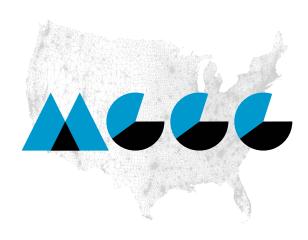
MICRC Evaluation Report





Voters Not Politicians Education Fund and the MGGG Redistricting Lab

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1 Introduction

In the redistricting cycle following the 2020 Decennial Census, the state of Michigan overhauled its redistricting process by passing control to a newly formed body: the MICRC, or Michigan Independent Citizens Redistricting Commission. The MICRC put new districting plans in place for Congress, the state Senate, and the state House in time for the November 2022 elections, and the results have been widely praised.

In the 2022 elections, Democratic candidates cumulatively collected 50-52% of the vote at each of the three levels of election, and earned 53.8%, 52.6%, and 50.9% of the seats, respectively—the smallest possible total greater than 50% in each case. This is a remarkably proportional outcome, with the representational share mirroring the vote preference nearly exactly. And this was accomplished by a body of thirteen citizens working outside the usual secretive and highly political process. It is little wonder that this outcome was looked to with envy from other states with dysfunctional processes or highly disproportional election results (see Figure 1).



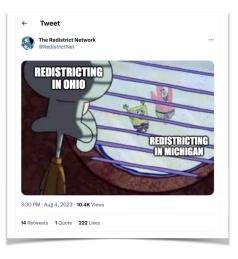


Figure 1. Online posts reflecting the congratulatory mood around the work of the Michigan Independent Citizens Redistricting Commission.

Not all reactions were positive, however. Most notably, the map was criticized for failing to provide adequate representation for the sizable and politically important Black community in greater Detroit. As the Detroit Free Press succinctly framed the issue, "the upcoming term marks the first time Detroit will not send a Black representative to Washington, D.C., in nearly 70 years." The number of Black representatives in the state Senate fell as well, while holding constant in the state House. And at the time of writing in December 2023, a federal court decision has just been issued

¹freep.com/story/news/politics/elections/2022/12/01/michigan-redistricting-commission-maps/69692417007

²In the 2020 census data, respondents indicating Black identity (alone or in combination with other racial and ethnic identities) make up 14.04% of voting age population. After the 2022 election, the share of Black-identified representatives in Michigan's Congressional delegation is 7.1%; in the state Senate, it is 7.9%; and in the state House, it is 12.7%. Note that counting members who identify as Black is not the same as identifying Black voters' *candidates of choice*, which is a key issue in the interpretation of the Voting Rights Act.



finding equal protection violations in 7 Senate districts and 10 House districts, which will send the commission back to drawing board.

Nevertheless, the progress represented by the commission is substantial. As reformers look to Michigan as a model, they will seek to discern which of the choices made by advocates and participants, and which external circumstances, combined to create the conditions for the commission's successes and challenges. Some fundamental ingredients to consider include the following.

Features of MICRC

- **Legal language.** (§2) Both in the ballot proposal and in the state constitution itself, reformers sought to craft precise and actionable, but durable, language.
- **Structural design of commission.** (§3) Key decisions include the selection, seating, and training of commissioners and the timeline of work.
- Staffing, data, and use of consultants. (§4) The state constitution created a role for the Michigan Department of State (MDOS) in staffing the commission, supplemented by commission staff and a team of consultants hired through a request-for-proposal (RFP) process.
- Public and grassroots engagement. (§5) The MICRC had a robust communications strategy and strong ties to grassroots groups across the political spectrum. They accepted public comment in person, on zoom, by email, and through written submissions to an online public portal.
- Interpretation of laws and criteria. (§6) From partisan fairness to communities of interest to the Voting Rights Act, each element of the redistricting criteria had to be interpreted, operationalized, and balanced against other requirements.
- Process of drafting, refining, and approving maps. (§7) Maps were drawn, released, and modified in a multi-stage process.

This report, undertaken in cooperation between Voters Not Politicians and the MGGG Redistricting Lab at Tufts University, will offer material for a critical look at each of these areas of commission design and procedure.³ We close with a short list of recommendations for future reformers and commissions (§8).

Contributors

The compilation of information and the drafting of this report was principally conducted by Charlie Beall, Moon Duchin, Alyson Grigsby, and Liz Kopecky. We thank Nancy Wang for major supporting contributions.

³Voters Not Politicians Education Fund is a 501(c)3 non-profit and MGGG is a university-based academic lab. Both organizations were involved in supporting the work of the commission; VNP was a prime mover in advocating for the ballot measure and worked to provide a bridge from the MICRC to grassroots organizations across the state throughout the process. MGGG was contracted by the Michigan Department of State (MDOS) to design the online public portal used to collect public feedback, and MGGG Director Moon Duchin spoke before the commission on numerous occasions, offering updates on public mapping as well as informal (and unpaid) advice on other matters. VNP is grateful for support from the Joyce Foundation, the Kresge Foundation, and the Kalamazoo Community Foundation, as well as hundreds of individual donors.



2 Legal language

In November 2018, Michigan voters approved Ballot Proposal 18-2 to amend the state constitution and create a citizen redistricting commission. The measure passed with 61 percent approval. Some reform efforts have focused on careful design of ballot language, and it would be natural to think that design elements of a redistricting commission that are articulated this far upstream—in wording presented directly to voters—have the best chance of capturing public support and persisting through rounds of enabling legislation. Careful framing can put a commission on the strongest legal footing for any pushback to come after reform measures are passed, which was witnessed around the country in this cycle. The ballot question in Michigan included the language below.

Proposal 18-2. A proposed constitutional amendment to establish a commission of citizens with exclusive authority to adopt district boundaries for the Michigan Senate, Michigan House of Representatives and U.S. Congress, every 10 years.

This proposed constitutional amendment would:

- Create a commission of 13 registered voters randomly selected by the Secretary of State:
 - 4 each who self-identify as affiliated with the 2 major political parties; and
 - 5 who self-identify as unaffiliated with major political parties.
- Prohibit partisan officeholders and candidates, their employees, certain relatives, and lobbyists from serving as commissioners.
- Establish new redistricting criteria including geographically compact and contiguous districts of equal population, reflecting Michigan's diverse population and communities of interest. Districts shall not provide disproportionate advantage to political parties or candidates.
- $\bullet \ \ \text{Require an appropriation of funds for commission operations and commissioner compensation}.$

Should t	this pro	posal be a	.dopted?	[]YES	[] NC
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If we inspect the ballot language itself, its key provisions establish the **size** of the commission, the use of **randomization** in the selection process, and the intention to create a **firewall** against partisan actors and lobbyists. The ballot language invokes redistricting criteria in fairly broad terms and leaves details unspecified, but is notable in that it makes explicit the importance of so-called **communities of interest** and that it has a **partisan fairness** component. Finally, it is also explicit in creating a **budget** for operations and compensation.

The commission language ultimately became Article IV §6 of the Michigan Constitution, available in full at <code>legislature.mi.gov/doc.aspx?mcl-Article-IV-6</code>. Table 1 provides a crosswalk from the Ballot Proposal to the constitutional language, showing that some details are spelled out quite precisely, like a minimum salary for commissioners, while other key details are left fairly imprecise, like the reference to "accepted measures of partisan fairness." This leaves open the choice of fairness metric as well as the sourcing of geographic and electoral data that such measurements might be based on.

⁴For one example of pushback, the Utah reform was passed in statute rather than the state constitution and the legislature quickly downgraded the commission from empowered to advisory. A short time after the original initiative passed in Missouri, voters were presented with a much weaker replacement; while the first measure was known as "Clean Missouri," the follow-up was nicknamed "Dirty Missouri". Ohio voters rejected a ballot measure in a special election of August 2023 that was partly designed to make future redistricting reforms more difficult to enact.



Ballot Proposal	State Constitution
Create a commission of 13 registered voters ran-	§ 6(1) An independent citizens redistricting commission for state legislative and congres-
domly selected by the Secretary of State: 4 each	sional districts is hereby established as a permanent commission in the legislative
who self-identify as affiliated with the 2 major	branch. The commission shall consist of 13 commissioners.
political parties; and 5 who self-identify as un-	§ 6(2)(f) By September 1 of the year of the federal decennial census, the secretary of state
affiliated with major political parties.	shall randomly draw the names of four commissioners from each of the two pools of
	remaining applicants affiliating with a major party, and five commissioners from the pool
	of remaining non-affiliating applicants.
Prohibit partisan officeholders and candidates,	§ 6(1)(b) [Each Commissioner shall] Not currently be or in the past 6 years have been
their employees, certain relatives, and lobbyists	any of the following: A declared candidate for partisan federal, state, or local office; An
from serving as commissioners.	elected official to partisan federal, state, or local office; An officer or member of the gov-
8	erning body of a national, state, or local political party; A paid consultant or employee of
	a federal, state, or local elected official or political candidate, of a federal, state, or local
	political candidate's campaign, or of a political action committee; An employee of the
	legislature; Any person who is registered as a lobbyist agent with the Michigan bureau of
	elections, or any employee of such person; or An unclassified state employee who is ex-
	empt from classification in state civil service pursuant to article XI, section 5, except for
	employees of courts of record, employees of the state institutions of higher education,
	and persons in the armed forces of the state;
	§ 6(1)(c) [Each Commissioner shall] Not be a parent, stepparent, child, stepchild, or
	spouse of any individual disqualified under part (1)(b) of this section; or
	§ 6(1)(d) [Each Commissioner shall] Not be otherwise disqualified for appointed or elected
	office by this constitution.
	§ 6(1)(e) For five years after the date of appointment, a commissioner is ineligible to hold
	a partisan elective office at the state, county, city, village, or township level in Michigan.
Parallish and a district of a salinate in the day	a partisan elective office at the state, county, city, vinage, or township level in withingan.
Establish new redistricting criteria including	§ 6(1)(13) The commission shall abide by the following criteria in proposing and adopting
geographically compact and contiguous dis-	each plan, in order of priority: Districts shall be of equal population as mandated by the
tricts of equal population, reflecting Michigan's	United States constitution, and shall comply with the voting rights act and other federal
diverse population and communities of inter-	laws. Districts shall be geographically contiguous. Island areas are considered to be con-
est. Districts shall not provide disproportionate	tiguous by land to the county of which they are a part. Districts shall reflect the state's
advantage to political parties or candidates.	diverse population and communities of interest. Communities of interest may include,
	but shall not be limited to, populations that share cultural or historical characteristics or
	economic interests. Communities of interest do not include relationships with political
	parties, incumbents, or political candidates. Districts shall not provide a disproportion-
	ate advantage to any political party. A disproportionate advantage to a political party shall
	be determined using accepted measures of partisan fairness. Districts shall not favor or
	disfavor an incumbent elected official or a candidate. Districts shall reflect consideration
	of county, city, and township boundaries. Districts shall be reasonably compact.
Require an appropriation of funds for commis-	§ 6(5) Beginning no later than December 1 of the year preceding the federal decennial
sion operations and commissioner compensa-	census, and continuing each year in which the commission operates, the legislature shall
tion.	appropriate funds sufficient to compensate the commissioners and to enable the com-
	mission to carry out its functions, operations and activities, which activities include re-
	taining independent, nonpartisan subject-matter experts and legal counsel, conducting
	hearings, publishing notices and maintaining a record of the commission's proceedings,
	and any other activity necessary for the commission to conduct its business, at an amount
	equal to not less than 25 percent of the general fund/general purpose budget for the sec-
	retary of state for that fiscal year. Within six months after the conclusion of each fiscal
	year, the commission shall return to the state treasury all moneys unexpended for that
	fiscal year. The commission shall furnish reports of expenditures, at least annually, to
	the governor and the legislature and shall be subject to annual audit as provided by law.
	Each commissioner shall receive compensation at least equal to 25 percent of the gover-
	nor's salary. The State of Michigan shall indemnify commissioners for costs incurred if
	the legislature does not appropriate sufficient funds to cover such costs.
	§ 6(6) The commission shall have legal standing to prosecute an action regarding the ad-
	equacy of resources provided for the operation of the commission, and to defend any
	action regarding an adopted plan. The commission shall inform the logislature if the
	action regarding an adopted plan. The commission shall inform the legislature if the
	commission determines that funds or other resources provided for operation of the com-

