

# EXHIBIT A

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

ALPHA PHI ALPHA FRATERNITY  
INC., *et al.*,

*Plaintiffs,*

v.

BRAD RAFFENSPERGER,

*Defendant.*

CIVIL ACTION

FILE NO. 1:21-CV-05337-SCJ

**DECLARATION OF JOHN B. MORGAN**

Pursuant to 28 U.S.C. § 1746, I, JOHN B. MORGAN, make the following declaration:

1.

My name is John B. Morgan. I am over the age of 21 years, and I am under no legal disability which would prevent me from giving this declaration. If called to testify, I would testify under oath to these facts.

2.

I hold a B.A. in History from the University of Chicago. As detailed in my CV, attached as Exhibit 1, I have extensive experience over many years in the field of redistricting. I have worked on redistricting plans in the redistricting efforts following the 1990 Census, the 2000 Census, the 2010

Census and the 2020 Census. I have testified as an expert witness in demographics and redistricting.

3.

I am being compensated at a rate of \$325 per hour for my services in this case.

4.

The redistricting geographic information system (GIS) software package used for this analysis is Maptitude for Redistricting 2021 from Caliper Corporation. The redistricting software was loaded with the census PL94-171 data from the Census Bureau and the census geography for Georgia. I was also provided with election data files used by the Georgia General Assembly during the redistricting process. The full suite of census geography was available, including counties, places, voting districts, water bodies, and roads, as well as census blocks, which are the lowest level of geography for which the Census Bureau reports population counts. Census blocks are generally bounded by visible features, such as roads, streams, and railroads and they can range in size from a city block in urban and suburban areas to many square miles in rural areas.

5.

I have been asked to review the House of Representatives and State Senate plans considered and adopted by the Georgia General Assembly and compare them to the proposed remedial plans drawn by William Cooper.

6.

In preparing this analysis, I was given the block-equivalency files of the Cooper remedial plans as well as the block-equivalency files of the 2021 adopted plans and incumbent databases used by the Georgia General Assembly during the redistricting process. I was also given the block-equivalency files of a Senate and House plan offered by the Democratic caucus during the redistricting process. The incumbent databases list the address locations and districts of the Representatives and Senators currently serving under the existing House (2015-enacted) and Senate (2014-enacted) plans. I was also given information on incumbents who are not intending to run for re-election to their current offices in 2022.

7.

I loaded the 2021 House and 2021 Senate plans enacted by the Georgia General Assembly into the Maptitude for Redistricting software using the block-equivalency files provided. I loaded the Cooper House remedial plan and the Cooper Senate remedial plan into the Maptitude for Redistricting

software using the block-equivalency files provided. I loaded the current existing House (2015-enacted) and Senate (2014-enacted) plans into the Maptitude for Redistricting software using files provided with software. I also uploaded a House plan and a Senate plan offered by the Democratic caucus during the redistricting process using the block-equivalency files provided. I loaded the current incumbent databases provided.

8.

Using the Maptitude for Redistricting software, I created district summary files in the for the 2021 adopted plans, the Democratic proposed plans, and the Cooper remedial plans. These summary files listed information for each district such as: the deviation from ideal district size, total population, voting-age population, any-part Black voting age population as well as percentage values for the latter.

9.

Using the district summary files, I tallied the number of majority-Black districts using any-part Black voting age population for each plan. For the Democratic proposed plans, each plan has fewer majority-Black districts than those proposed by the Cooper Remedial plans. In addition, the House Democratic proposed plan has fewer majority-Black districts than both the Cooper Remedial House plan and the 2021 adopted House plan.

10.

The chart below shows the total number of majority-Black districts in the 2021 adopted Senate plan, the Democratic proposed Senate plan, and the Cooper remedial Senate plan as well as the number of districts in the percentage ranges using the any-part Black voting age population.

**Chart 1. Number of Majority-Black Senate Districts**

<b>Majority-Black Senate Districts</b>			
<b>% AP Black VAP</b>	<b>2021 Adopted Plan</b>	<b>Proposed Democratic Plan</b>	<b>Cooper Remedial Plan</b>
Over 75%	0	1	1
70% to 75%	3	2	0
65% to 70%	3	3	1
60% to 65%	3	1	2
55% to 60%	3	3	3
52% to 55%	1	3	4
50% to 52%	1	2	8
<b>Total # Districts</b>	<b>14</b>	<b>15</b>	<b>19</b>

11.

