

Project Report: Redistricting in Oklahoma (Paper 2 of 3)

Brett Parker

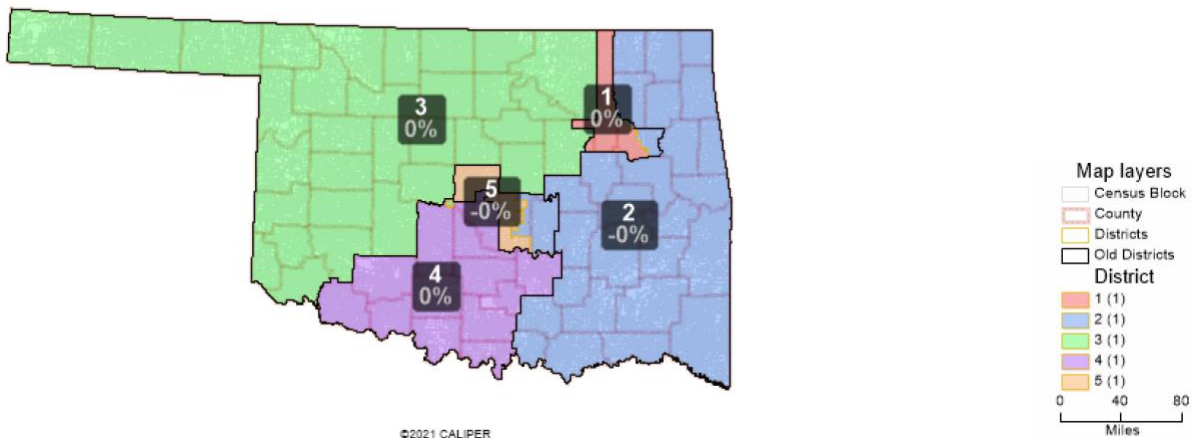
I. Redistricting in Oklahoma

The paper is the second in a three-paper series and concerns the state of Oklahoma (for a broader overview of the project, *see* Paper 1). Oklahoma has a population of approximately four million people and is entitled to five House members after the 2020 census (unchanged from the 2010 census).¹ This report provides two maps for Oklahoma: a “least change” map and a “good government” map. I discuss the least change map first.

A. Least Change Plan for Oklahoma

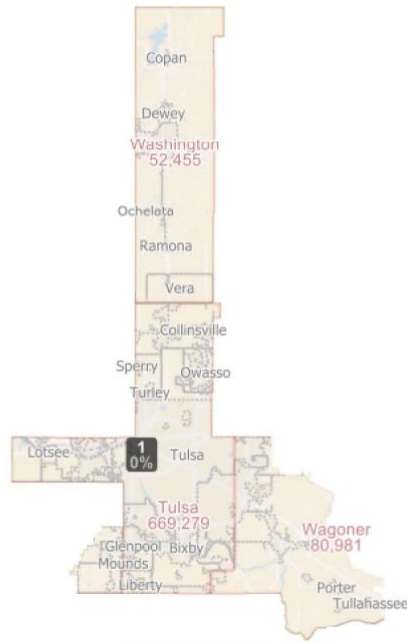
1. Maps

This section provides maps of both individual congressional districts and the state as a whole. In the first image, the solid black lines represent the old district lines, while the filled areas depict the new districts.



¹ See U.S. CENSUS BUREAU, QUICKFACTS OKLAHOMA (last visited Nov. 23, 2021), <https://www.census.gov/quickfacts/OK>.

District: 1



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District: 2



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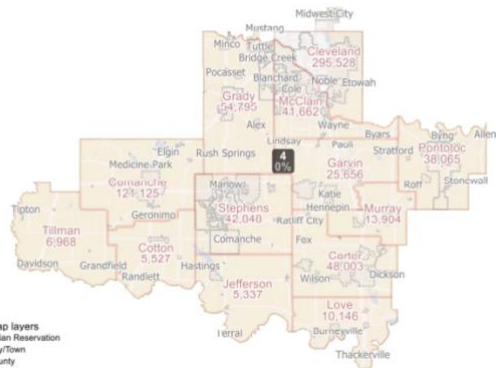
District: 3



