0, 43.8)	34% (32.3, 35.4)	41% (39.8, 42.6)

In a different part of the state, we have another example of where the Enacted Plan is more consistent with the compactness of the other districts in the state. Like other districts in urban areas, each plan's districts provide higher Reock, Polsby-Popper, and Convex-Hull scores, because it is easier to fit a polygon with smaller precincts that are densely populated.

Table: 6A: District Changes in Tampa-St. Petersburg

	Reock		Polsby-Popper	
	District	Pct. More or Less than State's Average Score	District	Pct. More or Less than State's Average Score
Enacted CD-13	0.546	+ 25%	0.584	+ 35%
Benchmark CD-13	0.655	+ 50%	0.685	+ 89%
Proposed CD-13	0.665	+ 49%	0.633	+ 63%

*The average Reock score for each district in the state was 0.464 in the Enacted Map, 0.436 in the Benchmark Map, and 0.443 in the Proposed Map. The average Polsby-

Popper score for each district in the state was 0.434 in the Enacted Map, 0.362 in the Benchmark Map, and 0.388 in the Proposed Map.

Table 6B: Convex-Hull

	District	Pct. More or Less than State's Average Score
Enacted CD-13	0.926	+ 14%
Benchmark CD-13	0.929	+ 20%
Proposed CD-13	0.903	+ 14%

*The state average Convex-Hull measure for each plan was 0.814 in the Enacted Map, 0.775 in the Benchmark Map, and 0.791 in the Proposed Map

North Florida & Benchmark CD-5

The Enacted Map for congressional elections from 2022 to 2030 used district north south district boundaries to equalize the populations in the North Florida districts. This equalized the population with more compact districts, and split fewer communities within Duval, Leon, and Marion Counties. Under the prior map, constituents from the west side of CD-5 near Lake Seminole in Gadsden County were 216 miles away from constituents on the east side of CD-5 at Florida State College's South Campus in Jacksonville, otherwise measured as three hours and twenty minutes if they travelled by car. From north to south the district was 40 miles tall at its maximum.

The prior district preserved a substantial population but not a majority of Black voters in Congressional District 5 (CD-5). It did this by connecting large and politically cohesive areas of Black voters from Jacksonville to Gadsden County. The narrow connection that bridged the areas north of Tallahassee between a lake and the Georgia border illustrates the tension required to join the disparate communities. An important recognition to the balance of the underpopulated district is that Gadsden County (CD-5's eastern edge) was adjacent to an underpopulated district CD-2. Moreover, the narrow areas connecting Jacksonville to the rest of CD-5 were adjacent to areas with the fastest growth in the state ignores traditional redistricting practices.

Table 7 presents another set of estimates generated by the ecological regression of the two-party vote used but the estimates differ based on which district a Census block is assigned. The table offers an election-by-election analysis that the estimate of candidate preference by Hispanic, non-Hispanic Black, and non-Hispanic white voters to assess differences in these plans.

The data reveals Hispanic voter preferences are closer to non-Hispanic white voters than Black voters. The difference in support for the Democratic candidate between Hispanic and Black voters in prior elections under the Benchmark Map ranged between 60% and 51% in recent elections. Hispanic voters in CD-5 of the Benchmark Map and the Proposed Map did not cohesively support a Democratic candidate in each election's analysis. The Plaintiffs' expert attempts to assume all minority voters support the Democratic Party substantially and regularly. The voting patterns of each group, with the estimates below, bellies up that assertion again.

When considering the differences between the Enacted Map's districts in North Florida, specifically CD-4, and the Proposed Map's CD-5 together two points become clear. The Proposed CD-5 seeks to join Gadsden County with parts of Duval County in order to maximize the Black population with two distant communities. Other options may have been insufficient to also maximize the opportunity for a Democrat to be elected, because Hispanic voters in the non-coastal region of North Florida do not cohesively support the Democratic candidate. The estimates of candidate preference among Hispanic voters shows that Hispanic voters near First Coast (Enacted CD-4) have different political views than North Florida (Proposed CD-5).

