

EXHIBIT D

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

ALPHA PHI ALPHA FRATERNITY
INC., et al.,

Plaintiffs,

vs.

BRAD RAFFENSPERGER, in his
official capacity as Secretary of State of
Georgia.

Defendant.

Civ. No. 21-5337

DECLARATION OF WILLIAM S. COOPER

WILLIAM S. COOPER, acting in accordance with 28 U.S.C. § 1746,
Federal Rule of Civil Procedure 26(a)(2)(B), and Federal Rules of Evidence 702
and 703, does hereby declare and say:

I. INTRODUCTION

1. My name is William S. Cooper. I have a B.A. in Economics from Davidson College. As a private consultant, I serve as a demographic and redistricting expert for the Plaintiffs.

2. I have testified at trial as an expert witness on redistricting and demographics in federal courts in about 50 voting rights cases since the late 1980s. Over 25 of the cases led to changes in local election district plans. Five of the cases

resulted in changes to statewide legislative boundaries: *Rural West Tennessee African-American Affairs Council, Inc. v. McWherter*, No. 92-cv-2407 (W.D. Tenn. 1995); *Old Person v. Brown*, No. 96-cv-0004 (D. Mont. 2002); *Bone Shirt v. Hazeltine*, No. 01-cv-3032 (D.S.D. 2004); *Alabama Legislative Black Caucus v. Alabama*, No. 12-cv-691 (M.D. Ala. 2017), and *Thomas v. Reeves* (S.D. Miss. 2019). In *Bone Shirt v. Hazeltine*, the court adopted the remedial plan I developed.

3. I served as the *Gingles* 1 expert for two post-2010 local-level Section 2 cases in Georgia, *NAACP v. Fayette County* and *NAACP v. Emanuel County*. In both cases, the parties settled on redistricting plans that I developed (with input from the respective defendants). In the latter part of the decade, I served as the *Gingles* 1 expert in three additional Section 2 cases in Georgia, which were all voluntarily dismissed after the 2018 elections: *Georgia NAACP v. Gwinnett County*, No. 1:16-cv-02852-AT; *Thompson v. Kemp*, No. 1:17-cv-01427 (N.D. Ga. 2018); and *Dwight v. Kemp*, No. 1:18-cv-2869 (N.D. Ga. 2018).

4. In 2022, I have testified as an expert in redistricting and demographics in six cases challenging district boundaries under Section 2 of the Voting Rights Act: *Caster v. Merrill*, No. 21-1356-AMM (N.D. Ala.), *Pendergrass v. Raffensperger*, No. 21-05337-SCJ (N.D. Ga.), *Alpha Phi Alpha Fraternity v. Raffensperger*, No. 21-05339-SCJ (N.D. Ga.), *NAACP v. Baltimore County*, No. 21-cv-03232-LKG (Md.), *Christian Ministerial Alliance v. Hutchinson* No. 4:19-cv-402-JM (E.D.

Ark.), and *Robinson v Ardoin*, No. 3:22-cv-00211-SDD-SDJ (M.D. La.). I also testified at trial this year as an expert on demographics in *NAACP v. Lee*, No. 4:21-cv-187-MW/MAF (N.D. Fla.), a case involving recent changes to Florida election law.

5. Since the release of the 2020 Census, three county commission-level plans I developed as a private consultant have been adopted by local governments in San Juan County, Utah, Bolivar County, Mississippi, and Washington County, Mississippi. In addition, a school board plan I developed was adopted by the Jefferson County, Alabama Board of Education subsequent to my expert work in the long-running case of *Stout v. Jefferson County Board of Education*, No. 2:65-cv-00396-MHH (N.D. Ala.).

6. My redistricting experience is further documented in my curriculum vitae, which is attached as **Exhibit A**.

A. Purpose of Declaration

7. The attorneys for the Plaintiffs in this case asked me to determine whether the African-American¹ population in Georgia is “sufficiently large and

¹ In this report, “African-American” refers to persons who are single-race Black or Any Part Black (i.e. persons of two or more races and some part Black), including Hispanic Black. In some instances (e.g. for historical comparisons) numerical or percentage references identify single-race Black as “SR Black” and Any Part Black as “AP Black.” Unless noted otherwise, “Black” means AP Black. It is my understanding that following the U.S. Supreme Court decision

geographically compact” to allow for the creation, consistent with traditional redistricting principles, of additional majority-Black Senate and House districts beyond those created in the legislative plans that were signed into law by Governor Kemp on December 30, 2021—in other words, districts that meet the first *Gingles* precondition (“*Gingles* 1”).²

8. For purposes of the *Gingles* 1 analysis in this report, and unless otherwise noted, I define majority-Black districts as those that are majority-Black voting age (“BVAP”). I also report whether districts are majority-Black citizen voting age (“BCVAP”).³

in *Georgia v. Ashcroft*, 539 U.S. 461 (2003), the “Any Part” definition is an appropriate Census classification to use in most Section 2 cases.

Throughout this report, I refer to the two legislative plans signed into law by Governor Kemp as the “2021 Senate Plan” and the “2021 House Plan,” respectively.

² See *Thornburg v. Gingles*, 478 U.S. 30, 50 (1986).

³ The CVAP levels reported herein are estimates based on block group level information published by the U.S. Census Bureau’s American Communities Survey (ACS). Unless noted otherwise, the CVAP estimates I report here count only persons who are non-Hispanic (“NH”) SR Black – and are therefore the most conservative measure of Black citizenship. In the summary population exhibits that I have prepared for each plan, I also report the NH DOJ Black CVAP metric. The NH DOJ Black CVAP category includes voting age citizens who are either NH SR Black or NH Black and White. An “Any Part Black CVAP” category which would include Black Hispanics cannot be calculated from the 5-Year ACS Census Bureau Special Tabulation.

The most current ACS data available is from the 2016-2020 ACS Special Tabulation, with a survey midpoint of July, 1 2018. <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>. The 2016-2020 estimates reflect Census 2020 population distribution. The 2017-2021 Special Tabulation will be released by the Census Bureau in early 2023, which could require updates to the number of majority-BCVAP districts by plan.

9. The two illustrative plans that I have prepared (one for the State House and one for the State Senate) demonstrate that Georgia's Black population is sufficiently numerous and geographically compact to allow for the creation of at least three additional majority-Black Senate districts and at least five additional majority-Black House districts.

10. The illustrative plans comply with traditional redistricting principles, including population equality, compactness, contiguity, respect for communities of interest, and the non-dilution of minority voting strength.

11. The illustrative plans are drawn to follow, to the extent possible, county and VTD⁴ boundaries. Where counties are split to comply with one-person one-vote requirements or to avoid pairing incumbents, I have generally used whole 2020 Census VTDs as sub-county components. Where VTDs are split, I have followed census block boundaries that are aligned with roads, natural features, census block groups, municipal boundaries, and/or current county commission districts.

12. **Exhibit B** describes the sources and methodology I have employed in the preparation of this report and the illustrative plans. Briefly, I used the Maptitude software program as well as data and shapefiles from the U.S. Census Bureau and the Georgia Legislative and Congressional Reapportionment Office, among other

⁴ "VTD" is a Census Bureau term meaning "voting tabulation district." VTDs generally correspond to precincts. Statewide, there are 2,698 2020 VTDs.

sources. I also used official incumbent address information supplied to Plaintiffs' attorneys by Defendants in January 2022, as well as another potential database of incumbent address information following the November 2022 General Election using the 2021 Plans, which I understand is largely based on the address information contained in the candidate qualifying materials of successful State House and State Senate candidates.

B. Summary of Expert Conclusions

13. Based on my *Gingles* 1 analysis, I conclude the following:

State Senate

- The 2021 Senate Plan contains 14 majority-Black districts that are BVAP majority (15 are BCVAP majority).
- As shown in the Plaintiffs' Illustrative Senate Plan, a statewide Senate plan can be drawn with 18 majority-Black districts, including two additional majority-Black districts in south Metro Atlanta and an additional majority-Black district anchored in the eastern portion of Georgia's Black Belt (encompassing part of Augusta-Richmond County and extending west to Twiggs County).⁵

⁵ The Illustrative Senate Plan described *infra* also creates an additional majority- Black Senate district in the counties of Cobb and Fulton (District 33), for a total of 18 statewide.

- The Black population in south Metro Atlanta is sufficiently numerous and geographically compact to allow for the creation of at least two additional compact majority-Black Senate districts, while adhering to traditional redistricting principles.
- The Black population in and around Georgia's eastern Black Belt counties is sufficiently numerous and geographically compact to form an additional majority-Black Senate district, while adhering to traditional redistricting principles.

State House

- The 2021 House Plan contains 49 majority-Black districts (47 of which are also majority BCVAP).
- As shown in the Plaintiffs' Illustrative House Plan, a statewide House Plan can be drawn with at least 54 majority-Black districts (53 that are both BVAP and BCVAP majority), including five additional majority-Black districts. Two of the additional majority Black districts are anchored in south Metro Atlanta, two are in Georgia's Black Belt (one in the eastern end of the Black Belt and one in the western end, in Southwest Georgia), and one is in metropolitan Macon.

- The Black population in south Metro Atlanta is sufficiently numerous and geographically compact to allow for the creation of at least two additional majority-Black House districts in Metro Atlanta, while adhering to traditional redistricting principles.
- The Black population in and around the eastern Black Belt counties is sufficiently numerous and geographically compact to form an additional majority-Black House district, while adhering to traditional redistricting principles.
- The Black population in and around the western Black Belt counties is sufficiently numerous and geographically compact to form an additional majority-Black House district, while adhering to traditional redistricting principles.
- The Black population in metropolitan Macon is sufficiently numerous and geographically compact to form an additional majority-Black district, while adhering to traditional redistricting principles.

C. Gingles 1 Analysis – Focus Areas

14. According to the data collected in the 2020 Census, and as discussed in further detail below, Georgia's Black population has grown significantly since 2010. The State's Black population is up by 484,848 persons, the equivalent of 2.5

100% Black State Senate districts or eight 100% Black State House districts. By contrast, the State’s non-Hispanic (“NH”) White population actually declined during that same period. Yet despite the significant growth in Georgia’s Black population since 2010, almost no additional majority-Black districts are created in Georgia’s 2021 Senate and House Plans.⁶

15. The 2021 Senate Plan merely maintains the status quo, with 14 majority-Black districts, the same number as in the previous plan which was enacted in 2012 and first used in 2014 during mid-decade redistricting (the “2014 Benchmark Senate Plan”).⁷

16. The 2021 House Plan has two more majority-Black districts than the previous plan, which was enacted in 2015 (the “2015 Benchmark House Plan”) (and which in turn incorporated a discrete set of changes to the plan enacted in

⁶ The ideal population size for a Senate district is 191,284 and 59,511 for a House district. Those numbers are derived from the State’s total population and the number of seats in each body.

⁷ I am counting Senate District 41 (DeKalb County) as majority-Black under the 2014 Benchmark Senate Plan. That district, which was 51.4% BVAP when drawn under the 2010 Census, slipped to 49.76% BVAP according to the 2020 Census. It remained a BCVAP-majority district at 57.22% BCVAP, according to the 2015-19 ACS.

Notably, Senate District 2 (Chatham County) in the 2014 Benchmark Senate Plan was similarly drawn at 50.94% BVAP based on 2010 Census data, but had fallen to 47.09% BVAP under the 2020 Census. District 2 is no longer majority-BVAP (46.86% in the 2021 Senate Plan and 46.33% under the Illustrative Senate Plan *infra*) but remains majority-BCVAP in both plans. I am not counting Senate District 2 as majority-Black under the 2014 Benchmark Senate Plan, though I note that doing so would result in the 2021 Senate Plan having one *fewer* majority-Black Senate district than its predecessor plan (14 under the 2021 Senate Plan versus 15 under the 2014 Benchmark Senate Plan).

2012).⁸ That small increase is nowhere near commensurate with the significant growth of Georgia’s Black population during that period.

17. Under the 2021 Senate Plan, 10 of the 14 majority-Black districts are in Metro Atlanta. Under the 2021 House Plan, 33 of the 49 majority-Black districts are in Metro Atlanta.⁹

18. To determine where additional majority-Black districts could be drawn, I focused on areas with substantial Black populations, in particular:

(1) Metro Atlanta counties (as defined by the Atlanta-Sandy Springs-Alpharetta Metropolitan Statistical Area (“MSA”) boundaries) shown in the Census Bureau’s map in **Exhibit C**;

(2) Georgia’s Black Belt, as illustrated by the Georgia Budget and Policy

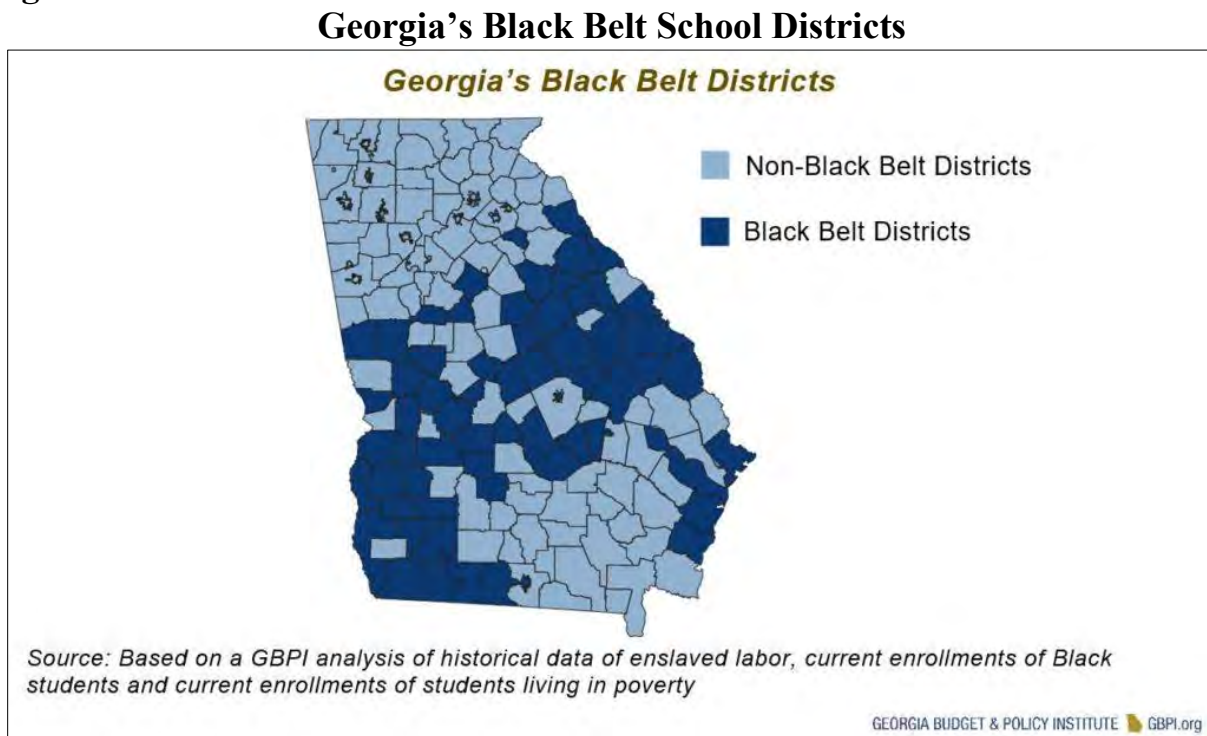
⁸ The Senate and House plans initially enacted after the 2010 Census are included in **Exhibits I-2** and **V-2**, *infra*. These historical plans are not substantially different than the Benchmark plans with respect to the number of majority-Black districts. The prior Senate and House maps, enacted in 2006, are also included in **Exhibits I-3** and **V-3**, respectively.

⁹ In this report, Metro Atlanta refers to the 29-county Atlanta Metropolitan Statistical Area (“MSA”) defined by the U.S. Office of Management and Budget. It includes the Counties of Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

MSA is an abbreviation for “metropolitan statistical area.” Metropolitan statistical areas are defined by the U.S. Office of Management and Budget and reported in historical and current census data produced by the Census Bureau. MSAs “consist of the county or counties (or equivalent entities) associated with at least one urbanized area of at least 50,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties.” U.S. Census Bureau, “About,” <https://www.census.gov/programs-surveys/metro-micro/about.html>.

Institute (“GBPI”) map in **Figure 1**.¹⁰ **Exhibit D** is an excerpt from the GBPI report (Appendix A) identifying the Black Belt counties and school districts depicted in **Figure 1**.

Figure 1



19. More broadly, and as the GBPI report explains, the term “Black Belt” refers to a swath of the American South that historically had large numbers of enslaved Black persons, and that today continues to have substantial Black populations. In Georgia, the area comprising the Black Belt extends roughly

¹⁰ For a current and historical analysis of Georgia’s Black Belt, see Stephen Owens, *Education in Georgia’s Black Belt: Policy Solutions to Help Overcome a History of Exclusion* (GBPI October 10, 2019), <https://gbpi.org/education-in-georgias-black-belt>.

southwest from the area around Augusta through Macon and Middle Georgia and on to the southwest corner of the State.

20. Upon review, I narrowed my focus to four regions within those larger areas (as illustrated by the maps in **Exhibit E** and **Figure 4, *infra***):

21. **(Region A) South Metro Atlanta:** suburban /exurban counties in a significantly Black, racially diverse, and geographically compact region that has emerged over the past quarter of a century—specifically, the counties of Fayette, Spalding, Henry, Rockdale, and Newton.

22. The Georgia Governor’s Office of Planning and Budget projects that this 5-county region will have 725,000 residents by the time of the 2030 Census – up by about 92,000 persons over the Census 2020 enumeration, of whom 61% will be non-White. African-Americans are projected to account for about 60% of the non-White population increase.¹¹

23. Under the 2021 Senate Plan, parts of three majority-Black districts are in the south Metro counties—Senate Districts 10, 34, and 43.

24. Under the 2021 House Plan, parts of seven majority-Black House districts are in these five south Metro counties.

¹¹ Georgia Governor’s Office of Planning and Budget, “Population Projections,” <https://opb.georgia.gov/census-data/population-projections>.

25. **(Region B) Eastern Black Belt:** urban Black Belt Richmond County (Augusta) plus a group of rural Black Belt counties in a geographically compact area. Several of the rural counties are home to long-standing Black communities that have not been in a majority-Black Senate district since the passage of the 1965 Voting Rights Act.

26. All of the Region B counties are part of the Central Savannah River Area Regional Commission, as shown in **Exhibit F** on the regional commission map prepared by the Georgia Department of Community Affairs (“GDCA”). Georgia’s Regional Commissions are “public agencies created and established by the Georgia Planning Act (O.C.G.A. 50-8-32) in order to assist local governments on a regional basis and to develop, promote and assist in establishing coordinated and comprehensive planning in the state.”¹²

27. Region B encompasses the following Central Savannah River Area Regional Commission counties: (counter clockwise from east to west) Jenkins, Burke, Richmond, Jefferson, McDuffie, Wilkes, Taliaferro, Glascock, Warren, Washington, and Hancock. Ten of these 11 contiguous counties—excluding Glascock (pop. 2,884)—are identified as part of Georgia’s Black Belt by GBPI.

¹² See Georgia Department of Community Affairs, “Regional Commissions,” <https://www.dca.ga.gov/local-government-assistance/planning/regional-planning/regional-commissions>; New Georgia Encyclopedia, “Regional Commissions of Georgia,” <https://www.georgiaencyclopedia.org/articles/government-politics/regional-commissions-of-georgia/>.

Moreover, additional adjacent counties, such as Baldwin County, lie outside the Central Savannah River Area Regional Commission area but are also identified as part of the Black Belt by GBPI and have substantial Black populations.

28. The 2021 Senate Plan includes one majority-Black district in Region B—Senate District 22 (56.5% BVAP)—in Augusta-Richmond County, and a small part of another majority Black district—Senate District 26 (56.99% BVAP)—anchored in Macon-Bibb County.

29. The 2021 House Plan contains five majority-Black districts in the Region B area.

30. **(Region C) Western Black Belt:** urban Black Belt Dougherty County (Albany) plus a group of southwest Georgia rural Black Belt counties in a geographically compact area, implicitly identified in the area encompassed by majority-Black Senate District 12 (57.97% BVAP) in the 2021 Senate Plan. Region C encompasses part of the Southwest Georgia and Valley River Area Regional Commission areas depicted on the GDCA map in **Exhibit F**.

31. The 2021 House Plan contains just two majority-Black House districts in Region C, even though there is obviously sufficient Black population to create three districts in an area generally circumscribed by majority-Black Senate District

12 in the 2021 Senate Plan. (This is obvious because Senate Districts are just over three times the size of House Districts.)

32. Senate District 12 encompasses 13 counties: (counter clockwise from north to south on the GDCA map) Sumter, Webster, Stewart, Quitman, Randolph, Terrell, Clay, Calhoun, Dougherty, Early, Miller, Baker, and Mitchell. Twelve of the 13 counties—excluding Miller (pop. 6,000)—are identified by GBPI as Black Belt counties.¹³ Moreover, additional adjacent counties, such as Thomas County, lie outside of Senate District 12 in the 2021 Senate Plan but are also identified as part of the Black Belt by GBPI and have substantial Black populations.

33. **(Region D): Metropolitan Macon:** a seven-county region in Middle Georgia defined by the combined MSAs of Macon-Bibb and Warner Robins. Three of the Macon area counties are identified as part of Georgia's Black Belt by

¹³ Plaintiffs' Illustrative Senate Plan also contains a majority-Black Senate District in the same general area of southwest Georgia, Illustrative Senate District 12 (57.97% BVAP).

GBPI—Macon-Bibb, Peach, and Twiggs, encompassing about 59% of the Black population (177,269) in the seven-county region.¹⁴

34. As shown in the map in **Exhibit F**, these seven MSA counties form the core of the Middle Georgia Regional Commission.

35. As is the case with Region C, the 2021 House Plan contains just two majority-Black House districts in Region D, even though there is obviously sufficient Black population to create three House districts in an area generally circumscribed by the Macon-Bibb Warner Robins portion of majority-Black Senate District 26 in the 2021 Senate Plan.¹⁵

D. Organization of Declaration

36. The remainder of this report is organized as follows: **Section II** reviews state and regional demographics since 1990. **Section III** reviews the benchmark 2014 Senate Plan and the 2021 Senate Plan. **Section IV** presents the Illustrative Senate Plan that I have prepared, containing 18 majority-Black districts. **Section V** reviews the benchmark 2015 House Plan and the enacted 2021 House Plan. **Section**

¹⁴ The Macon-Bibb MSA includes the Counties of Twiggs, Macon-Bibb, Jones, Monroe, and Crawford. The adjacent Warner Robins MSA encompasses Houston and Peach Counties. As noted *supra*, MSAs are in part defined by “counties having a high degree of social and economic integration with the core as measured through commuting ties.”

¹⁵ The Illustrative Senate Plan *infra* also contains a majority-Black Senate District in the same general area of metropolitan Macon, Illustrative Senate District 12 (52.81% BVAP), in the counties of Macon-Bibb and Houston.

VI presents the Illustrative House Plan that I have prepared, containing 54 majority-Black districts.

37. An **Appendix** at the end of my report contains maps and population summaries overlaying the challenged districts in the 2021 House and Senate Plans onto historical plans that were in effect from the late 1990s to 2021. I prepared the maps and population summaries in the Appendix at the request of the attorneys for the Plaintiffs. The maps and accompanying population data show how the population living in the area of the challenged districts has been divided and distributed into historical districts under legislative plans from the 1990s to the present day.

