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Redistricting Report  
Michigan  
April 4, 2022

## I. Introduction

The following report details a congressional redistricting plan for Michigan. Overall, congressional redistricting in Michigan is subject to multiple challenges. As Michigan lost a district this cycle, the state requires a new map to reorganize much of the state. In the process, Detroit's large Black population requires mapmakers to navigate the conflicting mandates of the Voting Rights Act and the constitutional prohibition on racial gerrymandering.

This report demonstrates one way to approach these difficulties, proposing a good government congressional plan for Michigan, which aims to create compact districts that respect political subdivision lines. The next section discusses the proposal's legality before explaining precisely how the plan was constructed. The report then discusses how this map compares to the state's plan.

## II. Good Government Plan

This proposal is a good government plan, seeking to draw compact districts that follow political subdivision lines. At the same time, the map preserves the high levels of minority representation in the previous plan (used in the 2020 election), creating two opportunity districts for African-Americans in the Detroit area. The proposal did not incorporate any political data, and the map aims for neutrality. However, independent analyses suggest the plan moderately favors Republicans.

The remainder of the report is organized as follows. Section A discusses the plan's legality under the Constitution, federal law, and state law. Section B provides a more detailed explanation of the plan's considerations and how the plan navigated various tradeoffs that emerged during the redistricting process. Section C then examines how this proposal compares to the state's enacted plan from this redistricting cycle. Section D concludes.

Figure 1: Good Government Proposal, Michigan

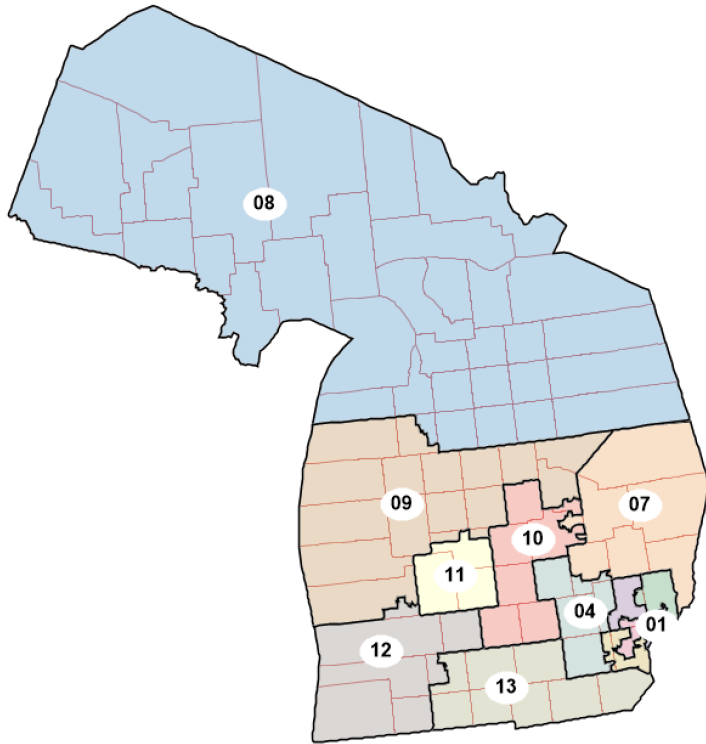
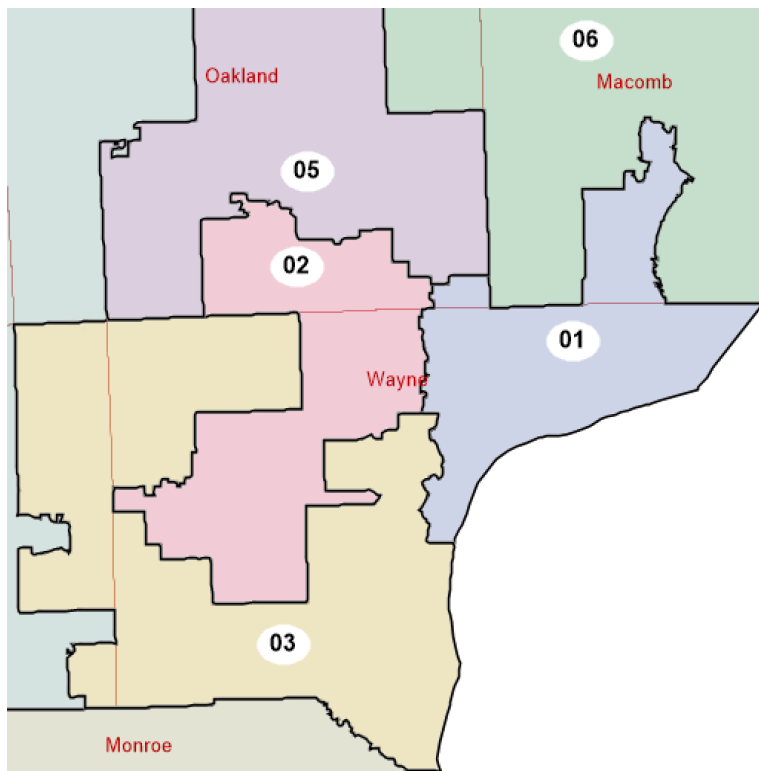


Figure 2: Good Government Proposal, Detroit Area



## A. Compliance with Legal Requirements

This map complies with all constitutional, federal, and state requirements for redistricting plans. Under the Constitution, plans must satisfy one person, one vote requirements and they may not gerrymander on the basis of race. Proposals must also adhere to section 2 of the Voting Rights Act, which imposes requirements designed to ensure a minority group's opportunity to elect candidates of their choice. Beyond federal law, the Michigan state constitution mandates that districts maintain contiguity, remain "reasonably compact," do not disproportionately advantage a political party, and respect political subdivision lines.<sup>1</sup> The next four sections examine each set of requirements in turn, concluding that the plan is legal.

### 1. Constitutional Requirements: One Person, One Vote

The one person, one vote principle requires that all districts have equal population, with every deviation justified by consistently applied, legitimate interests.<sup>2</sup> These legitimate interests include respect for political subdivisions, minimizing population shifts between districts, or preventing incumbents from competing against one another.<sup>3</sup> The Court has recognized that using registered voters or total population as the basis for equal population districts is legal.<sup>4</sup>

This plan satisfies one person, one vote requirements, using P.L. 94-171 total population data. Using this data, the ideal district would have 775,179 people. There are four districts that deviate from this ideal (districts 1, 5, 9, and 12), each of which have 775,180 people. Therefore, the difference between the smallest and largest districts is just one person. Thus, the plan reaches perfect population equality.

### 2. Voting Rights Act, Section 2

Section 2 of the Voting Rights Act ensures that "the political processes leading to nomination or election in the State" are equally open to racial minorities and majorities. Specifically, violations occur when a minority group's "members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice."<sup>5</sup> In determining

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<sup>1</sup> MICH. CONST. art. IV, § 6

<sup>2</sup> *Karcher v. Daggett*, 462 US 725 (1983)

<sup>3</sup> *Tennant v. Jefferson County*, 567 U.S. 758 (2012)

<sup>4</sup> *Burns v. Richardson*, 384 U.S. 73 (1966); *Evenwel v. Abbott*, 578 U.S. \_\_\_\_ (2016)

<sup>5</sup> 52 U.S.C. § 10301(b)

whether a state has violated Section 2 with respect to a particular minority community, courts first require that challenges satisfy three threshold conditions. First, the minority group in question must be large and compact enough to form a majority of a single member district. Second, the minority community must be politically cohesive. Third, racially polarized voting must ordinarily lead majorities to defeat minority candidates of choice.<sup>6</sup> After meeting these so-called *Gingles* prongs, challengers must then satisfy the “totality of the circumstances” test, proving that some of the Senate factors are present. Proving these factors requires plaintiffs to illustrate how past and present discrimination and racial polarization conspire to harm minority groups and their electoral chances.<sup>7</sup>

