

EXHIBIT A

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

COAKLEY PENDERGRASS, *et al.*,

Plaintiffs,

v.

BRAD RAFFENSPERGER, *et al.*,

Defendants.

CIVIL ACTION

FILE NO. 1:21-CV-05339-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 available to 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 congressional plan considered and adopted by the Georgia General Assembly and compare it to the proposed remedial congressional plan drawn by William Cooper.

6.

In preparing this analysis, I was given the block-equivalency file of the Cooper remedial congressional plan as well as the block-equivalency files of the 2021 adopted congressional plan.

7.

I loaded the 2021 congressional plan adopted by the Georgia General Assembly into the Maptitude for Redistricting software using the block-equivalency files provided. I loaded the Cooper congressional remedial plan into the Maptitude for Redistricting software using the block-equivalency files provided. I loaded the current existing (2012) congressional plan into the Maptitude for Redistricting software using files provided with the software.

8.

Using the Maptitude for Redistricting software, I created district summary files for the 2021 adopted congressional plan and the Cooper remedial congressional plan. 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, and non-Hispanic white voting age population as well as percentage values for the latter two categories.

9.

Using the district summary files, I tallied the number of majority-non-white districts using non-Hispanic white voting age population for each plan. The 2021 adopted congressional plan has five districts that are majority-non-white voting age population. I also looked at the any-part Black voting age population for districts in the 2021 adopted congressional plan and the Cooper remedial congressional plan. The Cooper remedial congressional plan reduces the any-part Black voting age population in District 13 to 51.4%. The Cooper remedial plan likewise makes District 6 a barely majority Black district at 50.2% any-part Black voting age population.

10.

The Cooper remedial plan is not a complete statewide plan and only contains eight congressional districts, although it appears to be designed to fit into the 2021 adopted congressional plan. The contiguous unassigned areas in Gwinnett and Fulton Counties correspond to District 007 in the 2021 adopted congressional plan; the contiguous unassigned areas in Fulton, DeKalb, and Clayton Counties correspond to District 005 in the 2021 adopted congressional plan. The contiguous unassigned areas in the southern part of the state could

be configured into the 2021 adopted congressional plan districts 001, 002, 008, and 012. As a result, the Cooper remedial congressional plan is not a complete plan and could not be used for elections in its current form.

11.

I ran core constituency reports in the Maptitude for Redistricting software to compare the 2021 adopted congressional plan to the existing 2012 congressional plan. I also compared the Cooper remedial congressional plan to both the existing 2012 congressional plan and the 2021 adopted congressional plan. 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 maps drafted by the Democratic caucus. In this case, 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.)

12.

Georgia retained 14 congressional seats after the new congressional apportionment required by the 2020 Census. While the number of congressional districts remained the same, the existing (2012) congressional districts were not equal in population with the new population numbers from

the 2020 census and would need to be re-drawn. The 2021 adopted congressional plan largely maintains existing district cores from the 2012 existing congressional plan. In sharp contrast, the Cooper remedial congressional plan makes drastic changes to many districts when compared to the existing 2012 districts. The Cooper remedial plan moves District 6 from its 2012 and 2021 core in northern metro Atlanta to become a district consisting of western suburbs of Atlanta. The chart on the next page uses data from the core constituency reports for the eight congressional districts changed in the Cooper remedial congressional plan and those same eight districts in the 2021 adopted congressional plan. The core constituency report shows how much population in a district from the existing 2012 congressional plan remains in the same district in the plan compared. The chart on the next page expresses this as a percentage of the total population of the new district.

Chart 1. Core Constituency retention of existing (2012) districts

District	2021 Adopted Plan core retention	Cooper Remedial Plan core retention
Congress 003	88.52%	64.91%
Congress 004	70.58%	67.59%
Congress 006	52.86%	4.55%
Congress 009	67.36%	38.86%
Congress 010	70.19%	55.01%
Congress 011	88.73%	47.14%
Congress 013	86.04%	39.75%
Congress 014	89.82%	62.66%

13.