Table 7: Estimated Support for the Democratic Candidate in North Florida, using Ecological Regression

	Election	Benchmark (CD-5)	Enacted (CD-4)	Proposed (CD-5)
Hispanic	President 2020	40% (35.9, 44.9)	57% (54.8, 58.9)	41% (36.2, 45.3)
	Senate 2018	39% (34.3, 43.1)	69% (67.2, 71.4)	39% (34.6, 43.7)
	Governor 2018	42% (37.5, 46.8)	70% (68.2, 73.6)	42% (37.4, 46.9)
	AG 2018	37% (32.6, 41.8)	70% (67.3, 71.8)	37% (32.6, 42.0)
	CFO 2018	37% (32.9, 42.0)	69% (67.1, 71.5)	37% (32.7, 42.1)
	Agr Com 2018	39% (34.1, 43.3)	70% (67.8, 72.1)	39% (34.3, 43.6)
	President 2016	40% (35.9, 44.9)	57% (54.8, 58.9)	41% (36.2, 45.3)
	Senate 2016	22% (17.9, 26.4)	65% (63.3, 67.2)	25% (20.2, 29.0)
NH Black	President 2020	90% (88.0, 91.1)	89% (87.3, 89.9)	90% (88.9, 91.7)
	Senate 2018	90% (88.6, 91.6)	89% (88.0, 90.5)	91% (89.5, 92.3)
	Governor 2018	93% (91.2, 94.3)	92% (90.6, 93.2)	94% (92.1, 95.1)
	AG 2018	90% (88.5, 91.6)	90% (88.4, 91.0)	91% (89.4, 92.3)
	CFO 2018	90% (88.5, 91.5)	89% (88.0, 90.6)	91% (89.4, 92.3)
	Agr Com 2018	90% (88.7, 91.8)	89% (88.0, 90.7)	91% (89.7, 92.6)
	President 2016	90% (88.6, 91.8)	88% (86.5, 89.1)	91% (89.6, 92.6)
	Senate 2016	82% (80.1, 83.1)	77% (76.0, 78.1)	82% (81.0, 83.8)
NH White	President 2020	34% (32.6, 35.9)	30% (28.7, 31.4)	31% (29.3, 32.5)
	Senate 2018	36% (34.1, 37.4)	28% (27.2, 29.7)	31% (29.8, 32.9)
	Governor 2018	34% (32.7, 24.0)	28% (27.0, 29.7)	31% (29.0, 32.2)

(table continues on next page)

Election	Benchmark	Enacted	Proposed
AG 2018	32% (29.9, 33.2)	25% (23.4, 25.9)	28% 26.2, 29.4)
CFO 2018	32% (30.5, 33.7)	26% (24.5, 27.1)	18% (26.7, 29.9)
Agr Com 2018	34% (32.1, 35.4	28% (26.2, 29.0)	30% (28.1, 31.3)
President 2016	34% (32.6, 35.9)	30% (28.7, 31.4)	31% (29.3, 32.5)
Senate 2016	30% (28.7, 32.0)	22% (20.8, 23.2)	25% (23.8, 27.0)

The Proposed Map's effort to maintain CD-5 in North Florida produced a less compact district. Proposed CD-5 splits two voting tabulation districts close to where Leon County, Jefferson County, and Georgia meet. In this geographic location the district is only 5.13 miles from top to bottom. The two voting tabulation districts (VTD 4159 & 4161) that were split to make this narrow bridge have a combined population of 4,329 residents. Only 1,429 residents are joined with Proposed CD-5 (33%) and 76% of the Black population become part of Proposed CD-2. Therefore, the extension around Tallahassee avoids a population center and by splitting a community along the state's border because the local area's collective Black population is not greater than 21%. This reduced the population to extend the district so it could cross back into Leon County and extend east of the Florida Capitol to capture a voting district where 2,510 of its 4,504 residents were Black (56%). This reach is aggressive and at its far end it chooses to exclude the Myers Park neighborhood, which was in Benchmark CD-5.

The comparison of Proposed CD-5 to all other districts in that plan shows that the district is 78% less compact than other districts in the state (Reock score). That is not an improvement from the Benchmark's deviation from the compactness of other districts in its map. The same approach to compare each map to itself and also to other district configurations with the Polsby-Popper score presents a similar story. The Proposed CD-5 is 71% less compact than the average

of all scores for congressional districts in Florida. The drop in compactness for CD-5 under the Proposed Map is counterintuitive to the slight increase in compactness seen in the adjacent southern slice of North Florida (CD-2).