The 2021 adopted Senate plan includes 14 majority-Black districts, the proposed Democratic Senate plan includes 15 majority-Black districts, and the Cooper remedial Senate plan has 19 majority-Black districts.

12.

The chart below shows the total number of majority-Black districts in the 2021 adopted House plan, the Democratic proposed House plan, and the Cooper remedial House plan as well as the number of districts in the percentage ranges using the any-part-Black voting age population.

**Chart 2. Number of Majority-Black House Districts**

<b>Majority-Black House Districts</b>			
<b>% AP Black VAP</b>	<b>2021 Adopted Plan</b>	<b>Proposed Democratic Plan</b>	<b>Cooper Remedial Plan</b>
Over 75%	2	6	6
70% to 75%	9	7	3
65% to 70%	7	7	5
60% to 65%	8	3	7
55% to 60%	11	9	15
52% to 55%	10	10	11
50% to 52%	2	3	7
<b>Total # Districts</b>	<b>49</b>	<b>45</b>	<b>54</b>

13.

The 2021 adopted House plan includes 49 majority-Black districts using any-part-Black voting age population, the proposed Democratic House plan includes 45 majority-Black districts, and the Cooper remedial House plan has 54 majority-Black districts.

14.

Using the incumbent databases provided, I ran incumbent reports in the Maptitude for Redistricting software for the 2021 adopted plans and the Cooper remedial plans. The incumbent report shows which district the current elected incumbents would be placed in under a new plan. During the redistricting process, several House members announced their intention not to run for re-election to the state house in 2022: Micah Gravely, Wes Cantrell, Thomas Benson, Matthew Dollar, William Boddie, and Susan Holmes. In the Senate, Senators Bruce Thompson, Tyler Harper, Burt Jones, and Jen Jordan are running for statewide offices in 2022 instead of running for re-election to the state Senate. As these incumbent intentions were known during the redistricting process, their pairings would not cause members to run against each other in 2022.

15.

The 2021 adopted Senate plan pairs no incumbents who are running for re-election in the state Senate; and the 2021 adopted state House plan makes only four incumbent pairings. The Cooper remedial Senate plan pairs more incumbents than the 2021 adopted Senate plan - Senators Donzella James (D) and Horacena Tate (D) in one district and Senators Carden Summers (R) and Larry Walker (R) in one district. The chart below shows the pairings of



incumbents who have not declared their intentions to retire from the State Senate or run for another office in 2022.

**Chart 3. Senate incumbent pairings**

<b>Incumbent Pairings</b>	<b>Adopted Senate Plan</b>	<b>Cooper Senate Plan</b>
Pairing #1	<b>NONE</b>	Carden Summers -R Larry Walker III -R
Pairing #2		Donzella James -D Horacena Tate -D
Total incumbents Paired	<b>0</b>	<b>4</b>

16.

The 2021 adopted Senate plan pairs no incumbents that are running for re-election and the Cooper remedial Senate plan pairs four incumbents.

17.

Using the incumbent databases provided, the incumbent reports from Maptitude for Redistricting show that Cooper remedial House plan pairs many more incumbents than the 2021 adopted House plan. The chart below shows the pairings of incumbents who have not declared their intentions to retire from the State House or run for another office in 2022.

**Chart 4. House incumbent pairings**

<b>Incumbent Pairings</b>	<b>Adopted House Plan</b>	<b>Cooper House Plan</b>
Pairing #1	Rebecca Mitchell -D Shelly Hutchison -D	Matthew Gambill -R Mitchell Scoggins -R
Pairing #2	Gerald Green -R Winifred Dukes -D	Trey Kelley -R Tyler Smith -R
Pairing #3	James Burchett -R Dominic LaRiccia -R	Matt Dubnik -R Emory Dunahoo -R
Pairing #4	Danny Mathis – R Robert Pruitt - R	Angelika Kausche -D Sam Park -D
Pairing #5		Regina Lewis-Ward -D Angela Moore -D
Pairing #6		Billy Mitchell -D Doreen Carter -D
Pairing #7		Mike Cheokas -R Debbie Butler -D
Pairing #8		Rick Williams -R Dave Belton -R
Pairing #9		Noel Williams -R Shaw Blackmon -R
Pairing #10		Robert Pruitt -R Matt Hatchett -R
Pairing #11		Gerald Greene -R Winifred Dukes -D
Pairing #12		Ron Stephens -R Carl Guillard -D
Pairing #13		Darlene Taylor -R John LaHood -R
Total incumbents Paired	<b>8</b>	<b>26</b>

18.

