

# IPPSR EVALUATION OF 6 DRAFT PROPOSED MI HOUSE MAPS FOR COMPLIANCE WITH THE *AGEE v BENSON* ORDER

## Summary

I analyze ten “Draft Proposed maps” that the MICRC has submitted for public comment. This analysis is meant to complement the work of consultants working for the Commission, by providing quantitative evidence to help the Commission and the public interpret how the maps comply with the Equal Protection clause, with the Court Order in *Agee v Benson*, with the Voting Rights Act, and with some of the seven redistricting criteria in the Michigan Constitution that have received less attention in the Commission’s work thus far.

I show evidence that at most ten (not eleven) compact geographic areas can simultaneously satisfy the first *Gingles* condition in reasonably configured maps that are drawn not on the basis of race. This provides an argument to defend that maps with ten at least districts of opportunity comply with the Voting Rights Act. All of the Draft Proposed maps create at least eleven districts of opportunity for Black voters.

Five of the Draft Proposed maps, in addition to creating at least eleven districts of opportunity, are according to our evidence, indistinguishable from maps drawn not on the basis of race: **Bergamot**, **Bergamot 2**, **Waterlily**, **Motown** and **Willow**.

All ten Draft Proposed maps outperform the 2022 MI House map across criteria.

Jon X. Eguia.

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## I. MOTIVATION

In December 2021, the Michigan Independent Citizens Redistrict Commission adopted a map of electoral districts for the Michigan House of Representatives (henceforth “the 2022 House map”) for the 2022-2030 elections.

In December 2023, a federal Court panel ruled that districts 1, 7, 8, 10, 11, 12, and 14 were drawn “*predominantly on the basis of race*” in violation of the Equal Protection clause in the U.S. Constitution (see [Agee v Benson](#)). In a subsequent scheduling order, the Court held that “*the district lines for not only for the unconstitutional districts, but also other districts as reasonably necessary, will be redrawn.*”

In this study, I evaluate nine draft maps proposed by the Commission and one proposed by Commissioner Szetela, for public comment. I use quantitative evidence that is informative of the draft maps’ compliance with the Equal Protection clause, with the Court’s Order, and with the Voting Rights Act.

This analysis complements the evaluations conducted by the Commission’s consultants, drawing on their work where appropriate, and contributing additional evidence that can be used to evaluate the Commission’s Draft Proposed maps, and to defend and support some of these maps. I show evidence focused on five goals that maps must satisfy.

1. Compliance with the Equal Protection clause.
2. Compliance with the Court’s Order to redraw other districts “*as reasonably necessary.*”
3. Compliance with the Voting Rights Act.
4. Partisan fairness, the fourth redistricting criterion under the Michigan Constitution.
5. Reflecting county, city and township boundaries, the sixth criterion. In the map analyses that the Commission has posted to its portal, this sixth criterion receives less attention than the lower-ranked seventh-criterion (compactness), so there is room for additional analysis here.

The following table lists the ten Draft Proposed maps evaluated in this report.

<b>Map</b>	<b>Full name</b>
Bergamot	011724_V1_HD_Col_Bergamot
Bergamot 2	011824_V4_HD_COL_Bergamont2
Daisy2	012524_V1_HD_Col_Daisy2FC
Spirit	012524_V2_HD_COL-Spirit of Detroit
Tulip	012324_v1_HD_Tulip
Waterlily	012524_V3_HD_COL_Water_Lily
Motown	020124_V4_HD_COL Motown Sound FC
Riverwalk	020124_V5_HD_COL The Riverwalk FC
Willow	020124_V2_HD_COL Willow FC
Szetela 4	01_26_24_V4_HD_RAS

*Table 1. List of draft proposed maps in this report.*

## II. EQUAL PROTECTION CLAUSE.

The Commission’s legal counsel advised the Commission to first draw draft maps without attention to race, and to then “tweak” these drafts as necessary with minor interventions narrowly tailored to comply with the Voting Rights Act.