The Plaintiffs' expert touted the Convex-Hull measure as a good comparison to make. Under this specification, Proposed CD-5 continues to be less compact than the prior district. This is unexpected as the adjacent district CD-2 did become more compact under the proposal. This further illustrates that traditional redistricting practices were not prioritized when creating the new composition of CD-5.

Table 8A: Compactness Comparison with Reock and Polsby-Popper Scores

	Reock		Polsby-Popper	
	District	Pct. More or Less than State's Average Score	District	Pct. More or Less than State's Average Score
Enacted CD-2	0.420	- 9%	0.482	+ 11%
Enacted CD-3	0.605	+ 30%	0.501	+ 15%
Enacted CD-4	0.410	- 12%	0.318	- 27%
Benchmark CD-2	0.281	- 36%	0.207	- 43%
Proposed CD-2	0.285	- 35%	0.256	- 19%
Benchmark CD-5	0.102	- 77%	0.097	- 73%
Proposed CD-5	0.096	- 78%	0.112	- 71%

*The average Reock score for each district in the state was 0.464 in the Enacted Map, 0.436 in the Benchmark Map, and 0.443 in the Proposed Map. The average Polsby-Popper score for each district in the state was 0.434 in the Enacted Map, 0.362 in the Benchmark Map, and 0.388 in the Proposed Map.

Table 8B: Convex-Hull

	District	Pct. More or Less Compact than State's Average Score
Enacted CD-2	0.821	+ 1%
Enacted CD-3	0.899	+ 10%
Enacted CD-4	0.755	- 5%
Benchmark CD-2	0.678	- 13%
Proposed CD-2	0.716	- 9%
Benchmark CD-5	0.707	- 6%
Proposed CD-5	0.657	-17%

*The state average Convex-Hull measure for each plan was 0.814 in the Enacted Map, 0.775 in the Benchmark Map, and 0.791 in the Proposed Map

Staying with the comparison of districts to the map they are a part of, the North Florida districts in the Enacted Map are either more compact than the average district in the state or substantially more compact than the standardized difference in the Proposed Map. Eliminating the North South divide of North Florida's narrow panhandle, provided districts that were substantially more compact than the recent Benchmark Map.

Conclusions

The congressional district map of Florida for the 2022 to 2030 elections has improved district compactness and limited when political subdivisions are split. Those are traditional redistricting practices that are present throughout the Enacted Map plan. It is also clear changes to recent district boundaries followed a set of principles and reflect the makeup of local communities.

Florida's political geography substantially changed in the prior decade. It is more common for the strongest Democratic precincts to be adjacent to other Democratic communities and Republican strongholds are adjacent to other communities that favor Republicans. The state also has three substantial race and ethnic groups of voters, who are not all cohesive in supporting the Democrats at the same level. Black voters in Florida clearly prefer Democratic candidates of any race. The support Democratic candidates receive from Hispanic voters in Florida vary district-by-district and election-by-election.

District boundaries across the map had to change to maintain zero deviation. Some districts were entirely surrounded by districts who had populations greater than the ideal population, like CD-7 and CD-10. However, other districts had to add new geographic areas in order to increase the district population to the ideal number (CD-5, CD-13).

The racially polarized voting analysis I conducted shows Republican gains in the U.S. House in Florida this past election all occurred under different political circumstances. For instance, a non-Hispanic white male Republican won in CD-7 by capturing a similar vote share in Seminole County that the prior incumbent received as an Asian American female. A Latino and Black male Democrat was elected to represent CD-10, which has seen non-Hispanic white voters increasingly cross-over to vote for Democratic candidates and Hispanic support for Democratic candidates decline. There is more to the story of how these candidates won in different ways than a narrative that redistricting structured a partisan bias.

