

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF LOUISIANA**

DR. DOROTHY NAIRNE, JARRETT
LOFTON, REV. CLEE EARNEST LOWE,
DR. ALICE WASHINGTON, STEVEN
HARRIS, ALEXIS CALHOUN, BLACK
VOTERS MATTER CAPACITY BUILDING
INSTITUTE, and THE LOUISIANA STATE
CONFERENCE OF THE NAACP,

Plaintiffs,

v.

R. KYLE ARDOIN, in his official capacity as
Secretary of State of Louisiana,

Defendant.

CIVIL NO. 3:22-cv-00178

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 serve as a demographic and redistricting expert for the Plaintiffs in the above-captioned case. I testified at trial in Baton Rouge on November 27, 2023 and November 28, 2023.

A. Recent Trial Testimony

2. Since my November 2023 trial testimony, I have testified at trial in three state-level Section 2 redistricting lawsuits. I testified in *DeSoto County State Conference of the NAACP v. State Board of Election Commissioners*, No. 3:22-cv-734-DPJ-HSO-LHS (S.D. Miss.); and *White v. State Board of Election Commissioners*, No. 4:22-cv-62-MPM-JMV (N.D. Miss.). I also testified for a second time in *Allen v. Milligan* (on behalf of the Caster plaintiffs). The 3-judge panel in Alabama credited my testimony in its May 8, 2025 order.

3. Also, in 2025, I testified at trial as an expert on demographics and redistricting in a county-level racial gerrymandering lawsuit—*McClure v. Jefferson County* No. 2:23-cv-00443-MHH (N.D. Ala.).

4. **Exhibit A** updates my review of redistricting and demographic projects to include additional lawsuits where I have been deposed or filed declarations since the November 2023 trial.

B. Purpose of Report

5. I drafted a supplemental declaration in this matter which I understand was shared with Defendants on March 19, 2024. That plan introduced proposed Remedial Plans with minor changes to the Illustrative Senate and House Plans presented at the trial stage.

6. The attorneys for the Plaintiffs have now asked me to develop remedial 2025 House and Senate plans, based on the Legislature's updated 2025 precinct boundaries.¹ In addition, they requested that I reconfigure Illustrative SD 29 and Illustrative HD 21 to match the boundaries for both districts under the Enacted Legislative Plans.² I also made a minor change to a district to account for new incumbents that have been elected in special elections, since I drafted my maps. In addition, I split a precinct in Tangipahoa to avoid an inadvertent incumbent conflict in the 2024 Remedial Plan.

C. Sources and Methodology

7. On January 10, 2025, the Legislature released a new set of GIS shapefiles,³ depicting statewide 2025 precinct boundaries⁴ and 2025 block boundaries.⁵ I have minimized 2025 precinct splits to the extent practicable in the Remedial Plans.

8. I designed the Remedial Plans so that the perimeters of the legislative districts follow 2020 census blocks. I also tried to avoid splitting the newly released 2025 state-defined census blocks—the map only splits several unpopulated 2020 blocks. Accordingly, the remedial

¹ https://redist.legis.la.gov/default_ShapeFiles2020

² The Plaintiffs' attorneys advised me that Dr. Handley's recent electoral analysis brings into question whether voters in Illustrative Plan SD 29 and Illustrative Plan HD 21 would elect the candidates favored by Black voters in districts where Black voters had historically been able to elect candidates of choice.

³ https://redist.legis.la.gov/default_ShapeFiles2020

⁴ [https://redist.legis.la.gov/2025%201RS/Shapefiles/2025%20Precinct%20Shapefiles%20\(01-16-2025\).zip](https://redist.legis.la.gov/2025%201RS/Shapefiles/2025%20Precinct%20Shapefiles%20(01-16-2025).zip)

⁵ [https://redist.legis.la.gov/2025%201RS/Shapefiles/2025%20Block%20Shapefile%20\(01-16-2025\).zip](https://redist.legis.la.gov/2025%201RS/Shapefiles/2025%20Block%20Shapefile%20(01-16-2025).zip)

plans can be converted into 2020 census block equivalency files or 2025 block equivalency files for importation into GIS software.

9. In addition, I have avoided 2025 incumbent conflicts where I had information about incumbent addresses.⁶ All of the Plaintiffs remain in the same districts where they were assigned under the Illustrative Plans.

10. I drew the Remedial Plans based on traditional redistricting principles, including population equality, compactness, contiguity, respect for communities of interest,⁷ and the non-dilution of minority voting strength. I followed the guidelines spelled out by the Legislature in Joint Rule 21, the legislative guidelines for the 2022 map (**Section II**, *infra*).⁸

⁶ Based on the ACLU's 2022 database that I relied upon to develop the Remedial Plans, no 2027 term-eligible incumbents were paired. I also avoided incumbent pairs based on all the updated address information I had. But because I do not have an official state database of the 2025 home addresses of all incumbent state legislators, there may remain incumbent conflicts in this set of Remedial Plans. However, should the Court determine that it is necessary, I am confident that with an official state incumbent home address database, I could quickly revise the Remedial Plans (within a day or two) in order to reduce or eliminate 2025 incumbent pairings, if any. I am also confident that the revisions would maintain three additional majority-Black Senate districts and six additional majority-Black House districts while abiding by traditional redistricting principles.

⁷ In my opinion, the Brennan Center provides a reasonable definition of "community of interest," which I have endeavored to follow in the development of the plaintiffs' Remedial Plans.

"Several redistricting criteria—like following county or municipal lines, or drawing districts that are compact—are in some ways proxies for finding communities of common interest. These are groups of individuals who are likely to have similar legislative concerns, and who might therefore benefit from cohesive representation in the legislature." According to the Brennan Center, 24 states define "community of interest," but Louisiana does not.

<https://www.brennancenter.org/sites/default/files/analysis/6%20Communities%20of%20Interest.pdf>

⁸ "Community of interest" is not defined in the Legislature's Joint Rule 21. Nor am I aware of an official state definition of the term. I am not aware of an official state database containing the residential addresses of incumbent legislators.

11. My initial 2023 Declaration included data and charts documenting socioeconomic disparities based on the 5-year 2015-2019 ACS. I have produced updated statewide and parish-level socioeconomic charts based on the 2019-2023 ACS in **Exhibit B**.

D. Report Overview

12. The Remedial Plans are based on the 2020 Census and the 2025 state-defined census blocks and precincts, containing 14 majority-Black Senate districts and 35 majority-Black House districts.

13. Like the Illustrative Plans, the Remedial Plans are superior to or on par with the Enacted Plans on virtually every metric that one could apply to legislative redistricting plans.

14. The Remedial Senate Plan keeps majority-Black SD 29 in the central part of the state as drawn in the Enacted Senate. In so doing, it maintains SD 29 as an identifiable community of interest, extending from the Alexandria area north to Natchitoches Parish and on to Lincoln Parish, where Grambling (a Historically Black College or University, or HBCU) is located. Elsewhere, the Remedial Senate Plan generally mirrors the Illustrative Senate Plan presented at trial.

15. The Remedial House Plan maintains majority-Black HD 21 as drawn in the Enacted House Plan. HD 21 is in the northeast corner of the Delta and runs south along the Mississippi River to encompass all of Concordia and Tensas Parishes.

16. All told, the Remedial Senate Plan modifies 35 Enacted Senate districts. The Remedial House Plan modifies 66 Enacted House districts.

17. Detailed map and statistical exhibits of the Enacted and Remedial Plans are referenced *infra*. In the exhibits, the Enacted Plans are referenced as the “2022 House” or “2022 Senate.” The Remedial Plans are sometimes referenced as the “2025 Remedial Plans.”

18. Section III and Section IV, *infra*, are condensed (in part) from my September 29, 2023 Declaration.

19. For ease of reference and comparison, exhibit numbers and content in Section III and Section IV (**Exhibits C to I**) are identical to exhibits in my September 29, 2023 Declaration. **Exhibits E, F, and G** contain socioeconomic data based on the 2015-2019 ACS.

20. Also, detailed maps in the style of the September 29, 2023 Exhibit M series (Illustrative Senate) and September 29, 2023 Exhibit Q series (Illustrative House) are not replicated.

II. REDISTRICTING GUIDELINES

A. Traditional Redistricting Principles

21. I applied traditional redistricting principles—one-person one-vote, compactness, contiguity, the non-dilution of minority voting strength, and preservation of communities of interest⁹—when drafting the Remedial Plans (one for the Senate and one for the House). I also took into account available incumbent addresses, which may factor into the overall framework of communities of interest.

