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U.S. DISTRICT COURT
N.D. OF ALABAMA

EXHIBIT 7

Grofman 2021 Plan

Grofman 2021 Plan

Plan Characteristics	Grofman 2021 Plan
Maximum Population Deviation	1
Contiguous	Yes
Core Retention (% Population in Same District as in 2023 Plan): Statewide	75.3%
County Splits (out of 67 counties)	6
Voting District Splits (out of 1,837 voting districts)	28
Municipality Splits (out of 462 municipalities)	27
Municipality Splits, excluding where at least 95% of population is together	15
Birmingham Split (% Population)	District 6: 26.3% District 7: 73.7%
Mobile (City) Split (% Population)	District 1: 26.2% District 2: 73.8%
Core Black Belt (out of 18 counties)	District 2: 10½ counties* District 3: 2 counties District 7: 5½ counties
Compactness: Reock Score: Statewide	0.32
Compactness: Polsby-Popper Score: Statewide	0.19
Compactness: Population Polygon Score: Statewide	0.64
Compactness: Cut Edges: Statewide	3,597

** Lowndes County is split between Districts 2 and 7 and counted as "½" in each case.*

District Characteristics	District 1	District 2	District 3	District 4	District 5	District 6	District 7
Total Population	717,754	717,754	717,754	717,754	717,754	717,754	717,755
Core Retention (compared to 2023 Plan)	66.6%	49.2%	85.6%	81.0%	95.4%	79.1%	69.9%
Compactness: Reock Score	0.21	0.34	0.36	0.36	0.30	0.31	0.34
Compactness: Polsby-Popper Score	0.16	0.17	0.25	0.19	0.32	0.14	0.13
Compactness: Population Polygon Score	0.74	0.61	0.76	0.38	0.89	0.64	0.46
Black Voting Age Population	16.1%	48.9%	25.0%	7.7%	18.1%	17.2%	47.9%

Grofman 2021 Plan Election Performance Analysis

The percentage below is the margin of victory or defeat of the Black-preferred candidate (equal to the vote count for the Black-preferred candidate minus the vote count for the other top-vote getting candidate, divided by the total number of votes of those two candidates, excluding third-party or "other" votes). The average is a simple average (equally weighted) of all unique election contests without duplicates; in the event of a duplicate, the Legislature's data was used.

Election Contest	District 1	District 2	District 3	District 4	District 5	District 6	District 7
Average	-51.4%	**7.7%**	-33.5%	-56.4%	-29.5%	-36.6%	**17.3%**
Count (out of 17 contests)	0	**12**	0	0	0	0	**17**
Data Supplied by the Legislature (Dr. Trey Hood)							
2017 U.S. Senate	-27.1%	**29.9%**	-5.9%	-36.4%	-0.4%	-3.5%	**39.7%**
2018 Attorney General	-43.0%	**16.2%**	-27.2%	-48.7%	-22.1%	-28.1%	**23.8%**
2018 Auditor	-46.6%	**12.9%**	-29.9%	-53.7%	-24.2%	-31.8%	**21.0%**
2018 Governor	-45.6%	**10.7%**	-29.1%	-49.6%	-23.0%	-25.5%	**22.7%**
2018 Lt. Governor	-48.4%	**11.1%**	-30.7%	-55.8%	-26.6%	-33.3%	**20.1%**
2018 Secretary of State	-47.9%	**11.3%**	-30.3%	-55.3%	-25.3%	-32.6%	**19.7%**
2020 President	-50.2%	**9.5%**	-34.4%	-62.4%	-27.5%	-32.2%	**16.6%**
2020 U.S. Senate	-43.0%	**13.7%**	-29.6%	-55.9%	-21.0%	-26.8%	**20.1%**
2022 Attorney General	-60.4%	-2.0%	-45.7%	-71.3%	-37.6%	-41.1%	**8.2%**
2022 Governor	-63.7%	-4.9%	-48.5%	-74.3%	-43.5%	-46.0%	**7.1%**
2022 Secretary of State	-60.9%	-0.8%	-45.9%	-71.7%	-38.0%	-41.8%	**9.2%**
2022 U.S. Senate	-62.0%	-3.0%	-46.2%	-71.6%	-39.0%	-41.9%	**8.4%**
Data Supplied by the Milligan Plaintiffs (Dr. Baodong Liu)							
2014 Auditor	-54.7%	**3.9%**	-29.9%	-42.7%	-35.4%	-54.5%	**14.8%**
2014 Lt. Governor	-56.4%	**4.8%**	-30.7%	-38.4%	-38.1%	-53.4%	**16.3%**
2014 Secretary of State	-56.6%	**5.5%**	-32.2%	-46.3%	-39.5%	-57.1%	**15.1%**
2018 Auditor	-46.6%	**13.0%**	-29.4%	-53.7%	-24.2%	-31.8%	**21.1%**
2018 Lt. Governor	-48.4%	**11.3%**	-30.3%	-55.8%	-26.6%	-33.3%	**20.2%**
2018 Pub. Serv. Comm'n	-47.2%	**13.2%**	-29.0%	-53.9%	-24.3%	-32.0%	**21.6%**
2020 President	-48.7%	**9.0%**	-29.3%	-60.6%	-27.9%	-33.2%	**16.4%**
2022 Supreme Court	-59.5%	-0.4%	-44.2%	-69.9%	-36.5%	-41.2%	**9.2%**
2022 Attorney General	-60.6%	-1.8%	-45.3%	-71.3%	-37.6%	-41.1%	**8.2%**
2022 Governor	-63.9%	-4.8%	-48.2%	-74.3%	-43.5%	-46.0%	**7.1%**
2022 Secretary of State	-61.1%	-0.6%	-45.5%	-71.7%	-38.0%	-41.8%	**9.1%**
2022 U.S. Senate	-62.2%	-2.9%	-45.9%	-71.6%	-39.0%	-41.9%	**8.4%**

Lauderdale
Limestone
5
Jackson
Colbert
Madison
Lawrence
Morgan
Franklin
Marshall
DeKalb
4
Cullman
Cherokee
Marion
Winston
Etowah
Blount
Lamar
Fayette
Walker
St. Clair
Calhoun
Cleburne
Jefferson
Talladega
Pickens
Tuscaloosa
Shelby
Clay
Randolph
6
Greene
Hale
Bibb
Coosa
3
Chambers
7
Chilton
Perry
Elmore
Lee
Sumter
Autauga
Dallas
Macon
Russell
Marengo
Montgomery
Lowndes
Bullock
Choctaw
Wilcox
Barbour
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Pike
Clarke
Butler
Crenshaw
Monroe
Henry
Washington
Coffee
Dale
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Blount
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Calhoun
Cleburne
Jefferson
Talladega
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