

Exhibit I

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF ARKANSAS
CENTRAL DIVISION**

THE CHRISTIAN MINISTERIAL
ALLIANCE, PATRICIA BREWER,
CAROLYN BRIGGS, LYNETTE
BROWN, MABLE BYNUM, and
VELMA SMITH, on behalf of
themselves and all other similarly
situated persons,

Plaintiffs,

vs.

JOHN THURSTON, in his official
capacity as the Secretary of State of
Arkansas,

Defendant.

CIVIL ACTION

Case No. 4:23-cv-471-DPM-DRS-
JM

THREE-JUDGE PANEL

REBUTTAL 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

The attorneys for Plaintiffs in this case asked me to review the expert report
submitted on September 16, 2024, by Thomas M. Bryan.

A. Organization of Declaration

1. This declaration is organized as follows:

- a. Section II** references the traditional redistricting principles I relied on to develop an additional alternative plan and briefly discusses other metrics included in Mr. Bryan’s report.
- b. Section III** presents an additional alternative plan:

 - i.** The new Alternative Plan 3 further demonstrates that the split of Pulaski County was not necessary to maintain a similar partisan advantage as reflected in the Enacted Plan. Alternative Plan 3 is drawn for the purposes of my report in this lawsuit, and from what I understand to be the relevant criteria presented to the Arkansas General Assembly. The plan maintains a similar partisan tilt as in the Enacted Plan without splitting Pulaski County, while still adhering to traditional redistricting principles within the context of this lawsuit.
- c. Section IV** briefly poses a critical question about the prospect of congressional redistricting in Pulaski County in the next redistricting cycle (in the 2030s) should the Enacted Plan remain in place for the remainder of this decade.

B. Summary Conclusion

2. Nothing in Mr. Bryan's report undermines the conclusions in my declaration submitted September 16, 2024 ("September 16 Declaration"), that the Enacted Plan fragments or divides the Black population in CD 2 (known as "cracking"). The Enacted Plan unnecessarily cracks the Black population by spreading the community in central and southeast Pulaski County across three congressional districts.

3. Based on my review of Mr. Bryan's report, I still conclude that cracking the Black population in Pulaski County cannot be explained by an objective to equalize population across congressional districts while adhering to traditional redistricting principles. Nor can the cracking of Black population in Pulaski County be explained by a desire to achieve a partisan end.

4. Both Alternative Plan 1 and Alternative Plan 2 presented in my September 16 Declaration are overall on par with or superior to the Enacted Plan in terms of adhering to traditional redistricting principles. *See* Sept. 16 Decl. ¶¶ 66-73.

5. Obtaining or maximizing partisan advantage is not a traditional redistricting principle. Nonetheless, Alternative Plan 2 maintains or enhances the partisan advantage in CD 2 under the 2011 Benchmark Plan as compared to the 2021 Enacted Plan. *Id.* ¶ 70-73.

6. Mr. Bryan’s claim that Pulaski County must have been split into three pieces to achieve a partisan objective embodied in CD 2 under the Enacted Plan is not true.

7. As I demonstrate with Alternative Plan 3 *infra*, the Legislature could have achieved a partisan advantage similar to that embodied in the Enacted Plan’s CD 2 even while keeping Pulaski County whole—and, indeed, without any county splits in CD 2.

8. This rebuttal declaration, and my September 16 Declaration, demonstrate that there were ways for the Legislature to enhance partisan performance in CD 2 without removing *any* of the Black neighborhoods in and around southeast Little Rock and North Little Rock. A similar partisan performance, relative to the Enacted Plan, could have been achieved by *adding* a different set of whole counties into CD 2—that is, without splitting neighborhoods (white or Black) in Pulaski County or elsewhere in a reconfigured CD 2.

II. TRADITIONAL REDISTRICTING PRINCIPLES

9. I considered the same traditional redistricting principles that I identified and defined in my September 16 Declaration for developing Alternative Plan 3, *infra*. See Cooper Decl. ¶¶ 13-15. Like the Enacted Plan, Alternative Plan 3 is well within the deviation range (0.79%) approved by the U.S. Supreme Court in *Tennant v. Jefferson County*, 576 U.S. 758 (2012). Like the Enacted Plan, Alternative Plan 3

is contiguous, as well as reasonably shaped and compact. Like the Enacted Plan, Alternative Plan 3 also does not pair incumbents and has a reasonably high level of core retention.

10. Even though political performance is not a traditional redistricting principle, Mr. Bryan's report reviews the political performance of the 2011 Benchmark Plan, Enacted Plan, and alternative maps that he developed. The report states that Mr. Bryan used "election information that would have been available to the Arkansas General Assembly" during the map drawing process, which includes a set of 2020 election results and 2022 election results. Bryan Rep. ¶ 128. As with my September 16 Declaration, I do not know what political data the Legislature had before it during the map drawing process. For this declaration, however, I will rely on Mr. Bryan's representation, even though the Legislature would not have had access to 2022 election results at the time the Enacted Map was enacted in 2021.