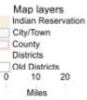
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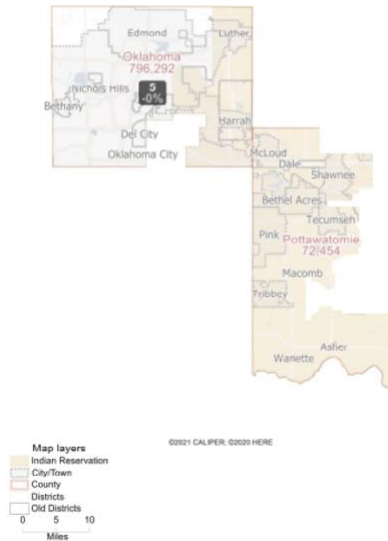
District: 4



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District: 5



2. Principles Prioritized

This map emphasizes the least change principle. It leaves CD3 and CD4—which barely experienced any population shifts—virtually unchanged. However, it does contract CD1 and CD5, which encompass Tulsa and Oklahoma City, respectively. These areas (Oklahoma City in particular) have gained people, and the districts surrounding those areas needed to shrink. Meanwhile, the eastern-most quarter of the state has become less populated, and accordingly needed to expand in order to comply with one person, one vote. CD2 dropped approximately 70,000 voters between 2010 and 2020, requiring westward expansion. Nevertheless, the cores of CD1 and CD5 remain intact. Indeed, the less densely populated areas in the eastern parts of the preexisting districts likely have more in common with rural CD2 than they do with the highly urban CD1 and CD5.

3. Demographic Considerations

Like most U.S. states, Oklahoma has a white majority.² However, it also has substantial Native American, Hispanic, and Black populations.³ According to the Census Bureau, 9.4 percent of all Oklahoma residents consider themselves to be primarily Native American—a remarkable number given that less than 2 percent of the total U.S. population is Native American. Oklahoma also has sizable Black (7.8 percent of total population) and Hispanic (11.1 percent of total population) communities.⁴ To be sure, none of these groups is sufficiently large to elect a candidate of its choice by itself in any congressional race; nevertheless, they can certainly carry weight in certain districts.

The five districts contained in this least change map have voting-age white majorities of between 57 percent and 73 percent. The largest minority group in any district is Native American residents in CD2—about 25.7 percent of the voting-age residents in that jurisdiction are at least part Native American. To the extent that this group votes as a bloc, they could have a significant influence the district’s congressional representative. CD5 contains the largest percentage of non-white voting-age residents (approximately 43 percent), but no single group makes up more than 16 percent of the total district VAP. Given that these groups generally lean Democratic,⁵ CD5 represents the best opportunity for a Democratic pickup in the state. Interestingly, though the new map shrinks CD5 towards Oklahoma City, the demographics of the district are virtually unchanged from the preexisting map.

² *See id.*

³ *Id.*

⁴ *Id.*

⁵ *See, e.g.,* N.Y. TIMES, NATIONAL EXIT POLLS: HOW DIFFERENT GROUPS VOTED (Nov. 3, 2020), <https://www.nytimes.com/interactive/2020/11/03/us/elections/exit-polls-president.html>.

4. Geographic Considerations and Compactness

One of the primary geographic considerations in Oklahoma is the locations of Native American reservations. Much of Oklahoma technically constitutes reservation land under *McGirt v. Oklahoma*,⁶ and the state has 30 separate reservations in total. This map would split 12 of the thirty reservations. While this might sound like a significant number, the existing district lines also divide 12 reservations, so the new map would effectively preserve the status quo.

This map also keeps all current incumbents in their current districts, and the cores of all current districts remain intact. Indeed, since this map relies on the “least change” principle, my primary geographic concern was ensuring that all new districts resemble the existing districts as closely as possible. No major geographic landmarks have changed districts, and the general character of each district (and approximate political lean) remains the same.

Since the preexisting Oklahoma congressional map featured relatively compact districts, it is no surprise that these least change districts achieve a similar level of compactness. All have a Reock score of at least 0.22 and a Schwartzberg score of no more than 2.23. CD5 is perhaps the most oddly shaped; it consists of two rectangles located diagonally across from one another and conjoined by a narrow strip of land. As the “good government” plan discussed below demonstrates, it is possible to draw a substantially more compact CD5 with approximately the same partisan lean. Nevertheless, the districts of this least change map do not offend aesthetic sensibilities.