Table 1. Comparison of ballot proposal and corresponding state constitutional language.



3 Structural design of commission

3.1 Commissioner responsibilities

The MICRC consists of 13 registered Michigan voters, selected through a partially randomized process. It is one of only four fully empowered citizen commissions in the nation (see Section A for a national overview). Its major constitutional responsibilities are in the following categories.

- Undergo training and hold advance hearings. Undergo training about redistricting, then host a minimum of ten public hearings before commencing the drawing of districting plans. The meetings are for "informing the public about the redistricting process and the purpose and responsibilities of the commission and soliciting information from the public about potential plans."
- **Create draft plans.** Draft a minimum of one proposed district plan for the state House, Senate, and Congress. Each commissioner is entitled to propose plans with individual authorship, but this is not required.
- Hold hearings on draft plans. Hold a minimum of five public hearings to collect public testimony about the draft plans. The Commission must offer a 45-day comment period to gather feedback from the public before voting on a plan.
- **Approve proposed plans.** Plans were deliberated in an ad hoc fashion, but final approval was obtained by majority vote, as required in the constitutional language—a plan must receive a majority of the votes, of which two each must be from Democratic, Republican, and unaffiliated commissioners.
- **Provide reporting.** Draft a collective explanation for why each final plan was selected and how it meets the Commission's goals and mission. Individual commissioners who disagree with the final plan(s) can write dissenting reports.

From September 17, 2020, to August 19, 2021, the inaugural MICRC held 16 public hearings and 56 business meetings with the whole commission, as well as 5 committee meetings. This included several hours-long training sessions on the basic principles of redistricting, as well as group deliberation about hiring, process, and public testimony. After line-drawing commenced on August 20, 2021, the commission held an additional 22 business meetings, 1 committee meeting, 44 mapping sessions, and 5 public hearings.⁵

As part of plan drafting, commissioners were required to participate in the "collaborative mapping process" led by their mapping consultant (described below in Section 7). Commissioners were expected to review public comments and consider other factors (e.g., natural geography and local industry) as "homework" to prepare for mapping sessions that were livestreamed and archived for the public.

 $^{^5}$ MICRC Meetings materials and logs can be found at michigan.gov/micrc/Meeting-Notices-and-Materials-Archives



3.2 Role of Michigan Department of State

The Michigan Department of State (MDOS) provided in-house (as opposed to contracted) support for the MICRC, coordinating behind the scenes to facilitate everything from calling the initial meeting of the commissioners to curating datasets for use by the commission and its consultants to maintaining logistical support and record-keeping once operations had begun. Formally, MDOS served as Secretary to the Commission without voting privileges.

As codified in Article IV §6 of the state constitution, MDOS is responsible for mailing applications, narrowing the candidate pool based on completeness of the application, passing the applicant names to leadership in the state legislature so that some can be struck from consideration, and overseeing the random selection of the final commissioners. MDOS was required to mail applications to at least 10,000 randomly selected registered voters by January 2020. If they did not receive enough complete applications to fill the 13 commissioner roles, the Department would then conduct further mailings. On December 30, 2019, MDOS proactively conducted a much larger mailing than required, sending applications to 250,000 registered voters.

The commission must be seated in time for MDOS to convene an initial meeting by October 15th of the census year (in this case, 2020). During meetings and mapping sessions, MDOS is then responsible for documenting the commission's decision-making process.

MDOS worked with academic teams at Michigan State, Michigan, and Princeton to create a brochure of Commissioner Orientation and Resource Materials that set the stage for the work and timeline and reviewed best practices from other commissions, particularly California [7, 1]. In their role as secretary to the commission, MDOS is also responsible for facilitating the commission's hiring of staff and consultants. MDOS contracted an academic team based at Tufts University through procurement (rather than commission hiring) to support the public feedback process.

The commission must necessarily make heavy use of joined geographic and electoral data, and this is also sourced to MDOS, which oversees elections. Section 4 below will catalog the process of securing support by the commission and by MDOS, as well as the sourcing of data.

3.3 Selecting and seating the commissioners

According to their published summary of the application process, the MICRC received 9,367 complete applications in all. Of the applicant pool, 78% identified as White—this compares to 72% of Michigan residents identifying as non-Hispanic White, according to the 2020 Census. 55% of applicants identified as male (vs. 49% of the state), and 61% were 55 years of age or older (vs. roughly 42% of adults statewide). With respect to partisan self-identification, about 48.5% of applicants were unaffiliated/nonpartisan, 38.5% were aligned with the Democratic Party, and 13% with the Republican Party. MDOS received at least one application from each of the 83 counties of Michigan, ranging from three residents of Schoolcraft County in the Upper Peninsula to 1,777 residents of Oakland County, northwest of Detroit.

The Democratic and Republican legislative caucuses received ten strikes each from the semifinalist pool of 200 candidates. In principle, it was up to the parties themselves to screen for excessive or misleading partisanship, such as via past public statements or campaign donations.



On August 17, 2020, MDOS randomly selected the commissioners, using software called Caseware IDEA (see Figure 2). As required by the constitution, the selection process was set to identify four Democrats, four Republicans, and five unaffiliated members.

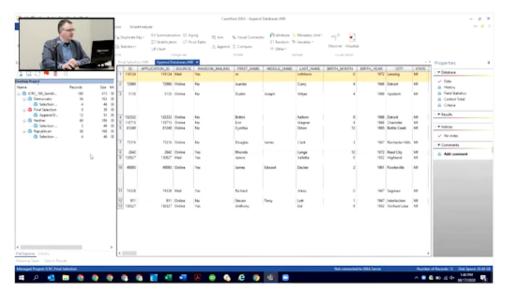


Figure 2. Still image from the livestream of the Final Random Selection.

The complete list of the thirteen commissioners by self-identified profession and party affiliation reads as follows.

- Commissioner Douglas Clark, Retired operations and development manager (R)
- Commissioner Juanita Curry, Retired specialized foster care worker (D)
- Commissioner Anthony Eid, Medical student (N)
- Commissioner Rhonda Lange, Real estate broker (R)
- Commissioner Steven Lett, Semi-retired attorney (N)
- Commissioner Brittni Kellom, Entrepreneur and trauma practitioner (D)
- Commissioner Cynthia Orton, College student (R)
- Commissioner M.C. Rothhorn, Financial cooperator (D)
- Commissioner Rebecca Szetela, Lawyer (N)
- Commissioner Janice Vallette, Retired banker (N)
- Commissioner Erin Wagner, Wife and mother of six / Household engineer (R)
- · Commissioner Richard Weiss, Retired auto worker and current handyman (N)
- Commissioner Dustin Witjes, Payroll specialist (D)



4 Staffing, consultants, and data

One of the commission's first actions was to create a budget to inform the staffing decisions; then, to hire staff members, the full commission had to authorize the intent to hire for each position. A subcommittee of commissioners would then review the applications and bids to narrow down the pool of candidates. Interviews with the final candidates and final presentations with firms were conducted in open meetings.

The commission had autonomy in hiring the experts they deemed necessary, with the option to follow a list of potential staff roles outlined in the Commissioner Orientation and Resource Materials brochure. MDOS facilitated the retention and procurement to fulfill the roles described in this section, including staff (§4.1) and external consultants (§4.2). After an initial period of staffing, hiring was conducted through a Request for Proposal (RFP) process. The external experts responding to these RFPs were largely from the professional consultant sector rather than think tanks or academia, with the exception of a law professor and former DOJ attorney who was ultimately contracted in the VRA advisor role. Beyond this, academic teams served in a supporting role for commission training (funded by foundation grants rather than the MICRC budget) and in for the collection of public feedback, including community maps (funded by an MDOS procurement process rather than the MICRC budget).

Overall, the MICRC budget was in the millions of dollars, with over 1 million each for the line-drawing team and the legal consultants.

4.1 MICRC staff

As stated in the constitution, "The commission shall have procurement and contracting authority and may hire staff and consultants for the purposes of this section, including legal representation."

During the period of peak activity, the MICRC employed four staff members, in a close fit to the recommended positions outlined in the orientation brochure.

- Executive Director Suann Hammersmith (Dec 2020 Mar 2022, retired);
- General Counsel Julianne Pastula (Dec 2020 Feb 2022, resigned);
- Communications and Outreach Director Edward Woods III (Jan 2021 Mar 2022, moved to ED and still serving in Dec 2023); and
- Executive Assistant Sara Martinez (Jun 2021 Jul 2022).

The Executive Director was to report directly to the MICRC, while other staff members would report to the Executive Director. The General Counsel would further advise the commission and other staff about the requirements of federal and state law, and would particularly ensure conformance with the new language in the Michigan constitution. The Executive Director and General Counsel

⁶These included Line Drawing and Redistricting Technical Services (No. 920, 210000000714), Voting Rights Act Legal Counsel (No. 920, 210000001155), Litigation Counsel (No. 920, 210000002217), and Local Counsel (No. 920, 210000002578).