In subsequent cases, the Court has expounded on how to determine when particular minority groups satisfy the *Gingles* prongs. On the first prong, the Court determined that minority groups must be able to form a strict majority of a single member district to bring a Section 2 claim.<sup>8</sup> When evaluating whether a minority group forms a majority, lower courts often use citizen voting age population (CVAP) as the denominator. In addition, the Court has attached a cultural compactness strand to the first prong, requiring that a group must be culturally cohesive to bring a Section 2 claim.<sup>9</sup>

When weighing the “totality of the circumstances,” the Court has ruled that achieving proportionality (where a minority group controls a share of districts comparable to their share of the state’s population) is not a safe harbor, though it does weigh in favor of the plan.<sup>10</sup>

When the *Gingles* prongs and Senate factors are present, the Court has clarified the state’s obligations in *Johnson v. DeGrandy*, holding that a state is not required to draw the maximum possible number of majority minority districts.<sup>11</sup> However, a state may not trade one group’s majority minority district for another, unless the state cannot accommodate both groups’ claims.<sup>12</sup>

Michigan’s Black population in and around Detroit is the only minority community large and compact enough to satisfy the first *Gingles* prong. While there are other Black communities in the state (eg. in Flint, MI), they are not large enough to form a majority of a single member district. Without racially polarized voting analyses to assess the second and third *Gingles* prongs, I drew two majority Black districts for the African-American community in Detroit.

Figure 3: African-American Population Density, Detroit Area

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<sup>6</sup> *Thornburg v. Gingles*, 478 U.S. 30 (1986)

<sup>7</sup> *See* Senate Judiciary Committee Report on the Voting Rights Act Amendments of 1982, S. Rep. No. 97–417, 97th Cong, 2d Sess. (1982)

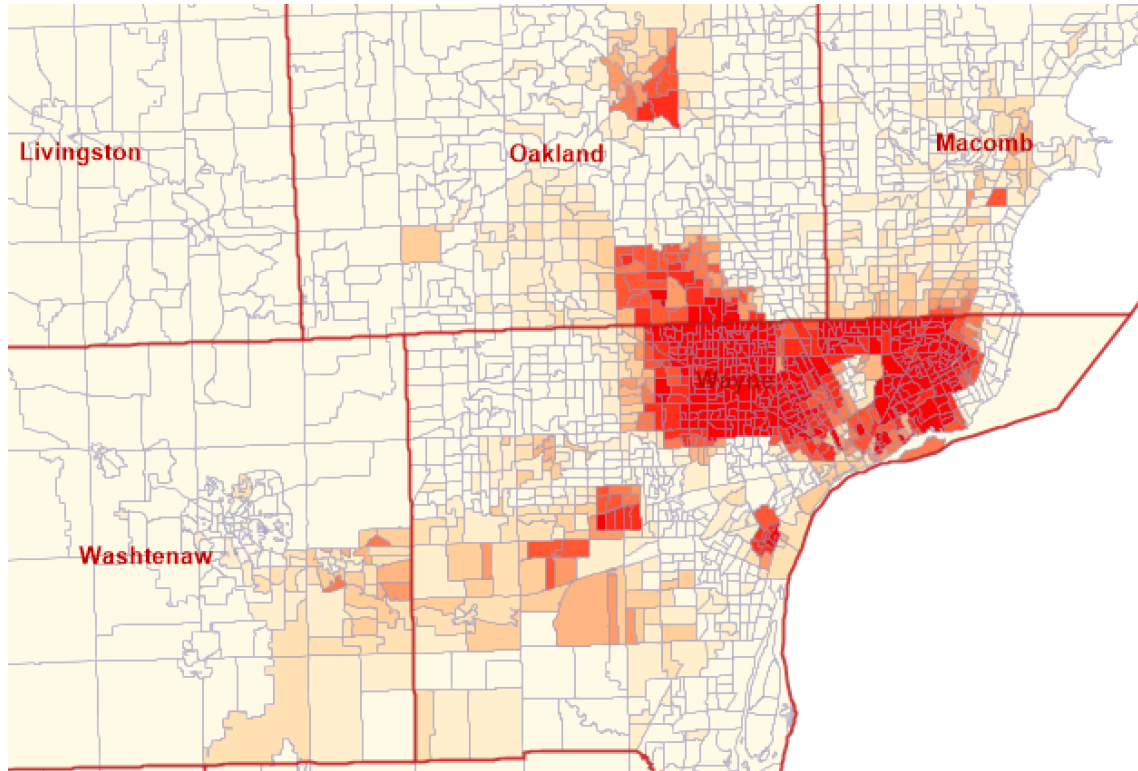
<sup>8</sup> *Bartlett v. Strickland*, 556 US 1 (2009)

<sup>9</sup> *League of United Latin American Citizens v. Perry*, 548 US 399 (2006)

<sup>10</sup> *Johnson v. De Grandy*, 512 U.S. 997 (1994)

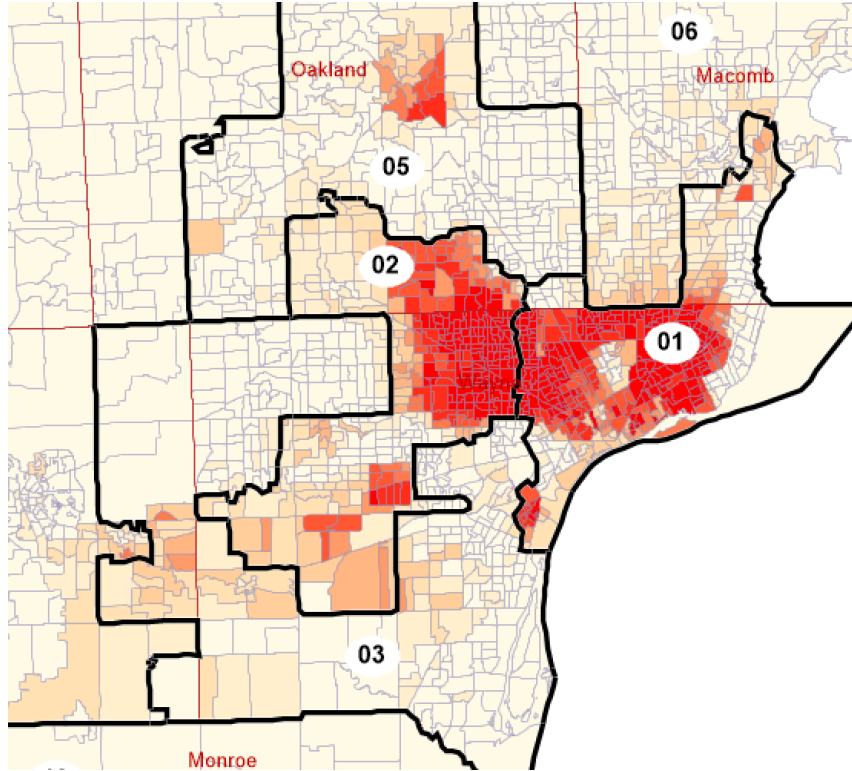
<sup>11</sup> *Johnson v. De Grandy*, 512 U.S. 997 (1994)

<sup>12</sup> *League of United Latin American Citizens v. Perry*, 548 US 399 (2006)



The map above shows the population density of African-Americans across the Detroit area, where darker red indicates higher concentrations of African-Americans by voting age population (VAP), and lighter yellow indicates lower concentrations. The thin, maroon lines indicate county boundaries. The following map shows the districts this proposal draws around this community.