22. The Remedial Plans are drawn to follow, to the extent possible, parish and municipal boundaries. Where parishes and municipalities are split, I have generally used whole 2020 VTDs and whole 2025 precincts as sub-parish components.¹⁰ Where VTDs or 2025 precincts are split, I have followed 2020 municipal boundaries, 2020 census block group boundaries, or 2020 census block boundaries.

⁹ In my opinion, the Remedial Plans adhere to the communities of interests outlined by Dr. Craig E. Colten in his expert reports prepared for this lawsuit.

¹⁰ VTDs are 2020 precincts or precinct proxies defined by the Census Bureau in the PL94-171 redistricting file, with corresponding geographic shapefiles.

23. Like the Illustrative Plans, the Remedial Plans I have drawn take into account present-day, historical, and cultural regional demographics and socio-economic characteristics.

B. Joint Rule No. 21 Redistricting Criteria

24. I have reviewed the Legislature’s Census 2020 redistricting criteria as embodied in the Legislature’s Joint Rule No. 21 “Redistricting criteria” (“JR 21”).¹¹ In my opinion, the Remedial Plans comply with JR 21, specifically with respect to the following:

- *Sec. G(1) – To the extent practicable, each district within a redistricting plan submitted for consideration shall contain whole election precincts as those are represented as Voting Districts (VTDs).*
- *Sec. H – All redistricting plans shall respect the established boundaries of parishes, municipalities, and other political subdivisions and natural geography of this state to the extent practicable. However, this criterion is subordinate to and shall not be used to undermine the maintenance of communities of interest within the same district to the extent practicable.*

25. JR 21 requires a +/- 5% deviation from the ideal district population size (119,430 for the Senate and 44,360 for the House), which I followed.

III. DEMOGRAPHIC PROFILE OF LOUISIANA

A. Decennial Census – Statewide Population – 2000 to 2020

26. The table in **Figure 1** presents the population of Louisiana by race and ethnicity for the decennial censuses between 2000 and 2020.

¹¹ See Joint Rule No. 21, <https://www.legis.la.gov/Legis/Law.aspx?d=1238755>.

**Figure 1: Louisiana – 2000 to 2020 Census
Population by Race and Ethnicity**

All Ages	2000	Percent of Total Population	2010	Percent of Total Population	2020	Percent of Total Population
Total Population	4,468,976	100%	4,533,372	100%	4,657,757	100.00%
NH White*	2,794,391	62.53%	2,734,884	60.33%	2,596,702	55.75%
Total Minority Pop.	1,674,585	37.47%	1,798,488	39.67%	2,061,055	44.25%
Latino	107,738	2.41%	192,560	4.25%	322,549	6.92%
NH Black*	1,443,390	32.30%	1,442,420	31.82%	1,452,420	31.18%
NH Asian*	54,256	1.21%	69,327	1.53%	85,336	1.83%
NH Hawaiian and Pacific Islander*	24,129	0.54%	28,092	0.62%	1,706	0.04%
NH Indigenous*	1,076	0.02%	1,544	0.03%	25,994	0.56%
NH Other*	4,736	0.11%	6,779	0.15%	16,954	0.36%
NH Two or More Races	39,260	0.88%	57,766	1.27%	156,096	3.35%
SR Black (Single-race Black)	1,451,944	32.49%	1,452,396	32.04%	1,464,023	31.43%
AP Black (Any Part Black)	1,468,317	32.86%	1,486,885	32.80%	1,543,119	33.13%

* Single-race, non-Hispanic.

27. According to the 2020 Census, non-Hispanic Whites comprise 55.75% of the population in Louisiana. African Americans are the next largest racial/ethnic category, representing 33.13% of the population in 2020—the second highest proportion of any state in the nation.

28. As shown in **Figure 1**, the statewide Any Part Black (“AP Black”) percentage increased from 32.86% in 2000 to 33.13% in 2020.¹² The minority population climbed from

¹² In this Declaration, “African American” or “Black” refers to persons who are Any Part Black (*i.e.*, persons of one or more races that are some part Black), including Hispanic Black, unless otherwise specified. It is my understanding that following the U.S. Supreme Court decision in *Georgia v. Ashcroft*, 539 U.S. 461 (2003), the “Any Part” definition is the appropriate Census classification to use in Section 2 cases.

37.47% in 2000 to 44.25% in 2020, with a corresponding drop in NH White population from 62.53% to 55.75%.

B. 2023 Population Estimates by Race (U.S. Census Bureau)

29. As shown in the table in **Figure 1-A**, 2023 populations estimates published by the Census Bureau indicate that the NH White population and AP Black populations have increased slightly in percentage terms since the 2020 Census enumeration, even as the overall population is estimated to have fallen by 84,008 persons.¹³ Voting age estimates by race and ethnicity are not published by the Census Bureau.

**Figure 1-A: Louisiana – 2020 Census and 2023 Census Bureau Estimates
Population by Race and Ethnicity**

All Ages	2020	Percent of Total 2020 Population	2023 Population Estimates	2020 to 2023 Estimated Change	Percent of Total 2023 Estimate
Total	4,657,757	100.00%	4,573,749	-84,008	100.00%
NH White*	2,596,702	55.75%	2,590,904	-5,798	56.65%
Total Minority	2,061,055	44.25%	1,982,845	-78,210	43.35%
AP Black	1,543,119	33.13%	1,543,160	41	33.74%

C. 2020 Census – Black Regional Population Distribution

30. **Exhibit C-1** reports 2020 population by race and ethnicity for the 64 parishes. **Exhibits C-2** (2010) and **C-3** (2000) follow the same format.

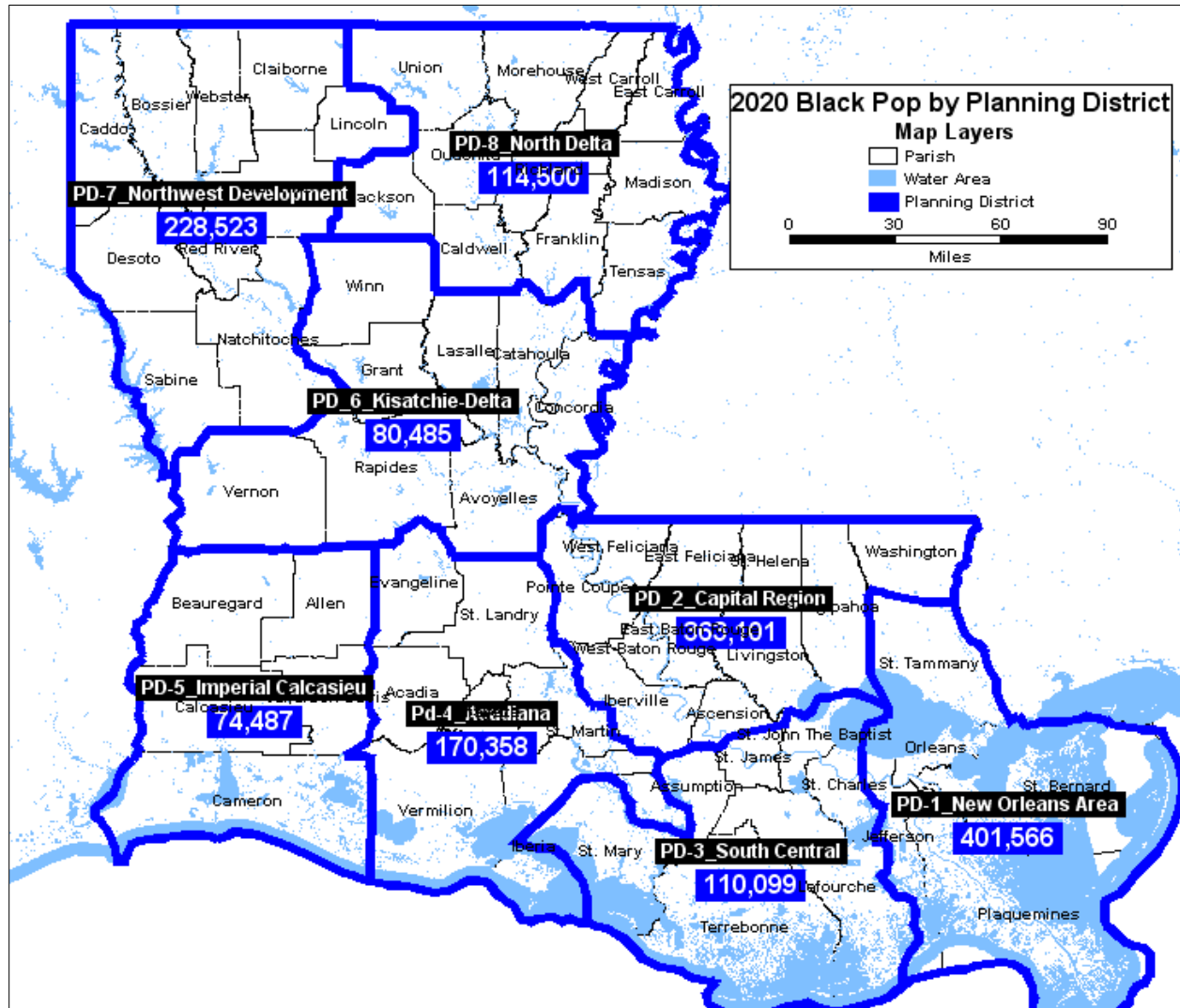
31. **Figure 2** outlines the eight planning and development districts in Louisiana (established by the State Legislature in 1956)—smoothing out the 2020 Black population

¹³ <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-detail.html>

2024 total population estimates by state and parish were published by the Census Bureau in March 2025. As of July 2024, the Census Bureau estimates that the state has a total population of 4,597,740. Detailed 2024 estimates by race and ethnicity are not yet available. See <https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html>

percentage from the parish to the regional level. Populations in the planning districts range between 24% Black and 40% Black. Blue labels show the 2020 Black population.