 $^{^7}$ See MICRC_2022_Budget_Approved_11_18_2021.pdf, with 2021 and 2022 budgets outlined, and an update from later in 2022 at 2022_Budget_App-2021_02_24_w-Exp-thru-2022_02-28-Recommended_Adj_2022_03-24.pdf.



positions were envisioned for a duration of two years, but both left early partly due to intense public scrutiny and pressure.

The hiring committee received 47 applications for the Executive Director position, and the commission voted to select Suann Hammersmith. The applicants had a range of different levels of experience, including nonprofit leadership and business experience. The subcommittee considering applications struggled with how to weigh partisan political involvement, such as for former party staffers, and how to weigh public responses on the six finalists, whose applications were published for feedback. In the end they seemed to be swayed by public comment but also to be so cautious about the appearance of politics that they were more comfortable with an executive director with no prior experience in government generally, or redistricting specifically.

For General Counsel, the commission selected Julianne Pastula from a pool of eleven applications and four finalists. This was the only staff position that required a second roll call vote. One plus for Pastula was her experience with the VRA, as her application said she was "heavily involved in the interpretation and application federal redistricting law to ensure compliance with the Voting Rights Act and other applicable laws" when the Detroit city council shifted to a district-based election system in 2009. Numerous commissioners favored a different candidate named James Lancaster, but his extensive donor history to the Democratic party and his relationship with Voters Not Politicians caused concerns among a section of the commission. Overall, the commissioners struggled to understand what competencies they should be weighing for a legal position.

The Communications and Outreach Director, Edward Woods III, was selected from among over fifty applications and four finalists. He was said to be a well-rounded communications professional with current and relevant experience. After Hammersmith's retirement, Woods took on a dual role, serving as Executive Director in addition to formally continuing as Communications and Outreach Director. As of mid-2022, Ed Woods was the only remaining member of the MICRC staff, and he has stayed on through all of 2023 as the commission has defended its work in lawsuits. With the court decision of December 21, 2023, Woods will serve for the commission's reconvening to draw modified legislative maps for both Senate and House.

4.2 External consultants

Mapping Consultants. It is hard to overstate the importance of the role that the mapping consulting firm ended up playing in the Michigan process. The hiring was one of the more contentious early activities of the commission, with debate in subcommittee before a vote of the whole commission. Redistricting support was ultimately obtained from Election Data Services, Inc. (EDS). The commission also received applications from Redistricting Partners, RelA2ve, and HaystaqDNA (Haystaq). From the list of four applicants, two—EDS and Haystaq—were invited to give presentations to the commission, and the MICRC selected EDS with eight votes for EDS and five votes for Haystaq on March 4, 2021.

RelA2ve is a small company based in Ann Arbor, Michigan, but the other three have significant national profiles in the redistricting space. Haystaq had previously consulted for the redistricting commission in Arizona, and one of their principals served as a mapper for the Democratic side of the Virginia commission in this cycle. Their team also included Q2 Data & Research, LLC, which

⁸See michigan.gov/-/media/Project/Websites/MiCRC/MISC2/MICRC_Election_Data_Services.pdf for the successful submission from EDS.



has provided extensive support to the California Citizens Redistricting Commission. Redistricting Partners has major experience in local California redistricting and ultimately played a key role with New York's state-level commission in this cycle.

EDS is closely associated with its president, Kimball ("Kim") Brace, who is viewed as a veteran of Democratic-controlled redistricting processes. They addressed the appearance of partisanship head-on in their application, offering gestures of partisan balance within the team: "While EDS, Inc is sometimes viewed with Democratic leanings, because the Independent Citizens Redistricting Commission was set up as a bi-partisan Commission [sic] we have created a bi-partisan team of map drawers to assist the Commission... EDS has teamed up with the top Republican map drawing firm Applied Research Coordinates and its President John Morgan." Besides Brace and Morgan, the EDS team also explicitly included Fred Hejazi, whose company Citygate GIS developed the AutoBound EDGE redistricting software. This means that the choice of EDS also had the effect of tying the commission to a particular commercial mapping software. Rounding out the core team were a researcher and a former director of Virginia's Division of Legislative Services.

During the cycle, the EDS team played an absolutely central role in all the workings of the commission. Kim Brace and Fred Hejazi attended many MICRC meetings, drew districts at the direction of commissioners during live-streamed collaborative mapping sessions, and produced data packages in AutoBound that constituted the core work products of the commission.

VRA Data and Partisan Fairness Expert. Dr. Lisa Handley, a commercial redistricting consultant who was formerly a member of the EDS staff, was subcontracted by EDS to provide a racially polarized voting (RPV) analysis for the commission. Her analysis focused on four counties: Wayne, Oakland, Genesee, and Saginaw. She was later contracted by the commission to write an additional report assessing partisan fairness metrics for the commission's proposed maps.

During the redistricting cycle, in addition to preparing memos with findings, Handley gave presentations about RPV analysis and partisan fairness metrics at meetings of the commission. As Handley notes in her final report, she conceived her role as bounded: "The legal implications of my findings and the assessment of any proposed plans have been left to the MICRC legal team." ¹⁰

VRA Legal Expert. The commission retained Bruce Adelson, a professor of law at University of Pittsburgh. Adelson had previous experience at the Department of Justice and with the Arizona Redistricting Commission. The other finalist was the Law Office of Bryan L. Sells. ¹¹

Adelson played a variety of roles for the commission, including providing implicit bias training, but most importantly was responsible for primary advice about the contours of the Voting Rights Act and federal law around race and redistricting. This role continued to be active throughout line-drawing, as he urged the commission to "unpack" districts by lowering their Black population below 50%.

⁹The debate around this hiring decision can be reviewed in MICRC meetings of Feb 23, 2021 (YouTube/Transcript) and March 4, 2021 (YouTube/Transcript).

 $^{^{10}} See\ Handley's\ Report\ to\ the\ Michigan\ Independent\ Citizens\ Redistricting\ Commission\ in\ MICRC\ Lessons\ Learned\ publication.$

¹¹See michigan.gov/-/media/Project/Websites/MiCRC/MISC3/Federal_Compliance_VRA_RFP_Submission.pdf for the successful RFP submission from Adelson. Scoring and rationale for deciding between the two finalists is also public at michigan.gov.

¹²A July 2021 presentation on the law of race and redistricting may be found at michigan.gov.



Public Mapping Support. Unlike the other positions that reported to the commission, support for the collection of public mapping and written testimony was obtained by MDOS itself, which hired the MGGG Redistricting Lab (based at Tisch College for Civic Life at Tufts University) to support the collection of maps and written testimony submitted by the public. MGGG maintains Districtr (districtr.org), which is free browser-based mapping software for drawing districting plans and identifying communities of interest.

The MGGG team was tasked with building a public portal to take submissions of various forms of public testimony and host them in a public gallery. MGGG sub-contracted a Michigan-based design firm, Menlo Innovations, to provide preliminary feedback on the interface based on user testing.

The MGGG team reviewed and consolidated the testimony, providing heat maps and community of interest (COI) clusters to the commissioners and their redistricting consultants at EDS. MGGG also coordinated with MDOS and EDS to package all of the COI data for review by the commission and hosted weekly sessions to train individuals on how to use Districtr.

Legal Counsel. The commission released RFPs for both Litigation Counsel and Local Counsel, to work under the supervision of General Counsel Julianne Pastula.

For litigation, the MICRC retained Baker Hostetler LLP, a firm largely known in the redistricting space for litigation on behalf of Republican clients and legislatures. Their primary purpose was to defend the final maps in federal and state court. Because this firm did not have counsel licensed in Michigan, the commission contracted Michigan-based Fink Bressack PLLC, with an office in the Detroit suburbs, as Local Counsel. The role of the local counsel—originally a minor role filled in order to meet technical requirements for representation—evolved and expanded after General Counsel Pastula's resignation.

Promotional Services and Media Support. The commission worked with two public relations firms to strengthen its outreach efforts. McConnell Communications handled the campaign in Southeast Michigan, while VanDyke Horn managed the rest of the state. Their primary focus was to support the Communication Director in executing outreach initiatives leading up to and during the initial MICRC Town Hall tour, which took place from May to July 2021. The primary goal of the public outreach campaign was to increase participation at MICRC's town halls and to promote the submission of written public testimonies to the MICRC through their public comment portal.

Good Fruit Video was contracted for multilingual informational videos on behalf of MICRC.

4.3 Sourcing geo-electoral data

The administration of elections in Michigan is handled by the Bureau of Elections, one of five major divisions of MDOS. This office collects, certifies, and publishes election data for primary and general elections.

Obtaining historical electoral data is essential for conducting some of the core functions of the commission, namely ensuring compliance with the Voting Rights Act (VRA) and assessing partisan fairness. In particular, VRA compliance has a component called *racially polarized voting* (RPV)

¹³The scoring sheet for Baker Hostetler may be found at michigan.gov.



analysis that relies on a multi-year geo-electoral dataset to determine whether minority voting preferences differ from those of the majority group. For this, analysts need to be provided with precinct boundary geography in a format called a shapefile, joined to election results from numerous primary and general election contests.

Ideally, precinct shapefiles with election results should be public and easily available from the MDOS website. However, in practice, the fact that sub-state-level localities like counties and townships can control changes to precinct boundaries, with limited reporting requirements to the state, makes it very difficult for state-level agencies to maintain and continually update this data. In Michigan, an additional complication exists because election results in Wayne County (home to the state's largest city, Detroit) are reported at the level of *counting boards*, which are groupings of precincts that are not transparently reported to outside observers. This means that, overall, conditions in Michigan make it extremely difficult for outside parties (whether scholars or members of the general public) to access the fundamental materials needed to support the commission, or to assess its work.

In this cycle, MDOS did not publish shapefiles for public use; their election data website has only tabular (table-based) data, but no digitized maps, and instead refers users to the 83 individual counties, which in turn all maintain data in different formats and vintages [6]. Well into the commission's work, certain processed datasets were provided to the support teams and were made public through the MICRC website [8]. These included general election returns at the precinct and block level, precinct shapefiles, and block assignment files. Statewide elections included the 2012, 2016, and 2020 Presidential race; 2012, 2014, 2018, and 2020 U.S. Senate race; and the 2014 and 2018 races for Governor (and Lieutenant Governor), Secretary of State, and Attorney General. Dr. Handley's report also references one statewide primary election, the 2018 Democratic primary for Governor, as well as several primary elections that occurred at the district rather than statewide level.