⁶ See Jack Healy & Adam Liptak, *Landmark Supreme Court Ruling Affirms Native American Rights in Oklahoma*, N.Y. TIMES (July 11, 2020), <https://www.nytimes.com/2020/07/09/us/supreme-court-oklahoma-mcgirt-creek-nation.html>.

5. Political Subdivisions

Given that this map largely keeps the preexisting district lines, it is almost equally successively at avoiding subdivision splits. It divides only five of 1,947 voting districts and five of 77 counties. Both statistics are largely unchanged from the previous map, which divides four counties and four voting districts (equalizing the population without substantially altering district lines required one addition county/voting district). This low level of subdivision splits is a substantial point in favor of this least change map—the Washington least change map (Paper 1) splits a higher percentage of both counties and voting districts.

6. Other Communities of Interest

This map splits 30 of Oklahoma’s 807 cities and towns. Unsurprisingly, this effectively creates the same level of city/town splits as the preexisting map (which splits 27 cities/towns).

7. Partisan Considerations

The preexisting district lines gave Republican congressional candidates a significant advantage, so it is no surprise that these least change lines also strongly favor the GOP. The predicted efficiency gap is 11.4 percent in the Republican direction, which constitutes a greater Republican skew than 87 percent of historical plans. The two rural districts—CD2 and CD3—are impregnable Republican fortresses. PlanScore.org characterizes CD4 as “Lean Republican,” but the reality of the matter is that the GOP would be virtually assured of holding it. The district is essentially unchanged from its previous configuration, and is currently represented by Republican Tom Cole, who is serving his tenth term in office.⁷ Following his initial election in 2002, Cole has never won the district by less than 25 percentage points.⁸ In a hypothetical open

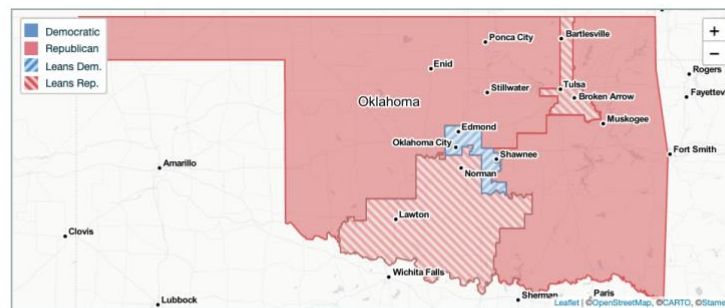
⁷ CONGRESSMAN TOM COLE, BIOGRAPHY (last visited Nov. 23, 2021), <https://cole.house.gov/about/full-biography>.

⁸ See U.S. HOUSE OF REPRESENTATIVES, OFFICE OF THE U.S. CLERK, ELECTION STATISTICS (last visited Nov. 23, 2021), https://web.archive.org/web/20070725184700/http://clerk.house.gov/member_info/electionInfo/index.html.

seat election, Republicans would be expected to have a 14-point advantage in the district. Put otherwise, it seems unlikely that anything other than the most overwhelming blue wave could push the seat into the Democratic column.

CD5, however, presents an opportunity for a Democratic pickup. The district is currently represented by Republican Stephanie Bice, but was in the hands of Democrat Kendra Horn as recently as 2020.⁹ Indeed, PlanScore.org predicts that a Democratic candidate would have a slight advantage (54-46) in a hypothetical open seat election. While the expected GOP advantage in the 2022 election would likely prevent this seat from falling immediately into Democratic hands, it could find its way into the blue column before the end of the decade.

District Map



District Data

District	Candidate Scenario	Pop. 2020	Hispanic CVAP 2019	Non-Hisp. Black CVAP 2019	Non-Hisp. Asian CVAP 2019	Non-Hisp. Native CVAP 2019	Chance of 1+ Flips ¹	Chance of Democratic Win	Predicted Vote Shares	Biden (D) 2020	Trump (R) 2020
1	Open Seat	791,871	5.6%	9.2%	2.2%	9.9%	Yes	30%	47% D / 53% R	121,894	190,647
2	Open Seat	791,869	2.8%	3.7%	0.6%	22.7%	No	2%	35% D / 65% R	71,382	242,782
3	Open Seat	791,871	5.8%	4.2%	1.2%	8.7%	No	3%	36% D / 64% R	72,836	234,778
4	Open Seat	791,872	6.2%	7.3%	2.3%	8.6%	Yes	13%	43% D / 57% R	102,237	206,043
5	Open Seat	791,870	8.3%	14.8%	2.9%	6.2%	Yes	75%	54% D / 46% R	135,550	146,027

⁹ N. Y. TIMES, OKLAHOMA ELECTION RESULTS: FIFTH CONGRESSIONAL DISTRICT (last visited Nov. 23, 2021), <https://www.nytimes.com/interactive/2020/11/03/us/elections/results-oklahoma-house-district-5.html>.