I show evidence on whether the draft maps have been drawn without attention to race. While as a matter of process, the Commission avoided discussion of race, and ostensibly proceeded to draw without attention to race, in theory it could be that commissioners paid attention to race in their line drawing, without explicitly mentioning race as a motivation for their line drawing.

I do not address commissioners’ intent or thought process. Rather, I evaluate whether maps appear to be drawn on the basis of race according to their outcomes. The key assumption I make is that maps drawn not on the basis of race are likely to look like maps that we know, with certainty, were drawn with no information at all.

The MGGG Redistricting Lab at Tufts University drew computationally-generated 100,000 maps of Michigan House districts, following an algorithmic code that has no information about race, and favors compact districts over non-compact ones.

In most (to be precise, in more than 95,000) of these maps, the distribution of ethnic minority voting age population in each district is such that there are:

between	and	districts in which at least ___ of voting-age residents identify as “Black” (alone).
1	3	85%
2	5	75%
3	6	65%
4	8	55%
5	9	50%
6	10	45%

*Table 2. Typical range of number of districts with large Black population in 100,000 MI House maps.*

Table 2 is meant to be read by row. For instance, the first row says that in most maps (precisely, in at least 38 out of every 40) drawn without information about race, there are between one (1) and three (3) districts in which at least 85% of voting-age residents identify by race as “Black” exclusively 2020 U.S. Census. If the number of districts with such shares of residents who identify by race exclusively as “Black” (including those who identify as “Black” exclusively by race and as “Hispanic” by ethnicity in the 2020 Census) departs much from these values, such departure is statistical evidence indicative that the drawing of district boundaries was probably influenced by race. After all, without information about race, there is only less than a 2.5% probability (less than one in forty) that a map ends up with a number outside that range of between one and three.

I compare the 2022 House map, and the current draft maps, against these ranges that we expect from maps not drawn on the basis of race.

A technical caveat: The definition of the set of voters who identify as “Black” in the 2020 Census varies by depending on whether one includes or excludes those who also identify with another race besides “Black”, and/or those who identify as “Hispanic” by ethnicity. The range for the computationally generated maps is for “Black” exclusively by race, regardless of “Hispanic” ethnicity. If the number of districts for the draft maps depends on which definition we use, I indicate the number with the most restrictive definition (“Black” only, with no other racial or ethnic identification) and the number with most inclusive definition (“Black” as one of possibly many racial or ethnic identifications). The number of districts in which at least a certain share of voting-age residents identifies as “Black” in the draft maps is then as follows.

Identify as “Black”	Range w.o. race info	2022 map	Bergamot	Bergamot2	Daisy2	Spirit	Tulip	Waterlily
>85%	1 to 3	0	2	2	0	1	2	3
>75%	2 to 5	0	4	4	1-2	3	2	4
>65%	3 to 6	0	5	4-5	2	6	3	5
>55%	4 to 8	2-4	6-7	6-7	4-6	8	5-8	7
>50%	5 to 9	7	9	9	9	10	10	9
>45%	6 to 10	7-9	9	9	9	10	10	9

Table 3a. Number of districts with large Black population.

Identify as “Black”	Range w.o. race info	2022 map	Motown	Riverwalk	Willow	Szetela 4
>85%	1 to 3	0	1	1	1	1
>75%	2 to 5	0	2	3	3	4
>65%	3 to 6	0	5	6	4	4
>55%	4 to 8	2-4	6-7	7	7	8
>50%	5 to 9	7	9	10	9	11
>45%	6 to 10	7-9	9-10	11	10	11

Table 3b. Number of districts with large Black population.

According to this quantitative evidence, we can conclude that the Szetela 4 map is unlike maps drawn not on the basis of race. No map in 100,000 drawn not on the basis of race generates eleven Black majority districts. Further, maps drawn not on the basis of race are unlikely to look like Daisy 2, Spirit, Tulip, or Riverwalk. Daisy 2 is missing at least one overwhelmingly Black district expected from any map drawn not on the basis of race; whereas Spirit, Tulip and Riverwalk feature ten Black majority districts, whereas fewer than one in a hundred maps drawn not on the basis of race generate more than nine such districts.