II. DEMOGRAPHIC PROFILE – STATEWIDE AND REGIONAL

38. This section provides current and historical population summaries for Georgia, Metro Atlanta, and for the four distinct areas where additional majority-Black legislative districts can be created—generally defined by **(Region A)** the 5-county south Metro Atlanta area, **(Region B)** the 11-county area in the eastern Black Belt within the Augusta/Central Savannah River Regional Commission area, **(Region C)** the 13-county western Black Belt around Albany and Southwest Georgia, and **(Region D)** the 7-county combined Macon-Bibb Warner Robins MSAs within the larger geographic area defined by the Middle Georgia Regional Commission.

A. 2010 to 2020: A Decade of Minority Population Growth in Georgia

39. According to the 2020 Census, Georgia has a total population of 10,711,908—up by 1.02 million since 2010. Georgia’s population growth since 2010 can be attributed entirely to gains in the overall minority population.

40. Between 2010 and 2020, nearly half (47.26%) of the State’s population gain is attributed to Black population growth.

41. **Figure 2** reveals that Georgia’s Black population, as a share of the overall statewide population, increased between 2010 and 2020 from **31.53%** Black in 2010 to **33.03%** in 2020. Over the 2010 to 2020 decade, the Black population in Georgia increased by 484,048 persons—an increase of nearly 16% from the 2010 baseline. By contrast, between 2010 and 2020, the NH White population fell by - 51,764 persons.

Figure 2

**Georgia – 2010 Census to 2020 Census
Population by Race and Ethnicity**

	2010 Number	Percent	2020 Number	Percent	2010 - 2020 Change	% 2010 - 2020 Change
Total Population	9,687,653	100.0%	10,711,908	100.00%	1,024,255	9.56%
NH White*	5,413,920	55.88%	5,362,156	50.06%	-51,764	-0.48%
Total Minority Pop.	4,273,733	44.12%	5,349,752	49.94%	1,076,019	10.05%
Latino	853,689	8.81%	1,123,457	10.49%	269,768	2.52%
NH Black*	2,910,800	30.05%	3,278,119	30.60%	367,319	3.43%
NH Asian*	311,692	3.22%	475,680	4.44%	163,988	1.53%
NH Hawaiian and PI*	5,152	0.05%	6,101	0.06%	949	0.01%
NH American Indian and Alaska Native*	21,279	0.22%	20,375	0.19%	-904	-0.01%
NH Other*	19,141	0.20%	55,887	0.52%	36,746	0.34%
NH Two or More Races	151,980	1.57%	390,133	3.65%	238,153	2.22%
SR Black (Single-race Black)	2,950,435	30.46%	3,320,513	31.00%	370,078	3.45%
AP Black (Any Part Black)	3,054,098	31.53%	3,538,146	33.03%	484,048	4.52%
NH Any Part Black	2,997,627	30.94%	3,455,484	32.26%	457,857	4.27%

* Single-race, non-Hispanic.

42. Non-Hispanic Whites are a razor-thin majority of the 2020 population (50.06%). Black Georgians account for one-third (33.03%) of the population and comprise the largest minority population, followed by Latinos (10.49%).

B. Voting Age and Citizen Voting Age Populations in Georgia

43. As shown in **Figure 3**, African Americans in Georgia constitute a slightly smaller percentage of the voting age population (VAP) than the total population. According to the 2020 Census, Georgia has a total VAP of 8,220,274 – of whom 2,607,986 (31.73%) are AP Black. The NH White VAP is 4,342,333 (52.82%).

Figure 3**Georgia – 2020 Voting Age Population & 2021 Estimated Citizen Voting Age Population by Race and Ethnicity¹⁶**

	2020 VAP	2020 VAP Percent	2021 CVAP Percent
Total	8,220,274	100.00%	100.00%
NH White 18+	4,342,333	52.82%	55.7%
Total Minority 18+	3,877,941	47.18%	44.3%
Latino 18+	742,918	9.04%	5.9%
Single-race Black (Including Black Hispanics) 18+	2,488,419	30.27%	31.4%
Any Part Black (Including Black Hispanics) 18+	2,607,986	31.73%	33.3%

44. The rightmost column in **Figure 3** reveals that both the Black and NH White population comprise a higher percentage of CVAP than the corresponding VAP, owing to higher non-citizenship rates among other minority populations.

45. According to estimates from the 2021 1-year *American Community Survey* (“ACS”), African Americans represent 33.3% of the statewide CVAP—about 1.5 percentage points higher than the 2020 AP Black VAP. The NH White CVAP is 55.7%, nearly 3 points higher than NH White VAP in the 2020 Census.

¹⁶ Sources:

PL94-171 Redistricting File (Census 2020);

Table S2901 -- CITIZEN, VOTING-AGE POPULATION BY SELECTED CHARACTERISTICS (1-year 2021 ACS)

<https://data.census.gov/cedsci/table?q=S2901&g=0400000US13&tid=ACSS1Y2021.S2901>

2021 ACS 1-Year Estimates Public Use Microdata Sample

<https://data.census.gov/mdat/#/search?ds=ACSPUMS1Y2021&vv=AGEP%2800,18%3A99%29&cv=RACBLK%281%29&rv=ucgid,CIT%281,2,3,4,%29&wt=PWGTP&g=0400000US13>

46. The Black CVAP in Georgia is poised to go up this decade. According to the 2021 1-year ACS, Black citizens of all ages represent 34.45% of all citizens.¹⁷

C. 2020 Census Spatial Distribution of Georgia's Black Population

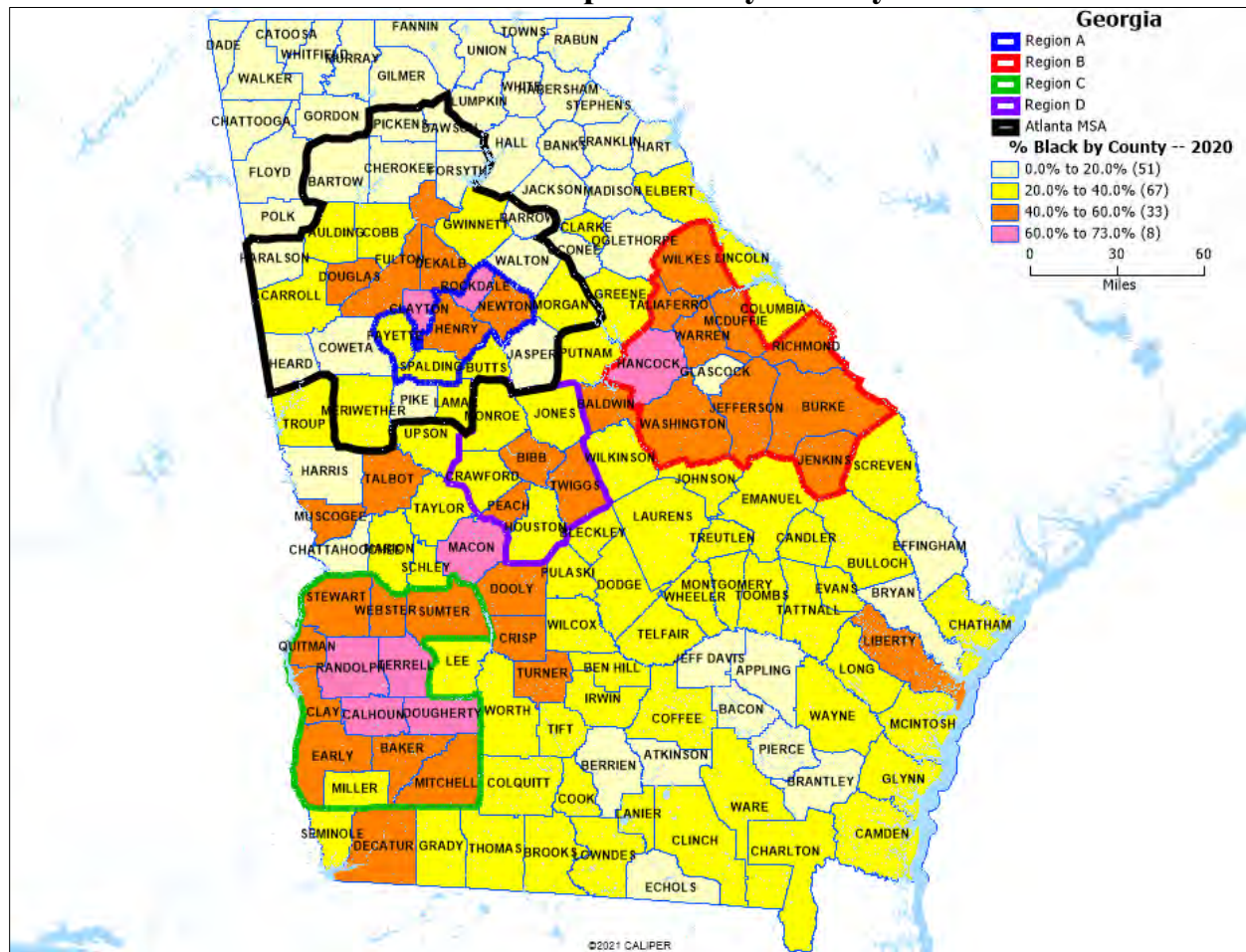
47. The map in **Figure 4** below depicts the 2020 Black population percentage for Georgia's 159 counties. 67 are in the 20% to 40% range, 33 are 40% to 60%, and 8 are between 60% and 73%. The bold black boundary identifies the Atlanta MSA.

48. Color lines on the **Figure 4** map demarcate the areas I focused on in considering prospects for additional majority-Black House districts: **Region A** (blue outline), which is south Metro Atlanta; **Region B** (red outline), a group of Black Belt counties around Augusta (Richmond County); **Region C** (green outline), a group of Black Belt counties around Albany (Dougherty County) comprising 2021 Senate District 12; and **Region D** (purple outline), the seven counties in Middle Georgia (Macon-Warner Robins MSAs). A high-resolution version of the **Figure 4** map is in **Exhibit E**.

¹⁷ Source:

2021 ACS 1-Year Estimates Public Use Microdata Sample

<https://data.census.gov/mdat/#/search?ds=ACSPUMS1Y2021&vv=AGEP&cv=RACBLK%281%29&rv=ucgid,CIT%281,2,3,4%29&wt=PWGTP&g=0400000US13>

Figure 4**2020 Census -- Black Population by County**

49. **Exhibit G-1** is a table showing 2010 and 2020 county populations by race and ethnicity, with the population change between 2010 and 2020. **Exhibit G-2** is a table 2000 and 2010 county populations by race and ethnicity, with population change between 2000 and 2010. **Exhibit G-3** is a table showing 1990 and 2000 county populations by race and ethnicity, with population change between 1990 and 2000. **Exhibit G-4** is a table showing the percentage BVAP by county between 1990 and 2020.

D. Black Population as a Component of Total Population from 1990 to 2020**(1) Georgia – Statewide**

50. As shown in **Figure 5**, Georgia's Black population has increased significantly in absolute and percentage terms since 1990, from about 27% in 1990 to 33% in 2020. Over the same time period, the percentage of the population identifying as NH White has dropped from 70% to 50%.

Figure 5

**Georgia – 1990 Census to 2020 Census
Population by Race and Ethnicity**

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	6,478,216	100.00%	8,186,453	100.00%	9,687,653	100.0%	10,711,908	100.00%
NH White	4,543,425	70.13%	5,128,661	62.65%	5,413,920	55.88%	5,362,156	50.06%
Total Minority Pop.	1,934,791	29.87%	3,057,792	37.35%	4,273,733	44.12%	5,349,752	49.94%
Latino	108,922	1.68%	435,227	5.32%	853,689	8.81%	1,123,457	10.49%
Black*	1,746,565	26.96%	2,393,425	29.24%	3,054,098	31.53%	3,538,146	33.03%

* SR Black in 1990 -- AP Black 2000-2020

(2) Metro Atlanta – 29-County MSA

51. **Figure 6** summarizes the obvious. The key driver of population growth in Georgia this century has been Metro Atlanta, led in no small measure by a large increase in the Black population in the area. (See **Exhibit C** depicting the 29-county MSA area with bold green lines).

Figure 6

29-County MSA – Metro Atlanta – 1990 to 2020
Population by Race and Ethnicity

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	3,082,308	100.00%	4,263,438	100.00%	5,286,728	100.00%	6,089,815	100.00%
NH White	2,190,859	71.08%	2,576,109	60.42%	2,684,571	50.78%	2,661,835	43.71%
Total Minority Pop.	891,449	28.92%	1,687,329	39.58%	2,602,157	49.22%	3,427,980	56.29%
Latino	58,917	1.91%	270,655	6.35%	547,894	10.36%	730,470	11.99%
Black*	779,134	25.28%	1,248,809	29.29%	1,776,888	33.61%	2,186,815	35.91%

* SR Black in 1990, AP Black 2000-2020

52. Under the 1990 Census, today’s 29 county-MSA was 25.28% Black, increasing to 35.91% in 2020. Since 2000, the Black population in Metro Atlanta has climbed by 75%, from 1,248,809 to 2,186,815 in 2020.

53. According to the 2020 Census, 56.29% of Metro Atlanta residents are non-White—a major shift compared to the previous decade. In 2010, NH Whites represented 50.78% of the population.

54. According to the 2020 Census, the 11 core counties comprising the Atlanta Regional Commission (“ARC”) area¹⁸ account for more than half (54.7%) of the statewide Black population. After expanding the Metro Atlanta area to include the 29 counties in the Atlanta MSA (including the 11 ARC counties), Metro Atlanta encompasses 61.81% of the state’s Black population.

¹⁸ Atlanta Regional Commission, “About the Atlanta Region,” <https://atlantaregional.org/atlanta-region/about-the-atlanta-region>.

(3) Region A – 5-County South Metro Atlanta

55. The table in **Figure 7** presents similar 1990 to 2020 population details for the five south Metro Atlanta counties (**Region A**), where I have determined that two additional majority-Black Senate districts and at least two additional majority-Black House districts can be drawn.

Figure 7

Region A – 5-County South Metro Atlanta – 1990 to 2020 Population by Race and Ethnicity

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	271,512	100.00%	401,133	100.00%	559,735	100.00%	633,265	100.00%
NH White	227,297	83.72%	305,779	76.23%	305,092	54.51%	262,792	41.50%
Total Minority Pop.	44,215	16.28%	95,354	23.77%	254,643	45.49%	370,473	58.50%
Latino	2,757	1.02%	11,560	2.88%	33,722	6.02%	48,287	7.63%
Black*	38,945	14.34%	74,249	18.51%	205,426	36.70%	294,914	46.57%

* SR Black in 1990, AP Black 2000-2020

56. As is readily apparent from the **Figure 7** timeline, south Metro Atlanta (comprising Fayette, Henry, Spalding, Newton, and Rockdale Counties) has undergone a dramatic demographic transformation over the past 30 years. In 1990, just 14.34% of the population in the 5-county south Metro Atlanta area was Black. By 2010, the Black population had more than doubled to reach 36.70% of the overall population, then climbing to 46.57% in 2020.

57. Between 2000 and 2020, the Black population in the 5-county south Metro Atlanta region quadrupled, from 74,249 to 294,914. The NH White population in the region actually decreased during the same period.

(4) Region B – Eastern Black Belt

58. In contrast to south Metro Atlanta, the Black Belt counties in and around the Augusta area have experienced a slight overall population decline since 1990, from 331,615 to 325,164 in 2020. However, the Black population in the region has grown. **Figure 8** reveals that a 19% increase in the Black population since 1990 has been offset by a 28.7% decline in the NH White population.

Figure 8

Region B – Eastern Black Belt Area - 1990 to 2020 Population by Race and Ethnicity

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	331,615	100.00%	321,998	100.00%	322,852	100.00	325,164	100.00%
NH White	174,163	52.52%	146,870	45.61%	133,467	41.34%	124,115	38.17%
Total Minority Pop.	157,452	47.48%	175,128	54.39%	189,385	58.66%	201,049	61.83%
Latino	4,412	1.33%	7,173	2.23%	11,179	3.46%	14,751	4.54%
Black*	149,307	45.02%	163,130	50.66%	173,238	53.66%	177,610	54.62%

* SR Black in 1990, AP Black 2000-2020

59. In 1990, the Black population in Region B represented 45.02% of the total population, climbing to 54.62% in 2020.

60. The total 2020 population in the 11-county area that I identified as Region B is sufficient to form about 1.7 Senate districts or 5.5 House districts, which is below what would be necessary to create a second majority-Black Senate

district or a sixth majority-Black House district. However, as shown in the Illustrative Senate and House Plans discussed in this report, this population deficit can be overcome, and additional majority-Black Senate and House districts can be drawn, by including contiguous, demographically similar Black Belt counties such as Baldwin, Twiggs, and Wilkinson in the additional districts.

(5) Region C – Western Black Belt

61. As shown in **Figure 9**, the western Black Belt has experienced a population decline since 2010, after holding relatively stable between 1990 and 2010. All of the population loss can be attributed to a steady decline in the NH White population over the past several decades

Figure 9

Region C – Western Black Belt Area - 1990 to 2020 Population by Race and Ethnicity

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	205,742	100.00%	214,686	100.00%	209,747	100.00%	190,819	100.00%
NH White	100,751	48.97%	90,946	42.36%	76,748	36.59%	64,553	33.83%
Total Minority Pop.	104,991	51.03%	123,740	57.64%	132,999	63.41%	126,266	66.17%
Latino	1,485	0.72%	3,588	1.67%	7,377	3.52%	7,429	3.89%
Black*	102,728	49.93%	118,786	55.33%	123,663	58.96%	115,621	60.59%

* SR Black in 1990, AP Black 2000-2020

62. In 1990, NH Whites constituted about half of the overall population. By 2020, NH Whites comprised only about one-third. Over the same time period, the Black population grew in absolute terms from 102,728 to 115,621, representing just under half the population in 1990, but 60.6% of the population by 2020.

63. There is insufficient population to create an additional majority-Black Senate district in Region C and the counties immediately adjacent to Region C in the western Black Belt. However, as shown in the Illustrative House Plan discussed in this report, an additional House district can be drawn in the area.

(6) Region D – Metropolitan Macon (Macon-Bibb Warner Robins MSAs)

64. As shown in **Figure 10**, metropolitan Macon has experienced steady population growth over the past 30 years. Almost all of the growth is attributed to a near-doubling in the non-White population from 113,653 in 1990 to 216,918 in 2020 (+90.86%).

Figure 10

**Region D – Metropolitan Macon - 1990 to 2020
Population by Race and Ethnicity**

	1990 Number	Percent	2000 Number	Percent	2010 Number	Percent	2020 Number	Percent
Total Population	317,013	100.00%	356,801	100.00%	399,888	100.00%	425,416	100.00%
NH White	203,360	64.15%	211,927	59.40%	216,968	54.26%	208,498	49.01%
Total Minority Pop.	113,653	35.85%	144,874	40.60%	182,920	45.74%	216,918	50.99%
Latino	3,123	0.99%	7,247	2.03%	16,069	4.02%	22,820	5.36%
Black*	109,958	34.69%	131,627	36.89%	157,470	39.38%	177,269	41.67%

* SR Black in 1990, AP Black 2000-2020

65. The Black population comprised about one-third of the population in the Macon area in 1990 (34.69%), climbing to 41.67% in 2020. Non-Hispanic Whites represented 64.15% of the regional population in 1990, slipping to 49.01% in 2020.

66. The seven counties in the combined Macon-Bibb Warner Robins MSAs are Macon-Bibb, Crawford, Houston, Jones, Monroe, Peach, and Twiggs. According to the GBPI analysis (**Exhibit D**), three of the seven counties in metropolitan Macon are part of the contemporary Black Belt—Macon-Bibb, Peach, and Twiggs.

67. Based on the 2020 Census, about seven House districts (7.15) can be drawn in metropolitan Macon. With a Black population of 177,269 according to the 2020 Census, there is clearly sufficient Black population in the 7-county Macon area to encompass three majority-Black House districts rather than just two as under the 2021 Enacted House Plan.

E. County and Municipal Socioeconomic Characteristics

68. For background on socioeconomic characteristics by race and ethnicity at the county, municipal, and community levels in Georgia, I have prepared charts based on the 5-year 2015-2019 ACS. That data is available online¹⁹ and has also been included in a compact-disk as **Exhibit CD**.

69. In addition, **Exhibit CD** contains charts and statistical summaries of socioeconomic characteristics from the 1-Year 2021 ACS for Georgia, the two most

¹⁹ The county level data is available at: http://www.fairdata2000.com/ACS_2015_19/Georgia/

The community-level data is available at:
http://www.fairdata2000.com/ACS_2015_19/Georgia/00_Places_2500+/

populous MSAs in the state—Atlanta and Augusta-Richmond County²⁰, and the four most populous counties of the Atlanta MSA—Cobb, Dekalb, Fulton, and Gwinnett. Statistics for other less populous counties are not available in the S0201 series.²¹

III. SENATE – HISTORICAL BENCHMARK PLANS AND 2021 PLAN

A. Majority-Black Senate Districts – 1990s Plan to 2021 Plan

70. As shown in **Figure 11**, despite the significant growth in Georgia’s Black population since 2000—climbing by 1.2 million persons—the number of majority-Black Senate districts has only inched up to 14 from 13 in the 2006 Plan, and has remained static for the last decade.

Figure 11

Number of Majority-Black Senate Districts by Plan – 2000 to 2021

²⁰ The August-Richmond MSA encompasses the Counties of Augusta-Richmond, Burke, Columbia, Lincoln, McDuffie, Wilkes, Jefferson, Warren, Jenkins and Screven.

²¹ Available via: http://www.fairdata2000.com/ACS_2021/Georgia. Source: **U.S. Census Bureau, “S0201 Selected Population Profile in the United States,”** https://data.census.gov/cedsci/table?text=s0201&t=001%3A005%3A451&g=0400000US13,13%240500000_0500000US13067,13089,13121,13135_310XX00US12060,12260&y=2021

Senate Plans²²	Statewide Majority- Black Districts	Metro Atlanta Majority- Black Districts
1990s Plan – 2000 Census	12	7
2006 Plan – 2010 Census	13	10
2014 Plan – 2020 Census	14	10
2021 Plan – 2020 Census	14	10

71. As **Figure 12** reveals, despite the major changes in the composition of the State’s population, the percentage of Black Georgians of voting age in majority-Black Senate districts has hovered around 50% since the mid-2000s, while the percentage of the NH White VAP in majority-White districts has stayed above 80% over the same timeframe—indicating that Black populations are disproportionately “cracked” or divided into majority-White districts rather than placed in majority-Black districts.²³

Figure 12

Same Race VAP in Majority-Black and Majority NH White Districts 2000 to 2021

²² As discussed *supra* n.7, I am including Senate District 41 (DeKalb County) as majority-Black under the 2014 Benchmark Senate Plan, even though it had fallen to 49.76% BVAP by the 2020 Census. Notably, when the 2014 Benchmark Senate Plan was drawn, it had 15 total BVAP-majority districts under the 2010 Census, including both Senate District 41 and Senate District 2 in Savannah. In that sense, the 2021 Senate Plan actually represents a *diminution* of one majority-Black district from the last districting effort.

²³ “Packing” describes election districts where a minority population is unnecessarily concentrated, resulting in an overall dilution of minority voting strength in the voting plan. “Cracking” describes election plans with one or more districts that fragment or divide the minority population, also resulting in an overall dilution of minority voting strength in the voting plan.