Figure 2: 2020 Black Population by Planning District



32. **Figure 3** presents the 2020 population by race and ethnicity for the eight planning and development districts.

**Figure 3: Planning and Development Districts – 2020 Census
Population by Race and Ethnicity**

	Planning District	Population	Latino	NH White	AP Black	% AP Black	% Minority	% NH White
PD-1	New Orleans Area	1,156,627	139,164	558,843	401,566	34.7%	51.68%	48.32%
PD-2	Capital Region	1,028,150	62,922	562,770	363,101	35.3%	45.26%	54.74%
PD-3	South Central	392,800	26,243	235,411	110,099	28.0%	40.07%	59.93%
PD-4	Acadiana	593,274	29,010	374,488	170,358	28.7%	36.88%	63.12%
PD-5	Imperial Calcasieu	313,951	15,479	211,324	74,487	23.7%	32.69%	67.31%
PD-6	Kisatchie-Delta	296,774	15,581	187,492	80,485	27.1%	36.82%	63.18%
PD-7	NW Development Corp.	573,210	24,900	295,920	228,523	39.9%	48.37%	51.63%
PD-8	North Delta	302,971	9,250	170,454	114,500	37.8%	43.74%	56.26%

D. Decennial Census – Statewide Voting Age Population – 2000 to 2020

33. Figure 4 reports the statewide voting age population (“VAP”) by race and ethnicity for 2000 to 2020.

34. Reflecting a younger and growing population, the statewide 2020 BVAP is 31.25% (1.88 points lower than the overall Black population percentage). By contrast, the NH White VAP is 58.31% (2.56 points higher than the corresponding percentage for the overall NH White population).

35. As shown in Figure 4, the statewide BVAP increased from 29.95% in 2000 to 31.25% in 2020. During that same time period, the NH White VAP dropped about seven percentage points, from 65.51% in 2000 to 58.31% in 2020.

**Figure 4: Louisiana – 2000 to 2020 Census
Voting Age Population by Race and Ethnicity**

Voting Age	2000	Percent of Voting Age	2010	Percent of Voting Age	2020	Percent of Voting Age
Voting Age Population	3,249,177	100.00%	3,415,357	100.00%	3,570,548	100.00%
NH White*	2,128,485	65.51%	2,147,661	62.88%	2,082,110	58.31%
Total Minority Pop.	1,120,692	34.49%	1,267,696	37.12%	1,488,438	41.69%
Latino	77,083	2.37%	138,091	4.04%	223,662	6.26%
NH Black*	959,622	29.53%	1,019,582	29.85%	1,066,511	29.87%
NH Asian*	39,702	1.22%	53,638	1.57%	67,983	1.90%
NH Hawaiian and Pacific Islander*	800	0.02%	1,152	0.03%	1,322	0.04%
NH Indigenous*	16,315	0.50%	19,952	0.58%	19,531	0.55%
NH Other*	2,803	0.09%	4,526	0.13%	11,524	0.32%
NH Two or More Races	24,367	0.75%	30,755	0.90%	97,905	2.74%
Black (Single-race Black)	965,052	29.70%	1,026,233	30.05%	1,073,754	30.07%
AP Black (Any Part Black)	973,149	29.95%	1,040,701	30.47%	1,115,769	31.25%

* Single-race, non-Hispanic.

E. Citizen Voting Age Population – 1-Year 2023 American Community Survey

36. According to the 1-year 2023 ACS, Black Louisianans comprise 30.86% of the citizen voting age population (“CVAP”), as compared to 59.7% NH White CVAP.¹⁴ Black CVAP is poised to climb for the remainder of this decade. Of citizens of all ages, 33.8% are AP Black.

¹⁴ **Table S2901 -- CITIZEN, VOTING-AGE POPULATION BY SELECTED CHARACTERISTICS (1-year 2023 ACS)**

<https://data.census.gov/table?q=S2901&g=040XX00US22&tid=ACST1Y2023.S2901>

**Public Use Microdata Sample of the 1-Year 2023 ACS
AP Black CVAP:**

[https://data.census.gov/app/mdat/ACSPUMS1Y2023/table?cv=CIT,RACBLK&rv=ucgid&vv=AGEP\(1:18:99\)&wt=PWGTP&g=AwFm-BVBIAmWg](https://data.census.gov/app/mdat/ACSPUMS1Y2023/table?cv=CIT,RACBLK&rv=ucgid&vv=AGEP(1:18:99)&wt=PWGTP&g=AwFm-BVBIAmWg)

AP Black Citizens – all ages:

<https://data.census.gov/app/mdat/ACSPUMS1Y2023/table?cv=CIT,RACBLK&rv=ucgid&wt=PWGTP&g=AwFm-BVBIAmWg>

F. Statewide Population Change by Decade – 2000 to 2020

37. As shown in **Figure 5**, Louisiana’s population grew between 2000 and 2020 (blue shaded rows)—up 4.22% from 4.47 million to 4.66 million.

**Figure 5: Louisiana – 2000 to 2020 Census
Population Change by Race**

	Total Pop.	NH White	Total Minority	AP Black
2000 Census	4,468,976	2,794,391	1,674,585	1,468,317
2010 Census	4,533,372	2,734,884	1,798,488	1,486,885
2020 Census	4,657,757	2,596,702	2,061,055	1,543,119
2000 - 2010 Gain/Loss	64,396	-59,507	123,903	18,568
% 2000 - 2010 Gain/Loss	1.44%	-2.13%	7.40%	1.26%
% of Statewide 2000 - 2010 Gain	100.0%	Net loss	192.4%	28.8%
2010 to 2020 Gain/Loss	124,385	-138,182	262,567	56,234
% 2010 to 2020 Gain/Loss	2.74%	-5.05%	14.60%	3.78%
% of Statewide 2010 - 2020 Gain	100%	Net loss	211.09%	45.21%
2000 to 2020 Gain/Loss	188,781	-197,689	386,470	74,802
% 2000 to 2020 Gain/Loss	4.42%	-7.07%	23.08%	5.09%
% of Statewide 2000 - 2020 Gain	100%	Net loss	204.7%	39.6%

38. The statewide population growth between 2000 and 2020 can be attributed entirely to a 23.08% gain in the minority population. Over the two decades, the Black population increased by 5.09%, while the NH White population fell by 7.07%.

G. The Rural to Urban Shift – MSA Population Change – 2000 to 2020

39. The table in **Figure 6** shows population change between 2000 and 2020 by MSA and the statewide non-metro remainder.¹⁵ For reference, **Exhibit D** is a Census Bureau-produced map depicting the nine MSAs in Louisiana.

40. All told, in this century, the MSAs have grown by 233,382 persons (equivalent to about two Senate districts and five House districts), while non-metro/rural areas of the state lost 44,601 persons (equivalent to about one House district).

Figure 6: Louisiana by MSA Region – 2000 to 2020 Population Change

MSA/Region (# of parishes)	2000 Pop.	2010 Pop.	2020 Pop.	Pop. Change (2000- 2020)	% Pop. Change (2000- 2020)
Alexandria (2)	145,035	153,922	152,192	7,157	4.93%
Baton Rouge (10)	729,361	825,905	870,569	141,208	19.36%
Hammond (1)	100,588	121,097	133,157	32,569	32.38%
Houma-Thibodaux (2)	194,477	208,178	207,137	12,660	6.51%
Lafayette (4)	425,020	466,750	478,384	53,364	12.56%
Lake Charles (2)	193,568	199,607	222,402	28,834	14.90%
Monroe (3)	201,074	204,420	207,104	6,030	3.00%
New Orleans-Metairie (8)	1,337,726	1,189,866	1,271,845	-65,881	-4.92%
Shreveport-Bossier City (3)	375,965	398,604	393,406	17,441	4.64%
Subtotal MSA	3,702,814	3,768,349	3,936,196	233,382	6.30%
Non-MSA Remainder	766,162	765,023	721,561	-44,601	-5.82%
Statewide	4,468,976	4,533,372	4,657,757	188,781	9.45%

¹⁵ 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.” Source: https://www.census.gov/geo/reference/gtc/gtc_cbsa.html.