In CD-13, a district the new Census showed to be underpopulated, was required to add population. The racially polarized voting analysis showed two important points. First, Hispanic voters in the Tampa-St. Petersburg area are not cohesive in support of a Democrat. Second, adding new voters did not alter estimates of party preference among race and ethnicity subgroups. The Hispanic and Black estimates of candidate preference were statistically the same and non-Hispanic white voters were not substantially different in their voting preferences than the district had been. With the former incumbent on the ballot as a candidate for Governor, CD-13 voted to elect a Hispanic Republican female. This is a key example for why Hispanic voters can be swing voters in a compact region.

The Proposed Map's attempt to reconstruct CD-5 to favor a preferred candidate of minority voters violates traditional principles of redistricting. It also overstates the political cohesion of Black and Hispanic voters in North Florida by estimating their political preferences as one aggregate and packing communities with higher concentrations of Black voters into the district. The new proposal for CD-5 leans on the existence of the prior district configuration. However, the Proposed CD-5 did not significantly improve the compactness of the district. The district also

perpetuates other violations of fair redistricting. At it's narrowest point, the Proposed CD-5 is 5 miles wide just below the Georgia border to traverse a sparsely populated area. Additionally, to ensure it was a sparsely populated area two voting tabulation districts in northwest Leon County were split in order to assign 67% of the population to CD-2. This selection was not done to keep portions of Leon County in CD-2. After the district moves west to Gadsden County the district gains a hand to reach back to Leon County to include Census blocks east of the state capitol. The Benchmark Map did this as well, but with an effort to keep larger sections of Leon County together.

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Curriculum Vitae

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University of Oxford - Visiting Doctoral Student in the Department of Politics 2013
Johns Hopkins University - M.A. in Government 2008
University of Florida - B.A. in Political Science, *magna cum laude* 2006

ACADEMIC POSITIONS

University of Texas at Tyler
Associate Professor & Honors Faculty 2020 - present
Assistant Professor 2015 - 2020
Reinhardt University - Adjunct Professor of Public Administration May 2014 & May 2017
Bates College - Visiting Assistant Professor 2014 - 2015

PROFESSIONAL EXPERIENCE

APSA Congressional Fellow, *Office of the President Pro Tempore*, United States Senate. 2015 - 2016
Legislative Assistant, two former U.S. Representatives. Washington, D.C. 2007 - 2009

BOOKS

Owens, Mark, Ken Wink, and Kenneth Bryant, Jr. 2022. *Battle for the Heart of Texas: Political Change in the Electorate.* Norman, OK: University of Oklahoma Press.

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BOOK CHAPTERS

2 McWhorter, Rochell, Mark Owens, Jessie Rueter, Joanna Neel, and Gina Doepker. 2020. "Examining Adult Learning of 'Giving Back' Initiatives." In *Handbook of Research on Adult Learning in Higher Education.* Hershey, PA: IGI Publishers. With Rochell McWhorter, Jessie Rueter, Joanna Neel, and Gina Doepker.

Reprinted in 2021 by Information Resources Management Association (Ed.), in *Research Anthology on Adult Education and the Development of Lifelong Learners* (pp. 1039-1066). IGI Global.

1 Carson, Jamie L. and Mark Owens. 2015. "Lawmaking." In Robert A. Scott and Stephen M. Kosslyn, eds. *Emerging Trends in the Social and Behavioral Sciences.* New York: Wiley.

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Owens, Mark. 2023. "Johnson, Marc. Tuesday Night Massacre: Four Senate Elections and the Radicalization of the Republican Party." *Great Plains Research.* **Forthcoming**.

Owens, Mark. 2021. "Lewallen, Johnathan. Committees and the Decline of Lawmaking in Congress." *Congress & the Presidency* 48(3): 404-406.

AWARDS

Burns "Bud" Roper Fellow. American Association of Public Opinion Researchers.	2021
Prestige Impact Award, Dean of the College of Arts & Sciences at UT Tyler.	2019
Outstanding Faculty Mentor Award, UT Tyler Office of the Provost.	2019
Teaching and Learning Award, UT Tyler Center for Excellence in Teaching and Learning.	2018

Community Engaged Learning Award, Harward Center at Bates College. 2015
Outstanding Teaching Assistant Award, University of Georgia Provost. 2013
Charles S. Bullock, III Scholar, UGA School of Public and International Affairs. 2009

GRANT & CONTRACT SUPPORT

10. Texas Vaccine Hesitancy Survey, (Co-Investigator & PI for Subaward). 2022. $2.6 million
PI's: Paul McGaha (UT Tyler HSC) & Paula Cuccaro (UT SPH-Houston)
PI of $1.3 million subaward: Mark Owens (UT Tyler).
Scope of Survey: Statewide survey of hard to reach respondents (Apr. to Nov.).
Funded by: Texas State Department of Health and Human Service.