Senate Plans	Statewide % Black VAP in Majority- Black Districts*	Statewide %NH White VAP in Majority- White Districts
1990s Plan – 2000 Census	43.51%	90.51%
2006 Plan – 2010 Census	53.84%	83.88%
2014 Plan – 2020 Census	52.29%	80.64%
2021 Plan – 2020 Census	52.45%	80.54%

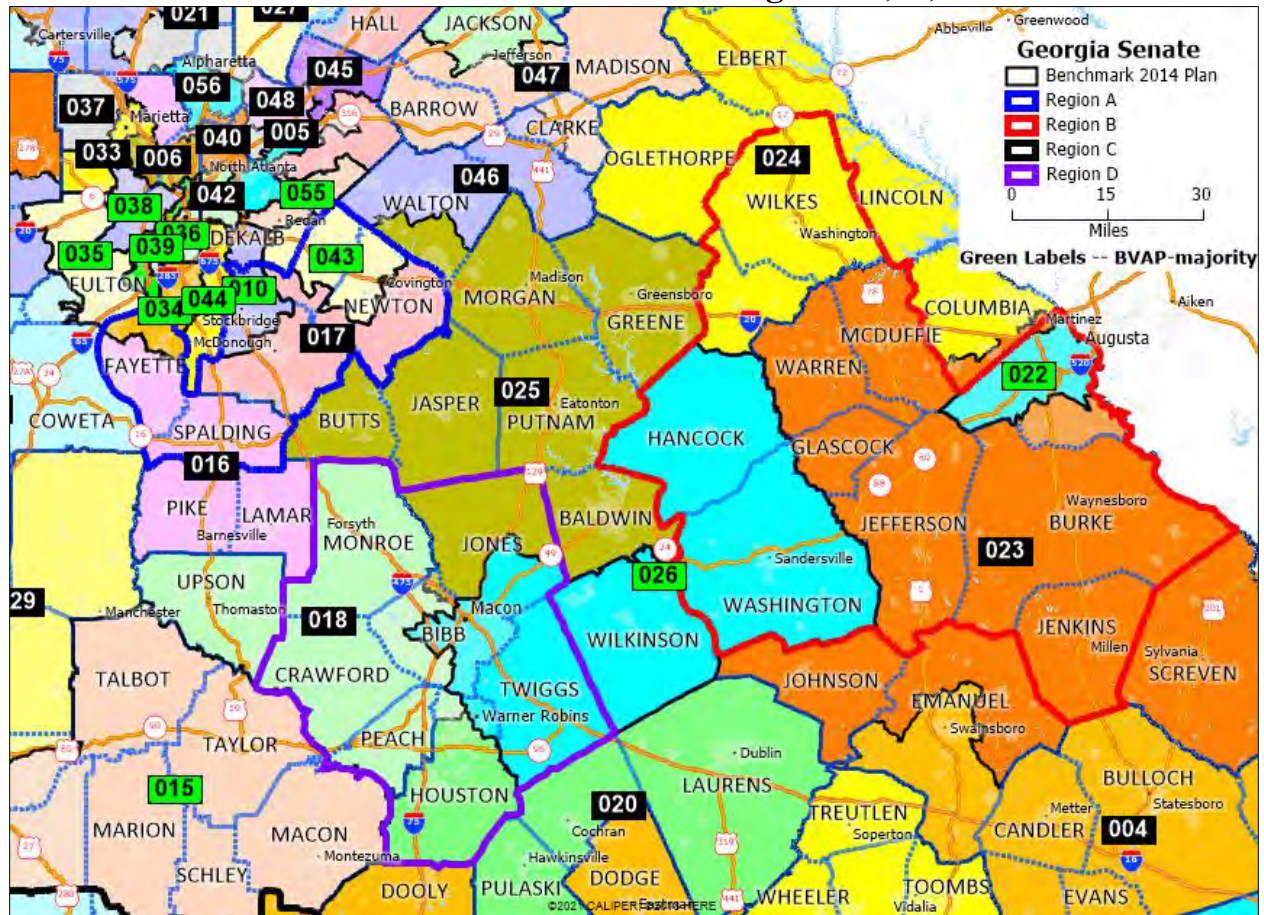
* including Senate District 2 for all years and Senate District 41 for 2014 and 2021

B. 2014 Benchmark Senate Plan

72. The map in **Figure 13** displays 2014 Benchmark Senate Plan districts in south Metro Atlanta (Region A), the eastern Black Belt (Region B) and metropolitan Macon (Region D.) Labels on the map display the district number. Green labels identify majority-Black districts. **Exhibit H** is a higher resolution version of the **Figure 13** map.

Figure 13

2014 Benchmark Senate Plan – Regions A, B, and D



73. **Exhibit I-1** contains a map packet depicting the 2014 Benchmark Senate Plan, with corresponding Census 2010 statistics, prepared by the Georgia Legislative & Congressional Reapportionment Office (“GLCRO”). **Exhibit I-2** shows the map for the prior 2011-enacted Senate plan, and **Exhibit I-3** shows the map for the Senate plan enacted in 2006.

74. **Exhibit J-1** is a table reporting Census 2020 population statistics for the 56 districts in the 2014 Benchmark Senate Plan, as well as CVAP estimates from

the 5-year 2015-2019 Special Tabulation.²⁴ **Exhibits J-2** and **J-3** provide similar population data for the prior 2011-enacted and 2006-enacted plans.

75. As a result of the dramatic population shifts in Georgia since 2010, the 2014 Benchmark Senate Plan was severely malapportioned upon release of the 2020 Census, with an overall deviation of 47.75%.

76. Including Senate District 41 in Metro Atlanta (see *supra* nn.7 & 22), the 2014 Benchmark Senate Plan contained 14 majority-Black districts. Fifteen districts in the 2014 Benchmark Plan were BCVAP-majority (the 14 BVAP majority ones plus Senate District 2 in Chatham County). Seventeen were majority NH Black + Latino + NH Asian (“B+L+A”) CVAP (*i.e.*, majority minority by CVAP).

77. Additional 2014 Benchmark Senate Plan information regarding compactness scores and jurisdictional splits is reported *infra* for comparison with the 2021 Senate Plan and Illustrative Senate Plan metrics.

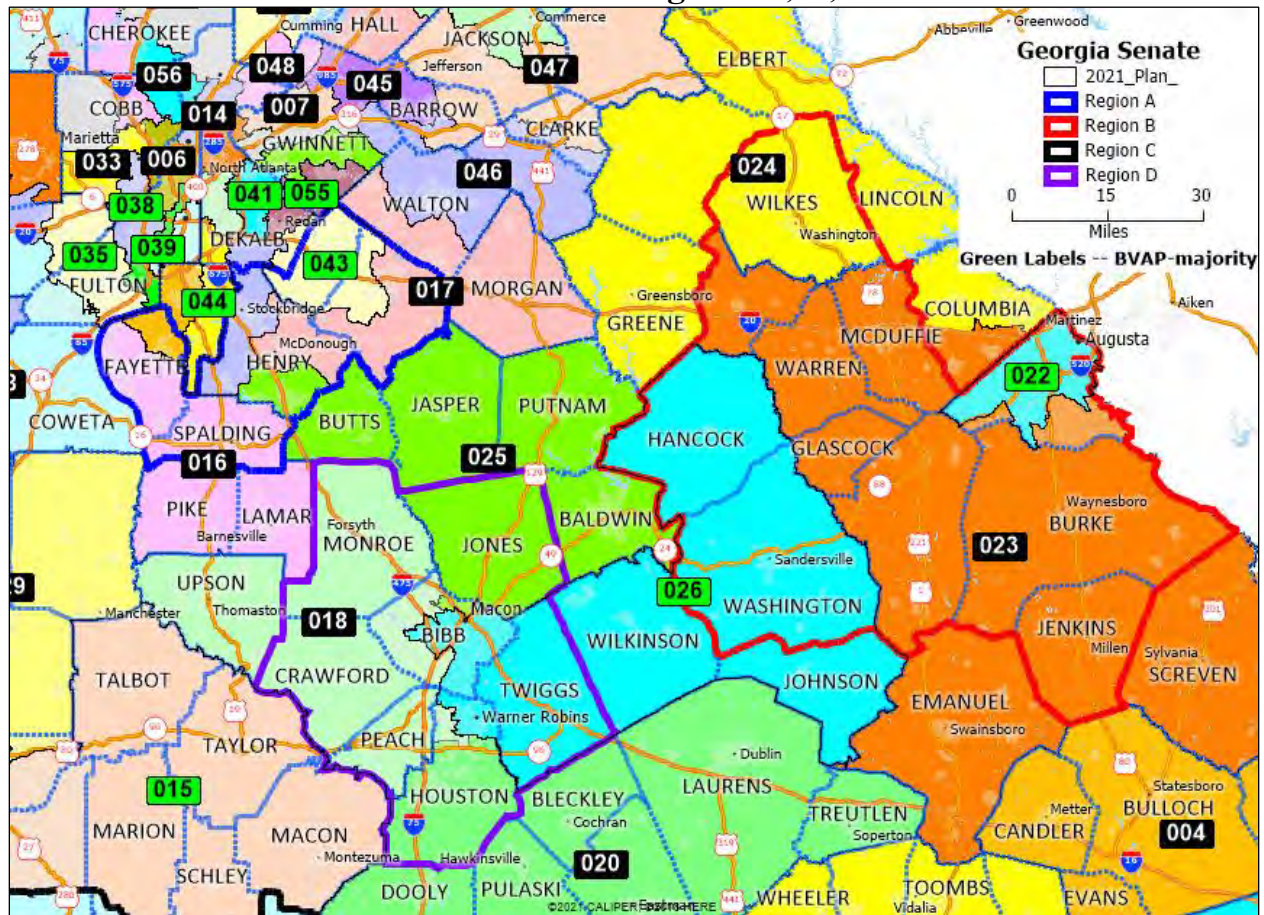
C. 2021 Senate Plan

78. The map in **Figure 14** displays 2021 Senate Plan districts in south Metro Atlanta (Region A) and in the eastern Black Belt (Region B). Green labels identify majority-Black districts. **Exhibit K** is a higher resolution version of the **Figure 14** map.

²⁴ See U.S. Census Bureau, Citizen Voting Age Population by Race and Ethnicity,” <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>.

Figure 14

2021 Senate Plan – Regions A, B, and D



79. **Exhibit L** contains a map packet depicting the 2021 Senate Plan, with corresponding Census 2020 statistics, prepared by GLCRO.

80. **Exhibit M-1** is a table reporting Census 2020 population statistics for the 56 districts in the 2021 Plan, as well as CVAP estimates from the 5-year 2016-2020 Special Tabulation.

81. **Exhibit M-2** breaks out the county population components for the 56 districts in the 2021 Senate Plan.

82. **Exhibit M-3** is a set of 12 sub-state maps of the 2021 Plan organized by regional commission areas.

83. The 2021 Senate Plan contains 14 majority-Black districts (BVAP). Fifteen are BCVAP majority (the 14 BVAP-majority districts plus Senate District 2 in Chatham County). Eighteen districts in the 2021 Senate Plan are majority B+L+ACVAP.

84. Supplemental 2021 Senate Plan information regarding compactness scores, VTD splits, county splits, municipal splits, and regional splits is reported *infra* for comparison with the Illustrative Senate Plan.

IV. ILLUSTRATIVE SENATE PLAN

A. State-level Perspective

85. The map in **Figure 15** displays Illustrative Senate Plan districts, with the map zoomed to identify the three additional majority-Black districts (large green labels) in south Metro Atlanta (Region A) and in the eastern Black Belt (Region B). **Exhibit N** is a higher resolution version of the **Figure 15** map.

(45.44% BVAP) in Chatham County is majority-BCVAP. Nineteen districts in the Illustrative Senate Plan are majority-NH DOJ BCVAP.²⁵ Twenty-two districts in the Illustrative Senate Plan are majority B+L+ACVAP.

88. **Exhibit O-1** is a table reporting Census 2020 population statistics for the 56 districts in the Illustrative Senate Plan, as well as CVAP estimates from the 5-year 2016-2020 Special Tabulation.

89. **Exhibit O-2** breaks out the county population components for the 56 districts in the Illustrative Senate Plan.

90. **Exhibit O-3** is a set of 12 sub-state maps of the Illustrative Plan organized by regional commission areas.

91. **Exhibit O-4** is a statewide map showing the 18 majority Black Senate districts (green) under the Illustrative Plan, with the three additional majority-Black districts shaded light green.

92. **Exhibit O-5** zooms on each of the three additional majority-Black districts in the Illustrative Senate Plan.

93. **Exhibit O-6** is a core constituencies report, showing population shifts by district from the 2021 Senate Plan to the Illustrative Senate Plan.

²⁵ See *supra* n.3. NH DOJ BCVAP is the sum of voting age citizens who are single-race NH Black or of 2 races (NH Black and NH White).

94. The text descriptions of the additional majority-Black Senate districts in the Illustrative Senate Plan set forth below are illustrated with side-by-side comparison maps, depicting the Illustrative Senate Plan and 2021 Senate Plan at the same scale. Higher resolution versions of these side-by-side pairings are also included in exhibits in the **Exhibit P**, **Exhibit Q**, and **Exhibit R** series, as marked below. The county-level population change data discussed below is reflected in **Exhibits G-1, G-2, and G-4**.

95. The side-by-side maps are occasionally interspersed with maps depicting Illustrative Senate Plan boundaries in counties that are split in the process of creating the additional majority Black districts—*e.g.*, Spalding and Wilkes Counties, which are not split in the 2021 Plan. The county-level maps reveal that the splits are reasonable, and especially so within the context of Georgia’s oftentimes irregularly shaped municipal and VTD boundaries. Notably, the Illustrative Senate Plan overall splits *fewer* counties than the 2021 Senate Plan, as reported *infra*.

B. District-by-District Analysis

(1) South Metro Atlanta (Region A)

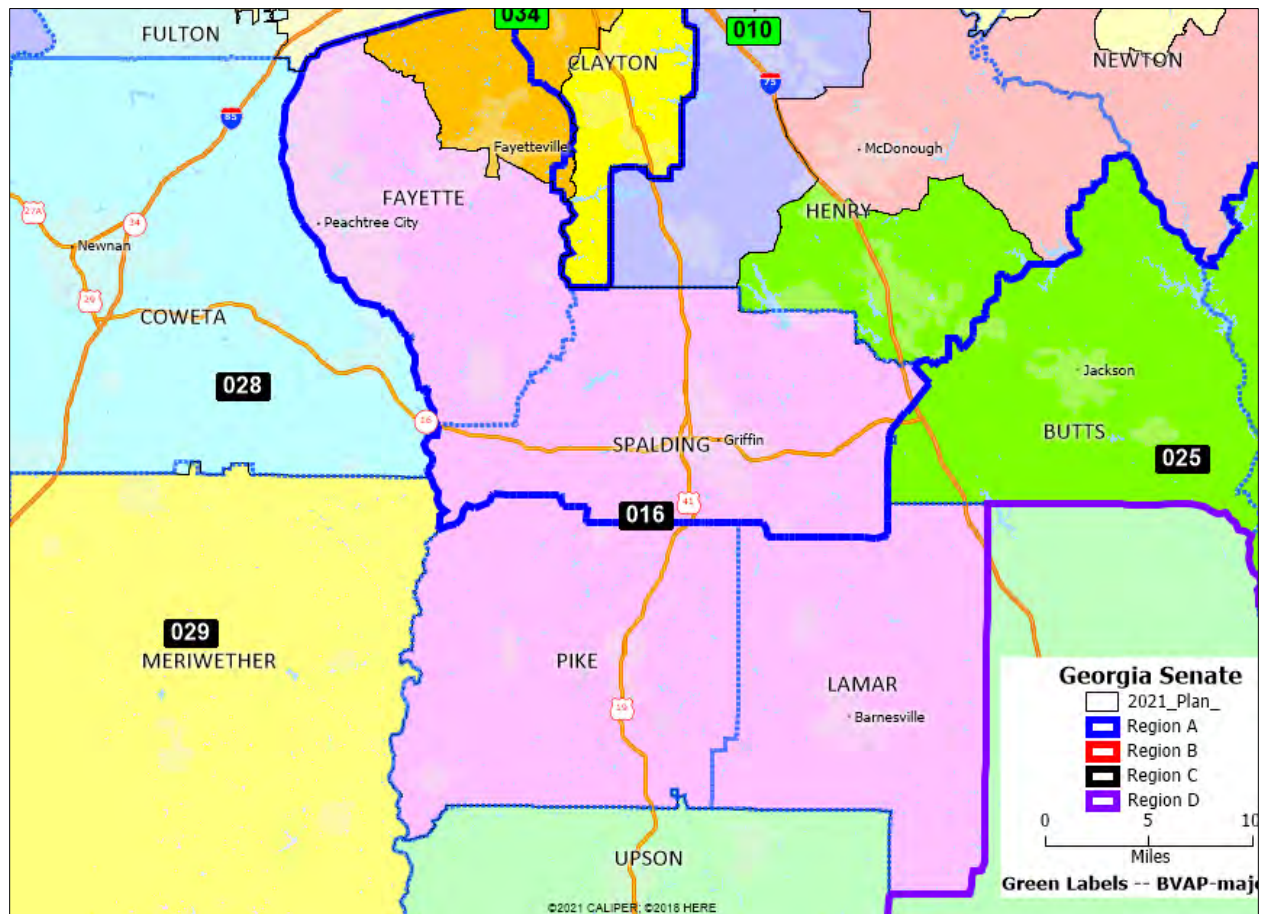
(a) 2021 Senate District 16 (Exhibit P-1)

96. As shown in **Figure 16**, District 16 in the 2021 Senate Plan lies in the south and southwestern part of the Atlanta Metro area. It includes part of Fayette

County, extending south to encompass Spalding, Lamar and Pike Counties (partially displayed on the map).

Figure 16

2021 Senate District 16 and vicinity

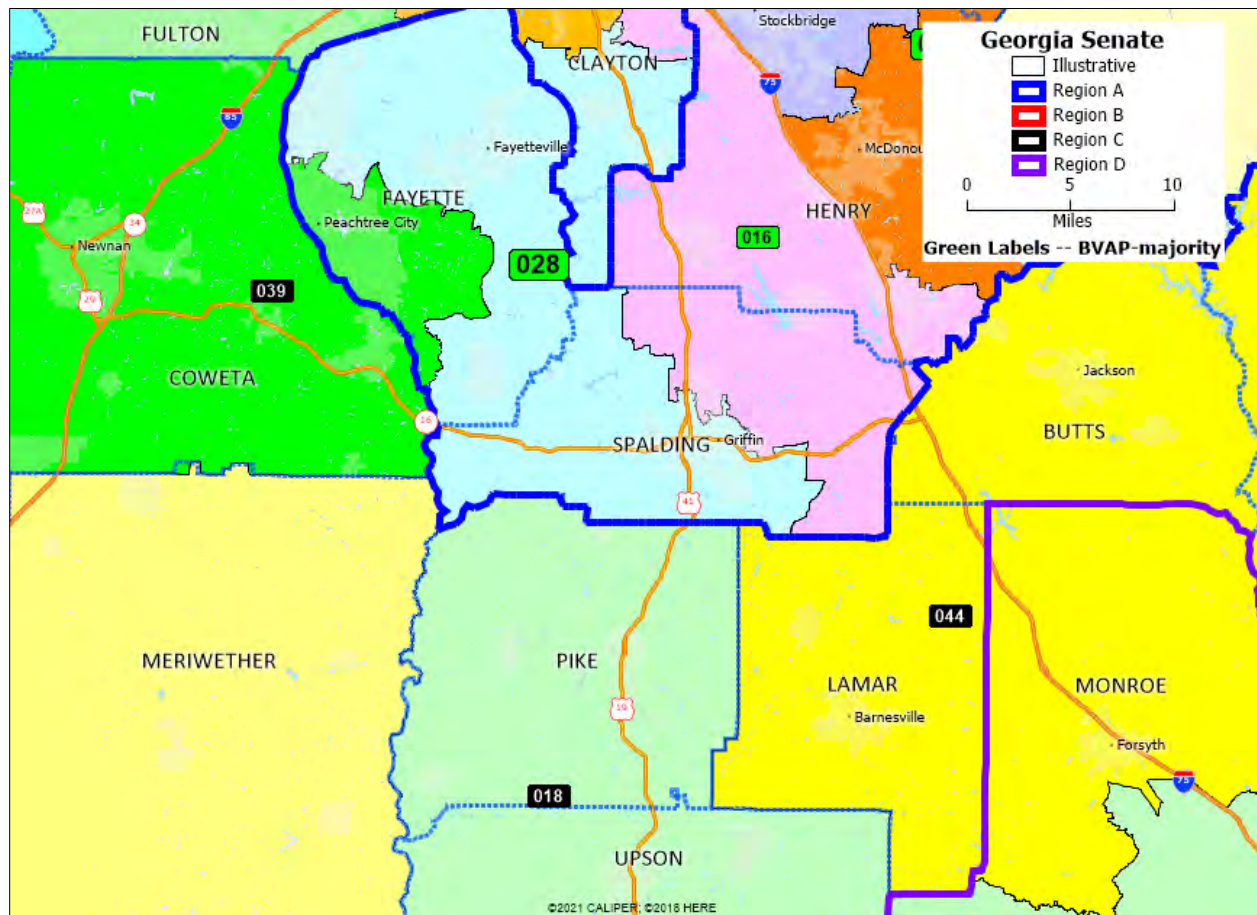


97. Both Fayette and Spalding Counties have seen significant, double-digit growth in their Black populations over the last decade. The Black VAP in Fayette County increased by 54.5% between 2010 and 2020 (from 15,355 to 23,728) even as the NH White VAP fell slightly. Spalding County saw its Black VAP grow by 18.5% over the decade, with virtually no change in the White VAP.