The population figures in **Figure 5** are adjusted to reflect boundaries conforming to the 2020 MSA boundaries. In 2015, St. James Parish was added to the New Orleans MSA and Hammond (Tangipahoa Parish) became a newly defined MSA.

41. The Baton Rouge MSA (+141,208) accounts for more than half of the total 2000-2020 population gain in the MSAs. The New Orleans MSA has yet to recover to pre-Katrina population levels and is the only MSA that lost population (-65,881) over the two decades.

42. As shown in **Figure 7**, between 2000 and 2020, Black population at the MSA-level grew in eight of the nine MSAs. The exception is the New Orleans MSA. But the 2000-2010 New Orleans losses are reversing. The 2020 Census reported that the New Orleans MSA has gained 32,272 Black persons and 81,979 persons overall since the 2010 Census.

Figure 7: Louisiana by MSA Region – 2000 to 2020 Black Population Change

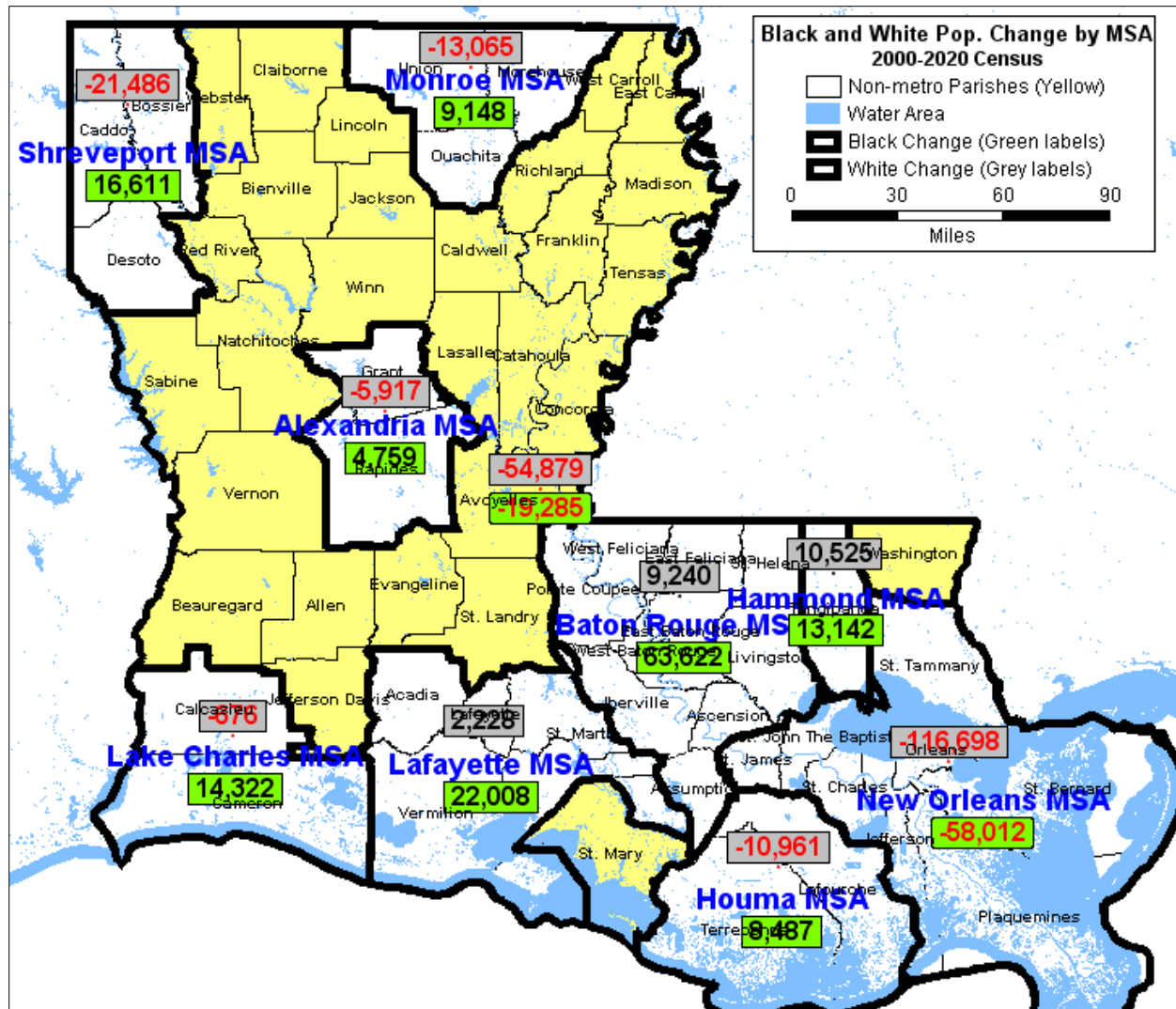
MSA/Region (# of Parishes)	2000 Black	2010 Black	2020 Black	Black Change (2000- 2020)	% Black Change (2000- 2020)
Alexandria (2)	41,168	46,752	45,927	4,759	11.56%
Baton Rouge (10)	250,386	297,951	314,008	63,622	25.41%
Hammond (1)	28,737	37,381	41,879	13,142	45.73%
Houma-Thibodaux (2)	30,515	35,435	39,002	8,487	27.81%
Lafayette (4)	103,279	119,699	125,287	22,008	21.31%
Lake Charles (2)	45,189	49,960	59,511	14,322	31.69%
Monroe (3)	69,777	76,717	78,925	9,148	13.11%
New Orleans-Metairie (8)	508,464	418,180	450,452	-58,012	-11.41%
Shreveport-Bossier City (3)	145,217	158,435	161,828	16,611	11.44%
Subtotal MSA	1,222,732	1,240,510	1,316,819	94,087	7.69%
Non-MSA Remainder	245,585	246,375	226,300	-19,285	-7.85%
Statewide	1,468,317	1,486,885	1,543,119	74,802	5.09%

43. Rural non-metro parishes lost Black population (-19,285) between 2000 and 2020, reflecting a rural-to-urban shift as the Black population grew by 94,087 persons at the MSA-level.

44. In contrast to 2000-2020 Black population growth at the MSA level, the map in **Figure 8** and table in **Figure 9** paint a different regional pattern for the White population over the two decades.

45. Black lines on the **Figure 8** map delineate the boundaries of the nine MSAs. Green labels show Black population change by MSA between 2000 and 2020. Grey labels show White population change between 2000 and 2020. Red fonts indicate population loss. Non-MSA parishes are shaded yellow.

Figure 8: MSA-level Black vs. White Population Change 2000-2020



46. As detailed in the **Figure 9** table, between 2000 and 2020, the White population fell in six of the nine MSAs for a net loss of 201,689 persons (equivalent to almost two Senate districts and five House districts). Over the two decades, the White population fell (-116,698) in

the New Orleans MSA, with an incremental loss between 2010 and 2020 (-24,540), even as the New Orleans MSA Black population grew over the past decade.¹⁶

Figure 9: Louisiana by MSA – 2000 to 2020 NH White Population Change

MSA/Region (# of Parishes)	2000 NH White	2010 NH White	2020 NH White	NH White Change (2000- 2020)	% NH White Change (2000- 2020)
Alexandria (2)	98,918	98,984	93,001	-5,917	-5.98%
Baton Rouge (10)	453,697	480,750	466,937	13,240	2.92%
Hammond (1)	69,300	77,807	79,825	10,525	15.19%
Houma-Thibodaux (2)	150,485	151,869	139,524	-10,961	-7.28%
Lafayette (4)	307,873	322,165	310,101	2,228	0.72%
Lake Charles (2)	142,960	140,168	142,284	-676	-0.47%
Monroe (3)	127,000	121,222	113,935	-13,065	-10.29%
New Orleans-Metairie (8)	731,514	639,356	614,816	-116,698	-5.95%
Shreveport-Bossier City (3)	217,317	218,052	195,831	-21,486	-9.89%
Subtotal MSA	2,299,064	2,250,373	2,156,254	-142,810	-6.21%
Non-MSA Remainder	495,327	484,511	440,448	-54,879	-11.08%
Statewide	2,794,391	2,734,884	2,596,702	-197,689	-7.07%
Baton Rouge (adjusting for 2020 Census Angola prison count error) - 4,000 NH white estimate			462,937	9,240	2.04%
Statewide (adjusted)			2,592,702	-201,689	-7.22%

47. White population gains between 2000 and 2020 were recorded in the MSAs of Baton Rouge, Lafayette, and Hammond, but the Black population increased at a much faster pace in the Baton Rouge and Lafayette areas.