Figure 4: African-American Population Density in Proposed Districts 1 and 2



As the map illustrates, Detroit’s African-American community is nearly entirely contained in proposed districts 1 and 2 (GG1 and GG2), which are majority Black by both VAP and CVAP. These districts should perform as Black opportunity districts, since their location is similar to the previous map’s districts 13 and 14 (PR13 and PR14), which were majority Black districts in Detroit. The previous districts 13 and 14 appeared to elect minority candidates of choice, electing Rashida Tlaib and Brenda Lawrence. While PR13 and PR14 have higher concentrations of Black voters than my proposed GG1 and GG2, the proposed districts should still perform: Black voters have a majority in the districts, and Tlaib and Lawrence are now incumbents, raising the probability they win elections.

The following table shows the demographics of my proposed districts 1 and 2 and the previous districts 13 and 14. In the table’s headings, NH and H refer to Non-Hispanic and Hispanic, while BLK and ASN refer to Black and Asian respectively. All demographic data are presented in percentages. Note that VAP numbers are from the Census data, while CVAP numbers come from survey data estimates.

Table 1: Demographics of Proposed Districts 1 and 2, and Previous Districts 13 and 14

District	NH_BLK_CVAP	BLK_VAP	NH_ASN_CVAP	ASN_VAP	H_CVAP	H_VAP
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GG1	52%	50.08%	1.85%	3.41%	3.94%	6.29%
GG2	50.75%	50.01%	2.17%	4.7%	1.92%	2.95%
PR13	56.69%	55.31%	1.05%	2.11%	4.26%	6.8%
PR14	59.21%	55.65%	3.19%	5.98%	2.89%	4.57%

This plan should satisfy any Section 2 claim from the African-American community in Detroit. The previous plan — which was not struck down under Section 2 — also allotted two majority Black districts for the African-American community in Detroit, so it is unlikely that the Voting Rights Act requires more. Moreover, there are not enough Black voters in the Detroit area to create a third majority Black district, so this plan draws the maximum possible number of majority minority districts for this community, satisfying any Section 2 concerns.

There are likely no other minority communities with compelling Section 2 claims: as the previous plan did not provide majority minority districts for any other community, the Voting Rights Act likely does not require their creation. Regardless, no other minority community satisfies the first *Gingles* prong, preventing Section 2 challenges.

### 3. Constitutional Requirements: Racial Gerrymandering

Each minority opportunity district described above could be challenged under *Shaw v. Reno*. In *Shaw*, the Court ruled that if race is the predominant factor in the construction of a particular district, then the map is subject to strict scrutiny.<sup>13</sup> To show race predominated, courts often assess whether the district violated traditional redistricting criteria like compactness and contiguity in service of race-motivated goals such as creating a majority minority district. If race predominated, defendants can show the district in question was narrowly tailored to avoid a Voting Rights Act violation, in which case the plan would be legal.<sup>14</sup> Compliance with the Voting Rights Act is the only compelling interest the Court has recognized to justify racial predominance. Since *Shelby County*, this interest is limited to compliance with Section 2.<sup>15</sup>

The next two sections discuss each minority opportunity district, explaining why it would withstand a *Shaw* claim. Each of these districts considered race, aiming to give minority groups substantial representation in the plan. However, race was not the predominant factor. In each case, traditional redistricting criteria such as compactness, contiguity, and respect for political subdivisions

<sup>13</sup> *Shaw v. Reno*, 509 US 630 (1993)

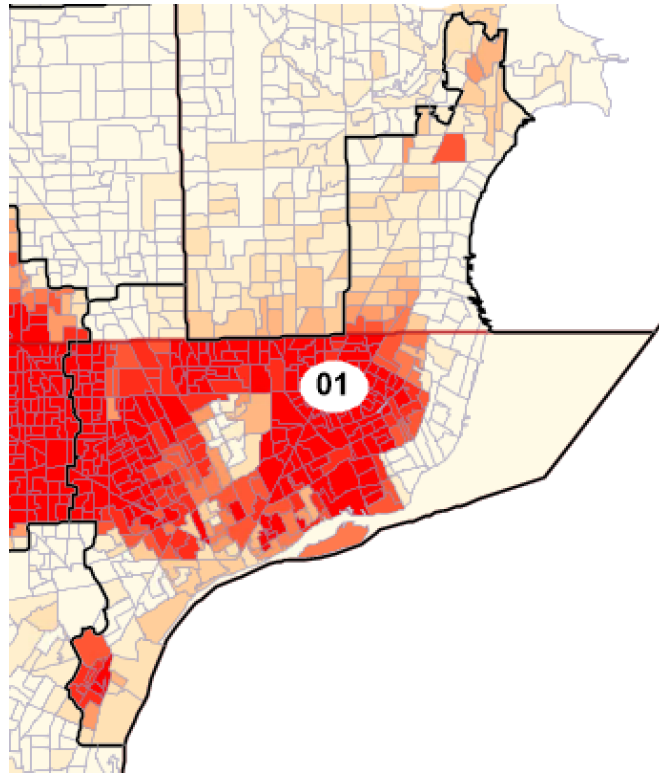
<sup>14</sup> *Bush v. Vera*, 517 US 952 (1996)

<sup>15</sup> *Shelby County v. Holder*, 570 US 529 (2013)

dominated my considerations. However, lacking the racially polarized voting analyses necessary to establish the *Gingles* prongs, this report does not prove that any particular district was narrowly tailored to avoid a Voting Rights Act violation.

a. District 1

Figure 5: African-American Population Density in GG1



District 1 is a majority Black district centered in Detroit, extending north to the town of Mount Clemens and south toward River Rouge. The map above shows the African-American VAP density in my proposed district 1, with gray areas indicating cities and towns. While a *Shaw* claim against this map might argue that district 1 was primarily race-motivated, the district's respect for political subdivisions and emphasis on compactness illustrate how traditional redistricting criteria dominated racial considerations: the district would have higher concentrations of African-Americans if it split towns such as Fraser and Roseville, keeping just enough of them to maintain contiguity as the district moved from Detroit to Mount Clemens. However, the district would have been less compact, with only a thin strip along the shore connecting Detroit to Mount Clemens. Moreover, this move would introduce more splits across towns, which the plan sought to avoid.



Furthermore, my proposed district 1 is more compact and respects political subdivisions to a greater extent than the previous map's equivalent, the majority Black district PR14. The map below shows the African-American population density in PR14 (highlighted in green). As the map and table illustrate, PR14 appears less compact and splits more towns than my district 1 to achieve higher concentrations of Black voters.<sup>16</sup> In other words, PR14 prioritized racial considerations over traditional redistricting criteria to a greater extent than my proposed district 1; since PR14 was not struck down under *Shaw*, it is unlikely that my proposed district would be.