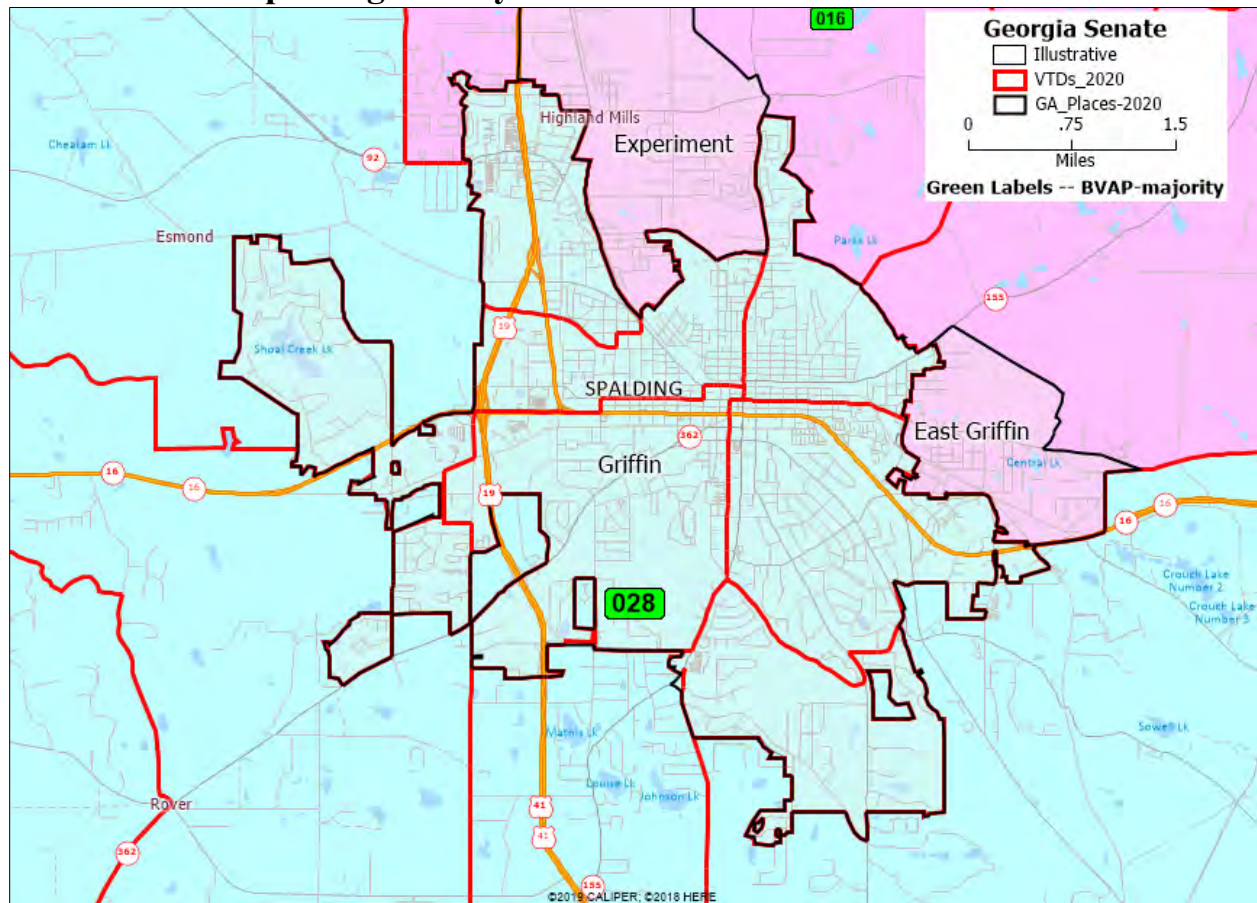
98. Neighboring Clayton County, which borders Fayette and Spalding Counties, is majority-Black, and also has increasing Black population (30% increase since 2010). Senate District 16 is nevertheless drawn with a BVAP of 23% by packing majority-Black neighborhoods in northeast Fayette County into Senate District 34 (a neighboring, 69.54% BVAP district anchored in Clayton County), and then joining the remaining areas of Fayette County with Spalding County and Pike and Lamar Counties on the outer ring of Metro Atlanta.

(b) Illustrative Senate District 28 (Exhibit P-2)

99. As **Figure 17A** reveals, a majority-Black District 28 (51.32% BVAP) can be drawn in the vicinity of 2021 Senate District 16 by joining adjacent portions of Fayette, Spalding, and Clayton Counties, and unpacking some of the Black population in neighboring Senate District 34 (parts of Clayton and Fayette Counties) as well as Senate District 44 (which also stretches into the adjacent portion of Clayton County). In the 2021 Senate Plan, the BVAP in these two packed neighboring districts stands at about 70%.

Figure 17A**Illustrative Senate District 28 and vicinity**

100. **Figure 17B** zooms in on the City of Griffin (pop. 23,470) in Spalding County, displaying municipal and VTD boundaries. The majority-Black City of Griffin is placed in Illustrative District 28, with Griffin's municipal lines serving as a border between District 28 and District 16.

Figure 17B**Griffin/Spalding County Detail – Illustrative Districts 28 and 16**

101. To recap, unpacking 2021 Plan District 34 and District 44 allows a majority-Black Illustrative Senate District 28 to be drawn in Fayette, Spalding, and a neighboring part of majority-Black Clayton County, while “uncracking” the surrounding Black population that is drawn into 2021 Senate District 16.

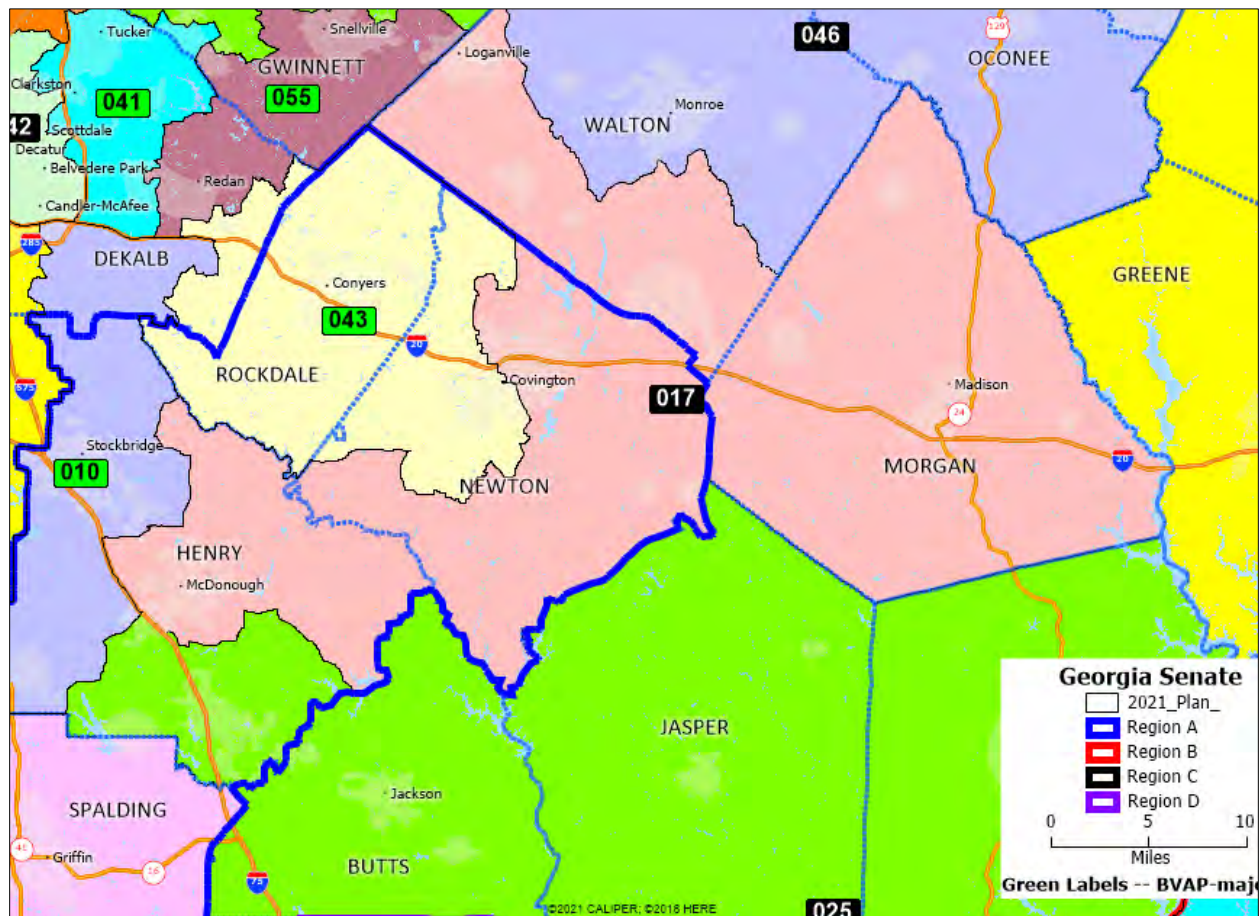
(c) 2021 Senate District 17 (Exhibit Q-1)

102. As shown in **Figure 17C**, Senate District 17, as drawn in the 2021 Senate Plan, includes parts of Henry, Newton, and Walton Counties, and all of Morgan County. Of the counties in 2021 Senate District 17: Henry County’s

BVAP increased by almost 75% in the last decade (to reach almost 50% of the county VAP) and Newton County's BVAP increased by more than 45% to reach almost 50% of the total VAP of the county.

Figure 17C

2021 Senate District 17 and vicinity



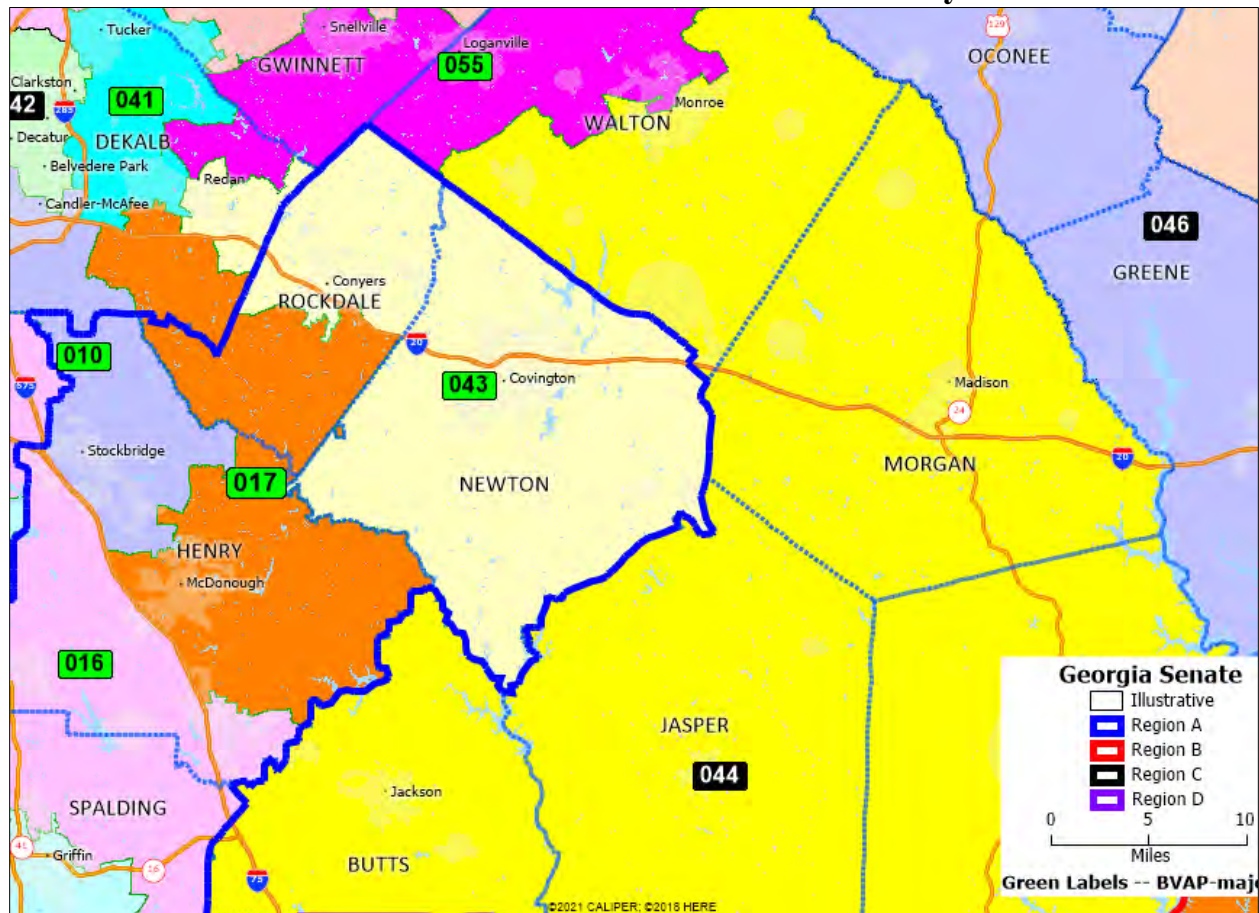
103. Neighboring Dekalb and Rockdale Counties, which border Henry and Newton Counties, also have substantial Black populations. For example, Rockdale County is majority Black (58.6% BVAP) and the county's BVAP increased by 53% over the last decade. Senate District 17 is nevertheless drawn in the 2021 Plan with a BVAP under 34%, cracking the Black population in central and eastern Henry

County as well as in parts of Newton County by extending the district out into predominantly white and more rural Walton and Morgan counties outside the South Metro area, splitting multiple counties in the process. Meanwhile, the 2021 Senate Plan packs the Black population in Senate Districts 10 and 43 (which include parts of Henry, Rockdale, and Newton Counties), drawing those districts with BVAPs of over 70% and almost 65%, respectively.

(d) Illustrative Senate District 17 (Exhibit Q-2)

104. As shown in **Figure 17D**, a majority-Black Senate District 17 can be drawn in the vicinity of 2021 Senate District 17 by unpacking the Black population in a number of neighboring districts, including 2021 Senate Districts 10 and 43.²⁶

²⁶ The Illustrative Senate Plan places the booming Black population of Newton County in majority-Black District 43.

Figure 17D**Illustrative Senate District 17 and vicinity**

105. By unpacking 2021 Senate Districts 10 and 43 and uncracking the Black population in central and eastern Henry County (which the 2021 Senate Plan places in majority-White Senate District 17), a majority-Black Illustrative Senate District 17 can be drawn in Henry, Rockdale, and DeKalb Counties. As Figure 17C and Figure 17D make clear, Illustrative Senate District 17 is much more compact than the sprawling 2021 District 17.

106. **Figures 17E and 17F (Exhibits P-3 and P-4)** show the broader South Metro Region under both the 2021 Senate Plan and the Illustrative Senate Plan. As

shown in those figures, the 2021 Senate Plan repeatedly cracks the growing and diversifying South Metro Region by submerging it in districts that stretch out into more rural outlying counties in the outer ring of the Atlanta MSA and beyond. By contrast, the Illustrative Plan includes districts that are firmly anchored in the South Metro and are combined with similarly growing and diverse counties closer to the urban core.

Figure 17E

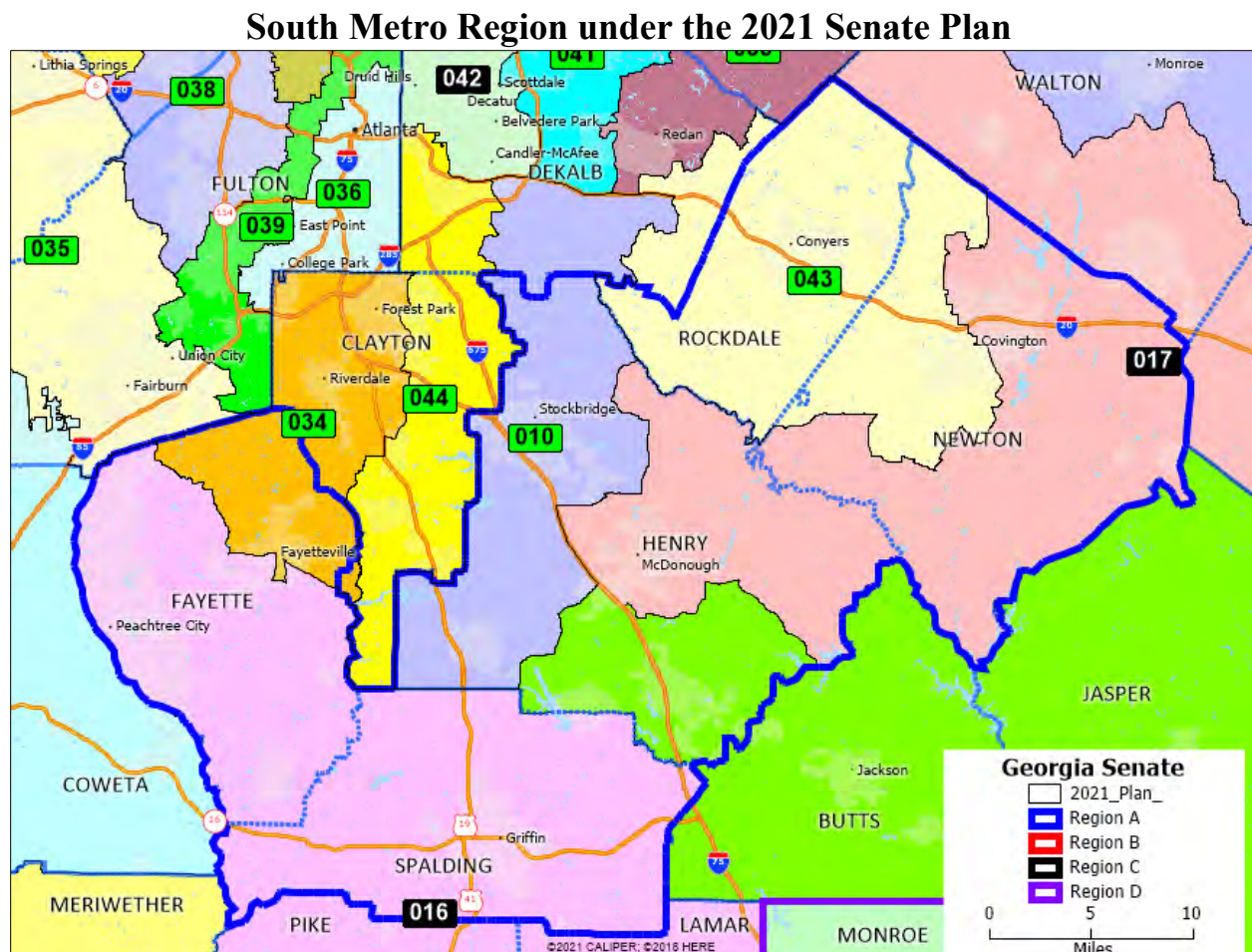
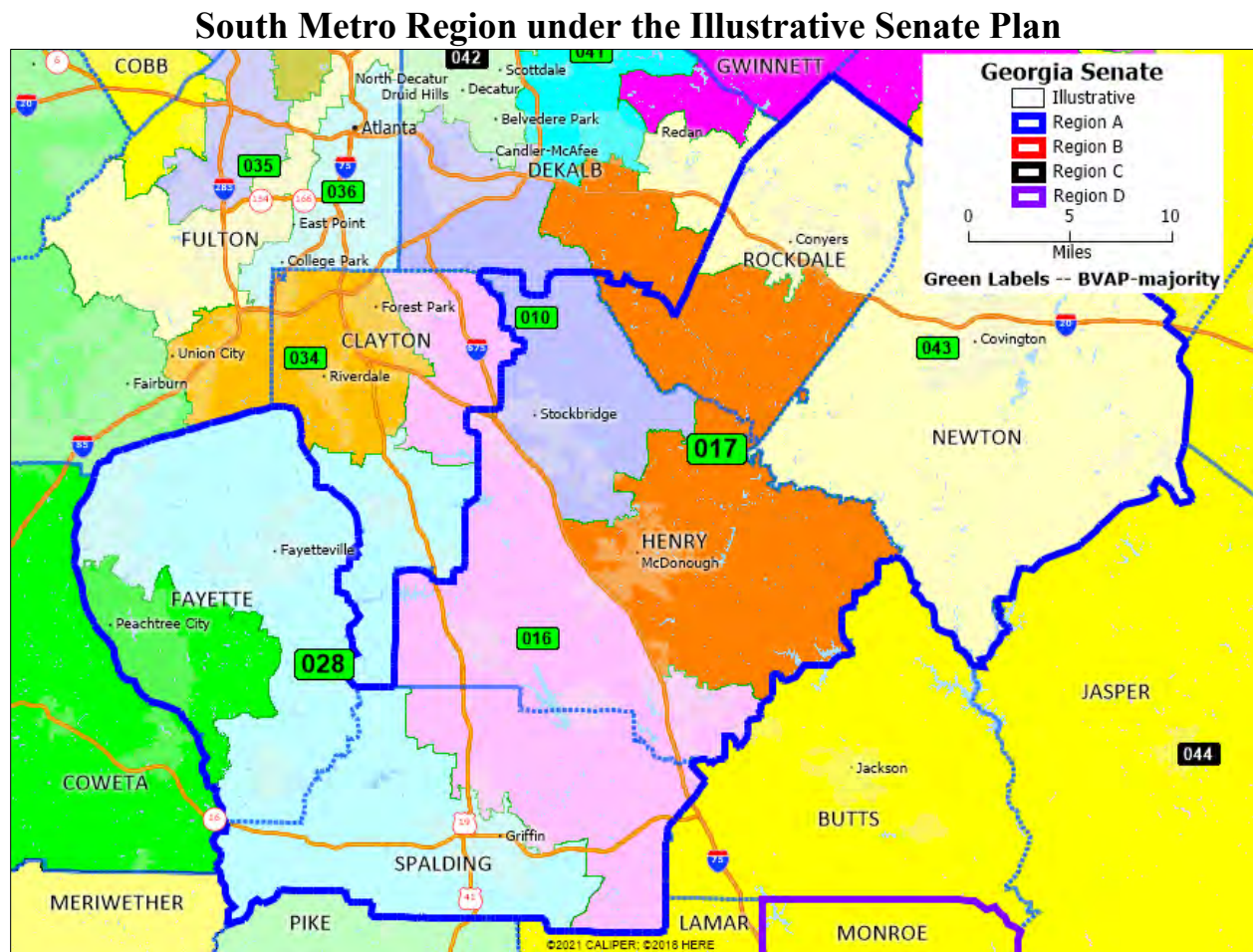
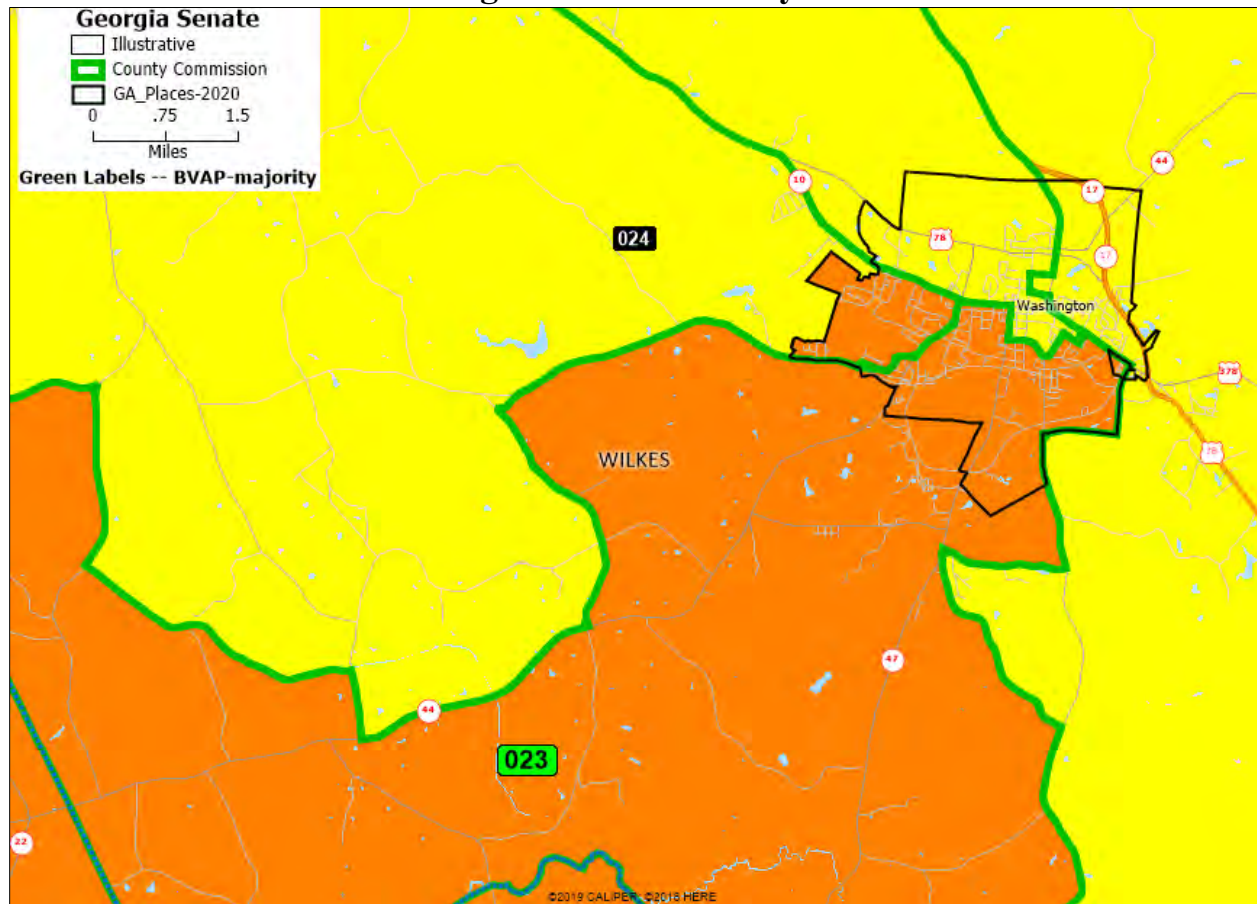


Figure 17F

107. Senate District 23 under the 2021 Plan is drawn with a BVAP under 36%. As shown in **Figure 18**, 2021 Senate District 23 lies around Augusta, including outlying parts of Augusta-Richmond County and a number of surrounding Black Belt counties in the larger Central Savannah River region, including Burke, Jefferson, Warren, and Taliaferro Counties.