¹⁶ As shown in yellow highlights in **Figure 9**, after adjusting for a clear 2020 Census error involving Angola prison in West Feliciana Parish—not yet corrected by the Census Bureau—White population grew by an estimated 9,240 persons in the Baton Rouge MSA. Under the 2020 Census, there are 5,429 persons (4,095 NH White) assigned to the three prison census blocks, of whom 5,265 are incarcerated. In all likelihood, the Census Bureau has mismatched the NH White and Black prison population in the prison blocks.

48. After accounting for the Angola prison error, the statewide MSA-total White population (*i.e.*, including only White population within MSAs) was down by -7.22% between 2000 and 2020, while the MSA-total Black population grew at a 7.69% clip. Both groups experienced substantial losses in non-metro population over the 20-year time frame, but the non-metro -11.08% White loss was steeper than the -7.85% loss for the Black population.¹⁷

49. The combined impact of the 2000 to 2020 rural-to-urban Black population shift (**Figure 7** and **Figure 8**) and Black population gains vis-à-vis White population losses (**Figure 8** and **Figure 9**) in the MSAs makes it possible to draw additional majority-Black legislative districts that were not drawn in the 2022 Enacted Plan (see Remedial Plans in **Section VI** and **VII**, *infra*).

IV. LEGISLATIVE PLANS – 1990s BENCHMARK TO 2022

A. Majority-Black Districts – 1990s Benchmark to 2022

50. As shown in **Figure 10**, at the start of the 21st century, there were 26 majority-Black House districts and 10 majority-Black Senate districts in Louisiana, based on the 1990s Legislative Plan and according to the 2000 Census.

51. After the Census 2000 legislative redistricting, there were 27 majority-Black House districts and 9 majority-Black Senate districts. On balance, this was a backward step because a majority-Black Senate seat was removed (from 10 to 9) and replaced with a majority-Black House district (from 26 to 27).

¹⁷ For simplicity and consistency with the current uncorrected 2020 Census data, other than references to the **Figure 8** map and **Figure 9** table, I have made no adjustments to the 2020 Census elsewhere in this Declaration—including election plan district statistics.

**Figure 10: Number of Majority-Black Legislative Districts
by Plan – 1990s to 2020s**

Decennial Census	Legislative Plan	Statewide Majority-Black Senate Districts	Statewide Majority-Black House Districts
2000	1990	10	26
2000	2001	9	27
2010	2001	9	23
2010	2011	11	28
2020	2011	10	28
2020	2022	11	29

52. By 2010, the number of majority-Black House districts under the 2000 Plan had dropped to 23 – due in large part to residential dislocations in the New Orleans area caused by Katrina. The 2011 Legislative Plan brought the number of majority-Black Senate districts back to 11, with 28 majority-Black House districts.

53. There were 11 majority-Black districts under the 2011 Senate Plan (2010 Census) and there are 11 under the Enacted Senate Plan. The Enacted Senate Plan restores SD 5 to the majority-Black status it held based on the 2010 Census. Between 2010 and 2020, SD 5 dropped from 50.1% BVAP to 43% BVAP.

54. On the other hand, the Enacted House Plan adds one majority Black House district—up to 29 from 28 under the 2011 House Plan. The new Enacted House district is HD 62 in the Baton Rouge MSA, encompassing part of East Baton Rouge Parish, as well as all of East Feliciana Parish.

55. All told, since 2000, one majority-Black Senate district (compared to the 1990 Senate Plan) and two majority-Black House districts (compared to the 2000 House Plan) have been added. Still, this is a paltry increase given the more than 7% statewide decline in the NH White population and the 5.09% climb in the Black population over the same 20-year period.

B. Demographics of Majority-Black and Majority-White Districts

56. As **Figure 11** reveals, despite the major changes in the composition of the State’s population over the past two decades, the percentage of Black Louisianans of voting age residing in majority-Black legislative districts has hovered around 50%—except for the 2000s when the Black VAP dropped to the 40% range in both chambers under the 2001 Legislative Plan.

**Figure 11: Same Race VAP in Majority-Black and Majority-White Districts
1990s to 2022 Legislative Plans**

Decennial Census	Legislative Plan	Black VAP in Majority Black Senate Districts	NH White VAP in Majority White Senate Districts	Black VAP in Majority Black House Districts	NH White VAP in Majority White House Districts
2000	1990s	47.8%	88.4%	50.6%	90.3%
2000	2001	39.8%	86.7%	47.9%	87.8%
2010	2001	39.0%	88.7%	42.6%	86.9%
2010	2011	53.2%	84.3%	55.1%	85.2%
2020	2011	47.0%	82.3%	53.8%	85.3%
2020	2022	53.6%	84.4%	55.6%	83.4%

57. By contrast, the percentage of the White VAP in majority-White districts has remained in the mid-80s over the same timeframe. This huge 30-point White-to-Black majority-district residency gap indicates that Black populations have been disproportionately “cracked”¹⁸ into majority-White districts, “packed”¹⁹ into overwhelmingly majority-Black districts, or both.

¹⁸ “Cracking” describes election districts that fragment or divide the minority population, resulting in an overall dilution of minority voting strength in the voting plan.

¹⁹ “Packing” describes election districts where a minority population is unnecessarily concentrated, resulting in an overall dilution of minority voting strength in the voting plan.

C. Enacted Senate Plan

58. **Exhibit H-1** contains detailed 2020 population statistics by district for the Enacted Senate Plan. The map in **Exhibit H-2** is a statewide map of the Enacted Senate Plan (best viewed or printed at 200%). **Exhibit H-3** identifies parish-level population by district. **Exhibit H-4** identifies district splits by parish and VTD. **Exhibit H-5** identifies municipal splits by district.

59. To facilitate comparison with the Remedial Senate Plan, I have prepared several sets of more detailed maps. For ease of reference and complete visual coverage, regional maps accompanying the Enacted Senate Plan (**Exhibit H-6**) are organized by planning district (“PD”) number (from PD 1 to PD 8 – see **Figure 2**, *supra*).

60. **Exhibit H-7** contains maps in sequential order that zoom in on each of the 11 majority-Black Enacted Senate Plan districts.

61. MSAs are identified in all of the maps with bold black lines. Parish lines are shown with dotted grey lines. Blue labels identify majority-Black districts.

D. Enacted House Plan

62. Maps and statistics for the Enacted House Plan are organized in the same fashion as the Enacted Senate Plan.

63. **Exhibit I-1** contains detailed 2020 population statistics by district for the Enacted House Plan. The map in **Exhibit I-2** is a statewide map of the Enacted House Plan (best viewed or printed at 200%). **Exhibit I-3** identifies parish-level population by district. **Exhibit I-4** identifies district splits by parish and VTD. **Exhibit I-5** identifies municipal splits by district.

64. **Exhibit I-6** contains maps zooming on the eight regional planning districts (from PD 1 to PD 8). **Exhibit I-7** contains maps in sequential order that zoom in on each of the 29 majority-Black Enacted House Plan districts.