As corroborating evidence we *know* from the record that Daisy 2, and Riverwalk were drawn with some attention to race. Daisy 2 inherits from the 2022 map all the boundaries between any of the 103 constitutional districts, and any of the 7 unconstitutional ones, and these boundaries were drawn with consideration of race. Further, Riverwalk was explicitly edited on the basis of race in a quest to create an additional district of opportunity for voters who identify as Black.

On the other hand, **Bergamot**, **Bergamot 2**, **Waterlily**, **Motown** and **Willow** appear indistinguishable from maps drawn without racial information. As a matter of process, we know Motown and Willow were edited on the basis of race, yet these race-conscious edits to Motown and Willow appear so minimal and narrowly tailored, that their cumulative effect does not distinguish these two maps from the larger collection of maps drawn not at all on the basis of race.

### III. ADHERENCE TO THE COURT’S ORDER TO REDRAW AS “REASONABLY NECESSARY.”

The Commission’s current mandate to redraw the boundaries of additional districts is limited to the Court’s Order to redraw additional districts “*as reasonably necessary*” to provide the remedy of redrawing districts D1, D7, D8, D10, D11, D12 and D14.

I count the number of additional districts, besides these seven, redrawn in each draft plan. I distinguish between three cases of edits to additional districts, beside the seven listed above.

The first case is changes to the boundary lines of any district that is adjacent to an unconstitutional district. This case includes districts D9, D13, D4, D2, D3, D6, D56 and D58. Any change to a boundary line between an unconstitutional district and a constitutional district adjacent to it necessarily redraws the adjacent district as well.

The second case involves changes to the boundaries of districts that are not adjacent to any of the unconstitutional ones but are adjacent to a district that is itself adjacent to an unconstitutional one, so districts in this second case are two steps removed from the unconstitutional ones. Any such change is not directly necessary to redraw the unconstitutional districts as in the Draft Proposed map (this change could be accommodated with a different redrawing of the districts adjacent to the unconstitutional ones). Arguing for the necessity of this change is more difficult, as it requires arguing that an adjacent district needs to be redrawn in a way that also indirectly requires drawing the affected non-adjacent district as in the Draft Proposed map. This case includes district D5 (adjacent to D4 and D6), district D15 (adjacent to D3) and district D16 (adjacent to D3 and D4).

The third case involves changes to districts that are not only not adjacent to an unconstitutional one, but they are not even adjacent to one that is adjacent to an unconstitutional one; that is, they are at least three steps removed from the geographic area directly affected by the Court mandate to redraw. Redrawing these districts is related to redrawing the unconstitutional ones –if at all— only very indirectly through a long domino effect (redrawing unconstitutional District A leads to redrawing adjacent District B in a way that impacts the boundaries of non-adjacent District C, and this change to District C induces a redrawing of District D, etc.). Arguing that such three-step changes are “*reasonably necessary*” is therefore most difficult. This case includes district D17, D18, D19, D22, D25 and D26.

Map	Total Adjacent	Total Non-Adjacent	Adjacent districts								Non-Adjacent districts				
			9	13	4	3	2	6	56	58	5	16	15	17	18,19,22,25,26
Daisy 2	0	0													
Tulip	3	0	x	x	x										
Bergamot	6	2	x	x	x	x	x	x			x	x			
Bergamot2	6	2	x	x	x	x	x	x			x	x			
Spirit	6	2	x	x	x	x	x	x			x	x			
Waterlily	6	2	x	x	x	x	x	x			x	x			
Motown	6	2	x	x	x	x	x	x			x	x			
Willow	6	2	x	x	x	x	x	x			x	x			
Riverwalk	6	3	x	x	x	x	x	x			x	x		x	
Szetela 4	8	9	x	x	x	x	x	x	x	x	x	x	x	x	x

Table 4. Number of additional districts with boundaries redrawn in Draft Proposed Maps.