The relevance of Democratic primaries stems from the fact that in recent years, voters from most non-White racial and ethnic groups in the United States have a pronounced tendency to support Democratic candidates in general elections. This means that Democratic primaries are particularly important for assessing the cohesion of minority groups in a VRA context, and for identifying their candidates of choice. However, it was difficult for the commission and its support teams to obtain primary election data from MDOS. This is partly due to the electoral history itself (with a large number of uncontested primaries) and partly due to unexplained data availability gaps. Among races for state office (Governor, Lt. Governor, U.S. Senator, Attorney General, Secretary of State), Michigan had only one contested Democratic primary between 2012 and 2020. This was the Democratic primary for Governor in 2018, in which Gretchen Whitmer ran against Shri Thanedar and Abdul El-Sayed. The Presidential primaries of 2016 and 2020 were also contested. As seen in Table 2, other statewide races either ran uncontested or the Democratic party selected the candidate at the party's state convention.

The main part of the RPV analysis only used statewide generals and the single gubernatorial primary.¹⁴ To partially compensate for the absence of data, the expert assessing racially polarized voting also considered a number of Democratic primaries for districted elections (Congress and the state legislature) in Wayne, Oakland, Saginaw, and Genesee Counties. The use of election data in the interpretation of districting criteria is described further in §6.

¹⁴See, for instance, Voting Patterns of Select Minority Groups in Michigan presentation (November 1, 2021).



Year	Office	Democratic candidates receiving at least 5% of the vote
2012	President	Barack Obama (uncontested)
2012	U.S. Senate	Debbie Stabenow (uncontested)
	U.S. Senate	Gary Peters (uncontested)
	Governor	Mark Schauer (uncontested)
2014	Lt. Governor	Lisa Brown (nominated by party)
	Attorney General	Mark Totten (nominated by party)
	Secretary of State	Godfred Dillard (nominated by party)
2016 President Hilary Clinton vs. Bernie		Hilary Clinton vs. Bernie Sanders (contested)
	U.S. Senate	Debbie Stabenow (uncontested)
	Governor	Gretchen Whitmer vs. Shri Thanedar vs. Abdul El-Sayed (contested)
2018	Lt. Governor	Garlin Gilchrist (nominated by party)
	Attorney General	Dana Nessel (nominated by party)
	Secretary of State	Jocelyn Benson (nominated by party)
2020	President	Joe Biden vs. Bernie Sanders (contested)
2020	US Senate	Gary Peters (uncontested)

Table 2. Of all Democratic primaries for statewide races from 2012–2020, only three were contested. Of these, only the gubernatorial contest was used in the expert analysis.



5 Public engagement and outreach

The MICRC successfully solicited a great volume of public feedback on its process, as well as submissions of information and ideas intended to be incorporated into its workflow. This was accomplished through a mix of live testimony (both in person and by zoom), email accepted at a dedicated address (redistricting@michigan.gov), and submissions to the Michigan Mapping Portal. To explain and promote Michigan's new redistricting process, vigorous outreach was conducted, including some that specifically targeted communities considered historically underrepresented in government. Nonprofit organizations encouraged members of the public to provide testimony and descriptions about their communities at in-person hearings around the state. In addition to the official MICRC events, nonprofits and academic groups convened numerous town halls, presentations, and workshops. The online Michigan Mapping Portal provided a mechanism for collecting partial and complete districting plans, COIs, and written testimony.

The public engagement process was not only important procedurally for the legitimacy of the process, but also to produce material that the commission could use for its constitutionally required consideration of communities of interest (COIs). The state of California provided one model for collecting COIs following the 2010 Census, renewed and modernized for the 2020 cycle [1]. After the 2010 census, the California commission hosted a large number of public hearings throughout the state to gather descriptions and locations of important communities. Members of the public were encouraged to attend line-drawing meetings and argue for their communities; livestreams show that line-drawing decisions were often swayed in real time by public input. In the current cycle, California repeated this effort and also released an online mapping tool called Draw My California (drawmycalifornia.org) created by the California Statewide Database at UC Berkeley. Through that web tool, members of the public could draw communities of interest or districting plans, then download the files to their personal computers. In Michigan, one distinguishing factor was that the Michigan Mapping Portal not only supported the creation of content in multiple formats, but also allowed users to submit their work directly to the commission while making it simultaneously available to the public.

5.1 MICRC outreach and hearings

A system common to most states, and constitutionally required in many, is the convening of public hearings to collect input on matters related to political redistricting.

MICRC held public meetings and hearings around the state in several formats:

- 16 public hearings in the first phase (May–July 2021), rather than constitutionally required 10;
- Five university campus meetings (University of Michigan Ann Arbor, Ferris State, Grand Valley State, Central Michigan University, and Oakland University) in September 2021;
- Five public hearings after draft maps were released (second phase, October 20-26, 2021).

At public meetings, each commenter was allotted two minutes in the first phase, later reduced to one minute in the second phase. This frequently required stopping speakers early in their planned comments.



Overall, the commission's final report describes having conducted "195 presentations, 42 scheduled interviews and eight outreach activities." To promote participation in feedback, the commission reports using ads, direct mail, editorials, events, fact sheets, infographics, mail, press, Twitter, website, billboards, emails, Facebook, FAQs, Instagram, presentations, text alerts, videos, and YouTube.

5.2 Outside organizations and sub-granting

The Voters Not Politicians Education Fund undertook active outreach to communities statewide to boost the work of the MICRC in the form of educational resources, partnership building, trainings, and presentations. VNP developed several online toolkits and maintained a blog that tracked the commission's mapping progress. In July 2020, VNP formed a volunteer committee to engage informal communities in the identification of mapped-out Communities of Interest (COIs) for consideration by the commission. The Communities of Interest Engagement Program provided extensive resources and a toolkit that was shared with over 100 Michigan partners and over 300,000 Michiganders. The committee had 11 organizations participate in their Deep Engagement Partner Program, where they provided resources and guidance from volunteer liaisons to help them as their communities submitted maps and testimonies to the commission. ¹⁶

Nine organizations received small grants of roughly \$5000 to aid in offsetting the costs of participating in the redistricting process. From March 2021 through February 2022, VNP worked with 49 community and partner organizations to hold 108 educational events, including presentations, mapping workshops, town halls, and speaking engagements, reaching 5118 attendees. VNP also collaborated with the University of Michigan Ford School's CLOSUP program to host a series of three town halls on Michigan redistricting, which had 2710 attendees total.

The Michigan Nonprofit Association (MNA) likewise mobilized local community organizations to provide input during the redistricting process. They used an outreach strategy borrowed from their "2020 Census engagement model" and partnered with 38 organizations to educate Michigan communities about the redistricting process. 18 of these organizations received funding, technical support, and other resources to reach communities in Detroit, Flint, and Grand Rapids. MNA partnered with the Disability Network Oakland & Macomb to ensure that both printed and electronic materials were accessible to Michiganders with disabilities. They also offered language translation services, which were used by 59% of organizations involved, with educational materials written in languages including Spanish, Mandarin, Bangla, and Arabic. Through over 145 town halls, presentations, and meetings across Michigan and over 50 informational and outreach campaigns, MNA and its partner organizations reached over 11,400 Michiganders.

An organization-driven approach to submitting communities of interest (discussed further in §6.1 below) was embraced by several community organizations including LGBT Detroit and the Arab Community Center for Economic and Social Services (ACCESS). For example, LGBT Detroit mapped Palmer Park (submission c819), an area of about 90,000 residents that is described as a low-income, queer BIPOC community in Detroit. This submission received 98 comments, mostly in support—far more than any other submission in the public comment portal.¹⁷ ACCESS worked

¹⁵See MICRC Lessons Learned & Recommendations.

¹⁶A template for the Memorandum of Understanding (MOU) used for these agreements may be found in §B, and a full accounting of efforts can be found in the VNP Final Report on Redistricting Activities.

¹⁷Though discussed by the commission, this area was ultimately split in the Congressional plan.



with a professional mapper and demographer to develop single-district submissions that preserved areas with a significant Arabic community. Third-party groups also emerged to facilitate influence for groups in the COI process—for instance, a firm called NextVote provided technical mapping support and information about COIs to several organizations interested in submitting community maps. Other coordinated efforts to gather community testimony were spearheaded by non-profits Voters Not Politicians and Promote the Vote, and by labor groups like the AFL-CIO.

5.3 Michigan Mapping Portal, MyDistricting, and other online tools

The outreach materials in the VNP toolkit highlight three publicly available mapping options— Google Maps, Representable, and Districtr-giving examples of how to use each one to draw communities. Google Maps is a mass-market webapp provided by Google, and it has drawing features making it possible to form polygonal shapes on a map. Representable is a mapping tool released by a Princeton-based team, originally started as a class project by Princeton undergraduates and spun off into a startup. This webapp focuses on COI drawing only, allowing users to paint units on a map, which are either block groups or blocks. Representable solicits highly structured narrative entries to accompany mapping submissions, and is tailored to community drives by organizations. Districtr is a mapping tool released by the MGGG Redistricting Lab at Tisch College of Tufts University. Districtr supports COI mapping as well as district-drawing in every state and in many cities, counties, and other jurisdictions, with units including blocks, block groups, and precincts depending on the locality. Districtr also supports narrative entries with community maps, and it allows for the creation of points of interest as well as painted areas. By design, it is more open-ended than Representable about users and use cases, though it supports the creation of event pages. 18 There are several other popular free mapping apps, especially Dave's Redistricting App (or "DRA"), which is very widely used for districting but has less well-known COI functionality as well.

The MGGG Redistricting Lab was contracted by the Michigan Department of State to set up the Michigan Mapping Portal. For its mapped submissions, the portal hosts Districtr content natively, and it also allowed for submission of links from other mapping tools, such as DRA and Representable. The portal hosted brief video demos and accepted feedback to the commission in the form of written comments, partial or complete districting plans, or an identification of COIs at any scale, possibly overlapping. MGGG also ran 1-2 online trainings and "study halls" to support mapping submissions, in English and Spanish, every week for over a year. Mapping submissions to the Michigan Mapping Portal made in Districtr were immediately displayed in a public gallery and made available for public comment. As of December 2022, the gallery of submissions was still viewable in static form (michigan-mapping.org), but no longer accepted new inputs.

Alongside the collection of primary feedback from the public, the commission collected comments about their draft plans, using a combination of platforms—CityGate GIS, the official mapping software contractor for the MICRC, stood up their own portal called My Districting Michigan, distinct from the Michigan Mapping Portal.²⁰

 $^{^{18}}$ For an example of an event page, see ${\tt districtr.org/event/NYC2022}$ for New York City Council mapping.

¹⁹After significant debate, the commission elected not to require submitters to attest to Michigan residency, on the principle that in-person public comments are not similarly restricted. However, the submission of written testimony or comments on others' posts did require an email verification step.

²⁰The main site (michigan.mydistricting.com) is no longer operational as of December 2023, but comments are still visible at michigan.mydistricting.com/legdistricting/michigan/comment_links.