Figure 19B**Washington/Wilkes County Detail**

110. To recap, an east-west configuration of counties across the eastern Black Belt allows a majority-Black Illustrative Senate District 23 to be drawn in an area that includes part of Augusta-Richmond County and most of the Black Belt area counties between Augusta and Macon.

C. Supplemental Plan Information

(1) Population Equality

111. As demonstrated by the district-by-district population statistics in **Exhibits O-1** and **M-1**, the Illustrative Senate Plan matches the 2021 Senate Plan

by staying within a stringent 1% population deviation limit for each district (*i.e.*, no district is more than 1% away from ideal population size).

(2) Compactness

112. Compactness scores for the Illustrative Senate Plan are within the norm for a typical legislative Plan. **Exhibit S-1** contains district-by-district compactness scores generated by Maptitude for all districts in the Illustrative Senate Plan, alongside scores for the 2014 Benchmark Senate Plan (**Exhibit S-2**) and the 2021 Senate Plan (**Exhibit S-3**).

113. The table in **Figure 20** (condensed from the **Exhibit S** series) reports mean and minimum Reock²⁷ and Polsby-Popper²⁸ scores for the Illustrative Senate Plan, the 2014 Benchmark Senate Plan, and the 2021 Senate Plan.

114. On balance, the Illustrative Senate Plan and 2021 Senate Plan score about the same on the widely referenced Reock and Polsby-Popper measures. If

²⁷ “The Reock test is an area-based measure that compares each district to a circle, which is considered to be the most compact shape possible. For each district, the Reock test computes the ratio of the area of the district to the area of the minimum enclosing circle for the district. The measure is always between 0 and 1, with 1 being the most compact. The Reock test computes one number for each district and the minimum, maximum, mean and standard deviation for the plan.” Caliper Corporation, *Maptitude For Redistricting* Software Documentation.

²⁸ The Polsby-Popper test computes the ratio of the district area to the area of a circle with the same perimeter: $4\pi \text{Area}/(\text{Perimeter}^2)$. The measure is always between 0 and 1, with 1 being the most compact. The Polsby-Popper test computes one number for each district and the minimum, maximum, mean and standard deviation for the plan. *See* Caliper Corporation, *Maptitude For Redistricting* Software Documentation.

anything, the Illustrative Plan scores better inasmuch as its least compact district by Reock scores .22, compared to .17 for the 2021 Senate Plan.

Figure 20

**Compactness Scores
Illustrative Senate Plan and 2014 Benchmark and 2021 Senate Plans**

	Reock			Polsby-Popper	
	Mean	Low		Mean	Low
Illustrative Senate Plan	.43	.22		.28	.14
2014 Benchmark Senate Plan	.43	.14		.27	.11
2021 Senate Plan	.42	.17		.29	.13

(3) Jurisdictional Splits

115. The **Exhibit T** series contains Maptitude generated reports for splits of key geographic areas in Georgia—from VTDs to regional commissions—under the Illustrative Senate Plan, the 2014 Benchmark Plan, and the 2021 Senate Plan.

116. The table in **Figure 21** summarizes split counts for counties, 2020 VTDs, and municipalities. The Illustrative Senate Plan scores better than the 2021 Plan across all six categories.

Figure 21

**County and VTD Splits/Whole Municipalities –
Illustrative Plan versus 2014 Benchmark and 2021 Senate Plans**

	Split Counties	Total County Splits*	2020 VTD Splits*	Single- County Whole City/Towns (478)#	Single and Multi County Whole City/ Towns (531#)	Total City/ Town Splits*
Illustrative Senate	28	57	38	437	464	166
2014 Benchmark	38	65	86	422	448	198
2021 Senate	29	60	40	434	463	169

*Populated splits only

Higher is better

117. **Exhibit T-1** contains a county and VTD split report for the Illustrative Senate Plan. **Exhibit T-2** reports on the 2014 Benchmark Senate Plan and **Exhibit T-3** reports on the 2021 Senate Plan.

118. **Exhibit T-4** contains a split report for all 531 municipalities (including the 53 cities and towns that spill over into another county) for the Illustrative Senate Plan. **Exhibit T-5** reports on the 2014 Benchmark Senate Plan and **Exhibit T-6** reports on the 2021 Senate Plan.

(4) Regional Splits

119. The table in **Figure 22** shows regional splits, defined by the 12 state-designated regional commissions and the 39 federally-designated core-based statistical areas (“CBSAs”), which include MSAs and micropolitan statistical areas.²⁹

²⁹ As the Census Bureau has explained “Micropolitan statistical areas consist of the county or counties (or equivalent entities) associated with at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties.” *See also supra* n.9.

Figure 22

**Split Regional Commissions and CBSAs
Illustrative Plan versus 2014 Benchmark and 2021 Senate Plans**

	Regional Commission Splits	Whole CBSAs	CBSA Splits
Illustrative Senate	83	23	72
2014 Benchmark Senate	84	21	78
2021 Senate	89	20	79

120. Again, the Illustrative Senate Plan scores higher than the 2021 Senate Plan across the three categories.

(5) Incumbents

121. The Illustrative Senate Plan modifies 35 of the 56 districts as drawn in the 2021 Senate Plan.

122. Based on January 2022 incumbent address information given to Plaintiffs' attorneys by the Defendants in the form of a geocoded shapefile, Illustrative Senate District 4 has an incumbent conflict. Also, as in the 2021 Plan, Senate Districts 13 and 52 have paired incumbents. Based on the preliminary analysis of incumbent address information following the November 2022 general election pursuant to the 2021 House Plan, three districts in the Illustrative Senate Plan may have incumbent conflicts: 4, 5, and 35.

D. Comparative Socioeconomic Analysis

123. This section of my report briefly highlights charts and tables that I prepared from the 2015-2019 American Community Survey found on **Exhibit CD** or via: http://www.fairdata2000.com/ACS_2015_19/Georgia/.

124. The datasets available in these ACS-based documents facilitate comparisons by race/ethnicity and other socioeconomic measurements across counties that are included in relevant districts in the Illustrative Senate Plan and the 2021 Senate Plan, which can help identify commonalities and communities of interest in the relevant areas.

125. For example, the counties within Illustrative Senate District 28 share socioeconomic characteristics that make them similar to one another. A relatively high proportion of Black residents are in the labor force in Fayette, Spalding, and Clayton Counties (64.3%, 58.2%, and 69.5% respectively). (See **Exhibit CD** Reports for Fayette, Spalding, and Clayton Counties at pp. 53-55.)³⁰

126. By comparison, the labor force participation rates for Black residents in Pike and Lamar Counties (which are contained within 2021 Senate District 16 along with Spalding County and part of Fayette County) are lower than the

³⁰ Page references to Exhibit CD in this section refer to the county-specific or place-specific documents in Exhibit CD entitled “Single-Race African Americans and Latinos vis-à-vis Non-Hispanic Whites – Selected Socio-Economic Data,” which are based on the 2015-2019 ACS 5-Year Estimates. See *supra* ¶¶ 68-69.

counties contained within Illustrative Senate District 28. The Black labor force participation rates in Pike and Lamar Counties are 51.3% and 48.0% respectively. (See **Exhibit CD** Reports for Pike and Lamar Counties at pp. 53-55.)

127. The counties within Illustrative Senate District 17 share socioeconomic characteristics that make them similar to one another. For example, the counties that comprise Illustrative Senate District 17 are similar when educational attainment rates among Black residents are compared across the counties. A significant proportion of Black residents in Henry, Rockdale, and Dekalb Counties have received a bachelor's degree or higher (34.5%, 29.2%, and 29.2% respectively). (See **Exhibit CD** Reports for Henry, Rockdale, and Dekalb Counties at pp. 21-22.)

128. On the other hand, the counties that comprise 2021 Senate District 17 do not share these commonalities with respect to educational attainment characteristics. Walton and Morgan Counties are especially different. White residents in Walton and Morgan Counties (77.5% and 74.0% White) are less likely to have received a bachelor's degree or higher than Black residents in majority-non-White Henry County (14.1% in Walton County and 7.0% in Morgan County, compared to 34.5% in Henry County). (See **Exhibit CD** Reports for Walton and Morgan Counties at pp. 21-22.)

129. The counties within Illustrative Senate District 23 also share certain socioeconomic characteristics that make them similar to one another. For example, a significant proportion of Black residents across the Illustrative Senate District 23 counties had incomes that fell below the poverty line (ranging from 20.1% of the Black population to 38.4% of the Black population) (See **Exhibit CD** Reports for relevant counties at pp. 25-29.)

E. Online Interactive Maps

130. The Illustrative Senate Plan can also be viewed online in detail on the *Dave's Redistricting Application* (DRA) website via this link:

<https://davesredistricting.org/maps#viewmap::fe5932c5-df77-4a66-b242-1112a9666e60>.

131. For comparison, the 2021 Senate Plan can be viewed via this link:
<https://davesredistricting.org/join/52efcc99-481d-4b95-8e17-daddf279a59e>.

V. HOUSE – HISTORICAL BENCHMARK PLANS AND 2021 PLAN

A. Majority-Black House Districts – 1990s Plan to 2021 Plan

132. As shown in **Figure 23**, and despite the significant growth in Georgia's Black population over the past two decades discussed earlier in this report, the number of majority-Black House districts has climbed by just four districts from 45 (25% of districts) in the 2006 plan to 49 (27.2%) in the 2021 Plan, and has remained more or less static for the last decade.

Figure 23**Number of Majority- Black House Districts by Plan –2000 to 2021**

House Plans	Statewide Majority-Black Districts	Metro Atlanta Majority-Black Districts
1990s Plan -- 2000 Census	37	22
2006 Plan -- 2010 Census	45	30
2012 Plan -- 2010 Census	48	32
2015 Plan -- 2020 Census	47	31
2021 Plan -- 2020 Census	49	33

133. Since the enactment of the 2006 Plan, just three majority-Black districts have been added in Metro Atlanta, even as the Black population in the 29-county area has climbed by over 400,00 persons—the equivalent of nearly entire seven House districts based on the 2020 ideal district size.

134. Despite the nominal increase in majority-Black House districts since 2006, **Figure 24** reveals that the percentage of Black Georgians of voting age in majority-Black House districts is only slightly higher than in the 1990s (52% versus 45%). Under the 2021 Plan, the percentage of the NH White population in majority-White districts is down from the 1990s (76% versus 90%). Still, as with the Senate, the 25-point Black-White gap demonstrates that Black populations are disproportionately “cracked” or divided into majority-White districts in the House.

Figure 24

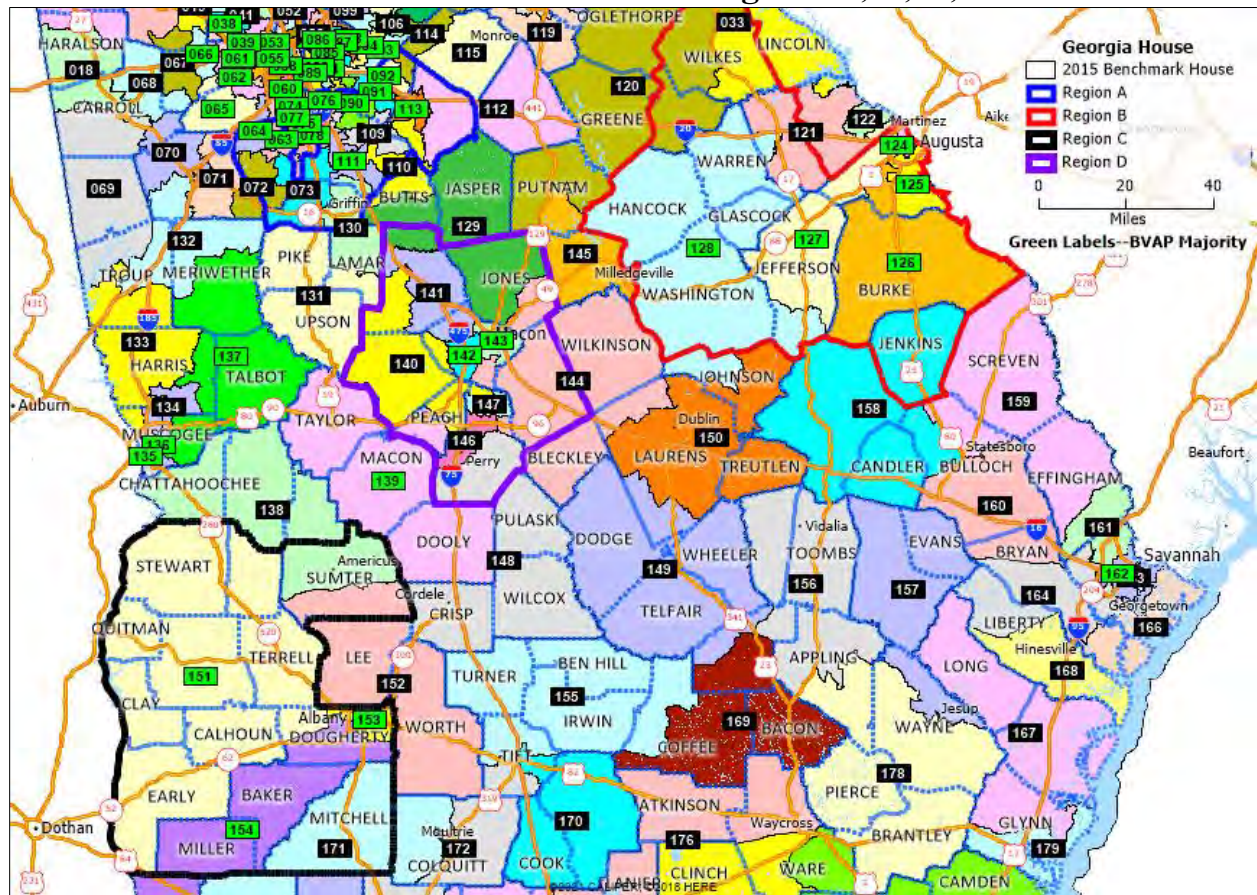
**Same Race VAP in Majority-Black and Majority NH White Districts
2000 to 2021**

House Plans	Statewide % Black VAP in Majority- Black Districts*	Statewide %NH White VAP in Majority-White Districts
1990s Plan – 2000 Census	44.81%	90.49%
2006 Plan – 2010 Census	44.61%	83.73%
2015 Plan – 2020 Census	47.94%	77.6%
2021 Plan – 2020 Census	51.65%	76.16%

* including Districts that are BVAP- and/or BCVAP-majority

B. 2015 Benchmark House Plan

135. The map in **Figure 25** displays 2015 Benchmark House Plan districts in south Metro Atlanta (Region A) and in the eastern and western Black Belt (Regions B and C) and metropolitan Macon (Region D). Labels on the map display the district number. Green labels identify majority-Black districts.

Figure 25**2015 Benchmark House Plan – Regions A, B, C, and D**

136. The map depicted in **Figure 25** is also included as **Exhibit U**.

137. **Exhibit V-1** contains a map packet depicting the Benchmark 2015 House Plan, with corresponding Census 2010 statistics, prepared by GLCRO. **Exhibit V-2** shows the map for the prior 2012-enacted House plan, and **Exhibit V-3** shows the map for the House plan enacted in 2006.

138. **Exhibit W-1** is a table reporting Census 2020 population statistics for the 180 districts in the 2015 Benchmark House Plan, as well as CVAP estimates

from the 5-year 2015-2019 Special Tabulation.³¹ **Exhibits W-2** and **W-3** provide similar population information for the prior, 2012-enacted and 2006-enacted plans.

139. As a result of the dramatic population shifts in Georgia since 2010, the 2015 Benchmark House Plan was severely malapportioned, with an overall deviation of 56.66%, according to the 2020 Census.

140. The 2015 Benchmark House Plan contains 47 majority-Black districts, with 48 BCVAP-majority districts and 62 districts that are B+L+ACVAP majority.

141. For comparison, additional 2015 Benchmark House Plan information regarding compactness scores, county splits, VTD splits, and municipal splits is reported *infra*.

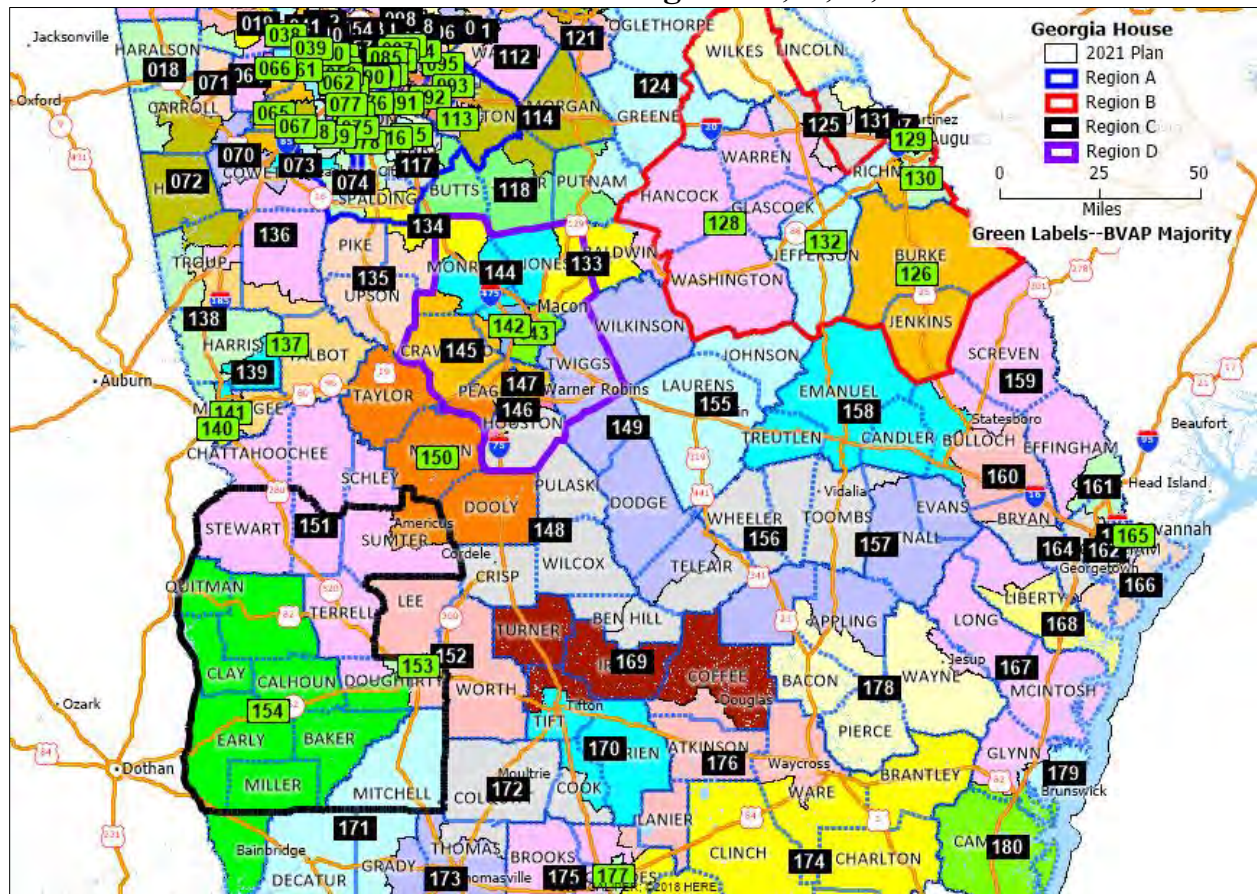
C. 2021 House Plan

142. The map in **Figure 26** displays 2021 House Plan districts in south Metro Atlanta (Region A), in the eastern and western Black Belt (Regions B and C) and metropolitan Macon (Region D). Green labels identify majority-Black districts.

Exhibit X is a higher resolution version of the **Figure 26** map.

143. For comparison, additional 2021 House Plan information regarding compactness scores, county splits, VTD splits, and municipal splits is reported *infra*.

³¹ See U.S. Census Bureau, Citizen Voting Age Population by Race and Ethnicity,” <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>.

Figure 26**2021 House Plan – Regions A, B, C, and D**

144. **Exhibit Y** contains a map packet depicting the 2021 House Plan, with corresponding Census 2020 statistics, prepared by GLCRO.

145. **Exhibit Z-1** is a table reporting Census 2020 population statistics for the 180 districts in the 2021 House Plan, as well as CVAP estimates from the 5-year 2016-2020 Special Tabulation.

146. **Exhibit Z-2** breaks out the county population components for the 180 districts in the 2021 House Plan.

147. **Exhibit Z-3** is a set of 12 sub-state maps of the 2021 House Plan organized by regional commission areas.