8. Legal Compliance

i. The U.S. Constitution

This map would likely pass constitutional muster. CD2 is slightly underpopulated compared to the ideal; it has 791,869 voters as compared to the ideal number of 791,871. However, this minor violation of one person, one vote would probably not attract significant constitutional challenge, particularly given that the current population estimates intentionally include minor errors.¹⁰ Moreover, no serious *Shaw* challenge could be brought to this map, as none of the districts appear to prioritize race over other redistricting criteria.

ii. The VRA

This map does not raise any serious VRA questions. No single minority group (or coalition of minority groups) could conceivably compose a compact and cohesive majority in any congressional district.

iii. State Law

No Oklahoma law places restrictions on the congressional lines drawn by the state legislature.¹¹ However, the state House redistricting committee adopted generic guidelines requiring that “congressional districts be compact, contiguous, preserve political subdivisions, and preserve communities of interest as well.”¹² As discussed above, this map meets those requirements to approximately the same extent as the previous Oklahoma congressional map. Consequently, it would almost certainly satisfy the state House requirements.

¹⁰ See, e.g., Christopher T. Kenny et al., *The Use of Differential Privacy for Census Data and Its Impact on Redistricting: The Case of the 2020 U.S. Census*, 7 SCI. ADVANCES at *1 (2021).

¹¹ See PRINCETON GERRYMANDERING PROJECT, OKLAHOMA (Nov. 1, 2021), <https://gerrymander.princeton.edu/reforms/OK>.

¹² *Id.*

9. The Proposed Plan vs. Existing Plan

The most significant differences between this plan and the existing plan come in CD1 and CD5. Both districts gained population between 2010 and 2020, meaning that even a least change plan needs to adjust the boundaries inward. Accordingly, CD2 takes some land that was previously a part of CD1 and CD5. Otherwise, the district lines barely change. CD4 and CD3 are virtually identical to their previous forms, and CD1 and CD5 retain the urban core of their predecessors.

The new districts would provide the Democrats with slightly improved political prospects. PlanScore.org predicts that CD1 would have approximately a 30 percent chance of going Democratic in an open seat election, while CD5 would have a 75 percent chance of moving into the blue column. Under the existing district lines, both seats have typically been held by the GOP; a Democrat held CD5 from 2019-2021, but promptly lost the district in the 2020 election.¹³ This map would likely give that seat to the Democrats more frequently over a ten-year period.

10. The Proposed Plan v. The Adopted Plan

Oklahoma officially adopted new congressional districts on the day before this report was due. This plan is effectively a Republican gerrymander; it eviscerates any possibility of Democrats winning CD1 and CD5. According to FiveThirtyEight, CD5 now has a 24-point Republican lean, while CD1 offers a 28-point GOP advantage.¹⁴ These numbers differ substantially from the least change plan offered here. My plan would actually give Democrats a slight advantage in CD5 (54-46) and a small probability of winning CD1. The GOP-controlled

¹³ See N.Y. TIMES, *supra* note 9.

¹⁴ See FIVETHIRTYEIGHT, WHAT REDISTRICTING LOOKS LIKE IN EVERY STATE (Nov. 17, 2021), https://projects.fivethirtyeight.com/redistricting-2022-maps/washington/commission_final/.

legislature achieves five safe Republican districts by splitting Oklahoma City; the overwhelmingly Republican CD3 absorbed substantial chunks of the city.¹⁵

In terms of demographics, my least change plan gives minority voters substantially more influence than the newly adopted map. The most significant deviation comes, unsurprisingly, in CD5. My least change plan would give non-white resident about 43 percent of the vote in CD5, while the newly adopted plan would allow them only about 35 percent of the vote.¹⁶ In addition, CD2 drops to about 16.6 percent Native American in this map, which compares poorly to the approximate 25.7 percent Native American share in my least change map.¹⁷