Among the Draft Proposed maps, only Daisy 2 and Tulip restrict their changes to adjacent districts, and neither of these two appears to be drawn without attention to race. On the other hand, an additional six maps (Bergamot, Bergamot 2, Spirit of Detroit, Waterlily, Motown and Willow), including five that appear drawn without attention to race (Bergamot, Bergamot 2, Waterlily, Motown and Willow), restrict their changes to adjacent districts, and to districts two steps removed from (i.e. they are adjacent to a neighbor of) the seven unconstitutional districts.

#### IV. EVIDENCE ON COMPLIANCE WITH THE VOTING RIGHTS ACT

As summarized by Mark Braeden’s 1/29 presentation, to prove a Section 2 violation of the Voting Rights Act, under the *Gingles* precedent, plaintiffs must satisfy three preconditions. The first one is the one I shed light on: The “*minority group must be sufficiently large and [geographically] compact to constitute a majority in a reasonably configured district.*”

The relevant minority group in our case is the population of residents who identify as Black. How many Black majority districts can there be in “reasonably configured” maps? We answer this question by looking at the 100,000 maps computationally generated by the MGGG Lab. The algorithm to create these maps imposes population equality and contiguity, and is more likely to generate maps with more compact districts. The algorithm does not have any information of race or past election results.

Table 5 shows the number of maps with zero to three, with four, five, ... and up to eleven, or with twelve or more Black majority districts, and their share of the total.

# Districts	# Maps	Share
0-3	0	0.0%
4	73	0.1%
5	4404	4.4%
6	27740	27.7%
7	41051	41.1%
8	21269	21.3%
9	4924	4.9%
10	539	0.5%
11	0	0.0%
12-110	0	0.0%

Table 5. Number of majority-Black districts.

Almost all maps feature between 5 and 10 Black-majority districts. We infer that there are **ten**, and no more than ten, distinct compact geographic areas with a Black majority of size large enough to meet the first *Gingles* precondition. Some maps draw an opportunity district for each of these areas; others do not. But any map that draws ten districts of opportunity, one for each of these compact geographic areas, is one in which there appears to be no eleventh geographic area that can meet the first *Gingles* precondition to raise a claim under the Voting Rights Act.

An eleventh Black-majority district does not emerge organically through a natural line-drawing process. Rather, such an eleventh district can only be artificially created through a race-conscious line-drawing process that optimizes the distribution of voters by race to attain this result. Such a line-drawing process is in tension not only with the Equal Protection clause requirement to draw districts not predominantly on the basis of race, but also with the goals of reflecting Communities of Interest (3<sup>rd</sup> constitutional criterion) and reflecting county, city and township boundaries (6<sup>th</sup> constitutional criterion).

The evidence in Table 5 does not argue for an upper limit to the number of districts of opportunity. Depending on the voting patterns, maps with at most ten Black-majority districts may have eleven or more districts of opportunity for Black voters (many do). In fact, it may be desirable to draw maps with eleven or more districts of opportunity.

The evidence in Table 5 only provides an argument that Section §2 of the Voting Rights Act cannot require more than ten districts of opportunity for Black voters in 2024 electoral district maps for the MI House of Representatives, because there are no more than ten geographically compact Black-majority communities that can simultaneously meet the first *Gingles* precondition.

According to the VRA analysis publicly posted by the Commission, all Draft Proposed maps create at least eleven districts of opportunity for Black voters, merely in the Metro Wayne area under consideration: the maps that most appear to be drawn on the basis of race —namely, Daisy 2 and Szetela 4— feature thirteen; Motown, Spirit of Detroit, and Riverwalk feature twelve; and Bergamot, Bergamot 2, Tulip, Waterlily and Willow feature eleven. All of them feature an additional majority Black district outside Metro Detroit: D70 in Genessee county; presumably it too would be a district of opportunity, if it were considered in the analysis. On the other hand, the analysis compares the Black turnout to the non-Hispanic White turnout; in many configurations of district D1, which feature about 40% of the population identifying as Hispanic and not as Black, this may not be the relevant comparison, and the district may be one of opportunity for voters who identify as Hispanic (regardless of race), and not for those who identify as Black (regardless of ethnicity).

In any case, regardless of this question about district D1, all Draft Proposed maps thus provide **more** districts of opportunity (at least eleven) than the maximum number (ten) of distinct geographically compact Black communities that can simultaneously meet the first *Gingles* precondition.