Figure 6: African-American Population Density in PR14

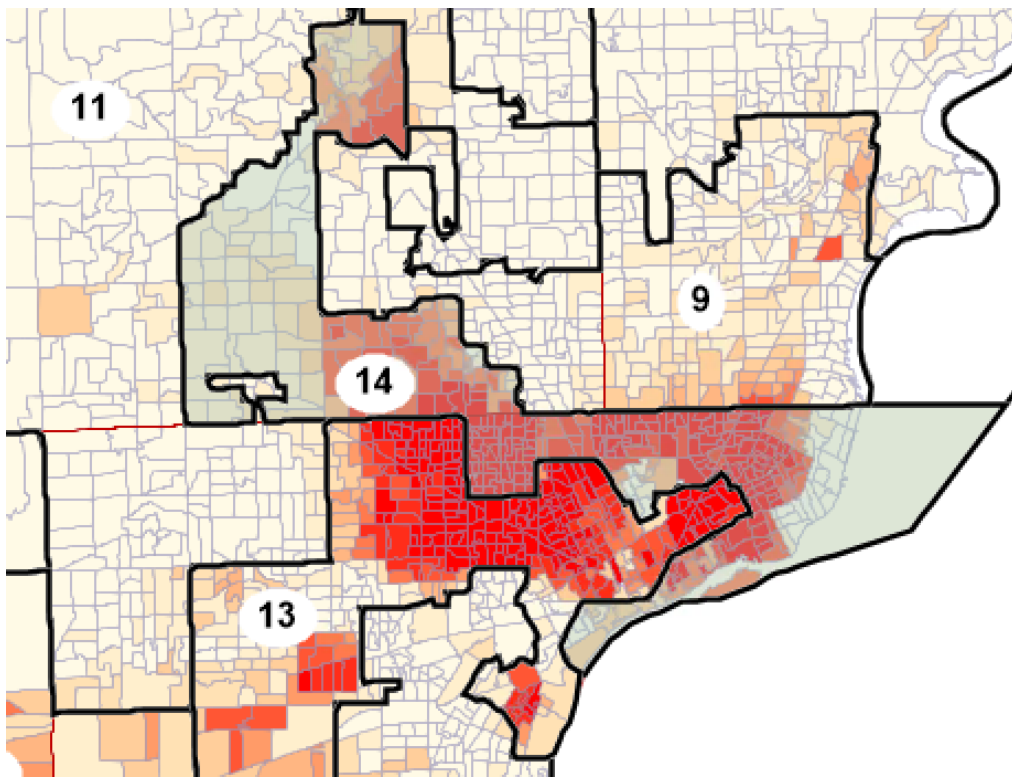


Table 2: Demographics and Compactness of PR14 and GG1

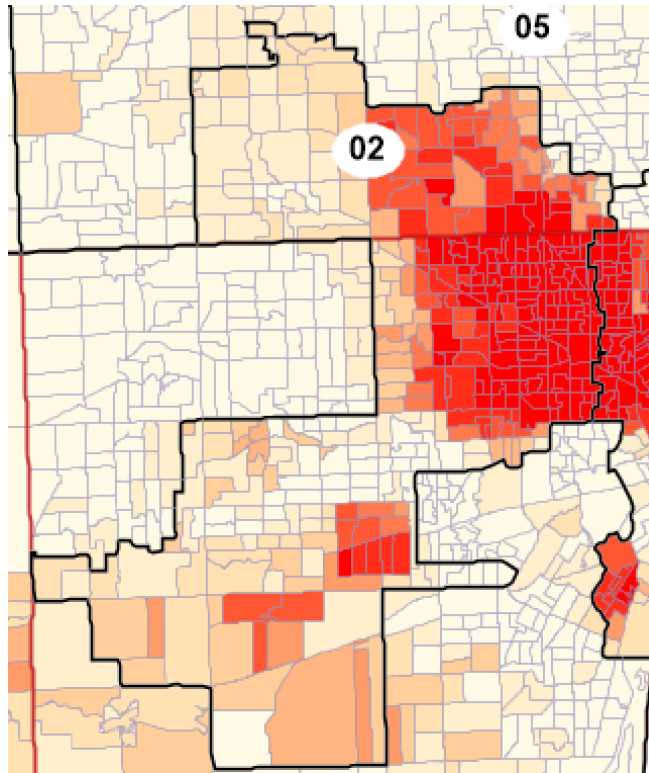
District	NH_BLK_CVAP	BLK_VAP	NH_ASN_CVAP	ASN_VAP	H_CVAP	H_VAP	Reock	Polsby-Popper	Ehrenburg
GG1	52%	50.08%	1.85%	3.41%	3.94%	6.29%	0.29	0.2	0.29

<sup>16</sup> Note on interpreting compactness scores: on the Reock, Polsby-Popper, and Ehrenburg measures, higher numbers indicate greater degrees of compactness.

PR14	59.21%	55.65%	3.19%	5.98%	2.89%	4.57%	0.22	0.1	0.15
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b. District 2

Figure 7: African-American Population Density in GG2



District 2 is a majority Black district centered in Detroit, extending north to the town of Farmington Hills and south toward the town of Romulus. As with GG1, proposed district 2 prioritized traditional redistricting criteria such as compactness and respect for political subdivisions over race. For example, the district could have increased its concentrations of Black voters if it lost largely white parts of Dearborn Heights, but this would have split the town. Similarly, the district could also increase its African-American population density if it extended north into Pontiac, a town with high Black VAP concentrations. However, doing so would further stretch the district northward, reducing its compactness.

Moreover, my proposed district 2 is more compact and respects political subdivisions to a greater extent than the previous map's equivalent, the majority Black district PR13. The map below shows the African-American population density in PR 13 (highlighted in purple). As the map and table illustrate, PR13 appears less compact and splits more towns than GG2 to achieve higher

concentrations of Black voters. In other words, PR13 prioritized racial considerations over traditional redistricting criteria to a greater extent than my proposed district 2; since PR13 was not struck down under *Shaw*, it is unlikely that my proposed district would be.

Figure 8: African-American Population Density in PR13

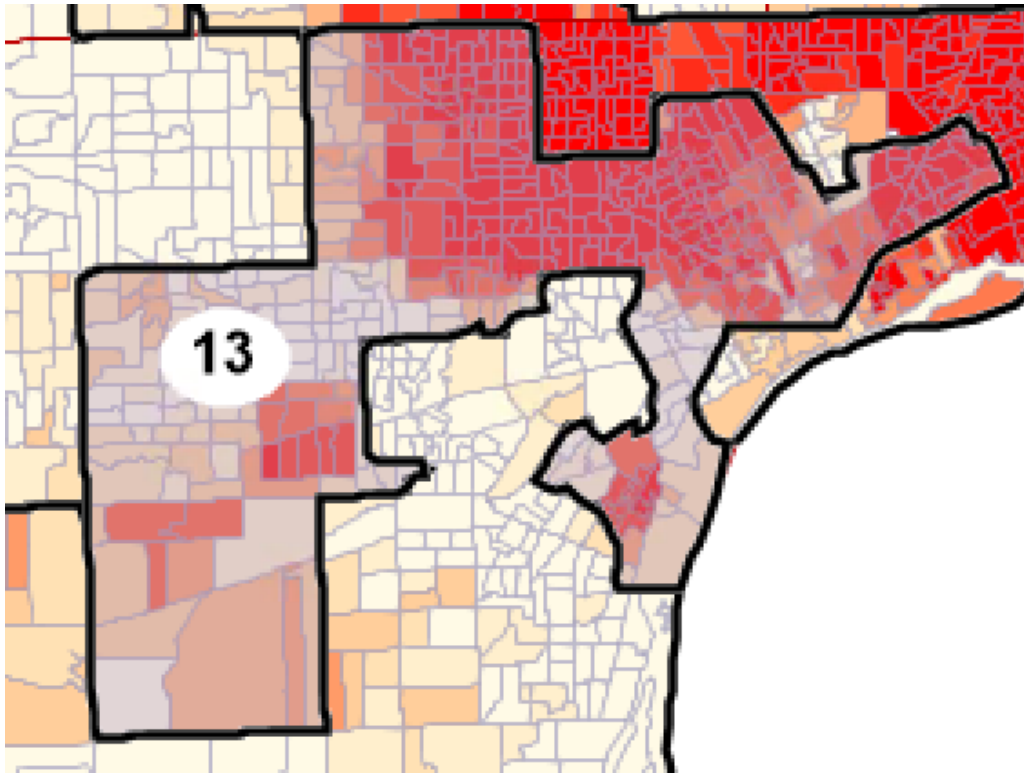


Table 3: Demographics and Compactness of PR13 and GG2

District	NH_BLK_CVAP	BLK_VAP	NH_ASN_CVAP	ASN_VAP	H_CVAP	H_VAP	Reock	Polsby-Popper	Ehrenburg
GG2	50.75%	50.01%	2.17%	4.7%	1.92%	2.95%	0.43	0.2	0.2
PR13	56.69%	55.31%	1.05%	2.11%	4.26%	6.8%	0.31	0.18	0.22

#### 4. Michigan State Law

The Michigan state constitution imposes four additional requirements on congressional maps: districts must be contiguous, appear compact, not disproportionately advantage a political party, and

respect political subdivision lines.<sup>17</sup> Each district in the proposed plan is contiguous, and the next three sections detail how the plan complies with each additional requirement.

a. Compactness

The proposed districts are relatively compact, scoring better on compactness measures than the previous plan. The table below displays the overall compactness measures for the proposed and previous plans. In the table, RK means Reock, PP means Polsby-Popper, and EH means Ehrenburg. As usual, GG refers to this good government proposal, and PR refers to the previous plan.