148. A higher resolution version of Figure 26 is included as **Exhibit Z-4**.

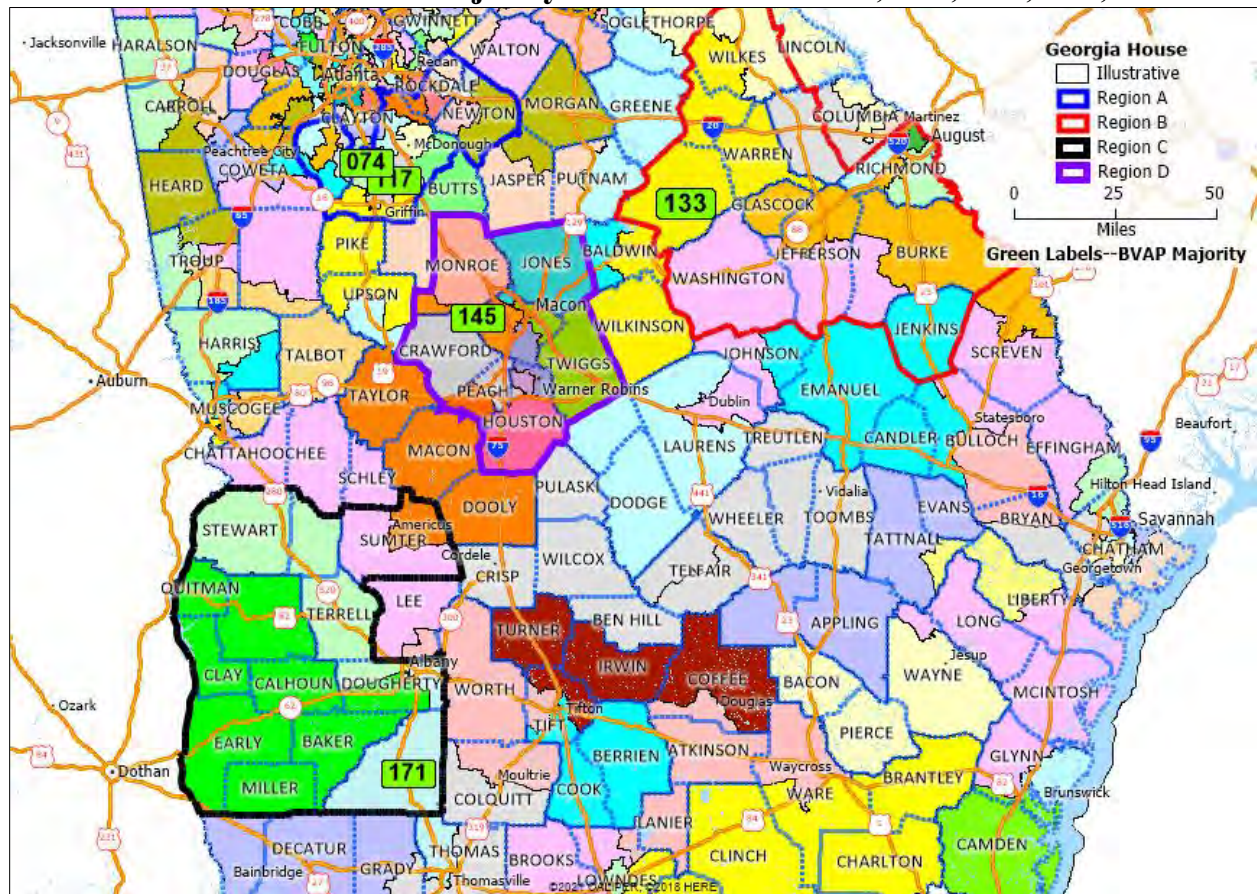
149. The 2021 House Plan contains 49 majority-Black districts, with 49 BCVAP-majority districts. Sixty-two districts in the 2021 House Plan are majority B+L+ACVAP.

150. Supplemental 2021 House Plan information regarding compactness scores, VTD splits, county splits, municipal splits, and regional splits is reported *infra* for comparison with the Illustrative House Plan.

VI. ILLUSTRATIVE HOUSE PLAN

A. State-level Perspective

151. The map in **Figure 27** displays Illustrative House Plan districts, identifying five additional majority Black districts (large green labels) in south Metro Atlanta (Region A), in the Black Belt (Regions B and C), and in metropolitan Macon (Region D). **Exhibit AA** is a higher resolution version of the **Figure 27** map.

Figure 27**Illustrative House – New Majority-Black Districts –74, 117, 133, 145, and 171**

152. The Illustrative House Plan contains 54 majority-Black districts (BVAP), with 54 majority-BCVAP districts and 53 that are both BVAP and BCVAP-majority. Sixty-seven districts in the Illustrative House Plan are majority B+L+ACVAP.

153. The five additional majority-Black House districts are:

Region A –South Metro Atlanta

District 74: in the Counties of Clayton (part), Henry (part), and Spalding (part)

District 117: in the Counties of Henry (part) and Spalding (part)

Region B – Eastern Black Belt/Central Savannah River Area

District 133: (north to south) in the Counties of Wilkes (part), Taliaferro, Warren,

Hancock, Baldwin (part), and Wilkinson

Region C – Western Black Belt

District 171: in the Counties of Dougherty (part), Mitchell, and Thomas (part)

Region D – Metropolitan Macon

District 145: in the Counties of Macon-Bibb (part) and Monroe (part)

154. **Exhibit AA-1** is a table reporting Census 2020 population statistics for the 180 districts in the Illustrative House Plan, as well as CVAP estimates from the 5-year 2016-2020 Special Tabulation.

155. **Exhibit AA-2** breaks out the county population components for the 180 districts in the Illustrative House Plan.

156. **Exhibit AA-3** is a set of 12 sub-state maps of the Illustrative House Plan organized by regional commission areas.

157. **Exhibit AA-4** is a statewide map showing the 54 majority Black House districts (green) under the Illustrative Plan, with the five additional majority-Black districts shaded light green.

158. **Exhibit AA-5** zooms on each of the five additional majority-Black districts in the Illustrative House Plan

159. **Exhibit AA-6** is a core constituencies report, showing population shifts by district from the 2021 House Plan to the Illustrative House Plan.

160. The text descriptions of the five additional majority-Black districts in the Illustrative House Plan set forth below are illustrated with paired comparison

map exhibits, depicting the Illustrative House Plan and 2021 House Plan at the same scale. Higher resolution versions of these side-by-side pairings are also included in exhibits in the **Exhibit AB**, **Exhibit AC**, **Exhibit AD**, **Exhibit AE**, and **Exhibit AF** series, as marked below. The county-level population change data discussed below is reflected in **Exhibits G-1**, **G-2**, and **G-4**.

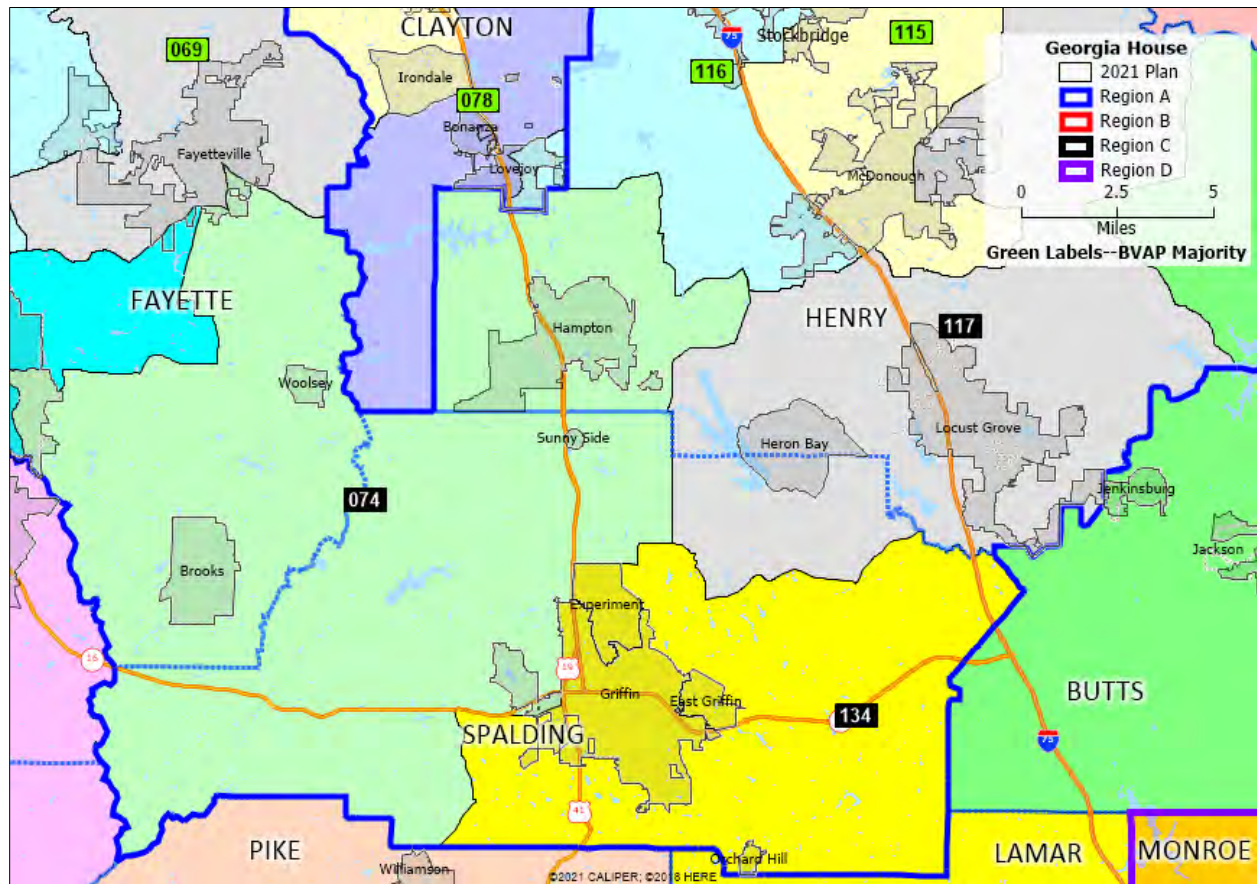
161. The side-by-side maps are occasionally interspersed with maps depicting Illustrative House Plan boundaries in a few counties that are split in the process of creating the additional majority Black districts—*e.g.*, Spalding and Wilkes—but are not split in the 2021 Plan. These county-level maps reveal that the splits are reasonable, especially within the context of Georgia’s oftentimes irregularly shaped municipal and VTD boundaries. Notably, the Illustrative House Plan overall splits *fewer* counties than the 2021 Senate Plan, as reported *infra*.

B. District-by-District Analysis

(1) South Metro Atlanta (Region A)

(a) 2021 House District 74 (Exhibit AB-1)

162. As shown in **Figure 28**, District 74 in the 2021 House Plan lies in the south Metro Atlanta area and combines parts of Fayette, Spalding, and Henry Counties. The BVAP of the district as drawn is under 26%.

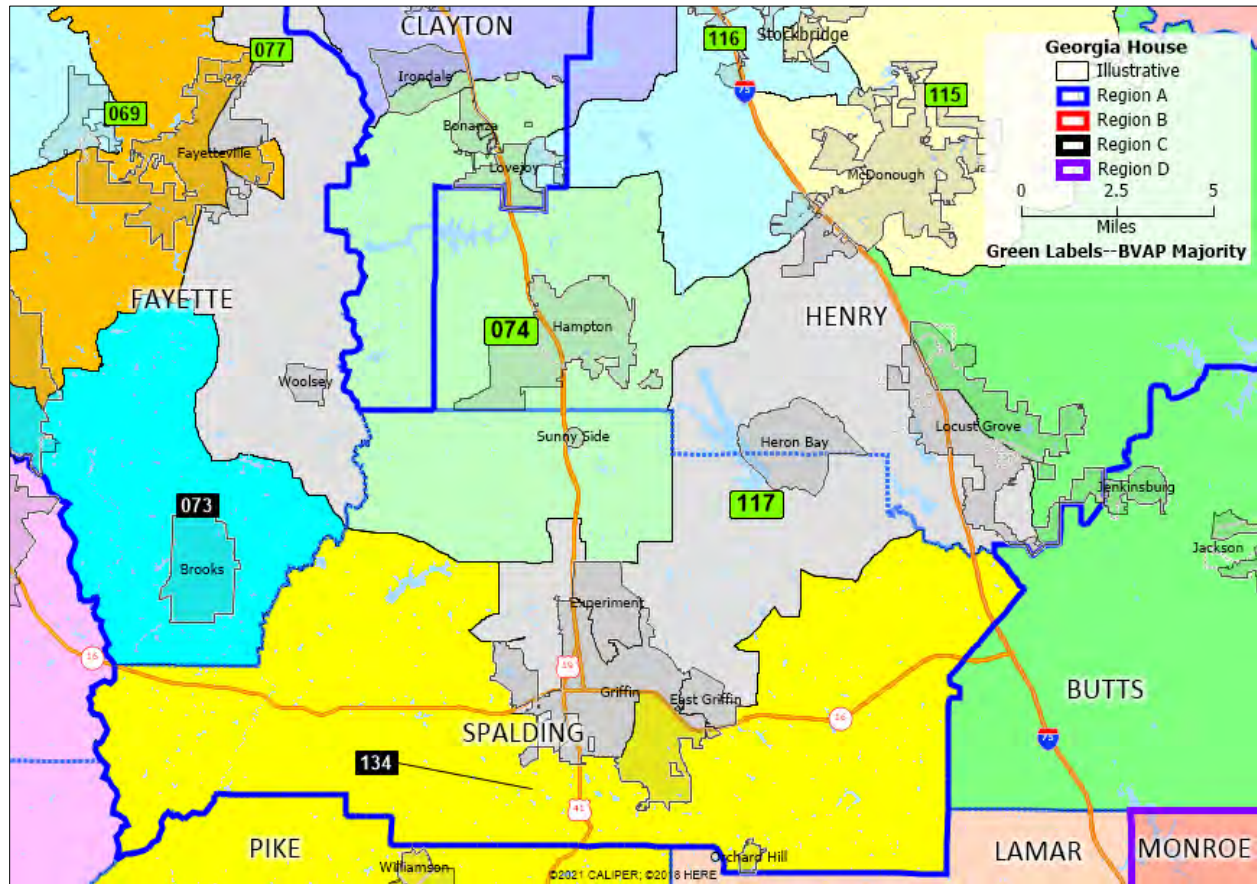
Figure 28**2021 House Plan District 74 and vicinity****(b) Illustrative District 74 (Exhibit AB-2)**

163. An additional majority-Black House District can be drawn in this area by unpacking the Black population in adjacent 2021 House District 78 (which is anchored in neighboring Clayton County, and is 71.58% BVAP under the 2021 House Plan) and uncracking the Black population in House District 74, which includes areas in Henry County and Spalding County that have experienced substantial Black population growth over the past two decades, as shown in the **Exhibit G** series and associated discussion *supra*.

164. As shown in **Figure 29**, unpacking those districts allows a majority-Black Illustrative House District 74 to be drawn in Henry, Spalding, and the neighboring part of Clayton County.

Figure 29

Illustrative Plan District 74 and vicinity



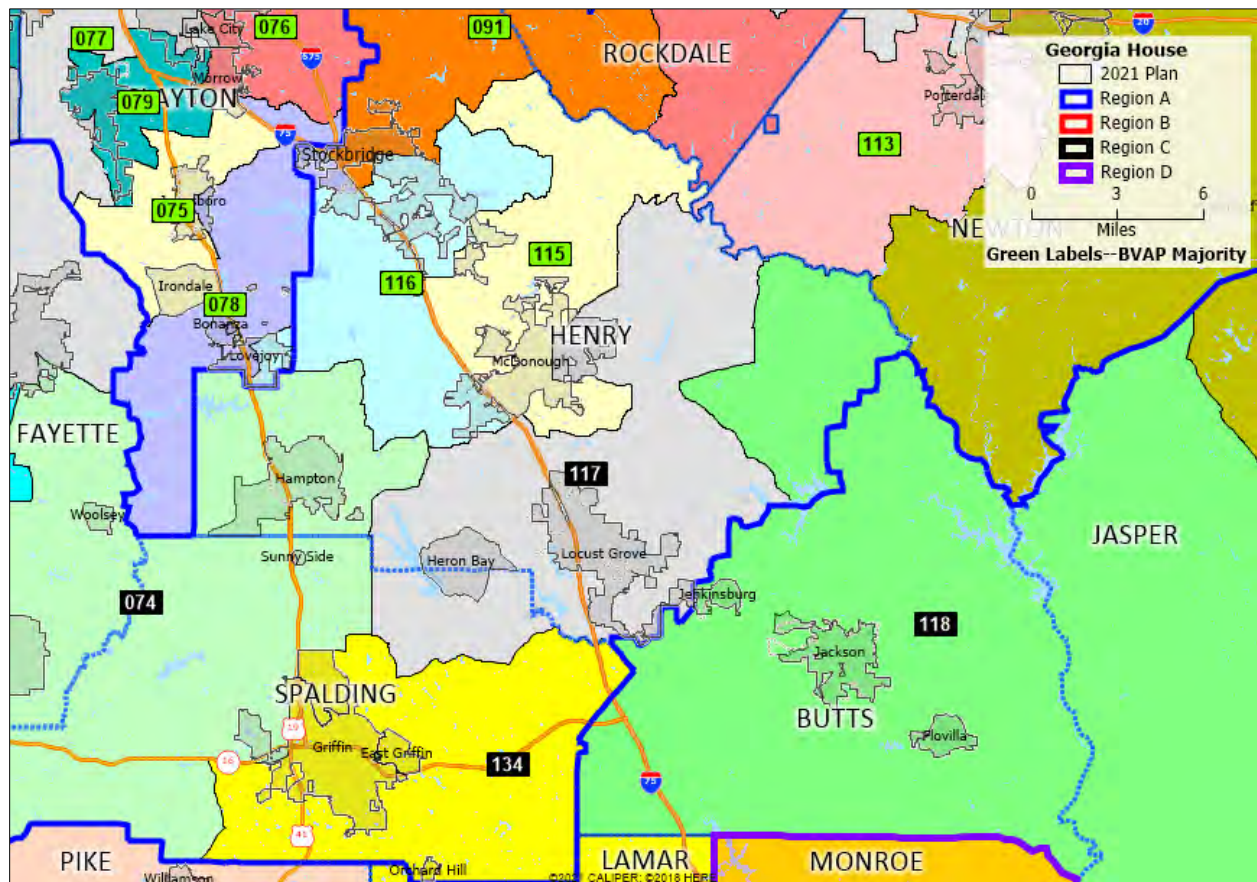
(c) 2021 House District 117 (Exhibit AC-1)

165. In the same general area, another additional majority-Black House district can be drawn around where District 117 in the 2021 House Plan is drawn. As shown in zoomed-in **Figure 29A**, displaying municipal boundaries, House District 117 in the 2021 House Plan lies in the south Metro Atlanta area and

includes parts of Henry and Spalding Counties. The BVAP of the district as drawn is just under 37%, and the BVAP of the neighboring district that includes the rest of Spalding County, District 134, is about 34%.

Figure 29A

2021 House Plan District 117 and vicinity



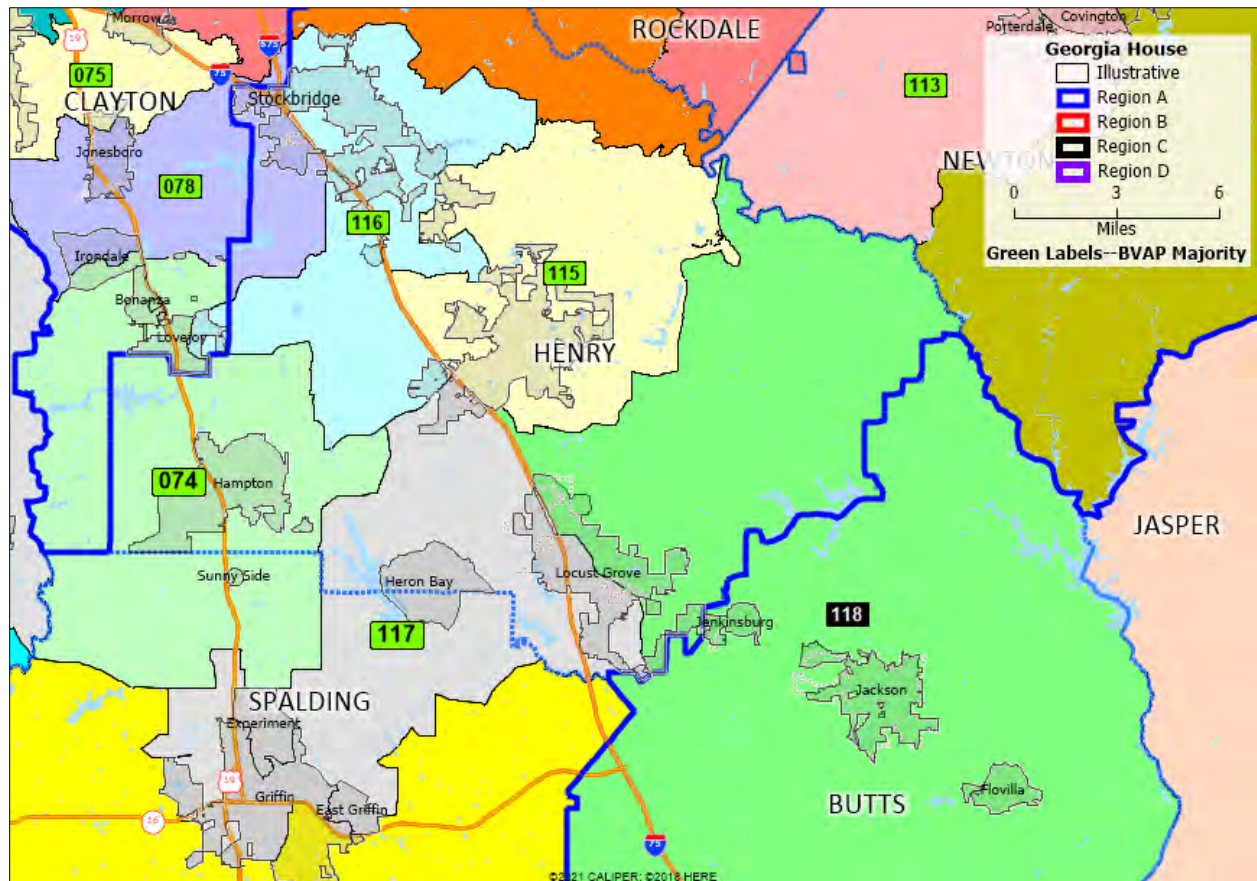
(d) Illustrative District 117 (Exhibit AC-2)

166. At least one additional majority-Black House District can be drawn in the area around 2021 House District 117 by unpacking the Black population in 2021 House District 116 (which includes part of Henry County just to the north, closer in to the center of the Metro Atlanta area) and uncracking the Black

populations in House Districts 117 and 134, bringing more of the growing Black populations in Henry and Spalding Counties into majority-Black districts. As demonstrated in **Figure 29B**, unpacking those districts allows for a majority-Black Illustrative House District 117 to be drawn in Henry and Spalding Counties.

Figure 29A

2021 House Plan District 117 and vicinity



167. **Figures 29B and 29C (Exhibits AC-3 and AC-4)** show the broader South Metro Region, including House Districts 74 and 117, in both the 2021 House Plan and the Illustrative Plan.