11. Nor are voter turnout rates a traditional redistricting principle. But Mr. Bryan calculates voter turnout rates to measure political performance. Bryan Rep. ¶¶ 128, 160-68. I do not incorporate this metric into any of my assessments because my assessments are based on net voting percentage for President Trump in the 2020 Presidential and 2022 U.S. Senate elections and therefore already account for voter turnout.

12. Mr. Bryan’s individual precinct-level turnout estimates and maps, *see* Bryan Rep. ¶¶ 70-75, 160-68, are flawed. Citizen voting age population (CVAP) data is reported at the census block group level (the level between census blocks and census tracts). Precincts generally split block groups into two or more pieces. Therefore, it is impossible to derive a reliable estimate of CVAP, as Mr. Bryan does in his report, for individual precincts except in (1) the rare instance where precinct boundaries match or closely match block group boundaries or (2) where block groups encompassing the precinct have very few non-citizens of voting age. *Id.*

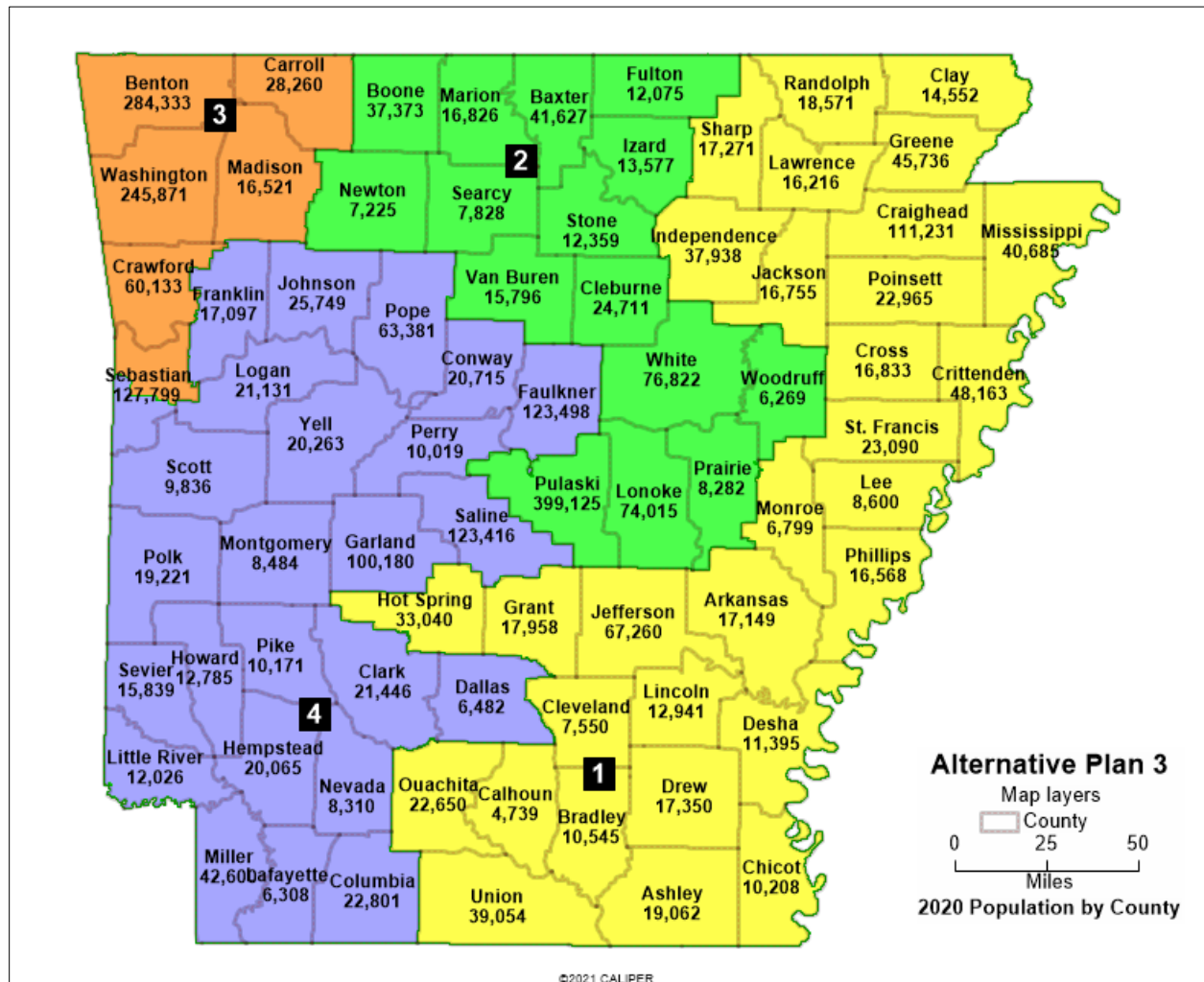
13. Throughout his declaration, Mr. Bryan fails to distinguish between “split counties” and “county splits.” These two categories are not one and the same. For example, the Enacted Plan contains two split counties—Pulaski and Sebastian—but has five total county splits (or pieces), comprising the two pieces of Sebastian County and three pieces of Pulaski County that are split. Mr. Bryan similarly fails to distinguish between “split municipalities” and “municipal splits.” For example, as shown in the exhibits that I generated using *Maptitude for Redistricting*, when a municipality is split, at least two municipal splits are created (excluding zero population splits).