Across all three measures, the proposal has higher maximum, minimum, and mean compactness scores. Assuming the previous plan satisfies Michigan’s compactness requirement, the proposal likely does as well.

Table 4: Overall Compactness Measures Across Plans

Plan	RK Max	RK Min	RK Mean	PP Max	PP Min	PP Mean	EH Max	EH Min	EH Mean
GG	0.63	0.29	0.43	0.64	0.16	0.33	0.75	0.19	0.4
PR	0.54	0.22	0.38	0.55	0.1	0.3	0.58	0.15	0.34

b. Political Bias

The construction of the plan did not use political data, and the plan does not have strong partisan biases. Examining the population density of Biden voters in 2020 across the state illustrates the lack of political bias in my map: no district contorts itself to absorb or avoid Democratic or Republican areas. The two images below show the density of Democratic voters in the 2020 presidential election, where darker blue indicates a higher proportion of Democrats. As usual, the black lines show the proposed districts and the maroon lines indicate county borders.

Figure 9: Population Density of Democrats, Michigan

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<sup>17</sup> MICH. CONST. art. IV, § 6

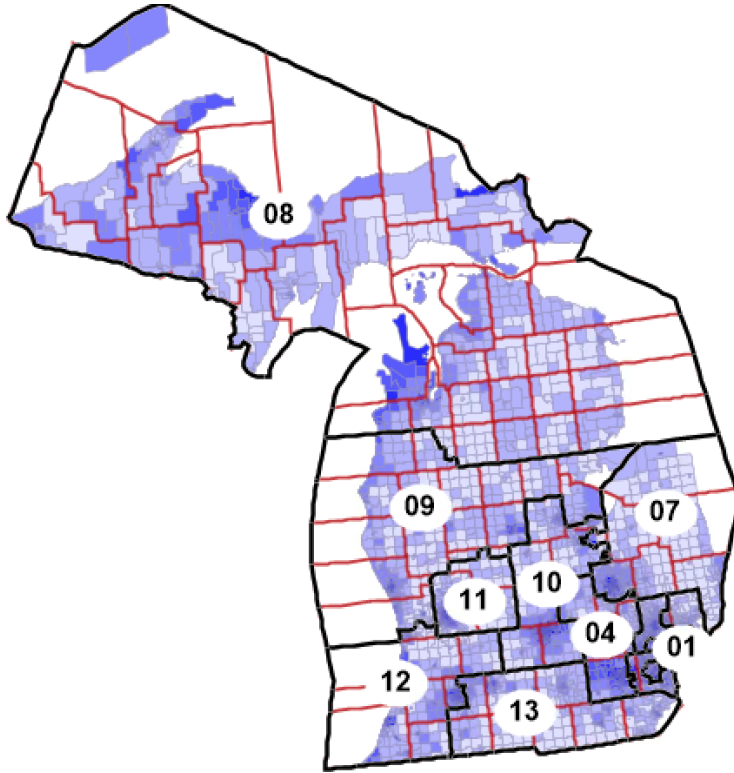
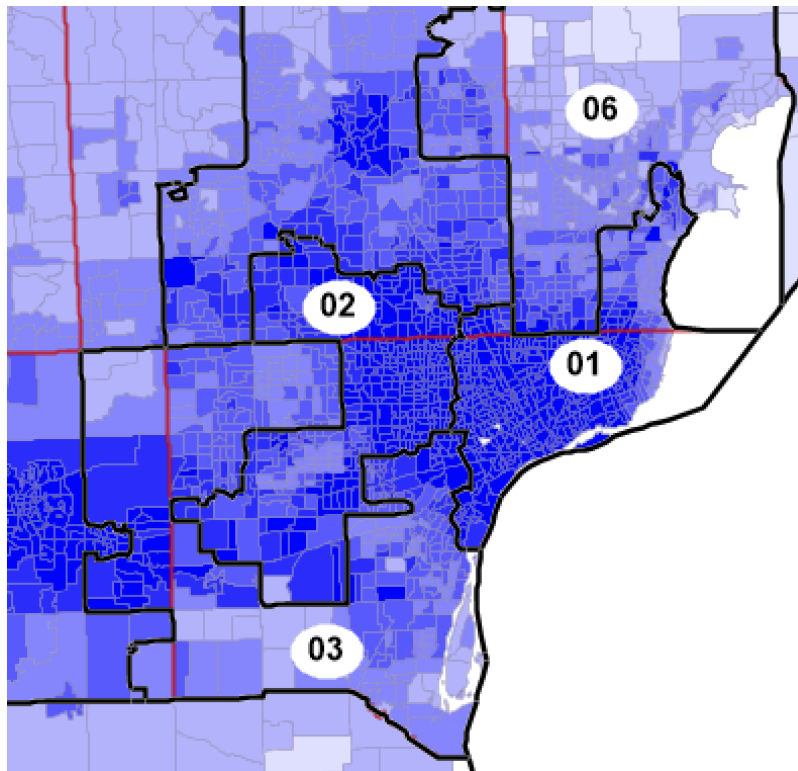


Figure 10: Population Density of Democrats, Detroit Area



An independent assessment of the proposal's political bias reveals that the map slightly favors Republicans. Across a set of scenarios, PlanScore predicts that Democrats would win 51% of votes statewide but just 46% of the congressional seats. Conversely, Republicans would win 49% of votes statewide but form 54% of the state's representatives. Running the same analysis on the previous plan shows similar levels of bias: PlanScore predicts Democrats would win 46% of the congressional seats, with Republicans capturing the other 54%. Since this proposal has similar partisan implications to the previous plan, it will likely pass the state's political bias test.

### c. Political Subdivision Lines

The proposal generally follows political subdivision lines, rarely choosing to split counties, precincts, or towns. In total, the plan splits 11 counties, 19 precincts, and 19 cities/towns. These numbers improve on the previous map, which split 10 counties, 33 precincts, and 24 cities/towns.<sup>18</sup> While my map splits an additional county, it splits five fewer towns and 14 fewer precincts. Assuming the previous map conformed to Michigan's requirements to respect political subdivision lines, my proposal likely does as well.

## B. Plan Description

This proposal seeks to draw compact districts that respect political subdivisions. I began with districts 1 and 2, aiming to draw two compact majority Black districts that followed town boundaries in the Detroit area. I considered starting with the previous map's districts 13 and 14, which were also majority Black. However, as shown in Figures 6 and 8, these two districts were relatively noncompact, and I aimed for higher compactness scores.

I then had to decide how to split the Black community in the Detroit area: north-south or east-west. If I split the community north-south, both districts would start in Detroit, and the northern district would extend two arms north: a western one toward Pontiac and an eastern one toward Mount Clemens. The southern district would similarly extend two arms down: a western one toward Inkster and Romulus and an eastern one along the coast toward River Rouge. The map below shows an example of what such a north-south division would look like, and the proposed map, in Figure 2, shows an east-west division. I refer to the districts in Figure 11 as example districts 1 and 2, or EX1 and EX2. The table below shows the demographics and compactness scores of these example districts compared to GG1 and GG2.

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<sup>18</sup> As precincts are often redrawn between redistricting cycles, the number of current precinct splits is likely not as informative as the number of county or town splits for assessing how well previous plans respect political subdivisions.