The Cooper remedial House plan pairs 26 incumbents, while the 2021 adopted House plan pairs only eight incumbents out of the 180 House members.

19.

I ran core constituency reports in the Maptitude for Redistricting software to compare the 2021 adopted plans and the Cooper remedial plans. The core constituency reports compare one plan to another; showing how much population in a district from the first plan is the same in a district (or districts) in the second plan. (As an example, the 2021 adopted Senate plan includes some districts that were also included in the Senate map drafted by the Democratic caucus. When comparing those plans, the core constituency report shows that 100% of the population in those districts from the 2021 adopted plan are the same in the proposed Democratic plan.) The Cooper remedial plans differ in every respect from the 2021 adopted plans. An analysis of the Cooper remedial plans compared to the 2021 adopted plans found that only one district—House District 003—was the same on both the Cooper remedial House plan and the 2021 adopted House plan. Not a single district of the Cooper remedial Senate plan was the same as the adopted Senate plan.

20.

I ran the split geography reports in the Maptitude for Redistricting software for the 2021 adopted plans and the Cooper remedial plans. The split geography report shows how many political subdivisions - counties and census voting districts (often referred to as voting precincts) are split.

21.

The Cooper remedial plans split more political subdivisions (counties and precincts / voting districts) than the adopted plans. The 2021 adopted Senate plan splits 29 counties and 47 voting precincts. The Cooper remedial Senate plan splits 33 counties and 56 precincts.

22.

The 2021 adopted House plan splits 69 counties and 184 voting precincts. The Cooper remedial House plan splits 74 counties and 258 voting precincts.

23.

I ran compactness reports in the Maptitude for Redistricting software for the 2021 adopted plans and the Cooper remedial plans. The Polsby-Popper and Reock compactness measures were shown in the reports for each district. The Polsby-Popper and Reock compactness measures are standard measurements comparing the district to the area of a circle.<sup>1</sup>

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<sup>1</sup> The Maptitude for Redistricting Users Guide describes the Polsby-Popper test in this way: “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.” And the same guide describes the Reock test in this way: “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

24.

The Cooper remedial Senate plan is less compact overall than the 2021 adopted Senate plan. The average Polsby-Popper score (.25) and the average Reock score (.38) for the Cooper remedial Senate plan is lower than average Polsby-Popper score (.29) and the average Reock score (.42) for the 2021 adopted Senate plan. While the overall compactness scores on the Cooper remedial House plan and the 2021 adopted House plan are similar, several districts on the Cooper remedial House plan are far less compact than the 2021 adopted House plan. The chart on the next page shows the compactness scores of the newly created majority-Black districts which Cooper identified in his report and the compactness scores of the corresponding district number in the 2021 adopted plans.

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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.”

**Chart 5. Compactness score summary**

<b>New Majority-Black District</b>	<b>Adopted Plan Reock</b>	<b>Cooper Plan Reock</b>	<b>Adopted Plan Polsby-Popper</b>	<b>Cooper Plan Polsby-Popper</b>
Senate 6	0.41	<b>0.43</b>	<b>0.24</b>	0.23
Senate 9	0.24	<b>0.33</b>	0.21	0.21
Senate 17	0.35	<b>0.37</b>	0.17	<b>0.18</b>
Senate 23	<b>0.37</b>	0.35	0.16	0.16
Senate 28	0.45	<b>0.49</b>	<b>0.25</b>	0.22
House 73	0.28	<b>0.44</b>	0.20	0.20
House 110	0.36	<b>0.44</b>	<b>0.33</b>	0.24
House 111	<b>0.33</b>	0.30	<b>0.29</b>	0.23
House 144	<b>0.51</b>	0.31	<b>0.32</b>	0.16
House 153	<b>0.30</b>	0.28	<b>0.30</b>	0.19

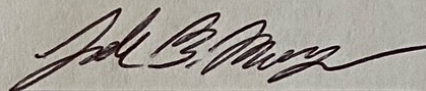
25.

In summary, the Cooper remedial plans differ substantially from those adopted by the General Assembly. The remedial plans split more counties and precincts and they pair more incumbents. They are also a complete re-draw of the 2021 adopted House and Senate plans, sharing almost no geography in common between the plans. In my experience, it would be very unusual to adopt a remedial plan with such vast differences from an adopted plan. In conclusion, this is my preliminary analysis of these plans. I reserve the right to continue adding to this analysis as the case proceeds.



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

Executed this 18th day of January, 2022.

A handwritten signature in dark ink, appearing to read "John B. Morgan", written over a horizontal line.