6 Interpretation of laws and criteria

The constitution requires the final maps to meet a list of ranked criteria, which address population balance, contiguity, communities of interest, partisan fairness, incumbency, and respect for county and municipal boundaries. This section explores how criteria were operationalized.

6.1 Communities of interest

The third highest-priority principle under the Michigan constitution, after (a) equal population, VRA, and other federal laws and (b) contiguity, is that "Districts shall reflect the state's diverse population and communities of interest." The constitution defines communities of interest as groups that "may include, but shall not be limited to, populations that share cultural or historical characteristics or economic interests. Communities of interest do not include relationships with political parties, incumbents, or political candidates." Respecting communities is a traditional districting principle, but making that concrete and actionable requires geospatial information identifying and locating relevant communities. To learn about Michigan's present COIs, the commission launched an ambitious statewide participatory mapping project to gather local knowledge, including extensive outreach and software support as described in the previous section.

The public portal received submissions from a variety of sources and in many different forms and formats. Some members of the public submitted maps on a personal basis (a bottom-up approach). Certain community organizations built consensus around one map meant to represent the views of a group (a top-down approach, as as described in §5). With 1,160 COI maps submitted to the public portal—in addition to hundreds more submitted maps drawing one or two districts with a justification in shared-interest terms—the testimony offered an abundance of narratives that described communities with anywhere from few words to substantial essays. COI narratives touched on a huge variety of concerns: shared culture, cost of living, urban/rural tensions, immigrant communities, infrastructure needs, and much more. Commissioners noted the overwhelming volume and diversity of COI content. Many submitters designated their cities, townships, and counties as COIs, while other residents defined their COIs by identifying what they are not. For example, in their first mapping session, commissioners discussed at length how they should weigh a community described as "Farming, small towns, NOT the Lansing area" (submission c1550) Throughout the process, the commission took public mapping input quite seriously, but struggled to find a systematic framework to process and weigh the testimony.

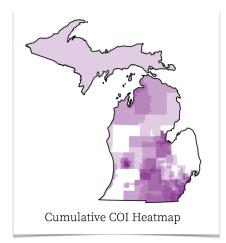
MGGG provided two kinds of support to aid in the overview of COIs.

- Weekly Public Feedback Overview reports were delivered over a span of 14 weeks covering May 1 to August 8, 2021. These reports gave a classification of feedback, as well as heatmaps to make it possible to track COI coverage.
- The COI maps and single-district plans were aggregated into 34 COI Clusters, or groupings of testimony based on similar geography and narrative descriptions. ²²

²¹See, for example, mggg.org/MIReportJuly4.

²²The COI Clusters for Michigan report is available online at mggg.org/Michigan-COI. The visualization tool developed for viewing how clusters interact with district boundaries can be explored in Districtr with the Communities tab, at districtr.org/plan/63709?portal&draft=d3. Supporting shapefile data is available in GitHub.





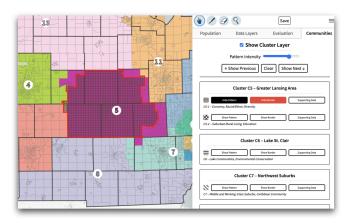


Figure 3. Left: heatmap from July 4 report, showing coverage of the 122 COI submissions through that point. Right: screenshot from Districtr, showing how CD 5 from the commission's Juniper draft map compares to Cluster C5-1 from the COI report.

Clustering into a few dozen rather than many hundreds of data points has clear advantages: it creates a relatively digestible product that the commissioners can use in a more systematic manner. The reliance on a data product like this requires the use of principled and transparent clustering technique. The method used to build the Michigan COI clusters is now the subject of a peer-reviewed scientific article entitled *Aggregating Community Maps*.²³

There is limited evidence that the clusters themselves were used by commissioners in the creation of proposed plans. ²⁴ Generally, the COI maps were processed and evaluated in two manners. The primary form of consideration was one-by-one review of submissions. There are individual instances where a COI submission can be seen reflected in the final mapping choices. One individual spoke to the commission about a COI surrounding Lake St. Clair that was ultimately kept whole in the State Senate Map (9/2/2021 Hearing YouTube, c3361, c6793). This is one instance in which the COI testimony gave a helpful non-partisan justification for the placement of a district boundary.

Generally, the Michigan process was unusual around the country in its emphasis on producing a sizeable data repository of mapped communities that the commission, its consultants, and future research communities can access. Though not perfected, the method of creating and clustering mapped input is a model for the use of data science techniques to take crowdsourced community maps into account. Many methodological questions remain open for future study and refinement.

²³In the article [2], the authors describe the task of using clusters of various sizes to guide the drawing of districts of various sizes. A scoring system is presented that credits a map for keeping small clusters mostly whole, on one hand, and for placing districts mostly whole within large COI clusters, on the other.

²⁴However, one example citing the clusters is the narrative given by Commissioner Anthony Eid for his Congressional map, where COI clusters are listed as part of the justification for individual districts. This can be seen on the livestream from the Dec 20, 2021 meeting, found at youtube.com/live/uhykiKpMlPM?si=EhlhGcDyV2fPxXYH&t=4850.



6.2 Partisan fairness

The fourth-listed principle, after communities of interest, is partisan fairness. The Michigan Constitution requires that the maps do not give "disproportionate advantage to any political party." Preventing the appearance of partisan preference was clearly a priority for reformers from the start: the legal language went to great lengths to require equal partisan representation on the commission, while regional and demographic representativeness was less emphasized. ²⁵

As far as criteria for map evaluation, the Michigan constitution provides that partisan fairness should be "determined using accepted measures of partisan fairness" but does not mandate that any particular metrics, or any particular underlying vote data, be used. Under the guidance of General Counsel Pastula in interpreting the ranked criteria, the commission considered the criteria in stages, starting with the top three. Because partisan fairness was ranked fourth, Pastula initially blocked the use of partisan data in mapping programs.

Later, the Michigan commission procured services from Dr. Lisa Handley (in partnership with mapping consultants EDS) to provide their operational definitions of partisan fairness. Dr. Handley presented three tests or metrics to measure partisanship in proposed maps—lopsided margins, mean-median difference, and efficiency gap—which were to be applied to an election index formed by blending a number of historical elections in a manner that was not detailed publicly. Furthermore, Dr. Handley's final report does not include calculations of these metrics for the commission's draft or proposed plans; instead, she notes that "Because I easily calculated the scores for each of these measures in excel, I knew it would be possible to incorporate an automated report function into the redistricting software that could provide these scores for any draft plans drawn." The AutoBound software was updated to include calculations of these scores in October 2021, so that commissioners could view scores in real time during their mapping from that point forward. Any further determinations of their relative importance or of what range of values was thought to be responsive to the Constitutional language was apparently left to individual commissioners to determine.²⁷

At the stage of evaluating draft maps, partisan scoring was employed and discussed, and district lines were sometimes adjusted based on the score. In one instance, commissioners became convinced by viewing the partisan metrics that they had inadvertently created Republican-favoring maps; they then attempted to redraw some of the safe Republican districts to be more competitive. This created some pushback from both other commissioners and outside commenters that improving the partisan metrics amounted to gerrymandering for Democrats.

²⁵The advisory People's Maps Commission in Wisconsin, by contrast, required a commissioner from each existing congressional district, thereby ensuring commission membership from all corners of the state.

²⁶In her report, Dr. Handley writes: "A composite election index was constructed using the statewide general elections between 2012 and 2020 – all 13 of the election contests included in the GIS redistricting database and analyzed in the racial bloc voting analysis. The composite index was weighted to give each election cycle equal weight in the index." It is unclear if this was constructed by adding votes adjusted by equalizing statewide turnout across contests, adjusting at the precinct level, averaging vote shares, or something else. Handley did not respond to a request to share the election index or a more precise description of its construction for subsequent analysis. Materials that reflect her approach to measurement can be found through the commission's archived materials, including: Measuring Partisan Fairness presentation (July 9, 2021); Three Partisan Fairness Measures memo (August 6, 2021); and Handley's final report.

²⁷Neither Handley's final report nor any other component of the commission's Lessons Learned report includes calculations of these fairness metrics for the proposed or adopted maps. Historical calculations of these scores from 1998-2016 were performed by a third-party group called the Citizens Research Council of Michigan [4] and are included as an appendix to the Lessons Learned report, with extremely vague sourcing to "Michigan Secretary of State voting data."



6.3 Voting Rights Act and Constitutional compliance

Throughout the district-drawing phase, General Counsel Julianne Pastula and VRA Legal Counsel Bruce Adelson seemed to urge the commission to view the creation of districts that were composed of roughly 40% BVAP (Black voting age population) as an operational way to balance VRA compliance, the U.S. Constitutional law on the use of race, and the requirements of the Michigan Constitution regarding partisan balance and communities of interest. Majority-Black districts were described as "packed" with excessive BVAP. To understand this in context, it is important to be clear about methods of district-drawing that are and are not elements of established Voting Rights Act practice and caselaw.

- The VRA does **not** require the drawing of majority-minority districts by a line-drawing body, and does not require that districts previously drawn over 50% remain over 50%. Rather, the only explicit legal requirement for majority-minority districts is in demonstration plans used by plaintiffs as part of a legal challenge.²⁹
- Nevertheless, courts are wary of securing VRA compliance through districts pushed substantially below the 50% line without strong evidence that they will provide an effective opportunity to elect candidates of choice.³⁰
- Race cannot predominate over other traditional principles in the process of drawing districts—this tenet is rooted in the Constitution rather than the VRA, but must be balanced with VRA practice. In the legal climate of the 2020 redistricting cycle, the use of explicit percentage targets for minority population has been highly scrutinized and has proved to be legally risky.³¹

The first of these points was strongly emphasized by VRA Legal Counsel Bruce Adelson,³² but not the second and third points. Given this background information, it is not hard to see why the advice of Adelson and Pastula drew attention from the public and in legal complaints.

The 40% target that seems to have been used in practice stems from Dr. Handley's component of the VRA analysis, which can be briefly summarized as follows. She used linear extrapolation to attempt to calculate a percentage of Black voting age population (BVAP) that would suffice to win in general elections in four contiguous counties, each containing cities or suburbs with significant Black population: Wayne (Detroit), Oakland (Detroit's northern suburbs), Genesee (Flint), and Saginaw (Saginaw). The analysis starts with the use of standard inference techniques to estimate turnout by race and candidate preference by race. Treating these numbers as fixed, one can then linearly adjust the percentages of Black and White voters in a potential district to arrive at threshold levels which would suffice for most, or all, of the 13 general elections to be won by a Democrat. This method has appeared in peer-reviewed articles by Dr. Handley and collaborators between 1988

²⁸The decision in Agee v. Benson describes Adelson as pushing to limit BVAP to 35-45%.