Figure 11: Example North-South Division of Detroit

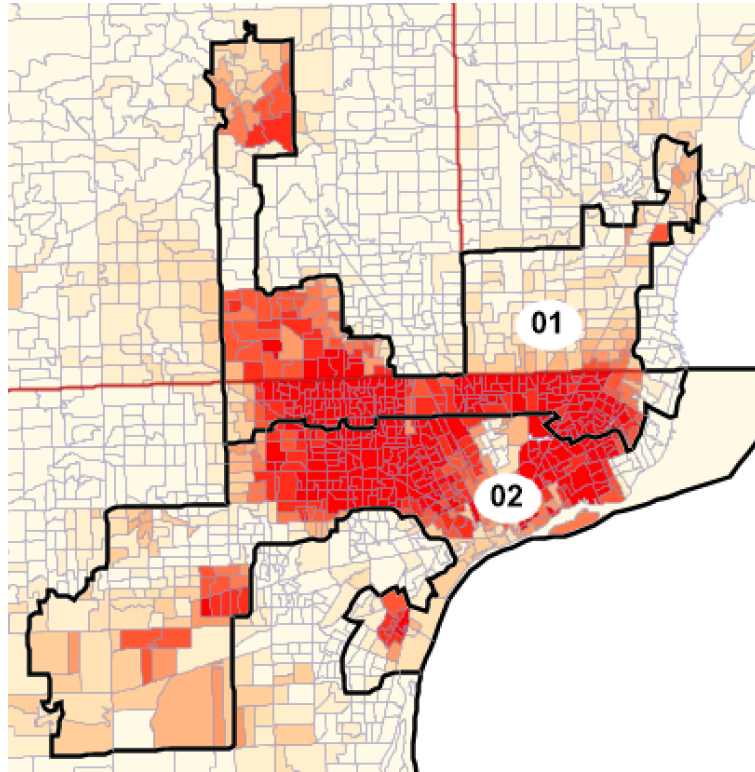


Table 5: Demographics and Compactness of EX1-EX2 and GG1-GG2

District	NH_BLK_CVAP	BLK_VAP	NH_ASN_CVAP	ASN_VAP	H_CVAP	H_VAP	Reock	Polsby-Popper	Ehrenburg
EX1	53.52%	53.11%	2.32%	3.51%	2.07%	3.2%	0.28	0.12	0.29
EX2	53.32%	51.41%	2.18%	4.11%	3.23%	4.77%	0.19	0.14	0.24
GG1	52%	50.08%	1.85%	3.41%	3.94%	6.29%	0.29	0.2	0.29
GG2	50.75%	50.01%	2.17%	4.7%	1.92%	2.95%	0.43	0.2	0.2

I ultimately chose an east-west division. As the table above shows, the example north-south division produces less compact districts than the east-west division I chose, likely because of each example district's two arms. Moreover, these arms create more town splits, as the extensions must be narrow to avoid picking up too much population. As a result, the east-west division appeared to perform better on good government metrics. Aside from good government considerations, EX1

appears vulnerable to a *Shaw* claim, as the district boundaries tightly conform to the precincts with the highest concentrations of Black voters.

When drawing the east-west division, I avoided splitting towns and precincts. For example, the northern extension of GG1 consists of whole towns. While splitting these towns could have increased the concentration of Black voters in the district and made it easier to reach the 50% threshold, I wanted to avoid introducing more political subdivision splits. As a result, the only city/town split in either GG1 or GG2 is the city of Detroit. Splitting Detroit is necessary regardless of how I chose to draw GG1 and GG2, since keeping the entire city in one district would overly pack Black voters, diluting their vote.

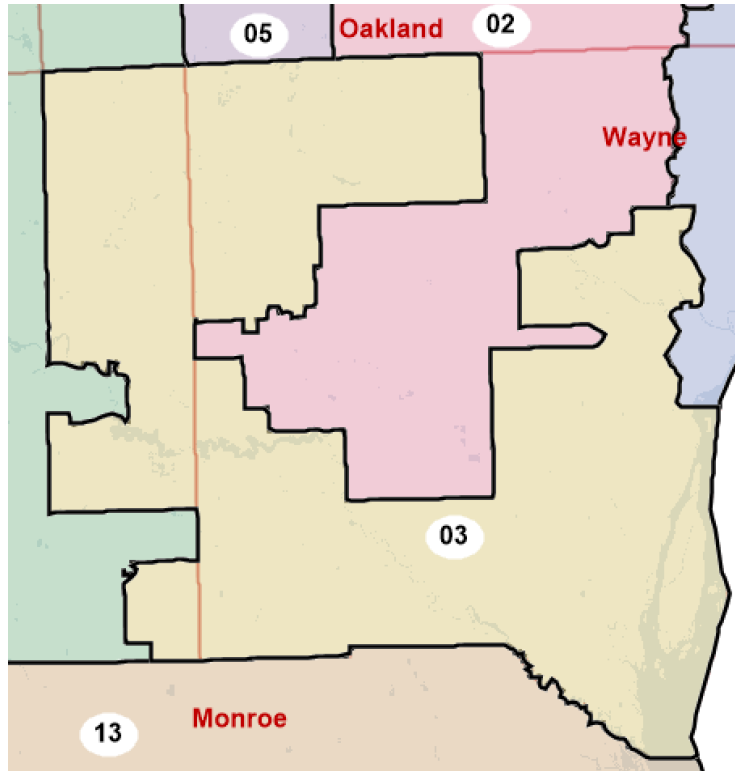
I also aimed to keep the districts compact, even at the cost of increasing the districts' concentration of Black voters. For example, I considered drawing an extension northward from district 2 toward the town of Pontiac, but the result would have been a narrow strip like in EX1 (shown in Figure 11). Unwilling to sacrifice the district's compactness, I opted not to draw the extension.

When preserving town or precinct boundaries conflicted with keeping districts compact, I chose to prevent town or precinct splits. I reasoned that splitting political subdivisions may sever communities and cause political ramifications, but small variations in compactness were unlikely to affect individual people as much. For example, Figure 7 shows that the southern part of proposed district 2 has a small appendage protruding eastward. While the district would have been more compact without that extension, the appendage follows the town boundaries of Dearborn Heights, and cutting it off would split the town. To avoid splitting the town, I choose to keep the extension.

After drawing districts 1 and 2, I moved on to district 3, which absorbed the rest of Wayne county. District 3 provides another example of how the map prioritized keeping political subdivisions intact over compactness considerations. The district would have been more compact if it took only the southern part of Wayne county and the surrounding area; instead the district absorbed all of the remainder of Wayne county. It then extended into Washtenaw county to achieve population equality.