I also compared the Cooper remedial congressional plan to the 2021 adopted congressional plan. None of the population in the 2021 adopted congressional plan District 6 overlaps with the population in District 6 on the Cooper remedial congressional plan. This is a wholesale change of population from the 2021 adopted congressional plan. Furthermore, several of the districts on the Cooper remedial plan have substantial discontinuity with the 2021 adopted congressional plan. Indeed, three of the districts in the Cooper remedial congressional plan have less than 55% of the population from their corresponding districts in the 2021 adopted congressional plan (Districts 9, 11, 13).

14.

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

15.

The Cooper remedial plan splits more political subdivisions (counties and precincts / voting districts) than the 2021 adopted congressional plan. In order to compare the plans, I made a copy of the 2021 adopted congressional plan and unassigned the same geographic area which was unassigned in the Cooper remedial congressional plan. Comparing the same eight districts, the 2021 adopted congressional plan splits 12 counties and 44 voting precincts while the Cooper remedial congressional plan split 13 counties and 49 precincts.

16.

In order to compare the plans, I made a copy of the 2021 adopted congressional plan and unassigned the same geographic area which was unassigned in the Cooper remedial congressional plan. I then ran compactness reports in the Maptitude for Redistricting software for the 2021 adopted

congressional plan with the same unassigned areas and the Cooper remedial congressional plan. 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.¹

17.

The Cooper remedial congressional plan is less compact overall than the 2021 adopted congressional plan (with the same unassigned areas in the Cooper remedial congressional plan). The average Polsby-Popper score (.23) and the average Reock score (.40) for the Cooper remedial congressional plan is lower than average Polsby-Popper score (.25) and the average Reock score (.43) for the 2021 adopted congressional plan (with the same unassigned areas

¹ 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 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.”

in the Cooper remedial plan). Of the eight districts changed in the Cooper remedial congressional plan, five districts are less compact on the Reock measurement and six districts are less compact on the Polsby-Popper measurement. The chart below shows the compactness scores of the eight congressional districts in the Cooper remedial congressional plan and the compactness scores of the corresponding district number in the 2021 adopted congressional plan.

Chart 2. Compactness score summary

Proposed Remedial Districts /Adopted Districts	Adopted Plan Reock	Cooper Remedial Plan Reock	Adopted Plan Polsby-Popper	Cooper Remedial Polsby-Popper
Congress 003	0.46	0.40	0.28	0.25
Congress 004	0.31	0.29	0.25	0.21
Congress 006	0.42	0.38	0.20	0.16
Congress 009	0.38	0.40	0.25	0.32
Congress 010	0.56	0.40	0.28	0.18
Congress 011	0.48	0.40	0.21	0.16
Congress 013	0.38	0.42	0.16	0.25
Congress 014	0.43	0.48	0.37	0.34

18.

In summary, the Cooper remedial congressional plan differs in meaningful ways from the 2021 plan adopted by the General Assembly. The Cooper remedial congressional plan splits more counties and precincts than

the 2021 adopted congressional plan. The Cooper remedial congressional plan retains less of the core constituencies of the existing (2012) congressional plan than does the 2021 adopted congressional plan. The Cooper remedial congressional plan also makes significant changes to the boundaries of districts from the 2021 adopted congressional plan. While some geography in the Cooper remedial congressional plan aligns with the 2021 adopted congressional plan, the Cooper remedial congressional plan changes eight districts to create one new majority-Black congressional district. In conclusion, this is my preliminary analysis of these plans. I reserve the right to continue adding to this analysis as the case proceeds.

[Signature on next page]

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

Executed this 18th day of January, 2022.

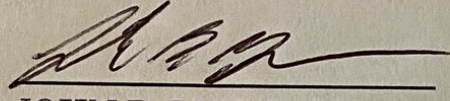

JOHN B. MORGAN

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