²⁹See Bartlett v. Strickland (2009), Allen v. Milligan (2023).

³⁰For instance, the district court in the Alabama congressional case (*Allen v. Milligan*) ordered the state to draw a new plan with "two districts in which Black voters either comprise a voting-age majority or something very close."

³¹Cases from the last five years in Virginia, Wisconsin, and Boston underscore courts' inclination to look unfavorably at racially targeted districts, absent a robust supporting analysis. The outcome in *Agee v. Benson* underscores this trend.

³²See, for instance, the VRA Memo of October 14, 2021, which was made public by court order.

 $^{^{33}}$ In particular, Handley reports estimates from two versions of King's EI (2 \times 2 and $R \times C$) as well as a linear regression called ER and an older method called homogeneous precinct analysis.



and 2001, but faces certain limitations. It assumes that adding Black population in a district would be accomplished with voters who are interchangeable with the Black voters already there in their turnout rate and voting preference; more problematically, it makes a similar assumption for White voters, who in these areas are far more heterogeneous in their partisan preference. In this way, Handley produces tables called "Percent BVAP Needed to Win"; using her methods, a Black voting age population of 40% suffices for the Democrat to prevail in all 13 general election contests in all four counties.

But in order to distinguish the determination of Black voters' opportunity-to-elect from merely optimizing for Democratic performance, it is widely acknowledged that primary elections must be considered. Among Democratic primaries in districted elections in Wayne County, Handley reports evidence of polarized voting between Black and White voters in 2018 in CD 13 (Black voters prefer Jones, White voters split between Tlaib and Wild); Senate districts SD 1 (where the Black/White preference is Talabi/Chang respectively); SD 3 (Santana/Woronchak); and SD 5 (Alexander/Knezek). However, these elections are not used in the quantitative analysis of effectiveness for the new districts. Handley examines the 2018 gubernatorial primary, but finds its usefulness limited because Black voters do not have a strong shared preference. And she also forgoes the use of the two other contested primaries available to her in the dataset, the 2016 and 2020 Democratic primary contests for U.S. President (see Table 2), without indicating why those are excluded.

During the redistricting cycle, many VRA questions were asked in private, citing attorney-client privilege. The Michigan Supreme Court compelled the commission to reveal audio from a private meeting with VRA counsel including a conversation about Detroit and Flint.³⁵ This session illustrates Adelson's active role in the commission's decisionmaking, often urging the commission to push Black voting age population down in their districts in the name of "unpacking." See Figure 5 for an illustration of the effect this had on the demographic distribution in the first round of proposed plans.

Ultimately, the enacted plan failed to elect Black candidates in multiple districts that were intended as Black opportunity districts, and Black incumbents faced unexpectedly difficult primary contests in several others. In particular, Shri Thanedar was able to win the CD 13 primary with under 30% of the vote, where over 70% split was among seven Black challengers. He went on to win in the general election, leaving Detroit without a Black representative in Congress. In SD 8, Black incumbent Marshall Bullock was paired with White incumbent Mallory McMorrow and lost by a more than two-to-one margin in the primary, becoming the only Democratic incumbent to lose re-election in the Senate. In SD 6, Black candidate Mary Cavanagh defeated a White challenger by under 3000 votes. Each of these contests has a different set of conditions and electoral dynamics, and only a holistic view on district design could have alerted the commission to the risks posed by expressly lowering BVAP despite the extremely limited analysis of primary elections.

³⁴It is challenging to use districted elections in analyzing proposed districts because of only partial overlap in terrain. However, these—and others from years besides 2018—could clearly have been useful in analyzing new Senate and House districts qualitatively, if not formulaically. To Handley's credit, she did warn that "Stephanie Chang, the state senator in District 1, which is 44.68% BVAP, was not the candidate of choice of Black voters in the 2018 Democratic primary, though she is the candidate of choice in the general election." This should have been regarded as a major red flag for treating 40% BVAP as a bright line for opportunity to elect.

³⁵See MI Supreme Court Orders Release of Redistricting Panel's Secret Work, BridgeMI, December 20, 2021; Here's what the Michigan redistricting panel discussed in secret, BridgeMI, December 20, 2021.

³⁶Thanedar is a businessman of Indian origin who, according to Handley's report, could be seen as the Black candidate of choice in the gubernatorial primary of 2018, while Gretchen Whitmer was the White-preferred candidate. However, Black candidates collectively drew much more support in the 2022 CD 13 primary.



7 Mapping process and outcomes

7.1 Drawing process

From the commission's first convening on September 17, 2020, it was more than a year until the vote to adopt maps was taken on December 28, 2021. During many collaborative mapping sessions, commissioners would give spoken guidance to Kim Brace of Election Data Services and Fred Hejazi of CityGate GIS, who operated a laptop with mapping software, on where to start drawing districts. The drawing was projected live on the meeting livestream. The exact placement of the boundaries was negotiated through group discussion. Along the way, commissioners could ask for additional information or guidance from the commission's consultants, when they were present at the meetings. This process is detailed in their Mapping Process and Procedures document.³⁷

On August 20, 2021, the commission began reviewing COI submissions one by one and mapping the State Senate districts. ArcView and AutoBound were used to view and assess COIs. EDS separated COI areas by geographic regions of the state in order for the commissioners to narrow in on relevant COIs, and offered demographic data during the meetings. The first discussion focused on three COIs that represent the Lansing school districts, with no consensus about the validity or importance of the submissions, leading commissioners to express worries about time and process for COIs overall. After a short time, commissioners were encouraged to review COIs on their own time.

7.2 First map release and public review

On October 11, 2021, the commission approved the first draft maps for public review, kicking off the second round of public comment on October 18. They were given tree-themed nicknames for identification. The public could review and comment on four Congressional plans (Apple, Birch, Juniper, Maple), three State Senate plans (Cherry, Elm, Spruce), and three state House plans (Oak, Peach, Pine). These were made publicly available at michigan-mapping.org/plans in the Michigan Mapping Portal, where members of the public were able to comment on the plans and were able to open and modify the plans and submit suggested improvements. For example, the "Apple" plan received 30 comments and two suggested modifications. In addition, numerous commissioners drew individual maps on their own for consideration at all three levels, with Clark, Eid, Lange, Orton, and Szetela each submitting at least one.

7.3 Second map release

A second release occurred over a five-day period in early November 2021, with three new Congressional plans (AppleV2, BirchV2, and Chestnut), three Senate plans (CherryV2, Linden, and Palm), and three House plans (PineV5, Hickory, and Magnolia).

On November 12, 2021, the MICRC issued public notice of a second round of maps. After the first round of proposed plans, subsequent plans and comments were hosted on CityGate's platform and may be found by following links from the MICRC Mapping Process site.

³⁷See michigan.gov/micrc/-/media/Project/Websites/MiCRC/MISC5/Mapping-Process-and-Procedures-v12-28.pdf.



7.4 Adoption

On December 28, 2021, the Chestnut Congressional plan, the Linden Senate plan, and the Hickory House plan were adopted by majority approval, each on its first time up for vote. Chestnut was approved 8–5, supported by 2D, 2R and 4N votes out of the 4 Democrats, 4 Republicans, and 5 Nonpartisan-identified members of the commission. Linden was approved 9–4 (2D, 2R, 5N in favor), and Hickory 11–2 (4D, 2R, 5N in favor). Each of these tallies met the threshold for passage requiring at least two votes from each of the D/R/N categories. The maps were signed into law in March 2022, 60 days after the MICRC final report was filed with MDOS.

After the votes, Commissioners Rhonda Lange (R) and Erin Wagner (R) filed dissenting reports to note their opposition to each of the three maps, and Commissioner Rebecca Szetela (N) dissented to the Congressional map only.³⁸

7.5 Outcomes and legal challenges

The plans were signed into law in early 2022, in time for candidate filing and a normal campaign before Election Day that November. As described in the introduction, the partisan outcomes of the 2022 election were highly proportional to voter partisan preference, drawing kudos for the commission from around the country.

Under the state constitution, the commission remains in force as long as there is active litigation, with a dormancy plan adopted after lawsuits have been resolved. During dormancy, commissioners are no longer paid and all responsibilities transfer to the Michigan Department of State. MDOS must then reactivate the commission in the case of mid-cycle litigation. If any adopted map is struck down by a court, the constitution makes clear that it falls back to the MICRC—not MDOS, the courts or legislators—to redraw the maps.

Two lawsuits against the MICRC plans were dismissed in 2022, one brought by Detroit lawmakers and civil rights advocates in state court and the other by Republican-identified plaintiffs in federal court.³⁹ A third lawsuit known as *Agee v. Benson* was filed on behalf of Black voters in March 2022, challenging the commission's Detroit-area legislative maps both under the VRA (for vote dilution) and the Constitution (for racial predominance).⁴⁰ The case went to trial in November 2023, and a ruling came down on December 21, 2023, finding Equal Protection violations in the drawing of thirteen legislative districts on the basis of unjustified use of demographic targets.⁴¹

Thus at the time of writing in December 2023, the commission is preparing to get back to work, ordered to correct the reliance on demographic targets while maintaining its balancing of other priorities.⁴²

³⁸Dissenting reports may be viewed in the Lessons Learned document.

³⁹League of Women Voters v. MICRC was filed in February 2022 and the state court denied relief the following month. Banerian v. Benson was filed in January 2022, with last appeal dismissed in November 2022.

⁴⁰An overview and case filings can be found at redistricting.lls.edu/case/agee-v-benson.

⁴¹Decision at **storage.courtlistener.com/recap/gov.uscourts.miwd.104360/gov.uscourts.miwd.104360.131.0.pdf.**The lawsuit initially challenged seven Senate and ten House districts, but only claims on six Senate and seven House districts made it to trial.

⁴²The court order contemplates the possibility of appointing a special master to assist the commission in redrawing maps, with next steps planned for January 2024.



8 Conclusion and recommendations

The work of the Michigan Independent Citizens Redistricting Commission marks a major step forward for fair, transparent, and trustworthy redistricting in Michigan and provides a model for the rest of the country. Though litigation has resulted in the need to reconvene and adjust the legislative maps, the process design was robust enough that this task now returns to the MICRC.

This study of the successes and challenges of the commission enables us to close with a set of observations and recommendations for future commissions in Michigan and around the nation.