Figure 12: Proposed District 3

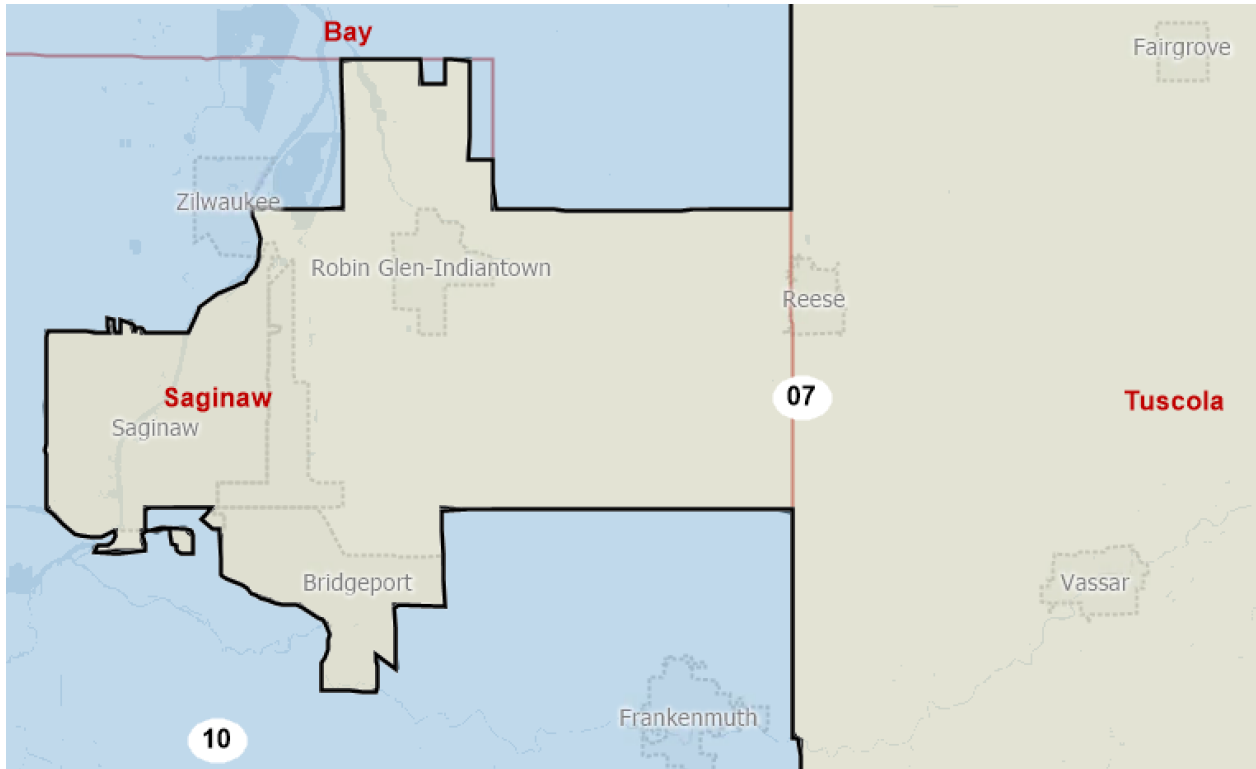




I drew the remaining districts with the same priorities in mind. District 7 provided an interesting case of where multiple of my priorities clashed. Proposed district 7 encompasses most of Michigan’s Thumb region in the east, and the district dipped into Saginaw county to achieve population equality. However, the combination of precincts and towns on the eastern edge of Saginaw county made achieving population equality while respecting political subdivisions difficult.

As precinct and town boundaries did not fully overlap, preserving the towns of Saginaw and Bridgeport would require splitting precincts. At the same time, the district would have greater levels of compactness if it split these towns and smoothed out the district’s extension into Saginaw county. The only other way to avoid splitting the towns would be to extend northward into Bay county, but this would require splitting a county instead.

Figure 13: Extension of District 7 into Saginaw County



I ultimately determined that since counties and towns were more likely to denote communities than precincts were, splitting precincts was preferable to splitting counties or towns. Since compactness differences on the small scale I was working in would not affect the overall shape of the district, I decided that preserving town boundaries was more important than making district 7's extension smooth and compact. As shown in Figure 13, I managed to keep the towns of Bridgeport and Saginaw together, and district 7's borders perfectly align with the towns' boundaries.

Overall, the plan minimizes political subdivisions and maximizes compactness. In total, the plan splits only 11 counties, 19 cities/towns, and 19 precincts. Moreover, the plan attains high average compactness scores, with mean Reock, Polsby-Popper, and Ehrenburg scores of 0.43, 0.33, and 0.4 respectively. The plan therefore succeeds in conforming to good government principles.

However, by focusing on good government characteristics, the plan does not create many competitive districts. Of the plan's 13 districts, only two — districts 10 and 11 — are competitive (where competitive districts are defined to be those where the difference between the Republican and Democratic vote shares in the 2020 presidential election was at most five percentage points). In a similar vein, independent analysis from PlanScore finds that the plan slightly favors Republicans, as discussed in section II.A.4(b). Thus, while the proposal draws an effective good government map, it has slightly unfavorable political implications, with few competitive districts and some partisan bias.

### C. Comparison to Enacted Plan

Michigan’s enacted map for this congressional cycle appears to be a good government map. As a result, the enacted map and my proposal likely aim for the same characteristics.

Overall, the enacted map performs slightly better on compactness scores, while my proposal better respects political subdivisions. The enacted plan has mean Reock, Polsby-Popper, and Ehrenburg scores of 0.42, 0.41, and 0.42 respectively, while my proposal has mean Reock, Polsby-Popper, and Ehrenburg scores of 0.43, 0.33, and 0.4 respectively. The proposal has a slightly higher average Reock score but lower average Polsby-Popper and Ehrenburg scores, meaning the enacted plan is likely more compact than the proposal. The table below further compares the plans’ overall compactness measures.

Table 6: Overall Compactness Measures Across Plans

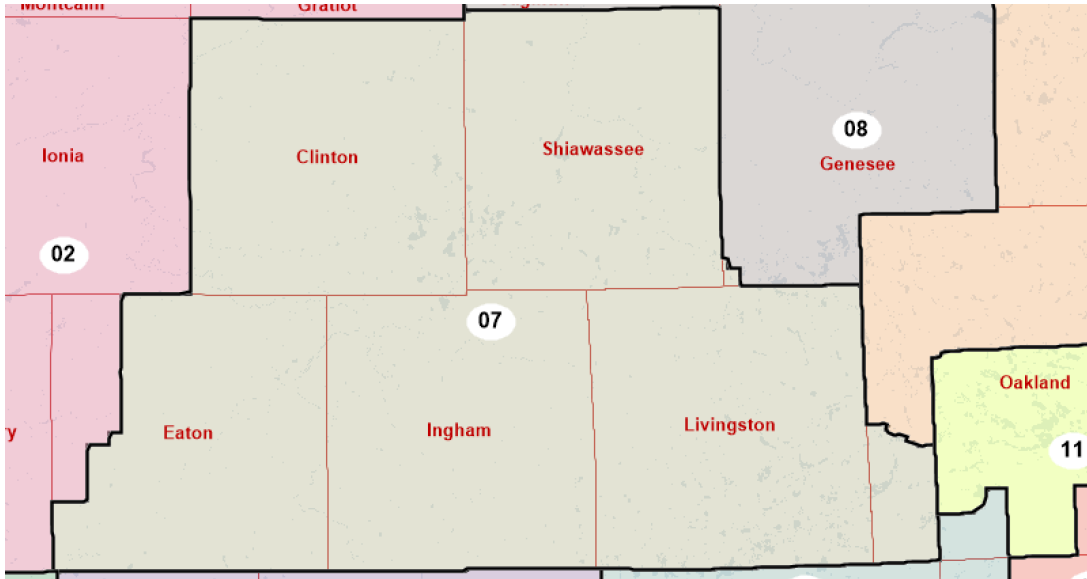
Plan	RK Max	RK Min	RK Mean	PP Max	PP Min	PP Mean	EH Max	EH Min	EH Mean
GG	0.63	0.29	0.43	0.64	0.16	0.33	0.75	0.19	0.4
EN	0.57	0.18	0.42	0.56	0.26	0.41	0.66	0.23	0.42

However, the enacted plan appears to split more political subdivisions. Where the proposal splits 11 counties, 19 cities/towns, and 19 precincts, the enacted plan splits 15 counties, 16 cities/towns, and 31 precincts. While the enacted plan splits three fewer towns, it splits four more counties and 12 more precincts, indicating that my proposal better respects political subdivisions.

Both these differences can be explained by variations in priorities between the two maps. As the last section detailed, this proposal generally prioritized keeping political subdivisions intact over maintaining compact districts. The enacted plan appears to take the opposite approach, splitting counties to improve compactness.

For example, enacted district 7 (EN7) splits three counties — Oakland, Eaton, and Genesee — ostensibly to preserve the district’s smooth edges and symmetrical shape. Achieving population equality would not create these splits: the plan does not even attain population equality, and it could achieve equality with fewer splits. This pattern of otherwise unnecessary county splits that increase districts’ compactness occurs throughout the plan, making it appear as though compactness considerations motivated these splits.