Finally, the GOP-gerrymander fares worse than my least change plan when it comes to subdivision splits, but does slightly better in terms of compactness. The legislature's plan splits six counties (as compared to my plan's five and the preexisting plan's four).¹⁸ The average Reock and Polsby-Popper scores are 0.42 and 0.28 respectively, which bests my plan's 0.34 and 0.23.¹⁹ This comparison demonstrates that enforcing compactness is no guarantee against gerrymandering. The GOP plan creates highly compact Oklahoma districts, yet still produces an unnatural Republican edge.

B. Good Government Plan for Oklahoma

1. Maps

This section provides maps of both individual congressional districts and the state as a whole. In the first image, the solid black lines represent the old district lines, while the filled areas depict the new districts.

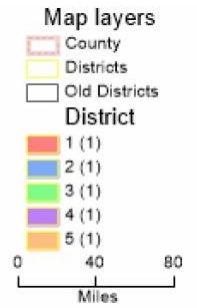
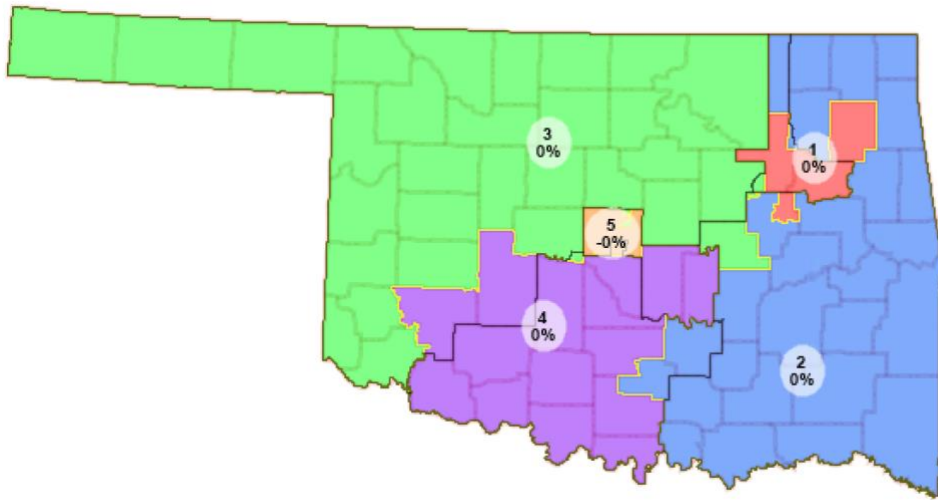
¹⁵ *Id.*

¹⁶ PRINCETON GERRYMANDERING PROJECT, OKLAHOMA 2021 DRAFT STAFF CONGRESSIONAL MAP (Nov. 1, 2021), <https://gerrymander.princeton.edu/redistricting-report-card?planId=rechcXBenhXaetezF>

¹⁷ *Id.*

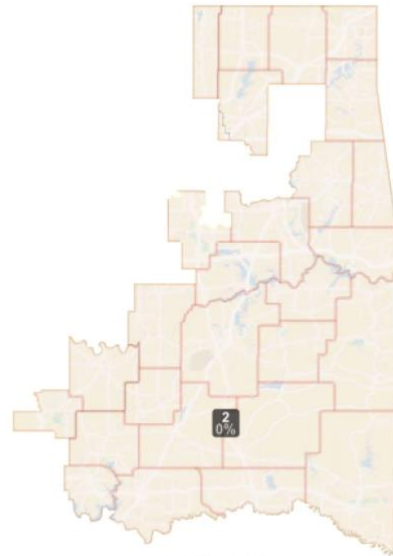
¹⁸ *Id.*

¹⁹ *Id.*



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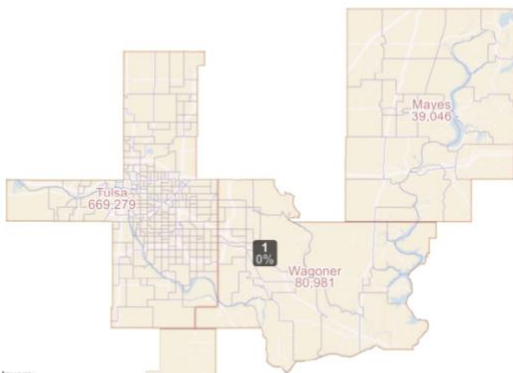
District: 2