III. ALTERNATIVE PLAN 3

14. Alternative Plan 3, shown in the map in **Figure 1** below, splits just one county: Sebastian. Sebastian County is split in exactly the same way under the

Enacted Plan. Alternative Plan 3 is drawn to achieve a similar partisan advantage as the Enacted Plan, while adhering to traditional redistricting principles within the context of this lawsuit.

Figure 1: Alternative Plan 3



15. The table in **Figure 2**, below, breaks out summary population statistics for Alternative Plan 3.

Figure 2: Alternative Plan 3 – 2020 Census

District	Population	Deviation	% Deviation	% 18+ Black	% 18+ Latino	% 18+ NH White
1	752874	-7	0.00%	25.57%	3.32%	67.63%
2	753910	1029	0.14%	20.35%	4.91%	69.49%
3	753219	338	0.04%	3.56%	13.89%	71.62%
4	751521	-1360	-0.18%	11.07%	6.08%	77.36%

16. **Exhibit A-1** is a higher resolution version of the map in Figure 1. **Exhibit A-2** contains detailed 2020 population statistics by district. As shown in **Exhibit A-3**, Alternative Plan 3 splits only one county (Sebastian), and does not include any VTD splits. **Exhibit A-4** documents that there are eight split municipalities—but all of these splits (16) are in municipalities that are already split along county lines. **Exhibit A-5** reports compactness scores by district. **Exhibit A-6** reports school district splits. **Exhibit A-7** shows regional Core-Based Statistical Area (“CBSA”) splits. **Exhibit A-8** reports district-by-district core retention vis-à-vis the 2011 Benchmark Plan.

17. As shown in the redistricting metrics table in **Figure 3**, Alternative Plan 3 is generally on par with or superior to the Enacted Plan across a broad range of redistricting metrics.

Figure 3: Redistricting Metrics – Benchmark & Enacted v. Alternative 3

	2011 Benchmark	2021 Enacted	Alternative 3
Total Split Counties*	5	2	1
Total County Splits*	10	5	2
VTD Splits*	1	0	0

Split Municipalities*	5	6	8
Municipal Splits*	10	12	16
Core-based Statistical Area splits*	13	11	5
Unified School District splits*	100	84	87
One-person, one-vote (deviation)	20.26%	0.09%	0.27%
DRA Compactness higher=better) #	41	59	62
Core Retention	NA	92.16%	70.66%
Incumbent Conflicts	0	0	0
CD 2 BVAP	22.64%	20.33%	20.35%

* Excluding unpopulated splits

See n. 1 (below)

18. In terms of compactness, Alternative Plan 3 scores slightly higher than the Enacted Plan—62 versus 59. In fact, as shown in **Figure 4**, with a DRA composite compactness score¹ of 62, Alternative Plan 3 would rank seventh out of the 36 states that have three or more congressional districts in terms of having compact districts.²

Figure 4: DRA Composite Compactness Scores (36 states with 3+ districts)

State	Score	State	Score	State	Score
Indiana	93	Connecticut	58	New Mexico	47
Nevada	77	Georgia	58	South Carolina	37
Florida	70	Washington	58	Alabama	36

¹ The composite compactness measure reported in **Figure 3** and throughout the text of this declaration is published by the widely used redistricting website, Dave’s Redistricting Application (“DRA”). The DRA composite compactness score (higher is better) is based on the Reock and Polsby Popper measures using the methodology as described at <https://medium.com/dra-2020/ratings-deep-dive-c03290659b7>. The district-by-district compactness scores reported in the exhibits that I have attached by plan are produced using *Maptitude for Redistricting* and report the raw Reock and Polsby-Popper scores, which are the two most widely referenced compactness measures. Mr. Bryan also uses Reock and Polsby Popper scores in his report. See Bryan Rep. ¶ 92.

² I prepared **Figure 4** using the state-by-state metrics published on the DRA website via <https://davesredistricting.org/maps#list::Official-Maps>.

