STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
No. 21 CVS 500085

REBECCA HARPER, *et al.*,

        Plaintiffs,

  v.

REPRESENTATIVE DESTIN HALL, IN HIS OFFICIAL
CAPACITY AS SENIOR CHAIR OF THE HOUSE
STANDING COMMITTEE ON REDISTRICTING, *et al.*,

        Defendants.

**DECLARATION OF
LALITHA D. MADDURI**

I, Lalith D. Madduri, declare and say as follows:

1.   I am over the age of eighteen (18) and competent to testify as to the matters set forth herein.

2.   I am a counsel with the law firm Elias Law Group LLP and one of the attorneys representing Plaintiffs in this case.

3.   I submit this declaration in support of Plaintiffs' Motion for a Preliminary Injunction.

4.   Attached as Exhibit A is a true and correct copy of the order granting plaintiffs' motion for a preliminary injunction in *Harper v. Lewis*, No. 19-CVS-012667 (N.C. Super Ct. Oct. 28, 2019).

5.   Attached as Exhibit B is a true and correct copy of the order enjoining the filing period for congressional elections in *Harper v. Lewis*, No. 19-CVS-012667 (N.C. Super. Ct. Nov. 20, 2019).

6.   Attached as Exhibit C is a true and correct copy of the transcript of the hearing on plaintiffs' motion for summary judgment in *Harper v. Lewis*, No. 19-CVS-012667 (N.C. Super. Ct. Nov. 20, 2019).

7.   Attached as Exhibit D is a true and correct copy of the Redistricting Criteria for the 2021 Congressional Plan adopted by the North Carolina House Committee on Redistricting and Senate Committee on Redistricting and Elections on August 12, 2021.

8.   Attached as Exhibit E is a true and correct copy of the Redistricting Criteria for the 2016 Congressional Plan adopted by the North Carolina General Assembly Joint Committee on Redistricting on February 16, 2016.

9.   Attached as Exhibit F is a true and correct copy of the transcript of the October 5, 2021 hearing before the North Carolina House of Representatives Committee on Redistricting.

10.   Attached as Exhibit G is a true and correct copy of the expert report of Christopher Cooper.

11.   Attached as Exhibit H is a true and correct copy of the expert report of Jowei Chen.

12.   Attached as Exhibit I is a true and correct copy of the expert report of Wesley Pegden.

13.   Attached as Exhibit J is a true and correct copy of the affidavit of Plaintiff John Anthony Balla.

14.   Attached as Exhibit K is a true and correct copy of the affidavit of Plaintiff Kathleen Barnes.

15.   Attached as Exhibit L is a true and correct copy of the affidavit of Plaintiff Virginia Walters Brien.

16.   Attached as Exhibit M is a true and correct copy of the affidavit of Plaintiff David Dwight Brown.

17.   Attached as Exhibit N is a true and correct copy of the affidavit of Plaintiff Gettys Cohen Jr.

18.   Attached as Exhibit O is a true and correct copy of the affidavit of Plaintiff Richard R. Crews.

19.   Attached as Exhibit P is a true and correct copy of the affidavit of Plaintiff Rebecca Harper.

20.   Attached as Exhibit Q is a true and correct copy of the affidavit of Plaintiff Amy Clare Oseroff.

21.   Attached as Exhibit R is a true and correct copy of the affidavit of Plaintiff Mark S. Peters.

22.   Attached as Exhibit S is a true and correct copy of the affidavit of Plaintiff Lily Nicole Quick.

23.   Attached as Exhibit T is a true and correct copy of the affidavit of Plaintiff Donald Rumph.

24.   Attached as Exhibit U is a true and correct copy of the affidavit of Plaintiff Shawn Rush.

Respectfully submitted this 30 day of November, 2021

/s/ _____

Lalitha D. Madduri

EXHIBIT A

STATE OF NORTH CAROLINA   IN THE GENERAL COURT OF JUSTICE
WAKE COUNTY   SUPERIOR COURT DIVISION
           19 CVS 012667

REBECCA HARPER, *et al.*   )
    Plaintiffs,   )
)
  v.   ) ORDER ON INJUNCTIVE RELIEF
)
Representative DAVID R. LEWIS,)
in his official capacity as Senior)
Chairman of the House Standing)
Committee on Redistricting, *et al.*,)
    Defendants.   )

THIS MATTER came on for hearing on October 24, 2019, before the undersigned

three-judge panel upon Plaintiffs' Motion for Preliminary Injunction, filed September 30,

2019. All adverse parties to this action received the notice required by Rule 65 of the North

Carolina Rules of Civil Procedure.