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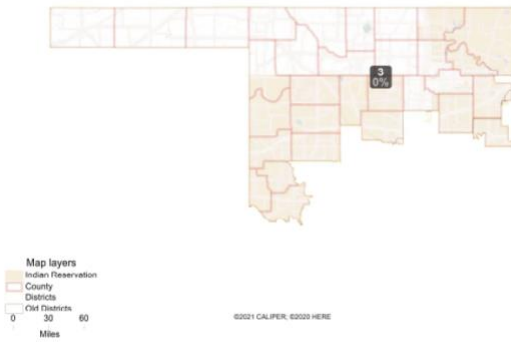
District: 1



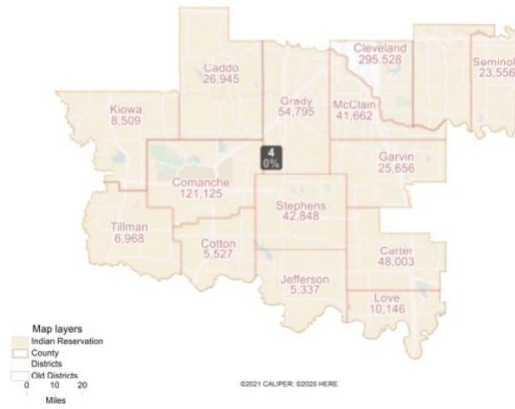
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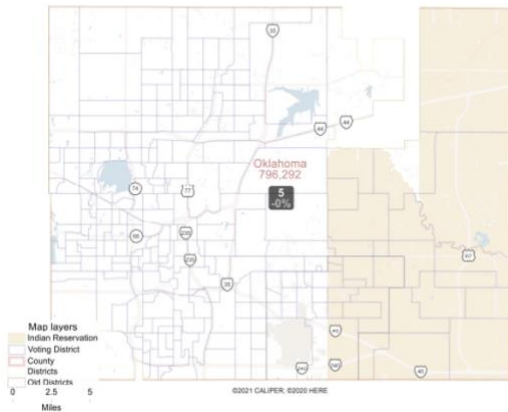
District: 3



District: 4



District: 5



2. Principles Prioritized

This map prioritizes the traditional “good government” principles: respect for political subdivisions, maximizing compactness, and maintaining contiguity. I already discussed the virtues of good government plans in the context of Washington (see Paper 1), so I will not rehash that analysis here. I reserve the question of how I accomplish these goals for the forthcoming subsections.

3. Demographic Considerations

All five of Oklahoma’s congressional districts have white majorities. These majorities range in size from 56 percent of the VAP to 73 percent of the VAP. That all five districts have white majorities is unsurprising—according to the Census Bureau, approximately 11.1 percent of the total population is Hispanic, about 9.4 percent is Native American, and around 7.8 percent is Black.²⁰ None of these groups could feasibly constitute a compact majority of a congressional district, so there are no Section 2 VRA concerns. Interestingly, CD2 has one of the largest Native American populations in the nation—approximately 152,000 residents, or about 25 percent of the district, have some Native American heritage. However, given that CD2 contains substantial portions of the Choctaw and Cherokee reservations, that is hardly surprising.

CD5, which includes Oklahoma City and the surrounding area, has the largest non-white population at approximately 44 percent. However, none of the minority groups in that district come close to comprising a majority. Black residents come closest at approximately 16.6 percent of VAP, while Hispanic voters comprise 16 percent of the district. It is possible that the district lines could be drawn so as to boost the non-white population to above 50 percent—however, these groups would almost certainly not be sufficiently culturally compact to have any serious VRA claim.

4. Geographic Considerations and Compactness

This plan prioritizes compactness (among other principles). Consequently, it scores well on various statistical measures of that trait. CD5 score higher than any other district in this report in terms of Reock (0.60) and lower than the other districts from a Schwartzberg perspective (1.53). Three of the other four districts also turn in strong performances. CD4 hits

²⁰ See U.S. Census Bureau, *supra* note 1.

0.49 on Reock, while CD2 and CD1 reach 0.43 and 0.39, respectively. Each district has a Schwartzberg score of 2.16 or less.