Utah	70	Kansas	56	New Jersey	36
Mississippi	65	Ohio	56	Kentucky	35
New York	63	Virginia	55	Maryland	35
Michigan	62	Iowa	54	California	33
North Carolina	61	Minnesota	53	Massachusetts	31
Missouri	60	Arizona	53	Texas	26
Arkansas	59	Oklahoma	51	Tennessee	21
Oregon	59	Colorado	51	Louisiana	11
Pennsylvania	59	Wisconsin	50	Illinois	10

19. Alternative Plan 3 scores lower on core retention than the Enacted Plan. However, there is no bright-line rule defining an acceptable core retention score, and it is my understanding that the Legislature did not stipulate one in its 2021 congressional redistricting process. In this instance, the balancing of traditional redistricting principles, including preserving political boundaries like counties that serve as communities of interest, allows for a core retention rate of 73.33%—particularly when measured against an Enacted Plan that cracks the sizeable Black population in Pulaski County across three districts.

20. **Figure 5** highlights partisan performance for the Enacted Plan and the two alternative plans that I have drawn in the September 16 Declaration and in this rebuttal declaration to maintain or enhance Republican performance in CD 2.

Figure 5: Partisan Metrics: Enacted v. Alternative Plans 2 and 3

Metric	2021 Enacted	Alternative 2	Alternative 3
2020 Election (Head-to-Head)			
CD 2 R – Trump	56.7%	55.7%	58.3%
CD 2 D – Biden	43.3%	44.3%	41.7%

Republican Margin	13.4%	11.4%	16.6%
2022 Election (Head-to-Head)			
CD 2 R – Boozman	60.00%	60.0%	60.82%
CD 2 D – James	40.00%	40.0%	39.18%
Republican Margin	20.00%	20.0%	21.64%

21. Alternative Plan 2 (from my September 16 Declaration) and Alternative Plan 3 (presented in this declaration) indicate a clear partisan advantage when looking at the results from two recent federal elections: the 2020 Presidential election³ and the 2022 U.S. Senate election.⁴ I am not an expert on measuring partisanship. But the most commonsense metric for measuring partisanship in the federal redistricting process is looking at recent statewide elections. Consistent with the Supreme Court’s decision in *Alexander v. S.C. State Conf. of the NAACP*, 144 S. Ct. 1221 (2024), the 2020 presidential election results may be alone sufficient for assessing partisanship performance. The 2020 U.S. Senate contest cannot be analyzed because there was no Democratic candidate on the ballot.

22. The partisan advantage in CD 2 under Alternative Plan 3, based on the 2020 Trump/Biden head-to-head contest, is similar to the Enacted Plan. Likewise,

³ For the 2020 presidential contest results, I relied on a dataset prepared by election data social scientists and available via the Redistricting Data Hub link below:
<https://redistrictingdatahub.org/dataset/arkansas-2020-general-election-results-disaggregated-to-the-2020-block/>.

⁴ For 2022 election results, I relied on 2022 precinct-level election data prepared by the Defendant’s expert, Thomas Bryan, as well as county-level election data available from the Secretary of State website:
<https://results.enr.clarityelections.com/AR/115767/web.307039/#/summary>.

based on the 2022 U.S. Senate contest, the partisan advantage under Alternative Plan 3 is similar to the Enacted Plan.

23. Alternative Plans 1 and 2 in my September 16 Declaration and Alternative Plan 3 here are just a few of the numerous ways to develop alternative maps that illustrate Pulaski County does not need to be split to equalize population and adhere to traditional redistricting principles, while also considering partisanship for the purpose of this lawsuit.

IV. POSTSCRIPT

24. As explained in my September 16 Declaration, the 2021 redistricting process started with a baseline—the 2011 Benchmark Plan—that already reflected the cracking of the Black population for decades. The Enacted Plan perpetuates this cracking in ways that could allow for even greater cracking of the Black population during the next redistricting cycle.

25. A post-2030 Census redistricting incursion deeper into predominantly Black or racially diverse precincts in central Pulaski County may only be six years away. Recently released state-level 2030 population projections (based on Census 2020) by the Weldon Cooper Center⁵ at the University of Virginia signal a modest increase in Arkansas's 2030 population from 3,011,524 in 2020 to 3,084,795—an increase of 73,271 people. Should the rural counties in CD 1 and CD 4 continue to

⁵ <https://www.coopercenter.org/national-population-projections>.

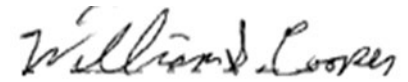
lose population, as they have over the past several decades, thousands of people may have to be shifted out of CD 2 and CD 3 and into CD 1 and CD 4.⁶

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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.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed on: September 23, 2024


WILLIAM S. COOPER

⁶ The Arkansas Economic Development Institute has not yet released Census 2020-based county and state projections for 2030. *See* <https://arstatedatacenter.youraedi.com/population-projections/>.