Data availability

- Advocacy groups and policymakers can support the Michigan Department of State (MDOS) by
 pushing for state-level regulation requiring geospatial precinct reporting from counties. Such a
 regulation should mandate that the census block assignment to precincts, matched to election
 results, be published within 60 days of certification of election, including for primaries.
- MDOS, in cooperation with county-level administrators, should commit to publishing precinct-level election shapes and results for every primary and general contest, and to maintaining a public repository of historical results.

Staffing and hiring

- Assign some experienced MDOS staff to support the commission, including at least one in-house support person with GIS and/or database experience, early enough that they can attend redistricting training sessions by the National Conference of State Legislatures (NCSL). This will reduce the dependence on consultants and will aid cooperation and data management.
- Publish ROIs (registrations of interest) to better understand the field of eligible candidates before drafting RFPs (requests for proposals). Writing RFPs so that they can be met by academic and think-tank teams will expand the field of advisors beyond commercial consultants.
- Develop a strategy to manage partisan tug of war on the hiring process. A record with some level of partisan engagement should not be disqualifying for those in a prescribed support role. Appoint one well-rounded and knowledgeable person as a **Coordinating Advisor** who is sensitive to the need to build trust and partisan balance. This will make it easier to locate and manage specialized support teams, including academic and commercial partners.
- The Executive Director should have experience with redistricting and an understanding of the pressures of the commission process. A former commissioner from Michigan or elsewhere could make a strong choice.

Partisan fairness

- The use of partisan fairness metrics can help the commission disentangle the effects of geography from the possibility for partisan balance. It is best practice to use metrics individually and to provide context of the range of values expected in the state given its political geography.
- The choice of election data to use with fairness metrics is crucial and should be transparent.



Public feedback and communities of interest

- The procurement process left the Michigan Mapping Portal poorly supported and integrated. 43 Better cooperation by technical consultants could serve to incorporate the COI submissions and COI clusters with the other mapping tools used by the commission.
- The collection process for COIs was extremely open-ended and the heterogeneity of the submissions created challenges in amalgamating them. A mediated intake process using interviewers to assist in map collection would be likely to produce more structured inputs. For example, a small group of paid interns (such as students supported by good-government grants) can serve as intake specialists available online or in person, ensuring that the maps submitted by the public are more responsive to the constitutional definition of communities of interest and are more suitable for aggregation into descriptive clusters, if that is desired.
- The commission should hold a vote early in their timeline on their process for taking public districting and COI submissions into account. An expanded definition could be approved by the commission specifying, for instance, whether a request to keep two areas apart fits as a COI.

Race and redistricting

- Voting Rights Act compliance and minority opportunity analysis is not possible without appropriate electoral data (see above), and also requires legal advising and data work in keeping with recent shifts toward sharply limiting the use of race data. The commission should strengthen its early practical training on the VRA to better equip commissioners to exercise judgment in the process, and VRA advice should be given publicly and transparently to build trust.
- Expanded outreach to community and civil rights groups will not only build legitimacy but will also create conditions to optimize the effectiveness of intended opportunity districts, such as with candidate recruitment efforts that avoid massive vote-splitting in primary contests.

Mapping process

- The citizen commissioners spent a great many hours engaged in the detailed work of linedrawing and relatively much less time on higher-level questions of how to operationalize and balance the criteria. With a combination of staff support and facilitation by a coordinating advisor, commissioners might be better leveraged in deliberative decisionmaking.
- It was not clear how the commission took into account, or aspired to take into account, the many *districting plans* submitted by the public in the mapping portal. The commission advisors or MDOS support staff should prepare tables comparing selected publicly submitted plans, organizational "unity maps," and draft plans by the MICRC and individual commissioners in both quantitative and qualitative terms.

⁴³MGGG Redistricting Lab was contacted by MDOS in February 2021, and was tasked with designing and launching a custom web portal by May 1. A total payment of \$50,000 covered developing technology, holding trainings, delivering reports, and attempting to integrate data products with the primary mapping team for over a year.



 Having two rounds of maps released, spaced out by public comment periods, allowed for feedback and comparison. Feedback should be solicited in formats that best facilitate practical use by the commission.⁴⁴

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⁴⁴For instance, the Michigan Mapping Portal supported the public ability to comment on each others' plans and testimony, give written comments on the commission's draft plans, and use draft plans as a starting point to draw modifications. The My Districting interface supported point-based comments in a sticky-note style.



A Brief national overview

Here we give a brisk overview of the operation of redistricting bodies around the country in the 2020 cycle. We attempt to summarize the makeup and power of the commission, some key personnel decisions, and the outcome. We use three main categories of line-drawing outside of the standard closed-door legislative process: independent commissions (empowered or advisory); politician commissions; and court-designated mappers. Since the status of redistricting control is quite complicated in most of the 50 states, this categorization is necessarily imperfect and this list is selective. For the 2020 redistricting cycle, we view Michigan as one of only four empowered independent commissions in the country, alongside Arizona, California, and Colorado.

From these examples, a few points emerge as the key elements for launching the work of an independent citizens commission. These are: **staffing and hiring**; **timeline**; **budget** and deliverables; and **cooperation** between advisors, consultants, state-level election offices, and software contractors.

Section A.4 gives a brief roster of some of the individuals and commercial entities who make up the current landscape of support in redistricting.

A.1 Independent citizens commissions

Empowered.

- Arizona. 5-member independent citizens commission with a 2-2-1 (Repub-Dem-Indep) structure in which the independent member is the commission chair. This commission enacted maps in the 2010 cycle that ultimately survived a challenge at the U.S. Supreme Court. To manage appearances of partisanship, two law firms were hired to manage operations at a high level, one identified with each major party. Mapping in Arizona faces VRA issues for Native American and Latino groups. Arizona redistricting framework is notable for inclusion of competitiveness as a goal. In this cycle, a commercial consultant was retained to run the practical operations (including database construction, RPV, metrics). Commission enacted Congressional and Senate maps successfully. (The state House is elected in a multi-member fashion from Senate districts, so no House districts are drawn.)
- California. Well-established 14-member commission with a strong tradition of seeking breadth and diversity in commissioners and emphasizing community maps. Commission has a close relationship with the Statewide Database, based at UC Berkeley. Significant staffing turnover during commission's work, including executive director and chief counsel. California's process relies on transparency and momentum, with line-drawing starting at the southern end of the state and scarce opportunities to revisit work that is already "locked in." The commission received vocal real-time feedback on its lines from a variety of figures including mayors and religious leaders, organized by civil rights organizations. Large state with many VRA issues for Latino, Asian, Black groups and subgroups—DOJ veteran VRA expert was brought in by RFP to advise. Four maps (Congress, state Senate, Assembly, Board of Equalization) were all approved with unanimous support and were adopted. One procedural lawsuit was dismissed.



- Colorado. Separate independent commissions for Congress and for legislative maps (both 12 members, with 4-4-4 structure) were created by 2018 ballot measure that was referred to voters from the General Assembly. Notably, the commissions were supported by a legislative staff team with significant redistricting experience, and commissions used staff-drafted maps as a starting point. Mapping in Colorado faces VRA issues for Latino voters and community-of-interest consideration for Native Americans. The legislative commission brought in an academic team to assess partisan fairness by the "ensemble method," comparing proposed maps to hundreds of thousands of alternative maps. Maps adopted.
- Michigan. Empowered 13-member commission was created by 2018 ballot initiative. Commercial consultant served as the de facto coordinating advisor, constructing a team including numerous commercial and consulting partners, with contracted mapping software. A law professor and DOJ veteran provided VRA legal advice and an academic team ran the public mapping component. Known VRA issues include Black voters in greater Detroit. Three maps (Congress, state Senate, state House) were adopted and enacted. December 2023 federal court decision will require redrawing of 17 legislative districts.

Advisory or with partial government support.

- Iowa. State's nonpartisan Legislative Services Agency draws the plans, with input from a five-member commission composed of four political appointees and a fifth member selected by the first four. The "Iowa Model" is often held up as a positive paradigm for centering the work of truly nonpartisan civil servants, but Iowa's relatively simple physical geography and racially homogeneous population make it hard to generalize to other states. In this cycle, the legislature rejected the first set of maps for deviating too greatly from the previous ones, and the LSA produced a second set more in line with "least change."
- Maryland. Governor-created citizen commission, supported by small staff team from Governor's office; academics brought in as coordinating advisor and for RPV. Commission drew maps at all three levels (Congressional, state Senate, state House) all rejected by legislature, which drew their own, more partisan (D) maps. Litigation seems to be settled.
- New Mexico. Active advisory commission (Citizen Redistricting Committee) with public mapping component; CRC has two members appointed by each political party and three by the State Ethics Commission, of whom two must be unaffiliated and one, who will chair the CRC, must be a retired judge. VRA issues include Latino and Native American populations. Academics brought in for training and for public mapping collection. Legislature adopted a modified version of the Congressional map advanced by the CRC. Lawsuit filed on behalf of Republican party alleging partisan gerrymander was unsuccessful.
- **Pennsylvania.** A full-fledged commission exists for legislative lines only. An academic played a support role, overseeing the data, metrics, and technical decisions; he ultimately drew the Senate (but not the House) map. Congressional mapping proceeded largely through litigation, where many parties submitted maps for consideration, including elected officials, good government groups, and plaintiffs' experts. Court ultimately selected map drawn by a different academic as an expert for Democratically-aligned plaintiffs. A Republican legislator who was on the legislative commission tried to get his maps through but failed, then sued the commission.



- **Utah.** Initially, an empowered commission was created by 2018 ballot initiative—but in statute rather than state constitution, which allowed for later downgrading by the legislature to an advisory role only. Law professor was retained as coordinating advisor by the commission's law firm. UICRC had significant support from nonpartisan legislative staff, experienced with redistricting software. Used ESRI/ArcGIS to collect public maps, then used commission staff to label these (Yes/No/Maybe) as responsive to state's community of interest criterion. Drew four maps (Congress, state Senate, state House, School Board) all immediately rejected by legislature, which drew their own, more partisan (R) maps. Partisan gerrymandering lawsuit heard by state supreme court in July 2023, still undecided in December.
- Wisconsin. Governor-created People's Maps Commission in split-control state. Academic retained by Wisconsin Department of Administration as coordinating advisor to PMC, which produced maps for Congress, state Senate, and state House; ignored by legislature. Case went to state court, which directed least-change maps with little role for other criteria. Governor and Legislature then proposed their own maps in litigation, and court adopted Governor's Congressional map and Legislature's Senate and Assembly maps—this was the result of a change on remand from U.S. Supreme Court, after initially choosing Governor's legislative maps. Supreme Court scrutinized use of race in the creation of majority-Black Senate districts. Subsequent change of control on state court opened the door to new lawsuit; legislative maps found to be invalid based on contiguity. Currently back at legislature, with academics appointed as backup special masters.