The one exception to these impressive statistical results is CD3, which has a Reock score of only 0.25. However, this district also includes the Oklahoma panhandle, which artificially constrains its performance. Indeed, visual inspection of CD3 shows no significant abnormalities. All the other districts also look reasonable from an aesthetic perspective. The boundaries are largely determined by county lines, which belies any suspicions of gerrymandering.

5. Political Subdivisions

My primary aim in drawing this good government map was to minimize political subdivision splits. This map manages to do so by splitting only two of 77 counties and six of 1,947 voting districts. One of the two counties split is Oklahoma County, which by itself has approximately 4,400 more residents than can be in a single district. As such, no legal map exists that would *not* split Oklahoma County. The other split county is Okmulgee, which is located at the intersection of CD1, CD2, and CD3. It is not geographically feasible to equalize population without this additional county division; accordingly, this good government map splits the smallest number of counties possible.

This map does split six voting districts, which is one more than the least change map and two more than the preexisting map. However, this is a negligible change in the context of Oklahoma's 1,947 voting districts. With substantially greater effort, it might be possible to further reduce the number of voting district divisions, but it is unclear that it would be worth the time required to do so.

6. Communities of Interest

Like the least change map, this plan splits 30 of 837 town/cities in Oklahoma. The preexisting Oklahoma plan has approximately the same number of municipality divisions (27). The high number of town/city splits occurs because some towns have multiple voting districts, and this map prioritizes keeping those districts whole. Given that the preexisting district lines produce approximately the same number of town/city splits, this new map would likely be acceptable to Oklahoma residents.

7. Partisan Considerations

Like the least change map discussed above, this plan provides the Republican Party with a substantial political advantage. Republican votes are expected to be inefficient at a rate of 10.8 percent lower than Democratic ones, making this plan more skewed than 86 percent of previously used plans. Indeed, while this plan improves on the least change map in terms of unifying political subdivisions, it differs only marginally from that map in terms of political consequences. Republicans still have near-certain victories in CD2, CD3, and CD4. Democrats would have an outside chance of capturing CD1 and a realistic shot at winning CD5 at least once over the course of a decade—however, the probability of winning those seats is effectively the same as it would be under the least change map.

The fact of the matter is that Oklahoma is an overwhelmingly Republican state.²¹ Its large cities are among the most conservative urban areas in the nation, making it difficult to draw Democratic districts without sacrificing compactness or the preservation of political

²¹ See N.Y. TIMES, OKLAHOMA ELECTION RESULTS (last visited Nov. 23, 2021), <https://www.nytimes.com/interactive/2020/11/03/us/elections/results-oklahoma.html>.

subdivisions.²² That is not to say that lines *couldn't* be drawn to give Democrats seats proportionate to their votes. However, the political geography of Oklahoma means that these districts would have to be drawn intentionally and would limit fidelity to other redistricting values. Advocates for proportional representation could certainly make a strong normative case for making this tradeoff—I pass no judgment here on the desirability of such a map. I simply note here that it would be exceedingly difficult to draw two Democratic districts without seriously limiting adherence to “good government” principles. Doing so would require the mapmaker to split several voting districts around Tulsa in order to pack in enough liberals.

District Data

District	Candidate Scenario	Pop. 2020	Hispanic CVAP 2019	Non-Hisp. Black CVAP 2019	Non-Hisp. Asian CVAP 2019	Non-Hisp. Native CVAP 2019	Chance of 1+ Flips†	Chance of Democratic Win	Predicted Vote Shares	Biden (D) 2020	Trump (R) 2020
1	Open Seat	791,872	5.4%	9.1%	2.2%	10.8%	Yes	29%	47% D / 53% R	121,329	190,349
2	Open Seat	791,871	3.0%	3.6%	0.6%	22.0%	No	2%	36% D / 64% R	72,714	243,303
3	Open Seat	791,873	5.7%	4.2%	1.2%	8.4%	No	3%	36% D / 64% R	72,776	236,207
4	Open Seat	791,871	6.2%	6.2%	2.2%	9.7%	No	10%	42% D / 58% R	96,024	206,437
5	Open Seat	791,866	8.4%	16.1%	3.0%	5.3%	Yes	81%	55% D / 45% R	141,054	143,983