JOHN B. MORGAN

# **EXHIBIT 1**



**JOHN B. MORGAN**  
*Curriculum Vitae*

**Redistricting Background and Experience**

- Performed redistricting work in 20 states, in the areas of map drawing, problem-solving and redistricting software operation.
- Performed demographic and election analysis work in 40 states, for both statewide and legislative candidates

*2021-2022 Redistricting Cycle*

- Mapping expert for Michigan Independent Citizens Redistricting Commission
- Mapping expert for Virginia Redistricting Commission
- Mapping expert for New Jersey Congressional Redistricting Commission
- Mapping expert for New Jersey Legislative Redistricting Commission
- Staff analyst for New Mexico Senate Republican caucus – Dec. 2021 special session
- Mapping consultant to Indiana State Senate Republican caucus
- Mapping consultant to redistricting commissioners in Atlantic County, New Jersey
- Drafted county commission districts for Sampson County, North Carolina

*2011-2012 Redistricting Cycle*

- Served as a consultant for:
  - Connecticut Redistricting Commission
  - Ohio Reapportionment Board
  - New Jersey Legislative Redistricting Commission
  - New Jersey Congressional Redistricting Commission
  - Pennsylvania Legislative Reapportionment Commission
- Drafted Wake County, North Carolina school board districts
- Drafted county commission districts in Sampson and Craven counties in North Carolina and Atlantic County in New Jersey
- Worked with redistricting commissions in Atlantic and Essex counties, New Jersey.
- Worked on statewide congressional, legislative, and local plans in the following states: Connecticut, Indiana, Kansas, Missouri, New Jersey, New Mexico, North Carolina, Ohio, Pennsylvania, South Carolina, and Virginia
- Plans drafted by Morgan adopted in whole or part by the following states: Connecticut, Indiana, New Jersey, New Mexico, North Carolina, South Carolina, Virginia.

*2001-2002 Redistricting Cycle*

- Worked on statewide congressional and legislative redistricting plans in the following states: Florida, Georgia, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Rhode Island, and Virginia.
- Dealt with redistricting issues as a member of the Majority Leader's legislative staff in Virginia House of Delegates. Drafted alternate plans for use by the minority parties in Rhode Island. Drafted alternate plans for use by legislative leadership in considering plans drawn by redistricting commission staff in Iowa.

#### *1991-1992 Redistricting Cycle*

- Worked on statewide congressional and legislative redistricting plans in the following states: Florida, Illinois, Indiana, Michigan, New Jersey, New York, Pennsylvania, Wisconsin.
- Focused primarily on Voting Rights Act issues with Black, Hispanic and Asian communities.
- Federal court incorporated portion of legislative plan drafted in part by Morgan for Wisconsin into final decree, finding the configuration superior to other plans in its treatment of minority voters.

#### *Expert Experience and Trial Testimony*

- Recognized as an expert in demographics and redistricting in *Egolf v. Duran*, New Mexico First Judicial District Court, Case No. D-101-CV-2011-02942, which dealt with New Mexico's legislative plans.
- In *Egolf v. Duran*, the Court adopted a House redistricting plan principally drafted by Morgan.
- Filed expert reports in *Georgia State Conference of NAACP v. Fayette County Board of Commissioners*.
- Filed expert reports and expert testimony in *Page v. Board of Elections*, Eastern District of Virginia; provided expert testimony at trial.
- Testified at trial in *Bethune Hill v. Virginia Board of Elections* and *Vesilind v. Virginia Board of Elections*.
- Filed expert report in *Georgia NAACP v. Gwinnett County*.

#### **Education**

- Bachelor of Arts degree in History from the University of Chicago
- Graduated with honors.
- Bachelor's Honors thesis on "The Net Effects of Gerrymandering 1896-1932."
- Demographic study on LaSalle, Illinois was published in *The History of the Illinois and Michigan Canal, Volume Five*.

#### **Employment**

- President of Applied Research Coordinates, a consulting firm specializing in political and demographic analysis and its application to elections and redistricting, 2007 to present
- Redistricting consultant for many legislatures and commissions: 1991, 2001, 2011, 2021
- Executive Director, GOPAC (Hon. J.C. Watts, Chairman), 2004-2007
- Vice-President of Applied Research Coordinates, 1999-2004
- National Field Director, GOPAC (Rep. John Shadegg, Chairman) 1995-1999
- Research Analyst, Applied Research Coordinates 1991-1995
- Research Analyst, Republican National Committee 1988-1989, summers