A.2 Politician or politically appointed commissions

- Alaska. Process controlled by 5-member Redistricting Board appointed by elected officials and supported by permanent staff with GIS and technical expertise. This cycle, the board had three Republican members and two independent members, who frequently did not agree. Alaska faces major VRA obligations with respect to Alaska Native population. Contract with academic group supported public mapping, otherwise process handled in-house. Litigation is ongoing for both VRA and partisan issues.
- **New York.** Bipartisan commission, in practice highly partisan in both directions, advised by professional consultant. Commission deadlocked and could not achieve any cross-aisle consensus. Democratic side put forward maps that were rejected by state courts. An academic was hired by the court as special master, ultimately drew Congressional and Senate maps. Assembly maps still pending, with placeholders for now.
- Ohio. Bipartisan politician commission was created by voter initiative; in practice, complete partisan (R) control. Commission created several rounds of plans rejected by Ohio state courts on partisan fairness grounds. Court appointed a balanced pair of map-drawers nominated in a partisan fashion (consultant by R, academic by D), but commission continued to ignore their map and all authority of the state courts. Commission plans will exist for short term, new districts must be drawn by 2026 elections.



• Virginia. Nominally independent commission was created by constitutional amendment, approved by voters and by the legislature. However, commission dominated by overtly political actors. This resulted in a commission with two of everything: two partisan-identified law firms, two map drawing consultants, and so on. State court ultimately appointed two academics as balanced partisan map-drawers. Status: enacted.

There are many other commissions controlled by politicians or partisan appointees, including Hawaii, Idaho, Maine, New Jersey, and Washington.

A.3 Court-designated mapper

Those listed in this section are states in which the courts instituted a process for creating a map, rather than just deciding on the legality of challenged maps.

- **Connecticut.** Legislature requires 2/3 supermajority or mapping resorts to a backup commission; in this cycle, the maps went to court. Supreme Court of Connecticut hired a law professor to draw a least-change Congressional map. Status: enacted.
- Minnesota. Failure of the legislature and governor to agree on maps has led to court-drawn maps for seven decades in a row, up to and including the present cycle. This time, a five-judge special panel heard testimony around the state, then created a "least change" map that closely resembled one submitted to court by a group of plaintiffs led by former Senate Counsel.
- New Hampshire. Split-control state. Governor vetoed Congressional map as a gerrymander, leading court to appoint law professor as an expert. The court process allowed for the public to submit maps, though choices were very constrained under a requirement that towns be left whole. The court's Congressional map was adopted.
- **North Carolina.** Split-control state, but Legislature removed Governor's veto power. Litigation culminated in appointment of special master team with local knowledge, who then brought in four academic/think-tank advisors. One advisor ended up in a de facto guiding role, including drawing the Congressional map adopted by the Court. This map was left in place by the U.S. Supreme Court in *Harper v. Moore*, but the partisan balance shifted on the court in the following year. With a more Republican-leaning state court, the entire case was reheard, and control was passed back to the legislature, which created maps widely viewed as highly gerrymandered.



A.4 Personnel

In this section, we overview the list of scholars, consultants, firms, and other entities that we know to have worked to assist commissions and courts on state-level redistricting as part of ongoing work in this area. ⁴⁵ Mentions are not intended as endorsement.

Academics/Think-Tankers. A significant number of people with PhD and/or JD degrees have been contracted by legislatures, courts, or commissions in this cycle to assist with the drawing of lines, the collection and synthesis of public mapping input, or the definition and balancing of criteria. The notation * indicates primary responsibility for criteria support, sometimes including ultimate drawing of adopted districting lines. This list is organized by the primary field of scholarly training.

- LAW. Nate Persily (Stanford Law) CT*, UT*, NH*, MD*; Bruce Adelson (Pittsburgh Law) MI,
 AK
- POLITICAL SCIENCE. Bernie Grofman (UC Irvine) NC*, VA/paired, WI; Jonathan Cervas (Carnegie Mellon) NY*, PA, WI; Eric McGhee (Public Policy Institute) NC; Michael McDonald (Florida) OH/paired, NJ/paired, Matt Barreto (UCLA) MD; Steve Ansolabehere (Harvard) AZ/paired; Sean Trende (OSU student) VA/paired, AZ/paired
- MATHEMATICS. Moon Duchin (Tufts) WI*, MA, UT, AZ, MI, AK, MD, NM; Tyler Jarvis (BYU) UT, NC; Jeanne Clelland (Colorado) CO; Daryl DeFord (Washington State) CO
- OTHER NEUROSCIENCE. Sam Wang (Princeton) NJ*, NC

In addition, Justin Levitt (Loyola Law) and Doug Spencer (Colorado Law) are law scholars and Jonathan Rodden (Stanford) and Christian Grose (USC) are political scientists whose work encompasses the full range of issues seen in an end-to-end redistricting process. Among scholars with more specialized experience, Max Palmer (Boston University) is a political scientist who is experienced with VRA-related issues in litigation, and Jon Eguia (Michigan State) has published work on partisan metrics.

Some academics played training roles with commissions, funded not by the commission or the state but by an outside philanthropic source. In particular, Sam Wang organized training sessions for the New Mexico commission (funded by the Thornburg Foundation) and Matt Grossmann, a political scientist from Michigan State, organized training for the Michigan commission (funded by the Joyce Foundation).

Many of those listed above (such as Grose, Trende, Duchin, Clelland, DeFord, Ansolabehere, Spencer, Rodden, Barreto, and Palmer) were disclosed as consulting and/or testifying experts in redistricting court cases in this cycle.

⁴⁵In assembling this report, every person listed here was contacted to confirm whether this list of advising roles is complete. Nonetheless, this is likely to be an incomplete overview of individuals and of their work. Public CVs were used in case of non-response.



Consultants. It is impossible to understand the redistricting landscape without considering analysts and consultants who do redistricting support as a major part of their professional work.

- Election Data Services / Kimball "Kim" Brace MI*, MA
- National Demographics Corporation / Doug Johnson AZ*, OH/paired
- Frontier International Consulting / Lisa Handley CO, MI, MA, AZ
- · Q2 Data & Research / Karin Mac Donald CA
- · Blockwell Consulting / Megan Gall CA
- Redistricting Partners / Paul Mitchell NY*
- HaystagDNA / Andrew Dreschler, Ken Strasma CA, VA/paired
- · Applied Research Coordinates / John Morgan NJ, MI, VA/paired
- · Crimcard Consulting / Kareem Crayton VA/paired

Several other consultants, including Bill Cooper, Tony Fairfax, Fred McBride, and Blake Esselstyn, are experienced at drawing maps and balancing criteria—these four in particular have a reputation of working with organizations identified with civil rights. Of all consultants named here, some have done graduate study in political science (Handley, Mac Donald, Gall, McBride) and others have master's degrees in geography and related areas (Esselstyn). Many (including Brace, Handley, Johnson, Cooper, Esselstyn, and Fairfax) filed expert reports in redistricting cases in this cycle.

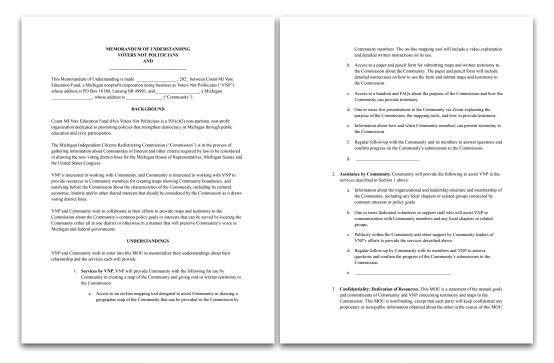
Mapping Software. As part of the commercial landscape, a small number of software companies hold a large market share of mapping software used for redistricting. Namely, Caliper produces Maptitude for Redistricting (often simply called Maptitude), CityGate GIS produces AutoBound, and GIS industry giant Esri (maker of ArcGIS) produces Esri Redistricting.

There are now numerous options for public mapping software, including Dave's Redistricting App, Districtr, Representable, DrawMyCA, and District Builder. See §5.3.

Law Firms. Snell and Wilmer (AZ/paired), Ballard Spahr (AZ/paired), Strumwasser–Roocher (CA), Baker Hostetler (MI), Research & Polling, Inc (NM), Taylor English (VA/paired), Wheeler Trigg O'Donnell (CO), Ray Quinney & Nebeker (UT)



B Materials for outreach partnerships



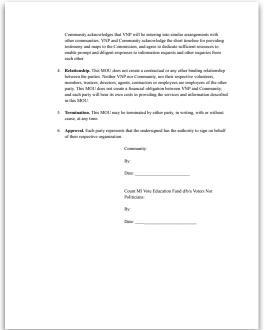


Figure 4. A memorandum of understanding (MOU) was used by Voters Not Politicians Education Fund to set agreements with community groups to assist in outreach, as described above in §5. A full copy may be viewed at mggg.org/uploads/VNP-MOU.pdf.



C Distribution of Black voting age population

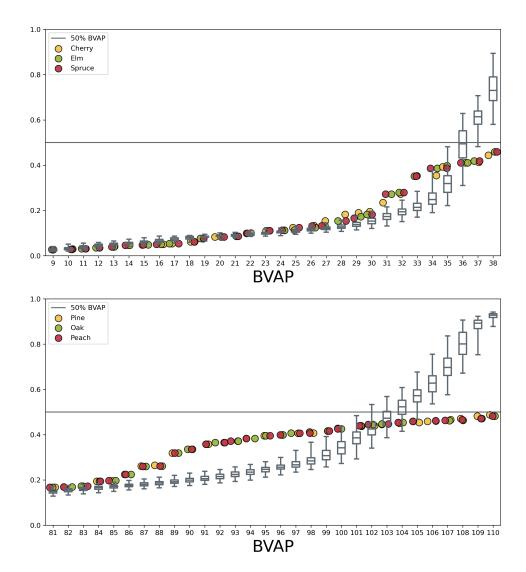


Figure 5. These plots show the distribution of Black voting age population, or BVAP, across the districts from the first round of proposed legislative plans. The columns show the districts sorted from lowest BVAP to highest, rather than using the state's numbering for districts. The colored markers represent the levels in the first round of MICRC proposed legislative plans: the Cherry, Elm, and Spruce plans for Senate (top) and the Pine, Oak, and Peach plans for state House (bottom). For comparison, the box-and-whisker plots show the range of observed BVAP in an ensemble of 100,000 plans drawn only with criteria of population balance, compactness, and contiguity, but without use of race data. The boxplots make it clear that some level of "unpacking" attention may be required to prevent the drawing of districts with excessively high BVAP, but the colored markers strongly suggest an express targeting of the 40-50% range.