## V. EVIDENCE ON MICHIGAN CONSTITUTIONAL CRITERIA

While the Michigan Constitution provides seven explicit and ranked criteria that maps must follow, I seek to provide only analysis that is complementary, and not any analysis that is redundant or competing with the evaluations that the Commission relies on generated by the consultants it employs. Therefore, I refer to their map-by-map analysis of population equality and the Voting Rights Act (criterion 1), contiguity (criterion 2) and compactness (criterion 7).

Reflecting Communities of Interest and not favoring or disfavoring candidates (criteria 3 and 5) have proven difficult to evaluate in a quantitative manner; to my knowledge, the Commission’s consultants have not made public a quantitative evaluation of these criteria, nor will I attempt one here.

I offer evidence on partisan fairness (criterion 4), and on reflecting county, city and township boundaries (criterion 6). On partisan fairness, the Commission relies on four academic measures presented as percentages; I merely present, in Table 6, simpler information in terms of seats gained or lost by each party under these maps, compared to the 2022 MI House map. If the differences were more notable, a more nuanced analysis (and additional measures besides, or instead of, the ones that the Commission relies on) would be warranted, but as we can see according to any measure, the differences across maps are minimal.

Averaging across the 2016 and 2020 Presidential elections, the 2018 and 2020 MI Senate elections, and the 2018 MI Governor election, the Democratic party won 56.2 of the 2022 House districts, and the GOP won the remaining 53.8 districts. The results for each Draft Proposed map, with the same election data from these five elections, are as follows.

<b>Map</b>	<b>Dem. seats</b>	<b>GOP gain</b>
Bergamot 2	56	+0.2 seats
Daisy 2	56	+0.2 seats
Motown	56	+0.2 seats
Riverwalk	56	+0.2 seats
Spirit of Detroit	56	+0.2 seats
Szetela 4	56	+0.2 seats
Tulip	56	+0.2 seats
Bergamot	55.8	+0.4 seats
Waterlily	55.8	+0.4 seats
Willow	55.8	+0.4 seats

*Table 6. Effect on Partisan Balance.*

Reflection of county, city and township boundaries is the 6<sup>th</sup> criterion, and thus subordinate to the five criteria that precede it. It is, however, higher ranked than compactness, and thus the relatively greater attention that the Commission paid to maps' performance on compactness (with a quantitative check of performance on two compactness measures for each map proposed for public comment), than to the maps' performance on following county, city and township boundaries is perhaps not warranted. The Commission's posted materials on the Draft Proposed maps' performance on compliance with the seven constitutional criteria do not offer any information on the maps' performance on respecting jurisdictional boundaries, and yet some of this information is easy to compile. For the purpose of informing commissioners and the public about performance on this 6<sup>th</sup> criterion, I provide Table 7, put together using DRA 2020.

If districts do not follow county lines, they split counties, creating two or more county pieces assigned to a different district. If each of Michigan's 83 counties were in one piece, the map would have 83 pieces. Because this is impossible, some county splits and thus more than 83 pieces are inevitable. According to criterion 6, all else equal, the fewer splits and county pieces, the better. The 2022 MI House map and all the Draft Proposed maps split 48 counties. The 2022 MI House map creates 202 distinct county pieces. The Draft Proposed maps create the following number of county pieces; recall, the fewer, the better.

<b>Map</b>	<b>Pieces</b>	<b>Improvement</b>
Waterlily	195	7 pieces
Bergamot	196	6 pieces
Bergamot 2	196	6 pieces
Motown	198	4 pieces
Tulip	198	4 pieces
Daisy 2	199	3 pieces
Riverwalk	199	3 pieces
Spirit of Detroit	199	3 pieces
Szetela 4	199	3 pieces
Willow	200	2 pieces

*Table 7. Criterion 6: Number of county pieces split into separate districts.*

It is notable that all ten Draft Proposed maps perform better on this measure —as they do on being drawn not predominantly on the basis of race, and on the number of Black-majority districts that they create— than the 2022 MI House map.