9. El Paso County Social Survey, (Investigator). 2022. $46,200
PI: Gregory Schober, UTEP
Scope of Survey: Countywide survey, oversampling low-income households (May-July)
Funded by: University of Texas at El Paso (UTEP).

8. Southern Cities Survey, (Co-PI). 2020. $12,000
PI's: Emily Goldmann (NYU) & Mark Owens
Scope of Survey: Sample of 5 major Southern Metropolitan areas in May.
Funded by: UT Tyler & New York University School of Global Health.

7. Small Grant, Center for Effective Lawmaking (Co-PI). 2020. $2,300
PI's: Mark Owens & Nicholas Howard (Auburn-Montgomery)
Scope of Work: Content Analysis of all Senate committee reports, 1985-2020.
Funded by: UVA & Vanderbilt.

6. Texas Mental Health Survey, (Co-PI). 2020 $45,000
PI's: Renee Johnson (JHU) & Mark Owens
Scope of Survey: Three wave statewide panel (April, May, & June)
Funded by: UT Tyler & Johns Hopkins Bloomberg School of Public Health

5. East Texas Survey on Education & Property Tax Reform, (Co-PI). 2019 $10,000
PI's: Kyle Gullings (UT Tyler) & Mark Owens
Scope of Work: Regional sample to compare East Texas to DFW and Houston.
Funded by: UT Tyler

4. Faculty Undergraduate Research Grant, (PI) Studying Vote Centers in Texas. 2018. $3,000
Scope of Work: Mentor undergraduates to gather data and submit FOIA requests.
Funded by: UT Tyler Office of Research and Scholarship.

3. Congressional Research Grant, (PI) Bicameralism's Effect on Appropriations. 2015. $3,133
Scope of Work: Archival visits to Concord, Tempe, and Washington, D.C.
Funded by: The Dirksen Congressional Center.

2. Faculty Development Grant, (PI) Majority Party Power in a Bicameral Congress. 2015. $2,575
Scope of Work: Mentor undergraduate researchers to analyze archived documents.
Funded by: Office of the Dean of Faculty at Bates College.

1. Richard Baker Award, (PI) Majority Party Power in a Bicameral Congress. 2011. $1,000
Scope of Work: Archival visits to Austin, TX and Washington, D.C..
Funded by: Association of Centers for the Study of Congress.

COMMENTARY

Owens, Mark. "Why our poll got it wrong on Biden but right on so much more." *Dallas Morning News.* Sunday November 15, 2020. Page, 5P.

Howard, Nicholas O. and Mark Owens. "Are Amendment Strategies Learned Through Experience or Contingent on the Institution?" *LegBranch.* May 27, 2019.

Bryant, Jr. Kenneth, Ken Wink, and Mark Owens. "Conflicting Attitudes of Texans on Wall and Border Policies." *Austin American-Statesman.* March 11, 2019.

Owens, Mark. "Are Courtesy Meetings Nuked?" *LegBranch.* July 10, 2018.

Owens, Mark. "East Texans support Trump, but at lower levels than 2012." *Tribtalk: Texas Tribune.* November 8, 2016.