Procedural History

On February 19, 2016, the current North Carolina congressional districts

(hereinafter "2016 congressional districts") were established by an act of the General

Assembly, N.C. Sess. Laws 2016-1 (hereinafter "S.L. 2016-1"), as a result of litigation in

federal court over the congressional districts originally drawn in 2011. On September 27,

2019, Plaintiffs filed a verified complaint in Superior Court, Wake County, seeking a

declaration that the 2016 congressional districts violate the rights of Plaintiffs and all

Democratic voters in North Carolina under the North Carolina Constitution's Free

Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and Freedom of Speech

and Freedom of Assembly Clauses, Art. I, §§ 12 & 14. Plaintiffs seek to enjoin the future

use of the 2016 congressional districts. On September 30, 2019, this action was assigned to

the undersigned panel by the Chief Justice of the Supreme Court of North Carolina.

On September 30, 2019, Plaintiffs filed a motion for a preliminary injunction seeking to bar Defendants from administering, preparing for, or moving forward with the 2020 primary and general elections in North Carolina for the United States House of Representatives using the 2016 congressional districts. Plaintiffs also filed a motion for expedited briefing and resolution of Plaintiffs' motion for a preliminary injunction. On October 2, 2019, Defendants North Carolina State Board of Elections and its members (collectively hereinafter "State Defendants") notified the Court that, among other things, candidate filing for congressional primaries is set to begin on December 2, 2019. On October 9, 2019, a motion to intervene was filed by three incumbent Congressional Representatives seeking to intervene in this action in both their capacity as Representatives and as residents and voters in three of the congressional districts challenged in Plaintiffs' verified complaint.

On October 10, 2019, the Court granted in part Plaintiffs' motion for expedited briefing, establishing a briefing schedule on Plaintiff's motion for preliminary injunction and setting for hearing Plaintiffs' motion for preliminary injunction and the motion to intervene.

On October 14, 2019, Defendants Representative David R. Lewis, Senator Ralph E. Hise, Jr., Speaker Timothy K. Moore, President Pro Tempore Philip E. Berger, Senator Warren Daniel, and Senator Paul Newton (hereinafter "Legislative Defendants") removed this case to the United States District Court for the Eastern District of North Carolina. On October 21, 2019, State Defendants and Legislative Defendants each filed in federal court a brief in response to Plaintiffs' motion for preliminary injunction in accordance with the Court's October 10, 2019 order. Plaintiffs notified and provided to the Court the

Defendants' briefs on October 22, 2019, and, on the same date, the federal court remanded this case to state court.

On October 22, 2019, the Congressional Representatives seeking to intervene in this case submitted a brief in response to Plaintiffs' motion for preliminary injunction. On October 23, 2019, Plaintiffs filed a motion to strike the Congressional Representatives' response brief, the Congressional Representatives submitted a response brief to Plaintiffs' motion, and Plaintiffs submitted a brief in reply to that response brief. Additionally, on October 23, 2019, Plaintiffs submitted a brief in reply to Legislative Defendants' brief in response to Plaintiffs' motion for preliminary injunction.

These matters came on to be heard on October 24, 2019, during which time the Court granted the Congressional Representatives (hereinafter "Intervenor-Defendants") permissive intervention and notified the parties that Intervenor-Defendants' response brief would be considered by the Court in its discretion. Plaintiffs' motion for preliminary injunction was taken under advisement.

The Court, having considered the pleadings, motions, briefs and arguments of the parties, supplemental materials submitted by the parties, pertinent case law, and the record proper and court file, hereby finds and concludes, for the purposes of this Order, as follows.

Political Question Doctrine

Legislative Defendants contend Plaintiffs' claims—challenges to the validity of an act of the General Assembly that apportions or redistricts the congressional districts of this State—present non-justiciable political questions. Such claims are within the statutorily-provided jurisdiction of this three-judge panel, N.C.G.S. § 1-267.1, and the Court concludes that partisan gerrymandering claims specifically present justiciable issues, as

distinguished from non-justiciable political questions. Such claims fall within the broad, default category of constitutional cases our courts are empowered and obliged to decide on the merits, and not within the narrow category of exceptional cases covered by the political question doctrine. Indeed, as the Supreme Court of the United States recently explained, partisan gerrymandering claims are not "condemn[ed] . . . to echo in the void," because although the federal courthouse doors may be closed, "state constitutions can provide standards and guidance for state courts to apply." *Rucho v. Common Cause*, 139 S. Ct. 2484, 2507 (2019).[1]