8. Legal Compliance

i. The U.S. Constitution

This map contains a de minimis violation of one person, one vote; CD5 has five fewer voters than it should, which allows CD1 and CD3 to be ever-so-slightly overpopulated. It is conceivable that some voter in either of those districts might challenge the map under *Karcher*;

²² See, e.g., Drew Desilver, *Chart of the Week: The Most Liberal and Conservative Big Cities*, PEW RESEARCH CENTER (Aug. 8, 2014), <https://www.pewresearch.org/fact-tank/2014/08/08/chart-of-the-week-the-most-liberal-and-conservative-big-cities/>.

however, given that the population estimates are not precise to a single person, it is unclear whether the plaintiffs could even prove harm.²³ Moreover, the state could potentially defend this map under *Tennant* as an effort to enforce a consistently applied policy against subdivision splits.²⁴ To be safe, however, the state would likely alter this map slightly to avoid litigation on this issue. Moreover, since I did not consider race in drawing this map (and clearly prioritize traditional redistricting criteria) there is no risk that this map would give rise to a *Shaw* claim.

ii. The VRA

This map does not raise any serious VRA questions. No single minority group (or coalition of minority groups) could conceivably compose a compact and cohesive majority in any congressional district.

iii. State Law

As discussed above, Oklahoma does not place any legal restrictions on congressional redistricting over and above those required by federal law. The state House commission adopted generic good government guidelines requiring compactness, preservation of subdivisions and communities of interest, and contiguity.²⁵ However, given that this is a good government map, it already emphasizes those principles and would likely meet the state House's specifications.

9. The Proposed Plan vs. The Existing Plan

The primary difference between this plan and the preexisting lines is the treatment of CD5. In the preexisting plan, CD5 is effectively two diagonally conjoined rectangles. This plan would shrink CD5 to effectively Oklahoma County, leading to considerable compactness gains.

²³ See Kenny, *supra* note 10.

²⁴ *Tennant v. Jefferson County*, 567 U.S. 758, 759 (2012).

²⁵ See PRINCETON GERRYMANDERING PROJECT, *supra* note 11.

In addition, CD2 expands slightly on its southwestern and northwestern borders, which is necessary to account for the district's shrinking population.

Politically speaking, this good government plan would likely produce outcomes similar to the current districts. CD2, CD3, and CD4 would remain clear Republican victories. The Tulsa-area CD1 moves somewhat towards the Democratic Party. PlanScore.org predicts that the new district would provide a six-point Republican advantage, while the existing district generally favors Republicans by about 20-points. CD5 would also move in the Democratic direction. The party only won the district once over the previous ten years, but PlanScore.org predicts they would be favored in a hypothetical open seat election in the new CD5.

Finally, the districts effectively resemble the previous lines from a demographic perspective. Native Americans still constitute a significant minority in CD2, and non-white voters collectively make up a strong bloc in CD5. In all five districts, however, white voters still constitute a majority.

10. The Proposed Plan v. The Adopted Plan

This good government plan equals or exceeds the adopted Oklahoma plan with regard to most of the traditional redistricting criteria. However, that comparative advantage is to be expected given that the new Oklahoma districts reflect a Republican gerrymander. The adopted plan splits six Oklahoma Counties; my plan splits only two.²⁶ The mean Reock score of the Republican plan is 0.42; the mean score for my plan is 0.60. Finally, the GOP gerrymander divides Oklahoma City, the largest municipality in the state, for partisan gain.²⁷ My plan keeps the city intact.

²⁶ See PRINCETON GERRYMANDERING PROJECT, *supra* note 11.

²⁷ See FIVETHIRTYEIGHT, *supra* note 14.

The most significant difference between Oklahoma’s plan and mine, however, is partisan lean. The adopted plan virtually guarantees that every House Member from Oklahoma will be a Republican.²⁸ According to PlanScore.org, my plan gives the Democrats an 81 percent chance of winning an open seat election in CD5 and 29 percent chance of prevailing in a similar contest in CD1. The plan Oklahoma adopted gives the GOP 24 and 28-point advantages in those districts, respectively.²⁹ Given that no state laws constrain redistricting in Oklahoma, it is unsurprisingly that the GOP’s legislative majorities decided to go with a more red-tinged plan.

²⁸ *See id.*

²⁹ *See id.*