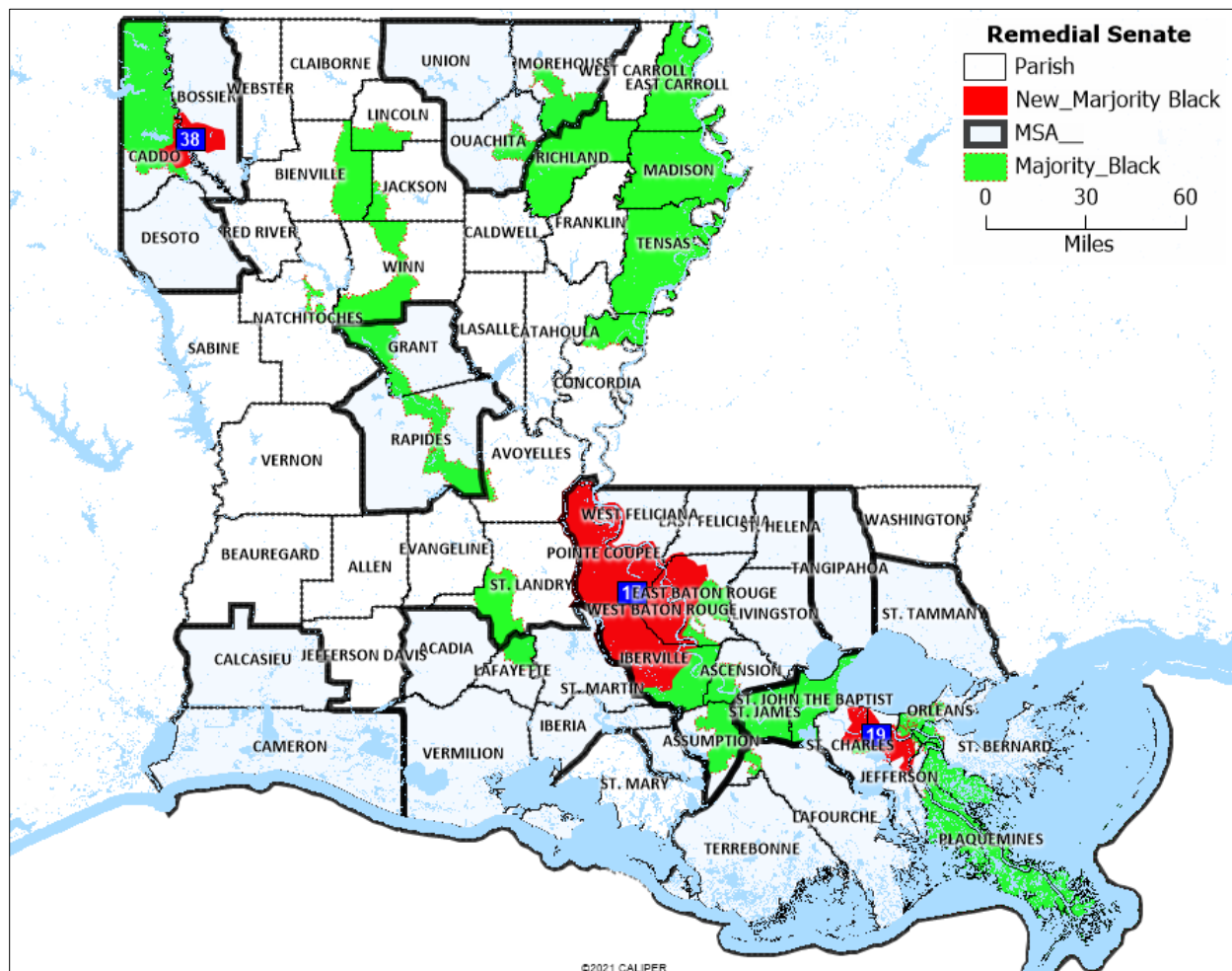
65. MSAs are identified in all of the maps with bold black lines. Parish lines are shown with dotted grey lines. Blue labels identify majority-Black districts.

V. REMEDIAL SENATE PLAN

A. Remedial Senate Plan – Overview

66. The map in **Figure 12** displays three additional majority-Black districts (outlined in red with small blue labels) in the Remedial Senate Plan: **Remedial SD 38** (Shreveport-Bossier City MSA), **Remedial SD 17** (Baton Rouge MSA), and **Remedial SD 19** (New Orleans MSA). All three of the additional majority-Black districts are urban-centric and more compact than their Enacted Senate Plan counterparts. As discussed *supra*, these districts are similar to the Illustrative Senate Plan districts and were changed to reflect new precinct and census block boundaries and as much as possible to ensure incumbents were not drawn out of their districts (based on the available information).

**Figure 12: Location of 3 Additional Majority-Black Districts
Remedial Senate Plan**



67. Green areas on the **Figure 12** map represent other majority-Black districts in the Remedial Senate Plan that generally encompass areas within majority-Black districts under the Enacted Senate Plan. All told, the Remedial Senate Plan modifies in some fashion 35 of the 39 Senate districts in the Enacted Senate Plan. SD 11, 12, 16, and 29 are not changed. Put differently, a core population²⁰ representing 75.09% of the state’s population is kept together in the redraw

²⁰ I define “core population” as the largest district-level subset of a population that is kept together in the shift from one plan to another (without taking into account changes in district numbers or changes in incumbent representation). The core population is identified with shading in the referenced tabular exhibits.

from the Enacted Senate Plan to the Remedial Senate Plan. (See **Exhibit L-2**, *infra*.) By comparison, 80.2% of the state’s population was kept together in the redraw from the Benchmark 2011 Plan to the Enacted Senate Plan. (See **Exhibit L-4**, *infra*.)

68. As documented in charts and datasets from the American Community Survey (see **Section III** in my September 29, 2023 Declaration) and updated charts in **Exhibit B**, *supra*, Black persons in Remedial SD 38, SD 17, and SD 19 are a community of interest based on socio-economic characteristics and racial disparities at the state and parish levels.

69. Remedial SD 17 and Remedial SD 19 also encompass a 4-district community of interest in the Remedial Senate Plan. These two districts anchor the north and south ends of Louisiana’s Chemical Corridor (aka “Cancer Alley”), with two majority-Black districts (Remedial SD 2 and Remedial SD 14) sandwiched in-between.

70. Maps and statistics for the Remedial Senate Plan are organized in the same fashion as the Enacted Senate Plan (*supra*).

71. **Exhibit J-1** contains detailed 2020 population statistics by district for the Remedial Senate Plan. The map in **Exhibit J-2** is a statewide map of the Remedial Senate Plan (best viewed or printed at 200%). **Exhibit J-3** identifies district splits by parish. **Exhibit J-4** identifies municipal splits by district. **Exhibit J-5** identifies 2025 precinct splits by district.

72. To facilitate comparison with the Enacted Senate Plan, I have prepared several sets of more detailed maps of the Remedial Senate Plan. For ease of reference and complete visual coverage, regional maps (**Exhibit J-6**) are organized by planning district (PD 1 to PD 8 – see **Figure 2**, *supra*).

73. **Exhibit J-7** contains maps in sequential order that zoom in on each of the 14 majority-Black Senate districts. MSAs are identified in all of the Exhibit J series maps with bold black lines and blue labels. Parish lines are shown with dotted grey lines.

74. The Remedial Senate Plan can also be viewed and analyzed on the Dave's Redistricting website at the following link: <https://davesredistricting.org/join/ef241b5b-2eca-4077-bdf5-dd00f2a4b3c6>

B. Senate Plan Metrics – Remedial vs. 2022 Enacted

i. Compactness Measures

75. **Exhibit K-1** reports district-by-district compactness scores generated by Maptitude for the Enacted Senate. Compactness scores for the Remedial Senate Plan are in **Exhibit K-2**. Remedial SD 29 is identical to Enacted SD 29—and, in this instance, I have prioritized a community of interest (HBCU Grambling) over compactness.

76. Each exhibit reports three compactness scores: Reock, Polsby-Popper, and Convex Area/Hull.²¹ Higher scores indicate higher compactness.

²¹ “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.” *Mapitude For Redistricting* software documentation (authored by the Caliper Corporation).

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. *Id.*

The Convex Area/Hull test computes the ratio the district area to the area of the convex hull of the district (minimum convex polygon which completely contains the district). The measure is always between 0 and 1, with 1 being the most compact. The Minimum Convex Polygon test computes one number for each district and the minimum, maximum, mean and standard deviation for the plan. *Id.*

77. The table in **Figure 13** summarizes the Reock and Polsby-Popper scores (the two most commonly referenced measures) for the Enacted Senate Plan, alongside scores for the Remedial Senate Plan.

78. The higher scores are in boldface. The Remedial Senate Plan scores higher or the same on all of the 12 categories (mean, lowest, and highest).

Figure 13: Compactness Scores – Enacted Senate vs. Remedial Senate Plan

	Reock				Polsby-Popper		
	Mean	Low	High		Mean	Low	High
Enacted Senate							
All Districts	.36	.11	.59		.18	.05	.35
11 Majority-Black Districts	.28	.11	.37		.14	.05	.29
2025 Remedial Senate Plan							
All Districts	.36	.11	.59		.22	.05	.36
14 Majority-Black Districts	.31	.11	.43		.19	.05	.36

ii. **Political Subdivision Splits**

79. The table in **Figure 14** compares district splits by parish and 2025 precincts for the Enacted Senate Plan (*see Exhibit H-4*) and the Remedial Senate Plan (*see Exhibit J-4*). Municipal split counts are in **Exhibit H-5** for the Enacted Senate Plan and **Exhibit J-5** for the Remedial Senate Plan. Figures that indicate fewer municipal or precinct splits are bolded.