<u>Standing of Plaintiffs</u>

Legislative Defendants and Intervenor-Defendants contend that Plaintiffs lack standing to pursue their claims in this action. The North Carolina Constitution, however, provides: "All courts shall be open; every person for an injury done him in his lands, goods, person, or reputation shall have remedy by due course of law; and right and justice shall be administered without favor, denial, or delay." N.C. Const. art. I, § 18. "[B]ecause North Carolina courts are not constrained by the 'case or controversy' requirement of Article III of the United States Constitution, our State's standing jurisprudence is broader than federal law." *Davis v. New Zion Baptist Church*, 811 S.E.2d 725, 727 (N.C. Ct. App. 2018) (quotation marks omitted); *accord Goldston v. State*, 361 N.C. 26, 35, 637 S.E.2d 876, 882 (2006) ("While federal standing doctrine can be instructive as to general principles . . . and for comparative analysis, the nuts and bolts of North Carolina standing doctrine are not coincident with federal standing doctrine.").

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[1] Likewise, Legislative Defendants' and Intervenor-Defendants' contentions that federal law—*i.e.*, the Elections clause and Supremacy clause of the United States Constitution—serves as a bar in state court to Plaintiffs' action seeking to enjoin the 2016 congressional districts on state constitutional grounds is equally unavailing. Our state courts have jurisdiction to hear and decide claims that acts of the General Assembly apportioning or redistricting the congressional districts of this State run afoul of the North Carolina Constitution.

The North Carolina Supreme Court has broadly interpreted Article I, § 18 to mean that "[a]s a general matter, the North Carolina Constitution confers standing on those who suffer harm." *Mangum v. Raleigh Bd. of Adjustment*, 362 N.C. 640, 642, 669 S.E.2d 279, 281 (2008). The "gist of the question of standing" under North Carolina law is whether the party seeking relief has "alleged such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination of difficult constitutional questions." *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879 (quoting *Stanley v. Dep't of Conservation & Dev.*, 284 N.C. 15, 28, 199 S.E.2d 641, 650 (1973)). Although the North Carolina Supreme Court "has declined to set out specific criteria necessary to show standing in every case, [it] has emphasized two factors in its cases examining standing: (1) the presence of a legally cognizable injury; and (2) a means by which the courts can remedy that injury." *Davis*, 811 S.E.2d at 727-28.

Plaintiffs in this case have standing to challenge the congressional districts at issue because Plaintiffs have shown a likelihood of "a personal stake in the outcome of the controversy," *Goldston*, 361 N.C. at 30, 637 S.E.2d at 879, and a likelihood that the 2016 congressional districts cause them to "suffer harm," *Mangum*, 362 N.C. at 642, 669 S.E.2d at 281.

<center>Applicable Legal Standards</center>

At its most basic level, partisan gerrymandering is defined as: "the drawing of legislative district lines to subordinate adherents of one political party and entrench a rival party in power." *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 135 S. Ct. 2652, 2658 (U.S. 2016). Partisan gerrymandering operates through vote dilution—the devaluation of one citizen's vote as compared to others. A mapmaker draws district lines to

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"pack" and "crack" voters likely to support the disfavored party. *See generally Gill v. Whitford*, 138 S. Ct. 1916 (2018).

Plaintiffs claim the 2016 congressional districts are partisan gerrymanders that violate the rights of Plaintiffs and all Democratic voters in North Carolina under the North Carolina Constitution's Free Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and Freedom of Speech and Freedom of Assembly Clauses, Art. I, §§ 12 & 14. Extreme partisan gerrymandering violates each of these provisions of the North Carolina Constitution. *See Common Cause v. Lewis*, 18-CVS-014001, slip. op. at 298-331 (N.C. Sup. Ct. Sept. 3, 2019).

Free Elections Clause

The North Carolina Constitution, in the Declaration of Rights, Article I, § 10, declares that "[a]ll elections shall be free." Our Supreme Court has long recognized the fundamental role of the will of the people in our democratic government: "Our government is founded on the will of the people. Their will is expressed by the ballot." *People ex rel. Van Bokkelen v. Canaday*, 73 N.C. 198, 220 (1875). In particular, our Supreme Court has directed that in construing provisions of the Constitution, "we should keep in mind that this is a government of the people, in which the will of the people--the majority--legally expressed, must govern." *State ex rel. Quinn v. Lattimore*, 120 N.C. 426, 428, 26 S.E. 638, 638 (1897) (citing N.C. Const. art. I, § 2). Therefore, our Supreme Court continued, because elections should express the will of the people, it follows that "all acts providing for elections, should be liberally construed, that tend to promote a fair election or expression of this popular will." *Id.* "[F]air and honest elections are to prevail in this state." *McDonald v. Morrow*, 119 N.C. 666, 673, 26 S.E. 132, 134 (1896). Moreover, in giving meaning to the Free Elections Clause, this Court's construction of the words contained therein must

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therefore be broad to comport with the following Supreme Court mandate: "We think the object of all elections is to ascertain, fairly and truthfully, the will of the people--the qualified voters." *Hill v. Skinner*, 169 N.C. 405, 415, 86 S.E. 351, 356 (1915) (quoting *R. R. v. Comrs.*, 116 N.C. 563, 568, 21 S.E. 205, 207 (1895)).