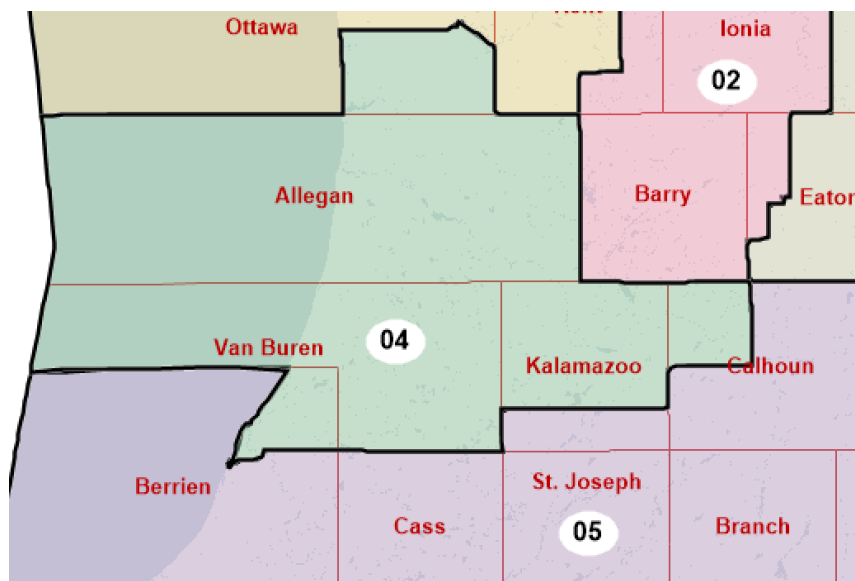
Figure 14: Enacted District 7



In the example of EN7, shown above, the county split into Oakland also splits the town of Milford. However, if the district had absorbed all of Milford or gone around Milford, the district would have appeared slightly less compact.

As another example, the border between enacted districts 4 and 5 runs along four counties: Calhoun, Kalamazoo, Van Buren, and Berrien. To achieve population equality, the border needs to split only one county. Instead, the border cuts through three, splitting Calhoun, Kalamazoo, and Berrien counties. These splits make district 4 appear more compact, as shown in the map below.

Figure 15: Enacted District 4



Since the enacted plan appears to prioritize compactness over respecting political subdivision lines, the opposite approach of my proposal, it is no surprise that my proposal performs worse on compactness measures but splits fewer political subdivisions.

Another notable difference between the proposal and the enacted plan is that the enacted plan has no majority Black districts. The enacted plan still places two Black opportunity districts in the Detroit area (EN12 and EN13), but neither district is majority Black by VAP or CVAP. The map below shows districts EN12 and EN13, and the table below compares their demographics to GG1 and GG2.

Figure 16: African-American Population Density in EN12 and EN13

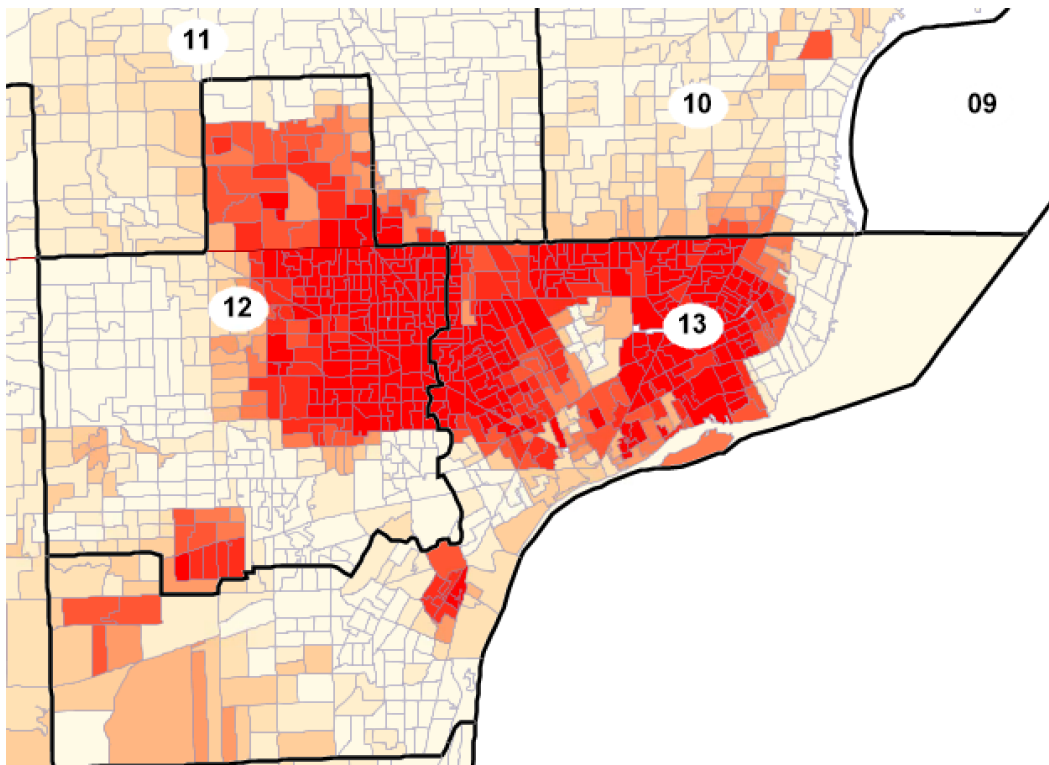


Table 7: Demographics of EN12-EN13 and GG1-GG2

District	NH_BLK_CVAP	BLK_VAP	NH_ASN_CVAP	ASN_VAP	H_CVAP	H_VAP
GG1	52%	50.08%	1.85%	3.41%	3.94%	6.29%
GG2	50.75%	50.01%	2.17%	4.7%	1.92%	2.95%

EN12	46.89%	45.7%	1.5%	2.61%	1.87%	2.85%
EN13	49.33%	46.85%	1.86%	3.47%	5.68%	8.77%

Since the plan does not create majority Black districts, it could be vulnerable to a Voting Rights Act suit. However, the districts will likely perform — measured by CVAP, Black voters are close to a majority in both districts, and both districts’ incumbents are ostensibly Black candidates of choice (Rashida Tlaib and Brenda Lawrence). Between the incumbency advantage and near-majority of Black voters, EN12 and EN13 will likely perform as well as Black opportunity districts GG1 and GG2.

Aside from demographic considerations, the enacted plan’s political implications are likely more favorable than mine. The enacted plan has three competitive districts (EN7, EN8, and EN10), whereas my plan has only two (GG10 and GG11). Moreover, a PlanScore analysis indicates that while the enacted plan still favors Republicans, it does so to a lesser degree than my map. PlanScore predicts that in the average Michigan election, Democrats would win 51% of the statewide vote, and Republicans would win the other 49%. However, PlanScore predicts that under my proposal, Democrats would win just 46% of the state’s congressional seats, with Republicans winning the other 54%. On the other hand, PlanScore predicts that the enacted map would grant Democrats 49% of the congressional races, with Republicans taking the other 51%. Therefore, the enacted plan is slightly less biased and more competitive than my proposal.

Overall, my good government proposal respects political subdivisions to a greater extent than the enacted plan. At the same time, the enacted plan draws more compact districts and has more favorable political implications than my plan, with slightly less Republican bias and one additional competitive district.

#### D. Conclusion

This proposal creates a good government plan for Michigan, drawing highly compact districts that respect political subdivisions. At the same time, the plan preserves the previous map’s high degree of minority representation, with two majority Black districts in the Detroit area. As Michigan’s redistricting process continues to face litigation and political fights, this map offers a non-partisan alternative.