INVITED TALKS

League of Women Voters, Tyler/Smith County	"Policies in Texas's Legislative Session"	2023
Dallas Democratic Forum	"Battle for the Heart of Texas"	2022
Southern Methodist University, Tower Center	"Battle for the Heart of Texas"	2022
East Texas Heritage Museum Association	"Polls in Today's Elections"	2022
League of Women Voters, Houston	"Battle for the Heart of Texas"	2022
Texas A&M San Antonio	"Public Attitudes on Equity and Inclusivity"	2022
Delta Sigma Theta Sorority, Tyler Alumnae	"Social Action & Election Education"	2022
League of Women Voters, Tyler/Smith County	"Your options under TX's new Election Law"	2022
Texas Associated Press Managing Editors	"Texas Politics Panel"	2021
League of Women Voters, Oklahoma	"All about Redistricting."	2021
League of Women Voters, Tyler/Smith County	"Essential Conversation on Voting in Texas"	2021
League of Women Voters, Oklahoma	"Representation & Redistricting"	2021
Kilgore College	"Why We Poll Texans"	2020
Smith County Republican Women Club	"Understanding the 2020 Election Polls"	2020
League of Women Voters, Tyler/Smith County	"Processes of the Electoral College"	2020
Kilgore College	"What Primary Voters in Texas Care About"	2019
League of Women Voters, Tyler/Smith County	"Census & Redistricting Forum"	2019
Tyler Area Chamber of Commerce	"Public Input on Transportation"	2019
League of Women Voters, Tyler/Smith County	"Representation & Redistricting"	2018
Bates College, Martin Luther King, Jr Day	"Legacy of the Voting Rights Act of 1965"	2015
Rothemere American Institute, Oxford, UK	"Effect of Bicameralism on Policy"	2013

CONFERENCE PRESENTATIONS

Hofstra University Presidential Conference on Barack Obama's Presidency	2023
The Citadel Symposium on Southern Politics	2014 - 2022
Congress & History Conference	2012, 2016, 2018
Election Science, Reform, and Administration Conference	2020
American Association of Public Opinion Researchers Meeting	2020, 2021, 2023
American Political Science Association Meeting	2011 - 2016, 2020
Midwest Political Science Association Meeting	2011 - 2018, 2023
Southern Political Science Association Meeting	2011 - 2014, 2017 - 2023
Southwest Social Science Association Annual Meeting	2017, 2021

PROFESSIONAL SERVICE

Book Review Editor. *Public Opinion Quarterly.*	2023 - 2024
Co-Chair. Election Sciences Conference within a Conference at SPSA, San Antonio, TX.	2022
Speaker: AAPOR Send-a-Speaker Program.	2020 - 2021
Field of Study Advisory Committee. *Texas Higher Education Coordinating Board.*	2018 - 2021
Co-Editor. *PEP Report* for the APSA Presidency and Executive Politics Section.	2018 - 2019
Grant Reviewer. Hurricane Resilience Research Institute (HuRRI), University of Houston.	2018
Grant Reviewer. Administration on Children, Youth, and Families, US Dept. of HHS.	2007

EXTERNAL SERVICE

Expert Witness for neither party, *Palmer et al. v. Hobbs*, racially polarized voting analysis.	2022
Expert Witness for Florida's Secretary of State, *BVM v. Lee*, racially polarized voting analysis.	2022
Map Consultant for People not Politicians OK, Independent U.S. House and state district plans.	2021

TEACHING EXPERIENCE

Graduate Course	Institution	Recent Evaluation	Years Taught
Scope & Methods	UT Tyler	4.6	2017 - 2022
Seminar on American Politics	UT Tyler	4.4	2015 - 2022
Budgeting & Public Finance	UT Tyler; Reinhardt	5	2014 - 2017
Program Evaluation	UT Tyler	4.7	2018
Advanced Quantitative Research	UT Tyler	3.8	2018
Undergraduate Course			
Campaigns & Elections	UT Tyler; Bates; UGA	4.6	2013 - 2022
Congress & Legislation	UT Tyler; UGA	4.3	2013 - 2021
Research Methods	UT Tyler	4.4	2016 - 2023
Southern Politics	UT Tyler	4.6	2018 - 2023
U.S. Presidency	UT Tyler; Bates	3.9	2014 - 2017
Intro. to Texas Government (Honors)	UT Tyler	4.1	2020 - 2023
Intro. to American Government	UT Tyler; Bates; UGA	3.8	2013 - 2019

CURRENT COMMUNITY INVOLVEMENT

KVUT 99.7FM UT Tyler Radio (NPR), Advisory Board Member. 2021 - 2023
Secretary (2022-23)

League of Women Voters - Tyler/Smith County, TX, Nominating Committee. 2020 - 2022
Chair of Nominating Committee (2021-22)