Figure 29B

South Metro Region under the 2021 House Plan

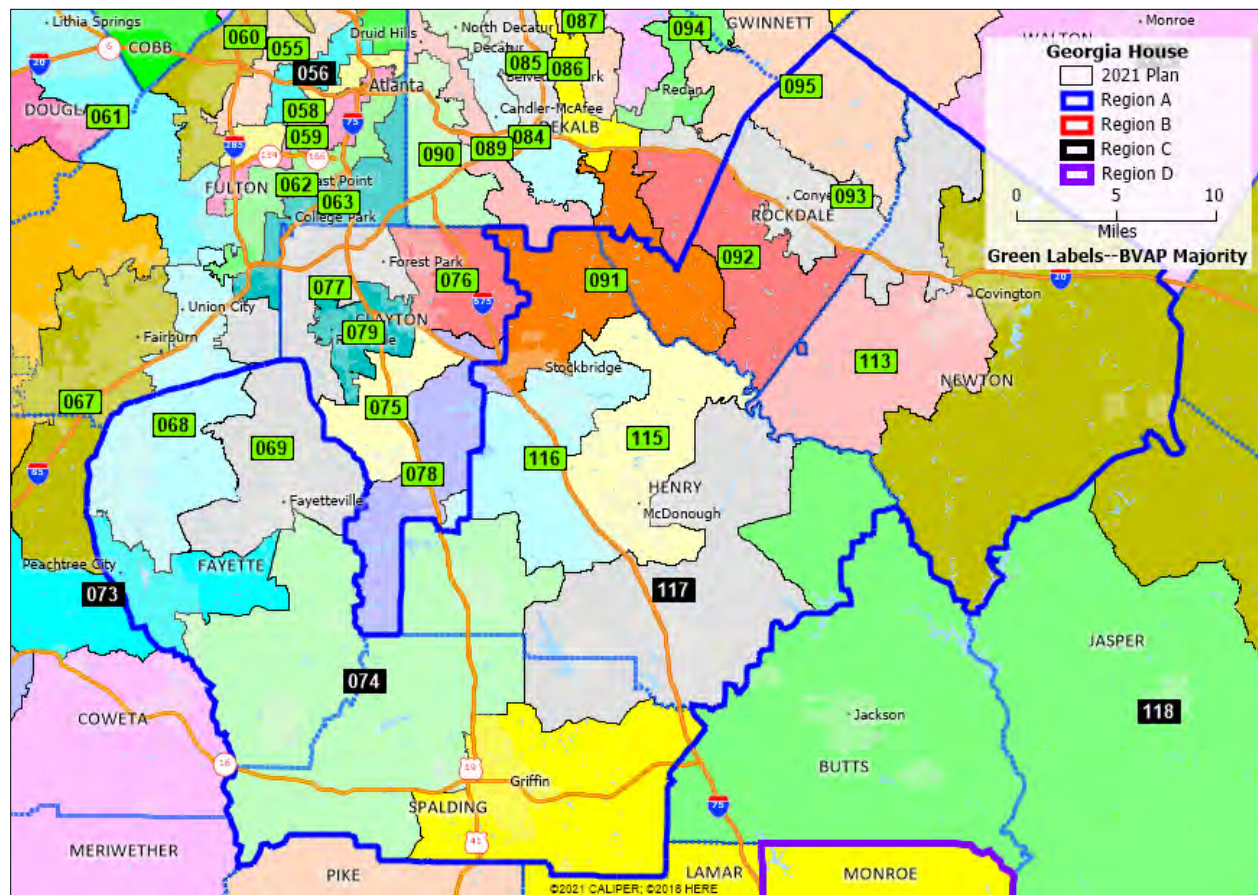
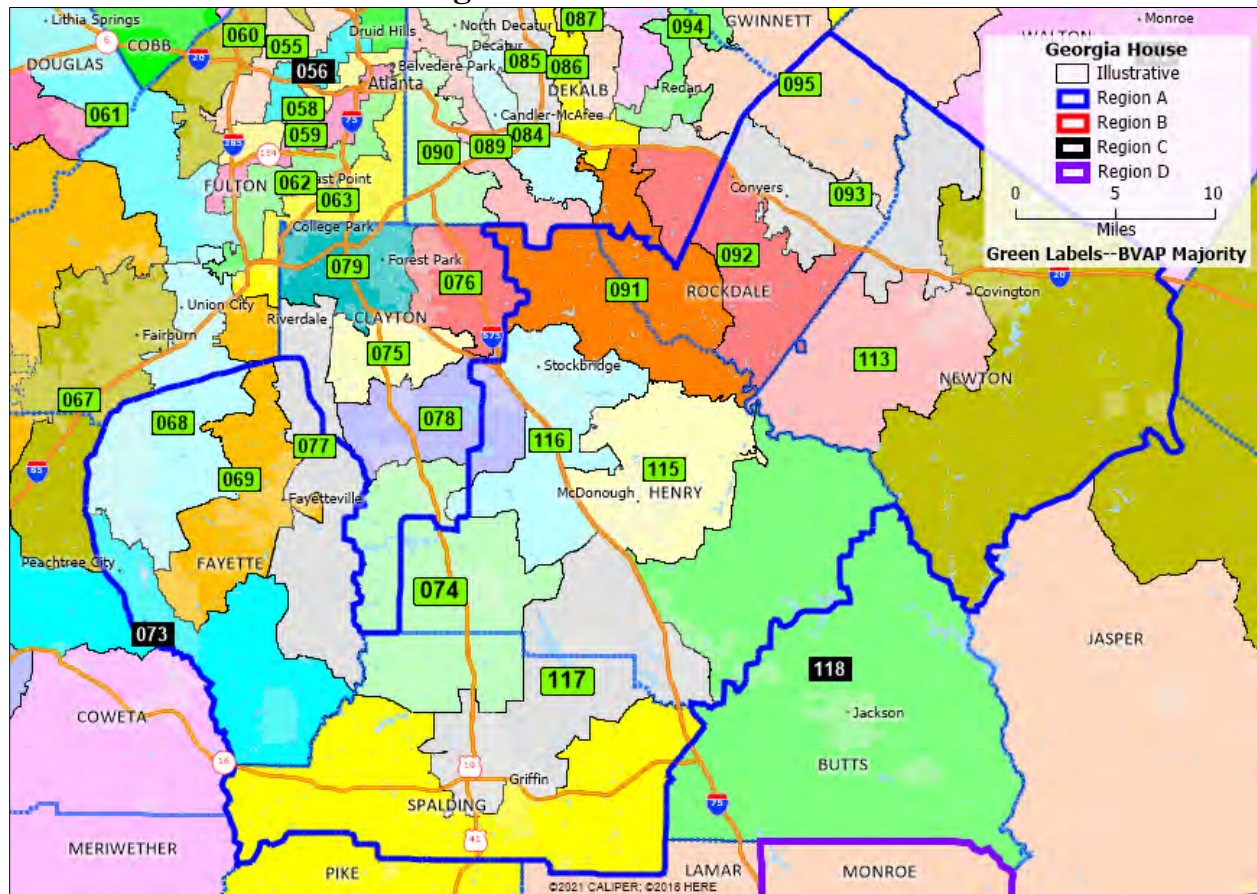
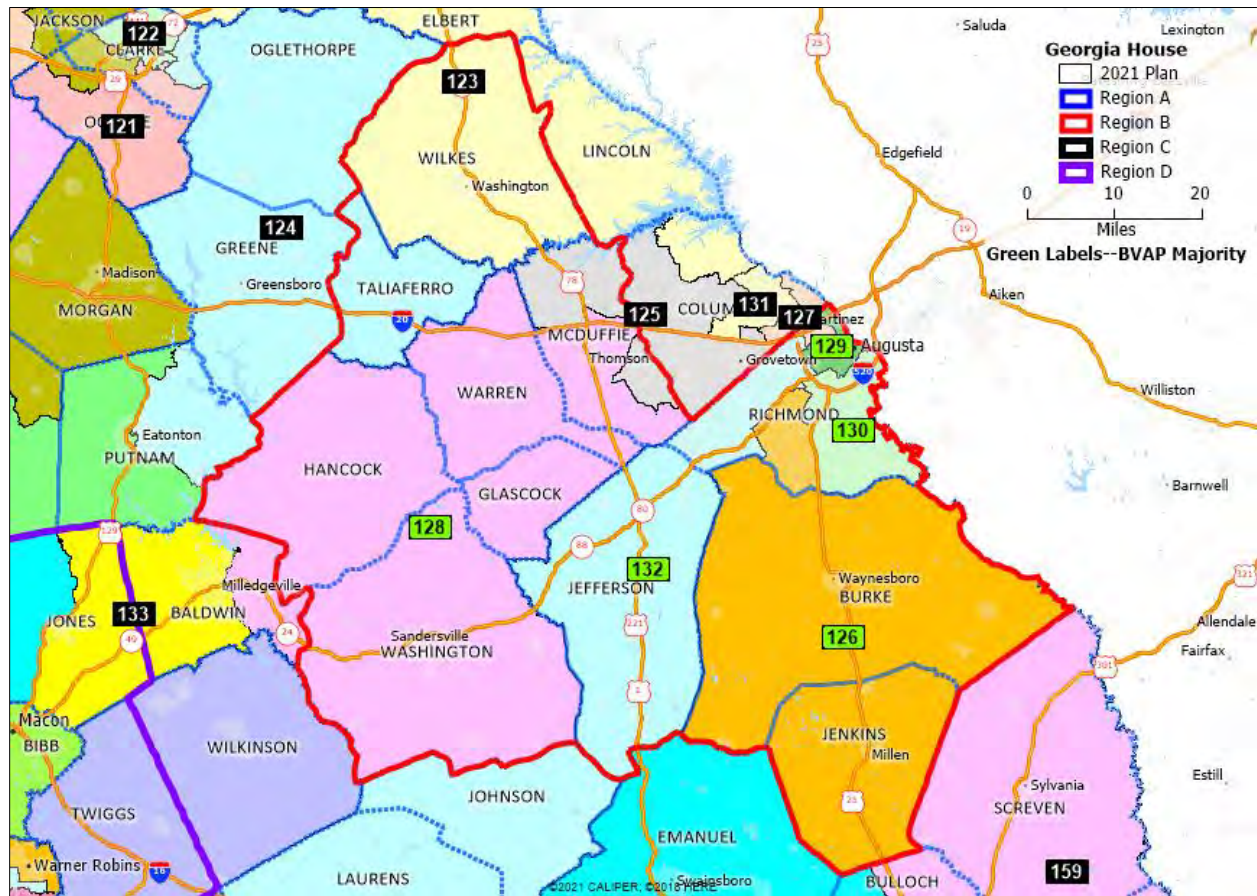
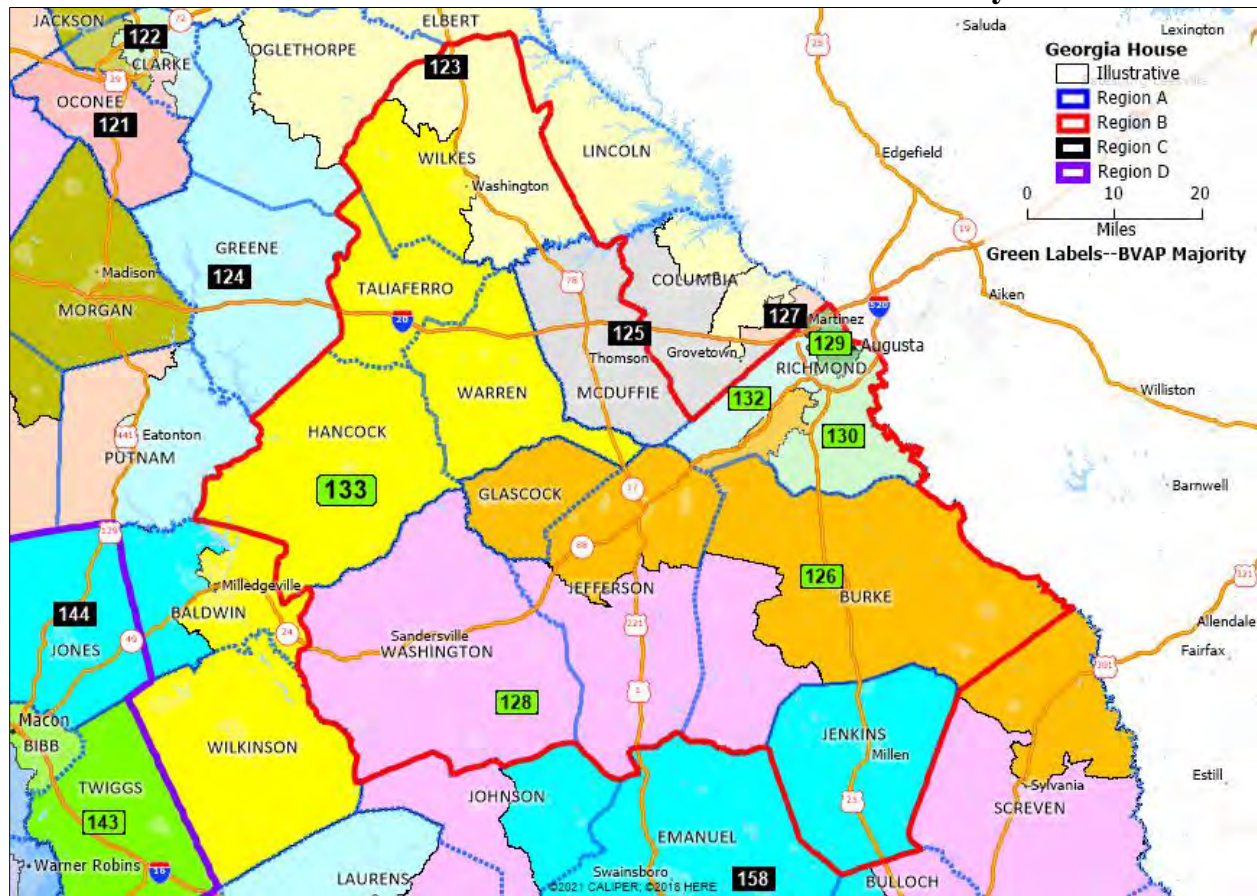


Figure 29C**South Metro Region under the Illustrative House Plan****(2) Eastern Black Belt (Region B)****(a) 2021 Plan Eastern Black Belt Districts (Exhibit AD-1)**

168. As shown in **Figure 30**, an additional majority-Black House District can also be drawn in the area in and around Augusta, including a number of Black Belt-area counties such as Baldwin, Wilkinson, and Taliaferro that are not within majority-Black districts under the 2021 House Plan.

Figure 30**2021 House Plan District 133 and the eastern Black Belt****(b) Illustrative Plan District 133 (Exhibit AD-2)**

169. As shown in **Figure 31**, in the 2021 House Plan, the area in and around Augusta includes five majority-Black districts: Districts 129 and 130 (entirely within Richmond County), as well as Districts 128, 131, and 132. An additional majority-Black district can be drawn in the outlying area by unpacking the Black populations of those five majority-Black districts in the 2021 House Plan.

Figure 31**Illustrative House Plan District 133 and vicinity**

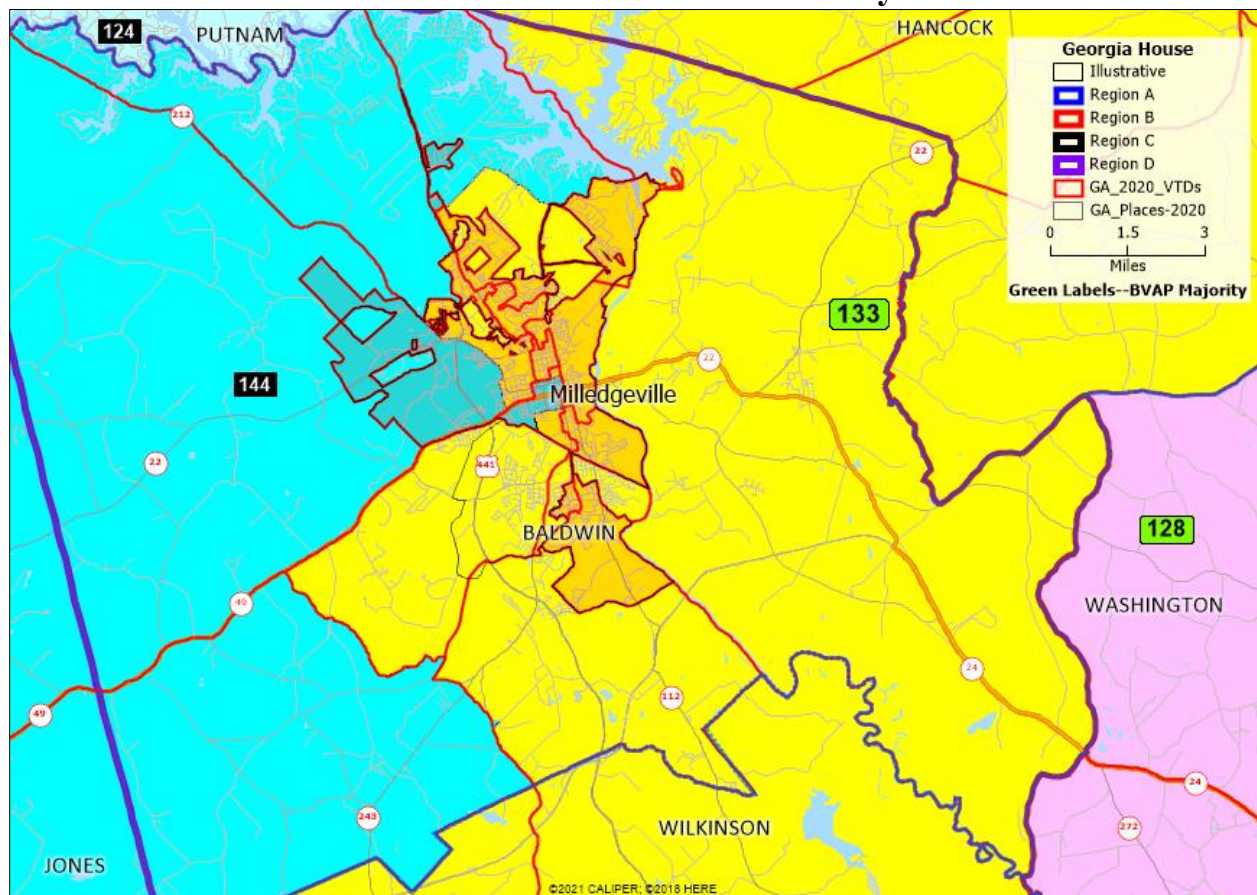
170. Looking at the Augusta region as a whole (Region B, outlined in red, plus adjacent counties), a sixth majority-Black district (Illustrative District 133) can be drawn in an area extending south-to-north from Wilkinson County to Baldwin County and on to Wilkes County.

171. Baldwin County is already split in the 2021 House Plan, but most of the Black population in the county lives in Milledgeville and is submerged in majority-White 2021 House District 133.

172. The map in zoomed-in **Figure 31B** demonstrates that Baldwin County can be split in a reasonable fashion along VTD and municipal lines to include most of oddly-shaped Milledgeville in Illustrative District 133. (The municipal boundary of Milledgeville is shaded in the **Figure 31B**. As shown below, there are unincorporated parts of Baldwin County contained within the Milledgeville city limits, some which are not contiguous or barely contiguous with the rest of the municipality.)

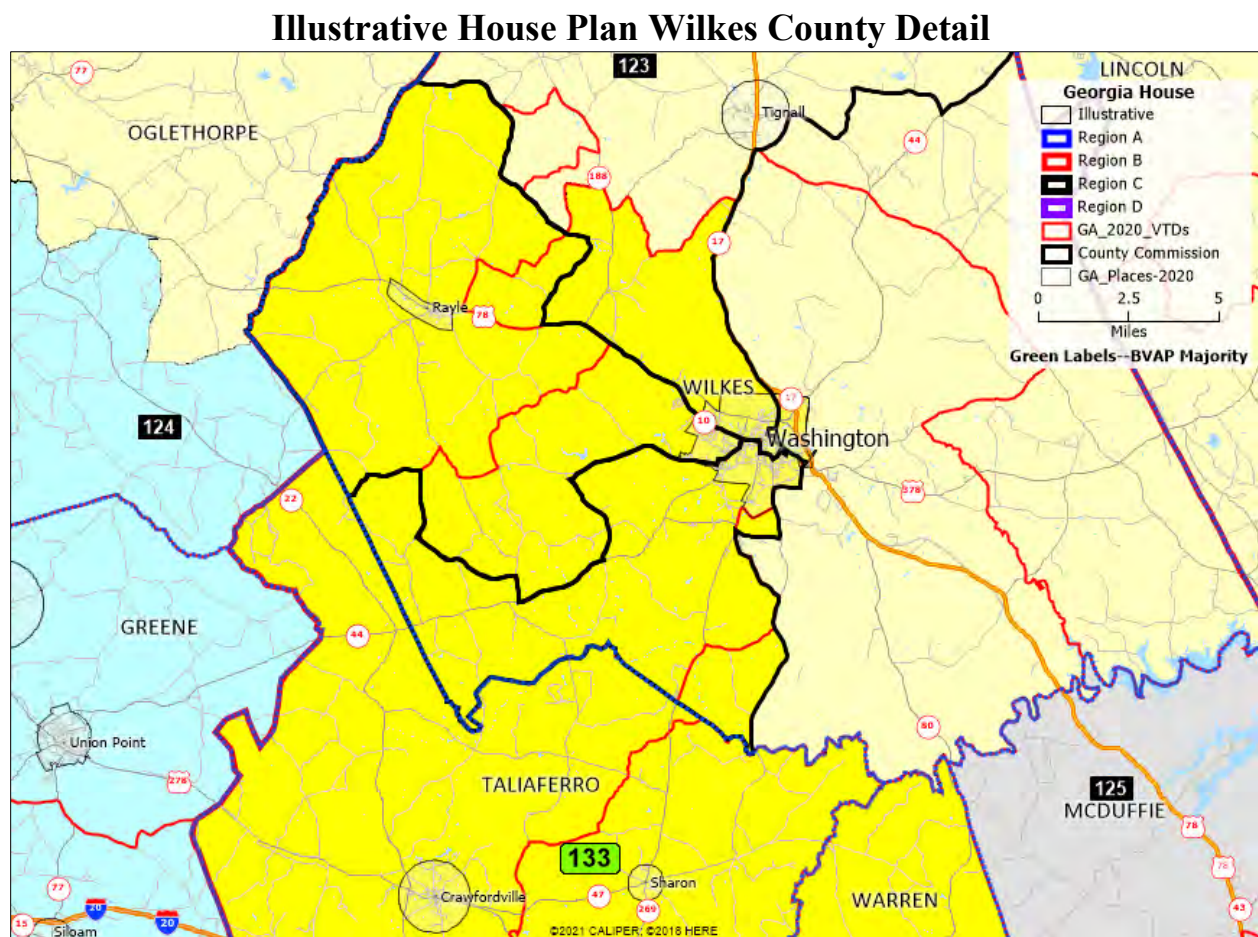
Figure 31B

Illustrative House Plan Baldwin County Detail



173. The map in **Figure 31C** shows that Wilkes County can be divided following county commission and municipal lines in forming Illustrative House District 133. A single VTD that is partly in the City of Washington forms the remainder of the perimeter. All of the City of Washington is in Illustrative District 133.

Figure 31



174. To recap, the Illustrative Plan draws six majority-Black House districts in the Eastern Black Belt—House Districts 124, 125, 126, 127, 128, and 133—where there are just five in the 2021 Plan.