Figure 14: Political Subdivision Splits (excluding 100% splits and unpopulated splits)

	Parishes not Split	Total Parish Splits (lower is better)	2025 Precinct Splits (lower is better)	Municipalities Not Split	Total Municipal Splits (lower is better)
Enacted Senate	24	117	4	266	107
Remedial Senate	28	102	2	265	90

80. As **Figure 14** reveals, the Remedial Senate Plan is superior to the Enacted Senate Plan in terms of parish splits and superior to the Enacted Senate Plan on municipal splits. The Remedial Senate Plan keeps 28 parishes whole, while the Enacted Senate Plan keeps 24 parishes whole.

81. The Remedial Senate Plan keeps 265 municipalities whole, with 90 populated municipal splits, which is better than the comparable municipal split count of 107 under the Enacted Senate Plan.

iii. Senate Districts – Majority-Black and Majority-White Comparison

82. As shown in **Figure 15** (see **Figure 11**, *supra*, for historical comparisons), with three additional majority-Black Senate districts, the percentage of the Black VAP residing in majority-Black Senate districts moves closer to parity with the White VAP, but there is still a 17-percentage point gap.

**Figure 15: Same Race VAP in Majority-Black and Majority-White Districts
Statewide Enacted Senate and Remedial Senate Plan**

Legislative Plan	2020 Black VAP in Majority Black Senate Districts	2020 NH White VAP in Majority White Senate Districts	Statewide Difference
Enacted Senate	53.6%	84.4%	-30.8%
Remedial Senate	61.2%	78.1%	-16.9%

83. As revealed in **Figure 16**, in the three MSAs where additional districts are created under the Remedial Senate Plan, the percentage of the Black VAP residing in majority-Black Senate districts does not exceed the statewide 84.4% White benchmark ceiling under the Enacted Senate Plan—Baton Rouge (73.5%), New Orleans (79.4%), and Shreveport (83.4%).

84. And in those same three MSAs, the NH White VAP residing in majority-White districts is above the statewide 53.6% Black benchmark floor under the Enacted Senate Plan—Baton Rouge (70.5%), New Orleans (66.5%), and Shreveport (54.9%).

**Figure 16: Same Race VAP in Majority-Black and Majority-White Districts
Regional MSA-level – Enacted Senate and Remedial Senate Plan**

MSA/Region (# of parishes)	2020 Black VAP in Majority Black 2022	2020 White VAP in Majority White 2022	2020 Black VAP in Majority Black Remedial	2020 White VAP in Majority White Remedial
Alexandria (2)	79.0%	74.4%	75.6%	74.8%
Baton Rouge (10)	63.9%	83.3%	73.5%	70.5%
Hammond (1)	0.0%	100.0%	0.0%	100.0%
Houma-Thibodaux (2)	17.4%	94.3%	17.8%	93.7%
Lafayette (4)	34.9%	90.0%	32.6%	90.4%
Lake Charles (2)	0.0%	100.0%	0.0%	100.0%
Monroe (3)	64.8%	87.5%	64.8%	87.5%
New Orleans-Metairie (8)	69.6%	74.9%	79.4%	66.6%
Shreveport-Bossier City (3)	51.8%	81.8%	83.4%	55.4%

85. To view all municipalities assigned by district in the Remedial Senate Plan, refer to **Exhibit L-1**. To view the Remedial Senate Plan district core components built from districts in the Enacted Senate Plan, refer to **Exhibit L-2**—“Core Constituencies.” To view all municipalities assigned by district in the Enacted Senate Plan, refer to **Exhibit L-3**. To view the Enacted Senate Plan district core components built from districts in the 2011 Benchmark Senate Plan, refer to **Exhibit L-4** “Core Constituencies.”

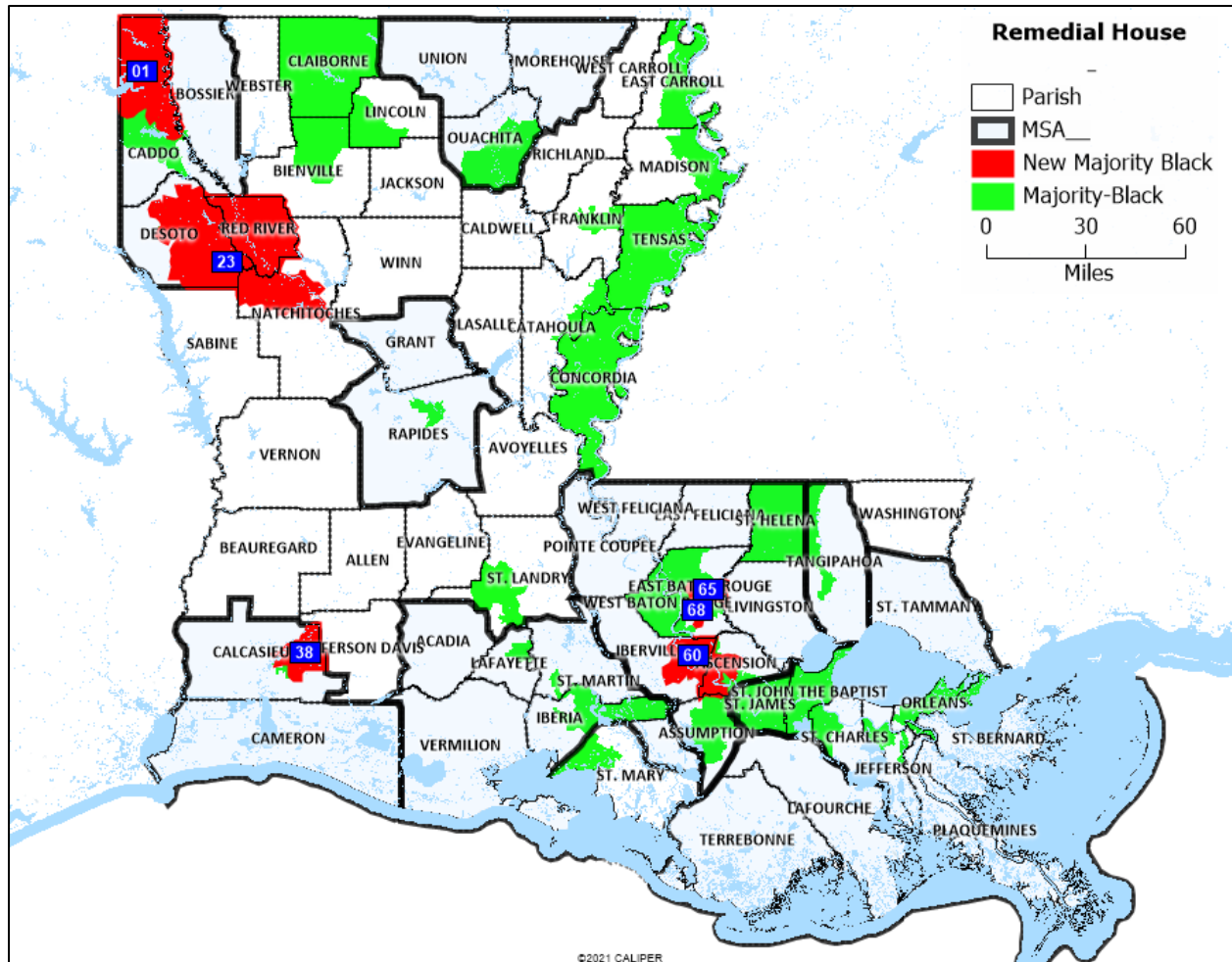
VI. REMEDIAL HOUSE PLAN

A. Remedial House Plan – Overview

86. The map in **Figure 17** displays six additional majority-Black districts (in red with small blue labels) in the Remedial House Plan: **Remedial HD 1** (Shreveport-Bossier City MSA), **Remedial HD 23** (Natchitoches area and Shreveport-Bossier City MSA), **Remedial HD 38** (Lake

Charles MSA), and **Remedial HDs 60, 65, and 68** (Baton Rouge MSA).²² As discussed, *supra*, these districts are largely similar to the Illustrative Plan districts and were changed to reflect new precinct boundaries as much as possible and to ensure incumbents were not drawn out of their districts (based on the available information).

**Figure 17: Location of 6 Additional Majorities-Black Districts
Remedial House Plan**



87. Green areas on the **Figure 17** map represent other majority-Black districts in the Remedial House Plan that generally encompass areas within majority-Black districts under the

²² As in the Illustrative Plan, there are four new majority-Black districts in the Baton Rouge MSA: HD 60, 65, 68 and 69; however, given that Enacted HD 62 is no longer a majority-Black district, I consider it a net of three new majority-Black districts in the Baton Rouge MSA.