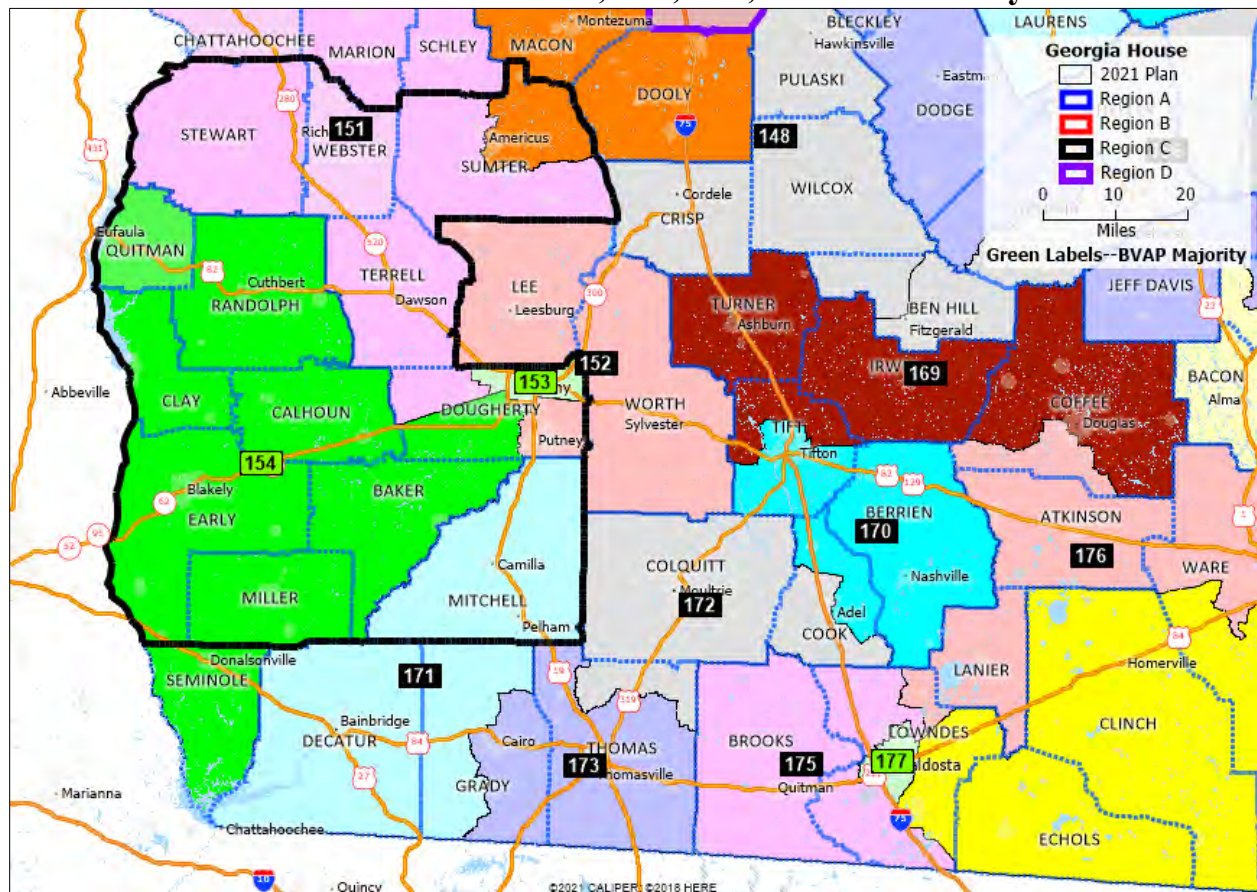
(3) Western Black Belt (Region C)

(a) 2021 Plan District 171 (Exhibit AE-1)

175. An additional majority-Black House District can also be drawn in the area along the historic U.S. Highway 19 corridor between Albany and Thomasville—unpacking and uncracking the Black population in and around the two cities. As shown in **Figure 32**, the 2021 House Plan includes only two majority-Black House Districts in the same general area as 2021 Senate District 12 in the southwest corner of the state (depicted with black lines as Region C).

Figure 32

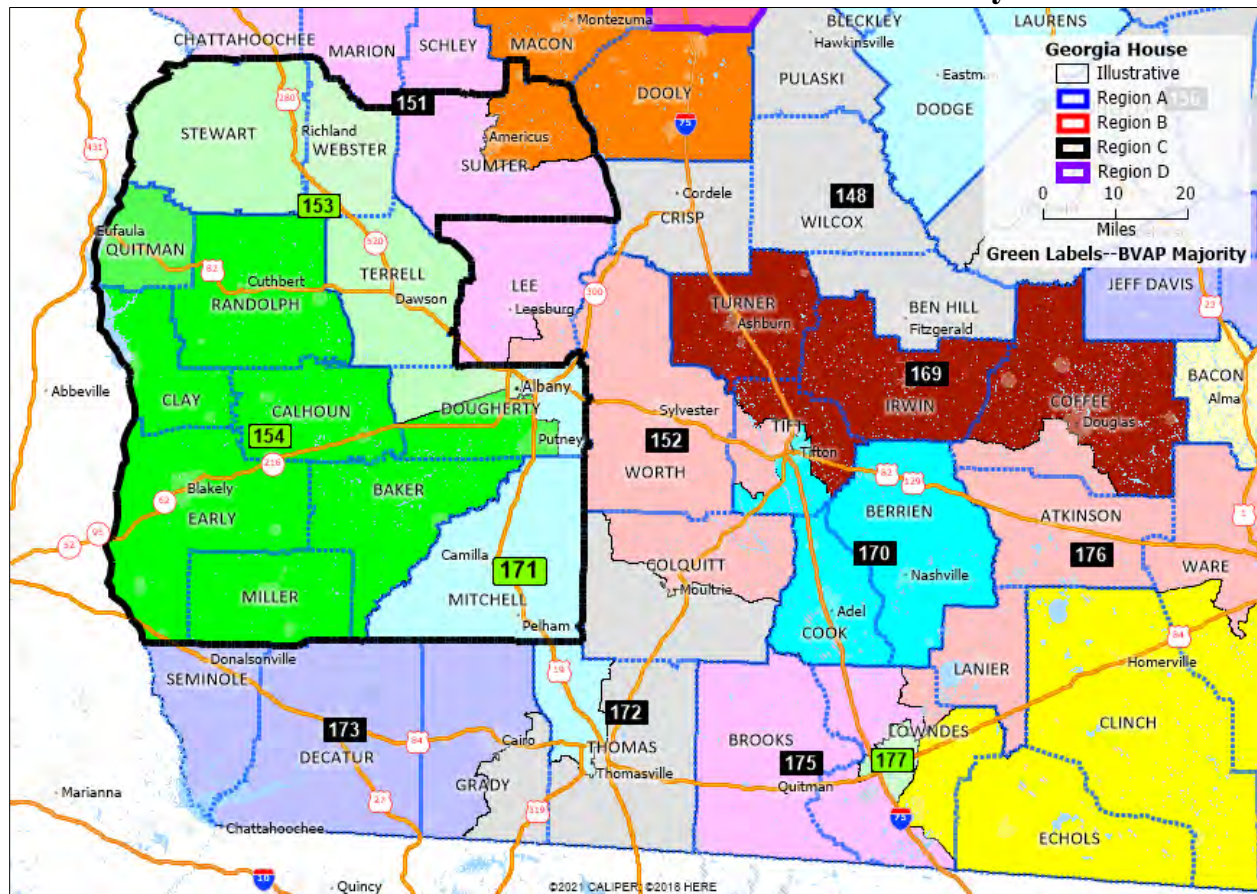
2021 Plan: District 151, 153, 171, 173 and Vicinity



176. The BVAP of 2021 House District 171, which contains Mitchell County, is about 40%. In addition, the BVAP of neighboring 2021 House District 173, which includes Thomas County, is just over 36%. And nearby Dougherty County, which contains the majority-Black City of Albany, is split among four districts in the 2021 House Plan—including 2021 House District 153, which is packed with Black voters (68% BVAP).

(b) Illustrative District 171 (Exhibit AE-2)

177. As shown in **Figure 33**, an additional majority-Black House District can be drawn in southwest Georgia by unpacking the Black population in 2021 House District 153 and uncracking the Black populations in 2021 House Districts 171 and 173. Unpacking those districts allows a majority-Black Illustrative House District 171 to be drawn in part of Dougherty, Mitchell, and Thomas Counties around where majority-Black 2021 Senate District 12 is drawn.

Figure 33**Illustrative House Plan District 171 and vicinity**

178. In addition to creating an additional majority-Black House district in the western Black Belt, the district unites the areas that comprise the Albany-Thomasville corridor. This economic, cultural, and historical transportation corridor runs along the western division of the historic Dixie Highway from

Albany to Thomasville, and has been recognized by the Southwest Georgia Regional Commission.³²

179. Moreover, the inclusion of Thomas County in majority-Black Illustrative House District 171 adds part of a second majority-Black district to the band of Black Belt counties in Southwest Georgia that extend as far east as the City of Valdosta and Lowndes County, as depicted in the GBPI map in **Figure 4**, *supra*. Majority-Black 2021 House District 177 in Valdosta is unchanged in the Illustrative Plan.

180. To recap, the Illustrative House Plan includes a third majority-Black district in the same general area as 2021 Senate District 12 in the southwest corner of the state, whereas the 2021 House Plan only includes two such districts.

(4) Metropolitan Macon (Region D)

(a) 2021 Plan (Exhibit AF-1)

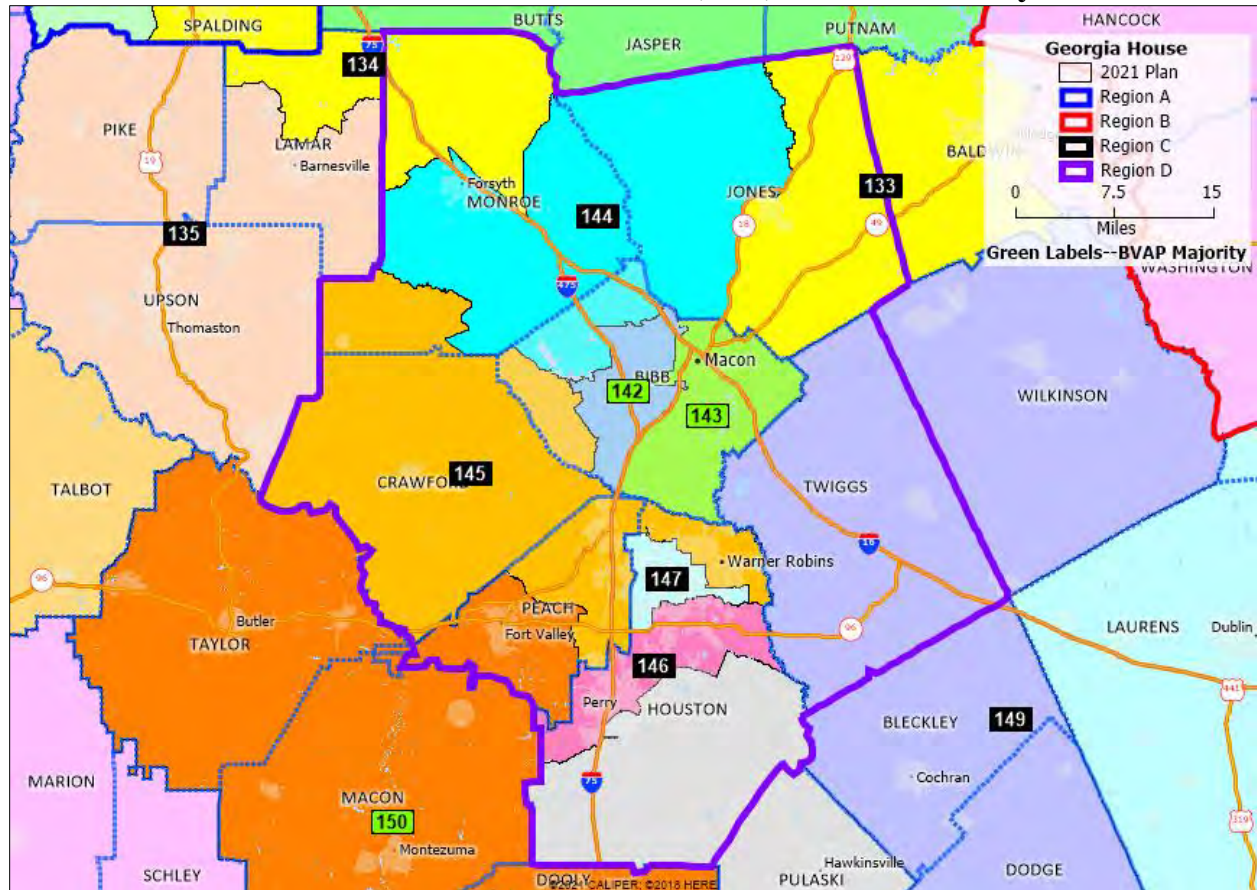
181. An additional majority-Black district can also be drawn in the Macon area by unpacking the Black population in the two majority-Black districts—2021 House District 142 (59.5% BVAP) and 2021 House District 143 (60.79% BVAP).

³² Southwest Georgia Regional Commission, *Corridor Management Plan* (2014), <http://www.dot.ga.gov/DriveSmart/Travel/ScenicByways/HistoricDixieHwy/HDH-CorridorManagementPlan.pdf>

182. As illustrated in **Figure 34**, under the 2021 House Plan, House District 145 includes parts of five different counties (Houston, Peach, Macon-Bibb, Crawford, and Monroe). The BVAP of 2021 House District 145 is 35.67%. Under the 2021 House Plan, there are two majority-Black districts in counties comprising the combined Macon-Bibb Warner Robins MSAs, even though the Black population there is more than sufficient to support a third.

Figure 34

2021 House Plan Districts 142,143, 145 and vicinity

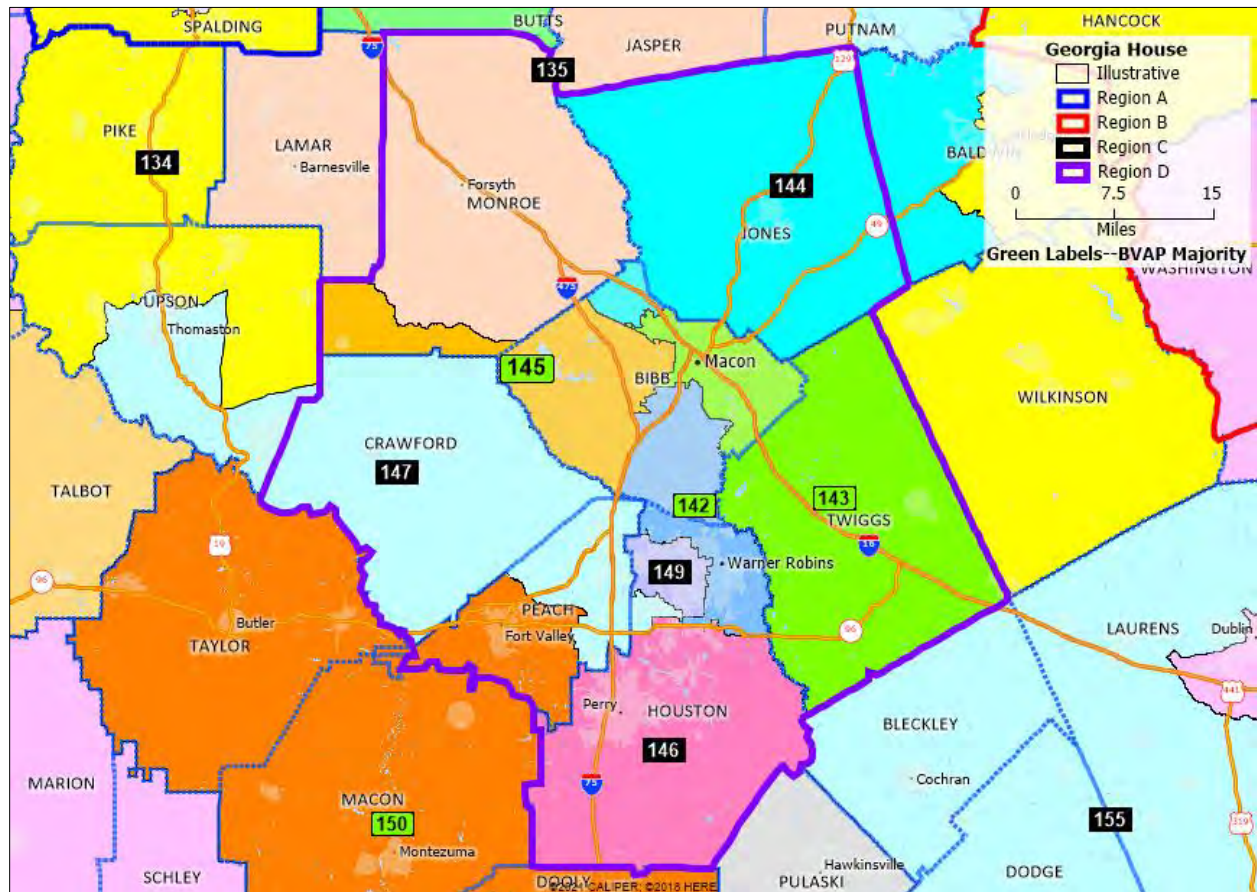


(b) Illustrative House District 145 (Exhibit AF-2)

183. Under the Illustrative Plan, majority-Black House District 145 (50.2% BVAP) is anchored in Macon and combined with the southern part of Monroe County, which is also split in the same general area in the 2021 House Plan.

Figure 35

Illustrative House District 145 and Vicinity



C. Supplemental Plan Information

(1) Population Equality

184. As demonstrated by the district-by-district population statistics in Exhibits AA-1 and Z-1, the Illustrative House Plan matches the 2021 Senate Plan

by staying within a stringent 1.5% population deviation limit for each district (*i.e.*, no district is more than 1.5% away from ideal population size).

(2) Compactness

185. Compactness scores for the Illustrative House Plan are within the norm. **Exhibit AG-1** contains compactness scores generated by Maptitude for all districts in the Illustrative House Plan, alongside scores for the 2015 Benchmark House Plan (**Exhibit AG-2**) and the 2021 House Plan (**Exhibit AG-3**).

186. The table in **Figure 37** (condensed from the **Exhibit AG** series) reports Reock and Polsby-Popper scores for the Illustrative House Plan, alongside scores for the 2015 Benchmark House Plan and the 2021 House Plan.

Figure 36

**Compactness Scores
Illustrative House Plan versus
2015 Benchmark and 2021 House Plans**

	Reock			Polsby-Popper	
	Mean	Low		Mean	Low
Illustrative House Plan	.39	.16		.27	.11
2015 Benchmark House Plan	.39	.13		.27	.09
2021 House Plan	.39	.12		.28	.10

187. On balance, the Illustrative House Plan and 2021 House Plan score about the same on the widely referenced Reock and Polsby-Popper measures. If anything, the Illustrative Plan scores better inasmuch as its least compact district by Reock scores .16, compared to .12 for the 2021 House Plan.

(3) Jurisdictional Splits

188. The **Exhibit AH** series contains Maptitude-generated reports for splits of key geographic areas in Georgia—from VTDs to regional commissions—under the Illustrative House Plan, the 2015 Benchmark Plan, and the 2021 House Plan.

189. The table in **Figure 38** summarizes split counts for counties, 2020 VTDs, and municipalities. On balance, the Illustrative House Plan and the 2021 House Plan score about the same on county and VTD splits. The 2021 House Plan has a slight edge on municipal splits (although the Illustrative House Plan keeps more single-county municipalities whole).

Figure 37

County and VTD splits/Whole Municipalities Illustrative House Plan versus 2015 Benchmark and 2021 House Plans

	Split Counties	Total County Splits*	2020 VTD Splits*	Single- County Whole City/Towns (478)#	Single and Multi County Whole City/ Towns (538)#	Total City/ Town Splits*
Illustrative House	68	209	179	393	402	361
2015 Benchmark	73	215	268	381	402	378
2021 House	69	209	179	384	412	344

*Populated splits only

Higher is better

190. **Exhibit AH-1** contains a county and VTD split report generated by Maptitude for all districts in the Illustrative House Plan. **Exhibit AH-2** reports for

the 2015 Benchmark House Plan and **Exhibit AH-3** reports for the 2021 House Plan.

191. **Exhibit AH-4** contains a split report for all 531 municipalities, including the 43 cities and towns that spill over into another county. See also **Exhibit AH-5** reports for the 2015 Benchmark House Plan and **Exhibit AH-6** reports for the 2021 House Plan.

(4) Regional Splits

192. The table in **Figure 39** shows summaries of Maptitude-generated regional splits, defined by the 12 state-designated regional commissions and the 39 federally-designated (“CBSAs”), which include MSAs and micropolitan areas.

Figure 38

**Split Regional Commissions and CBSAs
Illustrative House Plan versus
2014 Benchmark and 2021 House Plans**

	Regional Commission Splits	Whole CBSAs	CBSA Splits
Illustrative House Plan	223	10	218
2014 Benchmark House Plan	220	8	217
2021 House Plan	225	10	214

193. On balance, the Illustrative House Plan and 2021 Plan score about the same across the three regional categories.

(5) Incumbents

194. The Illustrative House Plan modifies about half (92) of the districts as drawn in the 2021 House Plan.

195. Based on January 2022 incumbent address information given to Plaintiffs' attorneys by the Defendants in the form of a geocoded shapefile, the following seven districts in the Illustrative House Plan may have incumbent conflicts: 106, 134, 154, 155, 167, 172, and 176. Based on the preliminary analysis of incumbent address information following the November 2022 general election pursuant to the 2021 House Plan, eight districts in the Illustrative House Plan may have incumbent conflicts: 65, 118, 134, 147, 155, 167, 171, 172.

E. Comparative Socioeconomic Analysis

196. This section of my report briefly highlights charts and tables that I prepared from the 2015-2019 American Community Survey found on **Exhibit CD** or via: http://www.fairdata2000.com/ACS_2015_19/Georgia/.

197. The datasets available in these ACS-based documents facilitate comparisons by race/ethnicity across counties and communities under the Illustrative House Plan and the 2021 House Plan, which can help identify commonalities and communities of interest in the relevant areas.

198. For example, Illustrative House District 74 includes parts of Henry, Spalding, and Clayton Counties and Illustrative House District 117 includes parts of

Henry and Spalding Counties. The counties within Illustrative House Districts 74 and 117 share socioeconomic characteristics that make them similar to one another. As one example, and as noted *supra* with respect to Illustrative Senate District 28, a similar proportion of Black residents in Henry, Spalding, and Clayton counties are in the labor force (71.0%, 58.2%, and 69.5% respectively). (See **Exhibit CD** Reports for Henry, Spalding, and Clayton Counties at pp. 53-55.)³³

199. In addition to being part of the eastern Black Belt region as discussed *supra*, counties within Illustrative House District 133 share socioeconomic characteristics that make them similar to one another. For example, a comparatively low proportion of Black residents in Illustrative District 133 counties have received a bachelor's degree or higher (ranging from 5.7% to 12.7% of the Black population ages 25 and over). (See **Exhibit CD** Reports for relevant counties at pp. 21-22.)

200. Illustrative House District 171 includes parts of Dougherty and Thomas Counties, and all of Mitchell County. Poverty rates are comparatively high for the Black population in all three counties. (See **Exhibit CD** Reports for Dougherty, Thomas, and Mitchell Counties at pp. 25-29.)

³³ Page references to Exhibit CD in this section refer to the county-specific or place-specific documents in Exhibit CD entitled "Single-Race African Americans and Latinos vis-à-vis Non-Hispanic Whites – Selected Socio-Economic Data," which are based on the 2015-2019 ACS 5-Year Estimates. See *supra* ¶¶ 68-69.

201. Illustrative House District 145 is in Macon-Bibb County and Monroe County. About 91% of all persons and 96% of Black persons in Illustrative House District 145 are Macon-Bibb residents. With the creation of a third Macon-centric district, Black voters in the consolidated city would potentially have a stronger voice in the State House to address shared socio-economic issues. For example, one-third of the Black population and nearly half (47.5%) of Black children in Macon-Bibb live in poverty. By contrast, 11.6% of the White population in Macon-Bibb and 14.1% of White children in live in poverty. (See **Exhibit CD** Report for Macon-Bibb County at pp. 25-29.)

E. Online Interactive Maps

202. The Illustrative House Plan can also be viewed online in detail on the *Dave's Redistricting Application* (DRA) website via the link below.

<https://davesredistricting.org/maps#viewmap::b9272e37-d718-49e8-b079-41f8331c9fa7>.

203. For comparison, the 2021 House Plan can be viewed via this link.

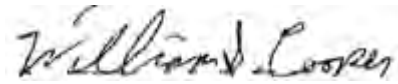
<https://davesredistricting.org/join/40c422df-0e13-4933-b3bb-5c661a9fc565>

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I reserve the right to continue to supplement my declaration in light of additional facts, testimony and/or materials that may come to light.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct according to the best of my knowledge, information and belief.

Executed on December 5, 2022.

A handwritten signature in cursive script, appearing to read "William S. Cooper", is written over a horizontal line.

WILLIAM S. COOPER