Enacted House Plan. All told, the Remedial House Plan modifies in some fashion 66 of the 105 House districts in the 2022 Enacted House Plan. Put differently, a core population²³ representing 79.24% of the state's population is kept together in the redraw from the Enacted House Plan to the Remedial House Plan. (See **Exhibit P-2**, *infra*.) By comparison, 83.2% of the state's population was kept together in the redraw from the Benchmark 2011 Plan to the Enacted House Plan. (See **Exhibit P-4**, *infra*.)

88. As documented in **Section III** of my September 29, 2023 Declaration and updated charts in **Exhibit B**, *supra*, Black persons in Remedial Plan HD 1, HD 23, HD 38, HD 60, HD 65, and HD 68 are a community of interest based on socio-economic characteristics and racial disparities at the parish and municipal levels.

89. The population residing in Baton Rouge MSA Remedial House Plan Districts 60, 65 and 68 also share a community of interest that goes beyond history, culture, and socioeconomic characteristics.²⁴ These three additional Remedial House Plan majority-Black districts would form a united community of interest with other Remedial House Plan majority-Black districts (displayed in green on the **Figure 17** map) whose residents must contend with negative environmental externalities along the Mississippi River.

90. **Exhibit N-1** contains detailed 2020 population statistics by district for the Remedial House Plan. The map in **Exhibit N-2** is a statewide map of the Remedial House Plan

²³ As noted with respect to the Senate plans, I define “core population” as the largest district-level subset of a population that is kept together in the shift from one plan to another (without taking into account changes in district numbers or changes in incumbent representation). The core population is identified with shading in the referenced tabular exhibits.

²⁴ See for example: James, W., Jia, C., and Kedia, S. (2012). Uneven Magnitude of Disparities in Cancer Risks from Air Toxics. *Int. J. Environ. Res. Public Health*, 9(12), 4365-4385. <https://doi.org/10.3390/ijerph9124365>.

(best viewed or printed at 200%). **Exhibit N-3** identifies parish-level population by district. **Exhibit N-4** identifies municipal splits by district. **Exhibit N-5** identifies 2025 precinct splits by district.

91. To facilitate comparison with the Enacted House Plan, I have prepared several sets of more detailed maps. For ease of reference and complete visual coverage, regional maps accompanying the Remedial House Plan (**Exhibit N-6**) are organized by planning district (from PD-1 to PD-8). **Exhibit N-7** contains maps in sequential order that zoom in on each of the 35 majority-Black House districts. MSAs are identified in all of the Exhibit N series maps with bold black lines. Parish lines are shown with dotted grey lines. Blue labels identify majority-Black districts.

92. The Remedial House Plan can also be viewed and analyzed on the Dave's Redistricting website at the following link: <https://davesredistricting.org/join/e64e031b-326e-4abc-b4f9-b9943bd9d761>

B. House Plan Metrics – Remedial Plan vs. 2022 Plan

i. Compactness measures

93. The districts in the Remedial House Plan are reasonably shaped and compact. **Exhibit O-1** reports district-by-district compactness scores generated by Maptitude for the Enacted House Plan. Compactness scores for the Remedial House Plan are in **Exhibit O-2**. Each exhibit reports three compactness scores: Reock, Polsby-Popper, and Convex Area/Hull.²⁵ Higher scores indicate higher compactness.

²⁵ See n.21, *supra*, for formulas and explanatory text relating to these three compactness measures.

94. The table in **Figure 18** summarizes the Reock and Polsby-Popper scores (the two most commonly referenced measures) for the Enacted House Plan, alongside scores for the Remedial House Plan.

95. The higher scores are in boldface. The Remedial House Plan scores about the same as the Enacted House Plan on the Reock measure (.39) and the same on the Polsby-Popper (.29) measure.

Figure 18: Compactness Scores – Enacted House vs. Remedial House Plan

	Reock				Polsby-Popper		
	Mean	Low	High		Mean	Low	High
Enacted House							
All Districts (mean avg.)	.40	.13	.63		.29	.05	.63
29 Majority-Black Districts	.38	.13	.51		.27	.05	.46
Remedial House Plan							
All Districts (mean avg.)	.39	.13	.65		.29	.05	.70
35 Majority-Black Districts	.37	.13	.51		.27	.05	.50

96. When the majority-Black House districts are examined independent of other districts (as shown in **Figure 18**), the Remedial House Plan has about the same mean average Reock and Polsby Popper scores as the Enacted House majority-Black districts.

ii. Political Subdivision Splits

97. The table in **Figure 19** compares district splits by parish and 2025 precincts for the Enacted House Plan (see **Exhibit I-4**) and the Remedial House Plan (see **Exhibit N-4**). Municipal split counts are in **Exhibit I-5** for the Enacted House Plan and **Exhibit N-5** for the Remedial House Plan.

98. As shown in **Figure 19**, the Remedial House Plan scores lower than the Enacted House Plan with respect to parish and precinct splits. The Enacted House Plan keeps 23 parishes intact with no splits, as compared to 19 parishes with no splits under the Remedial House Plan.

The Enacted House Plan has zero populated precinct splits, versus 12 populated precinct splits under the Remedial House Plan.

99. As shown in Figure 19, the Enacted House Plan also scores higher than the Remedial House Plan with respect to municipal splits. The Enacted House Plan keeps 253 municipalities intact — higher than the 242 intact municipalities under the Remedial House Plan. Figures that indicate fewer municipal or precinct splits are bolded.

Figure 19: Political Subdivision Splits (excluding 100% splits and unpopulated splits)

	Parishes not Split	Total Parish Splits (lower is better)	2025 Precinct Splits (lower is better)	Municipalities Not Split	Total Municipal Splits (lower is better)
Enacted House	23	157	0	253	152
Remedial House	19	164	12	242	168

iii. House Districts – Majority-Black and Majority-White Comparison

100. As shown in Figure 20 (see Figure 12, *supra*, for historical comparisons), with six additional majority-Black House districts in the Remedial House Plan, the percentage of the Black VAP residing in majority-Black districts increases to 61.4%, but White voters still hold a 16-percentage point advantage.

**Figure 20: Same Race VAP in Majority-Black and Majority-White Districts
Statewide – Enacted House and Remedial House Plan**

Legislative Plan	2020 Black VAP in Majority Black House Districts	2020 NH White VAP in Majority White House Districts	Statewide Difference
Enacted House	55.6%	83.4%	-27.8%
Remedial House	61.4%	77.4%	-16.0%

101. As revealed in **Figure 21**, in the three MSAs where additional districts are created under the Remedial House Plan, the percentage of the Black VAP residing in majority-Black House districts does not exceed the statewide 83.4% White benchmark ceiling under the Enacted House—Baton Rouge (76.8%), Lake Charles (77.6%), and Shreveport (74.2%).

102. And in those same three MSAs, the NH White VAP residing in majority White districts is above the statewide 55.6% Black benchmark floor under the Enacted House Plan—Baton Rouge (66.6%), Lake Charles (75.9%), and Shreveport (68.6%).

**Figure 21: Same Race VAP in Majority-Black and Majority-White Districts
Regional MSA-level – Enacted House and Remedial House Plan**

MSA/Region (# of parishes)	Black VAP in Majority Black Districts 2022	White VAP in Majority White Districts 2022	Black VAP in Majority Black Districts Remedial	White VAP in Majority White Districts Remedial
Alexandria (2)	65.7%	86.3%	67.4%	85.3%
Baton Rouge (10)	63.4%	82.3%	76.8%	66.6%
Hammond (1)	43.5%	84.3%	47.3%	82.0%
Houma-Thibodaux (2)	0.0%	100.0%	0.0%	100.0%
Lafayette (4)	44.0%	89.9%	41.7%	90.7%
Lake Charles (2)	59.7%	93.3%	77.6%	75.9%
Monroe (3)	72.1%	78.3%	80.9%	68.9%
New Orleans-Metairie (8)	62.3%	72.1%	62.6%	71.2%
Shreveport-Bossier City (3)	63.4%	84.5%	74.2%	68.6%

103. To view all municipalities assigned by district in the Remedial House Plan, refer to **Exhibit P-1**. To review population details for the Remedial House Plan district core components built from districts in the Enacted House Plan, refer to **Exhibit P-2**—“Core Constituencies.” To view all municipalities assigned by district in the Enacted House Plan, refer to **Exhibit P-3**. To review population details for the Enacted House Plan district core components built from districts in the 2012 Benchmark House Plan, refer to **Exhibit P-4**—“Core Constituencies.”

#

I reserve the right to continue to supplement my reports in light of additional facts, testimony, and/or materials that may come to light during the pendency of the above-captioned case.

Executed on: May 30, 2025

WILLIAM S COOPER