As such, the meaning of the Free Elections Clause is that elections must be conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. In contrast, extreme partisan gerrymandering—namely redistricting plans that entrench politicians in power, that evince a fundamental distrust of voters by serving the self-interest of political parties over the public good, and that dilute and devalue votes of some citizens compared to others—is contrary to the fundamental right of North Carolina citizens to have elections conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. *See Common Cause*, 18-CVS-014001, slip. op. at 298-307.

Equal Protection Clause

The Equal Protection Clause of the North Carolina Constitution guarantees to all North Carolinians that "[n]o person shall be denied the equal protection of the laws." N.C. Const., art. I, § 19. Our Supreme Court has held that North Carolina's Equal Protection Clause protects "the fundamental right of each North Carolinian to *substantially equal voting power.*" *Stephenson v. Bartlett*, 355 N.C. 354, 379, 562 S.E.2d 377, 394 (2002) (emphasis added). "It is well settled in this State that 'the right to vote *on equal terms* is a fundamental right.'" *Id.* at 378, 562 S.E.2d at 393 (quoting *Northampton Cnty. Drainage Dist. No. One v. Bailey*, 326 N.C. 742, 747, 392 S.E.2d 352, 356 (1990) (emphasis added)).

Although the North Carolina Constitution provides greater protection for voting rights than the federal Equal Protection Clause, our courts use the same test as federal courts in evaluating the constitutionality of challenged classifications under an equal

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protection analysis. *Duggins v. N.C. State Bd. of Certified Pub. Accountant Exam'rs*, 294 N.C. 120, 131, 240 S.E.2d 406, 413 (1978); *Richardson v. N.C. Dep't of Corr.*, 345 N.C. 128, 134, 478 S.E.2d 501, 505 (1996). Generally, this test has three parts: (1) intent, (2) effects, and (3) causation. First, the plaintiffs challenging a districting plan must prove that state officials' "predominant purpose" in drawing district lines was to "entrench [their party] in power" by diluting the votes of citizens favoring their rival. *Ariz. State Legis.*, 135 S. Ct. at 2658. Second, the plaintiffs must establish that the lines drawn in fact have the intended effect by "substantially" diluting their votes. *Common Cause v. Rucho*, 318 F. Supp. 3d 777, 861 (M.D.N.C. 2018). Finally, if the plaintiffs make those showings, the State must provide a legitimate, non-partisan justification (*i.e.*, that the impermissible intent did not cause the effect) to preserve its map. *Rucho*, 139 S. Ct. at 2516 (Kagan, J., dissenting).

Generally, partisan gerrymandering runs afoul of the State's obligation to provide all persons with equal protection of law because, by seeking to diminish the electoral power of supporters of a disfavored party, a partisan gerrymander treats individuals who support candidates of one political party less favorably than individuals who support candidates of another party. *Cf. Lehr v. Robertson*, 463 U.S. 248, 265, 103 S. Ct. 2985 (1983) ("The concept of equal justice under law requires the State to govern impartially.")

As such, extreme partisan gerrymandering runs afoul of the North Carolina Constitution's guarantee that no person shall be denied the equal protection of the laws. *See Common Cause*, 18-CVS-014001, slip. op. at 307-17.

Freedom of Speech and Freedom of Assembly Clauses

The Freedom of Speech Clause in Article I, § 14 of the North Carolina Constitution provides that "[f]reedom of speech and of the press are two of the great bulwarks of liberty and therefore shall never be restrained." The Freedom of Assembly Clause in Article I, § 12

provides, in relevant part, that "[t]he people have a right to assemble together to consult for their common good, to instruct their representatives, and to apply to the General Assembly for redress of grievances."

"There is no right more basic in our democracy than the right to participate in electing our political leaders"—including, of course, the right to "vote." *McCutcheon v. FEC*, 572 U.S. 185, 191, 134 S. Ct. 1434, 1440 (2014) (plurality op.). "[P]olitical belief and association constitute the core of those activities protected by the First Amendment." *Elrod v. Burns*, 427 U.S. 347, 356, 96 S. Ct. 2673, 2681 (1976). In North Carolina, the right to assembly encompasses the right of association. *Feltman v. City of Wilson*, 238 N.C. App. 246, 253, 767 S.E.2d 615, 620 (2014). Moreover, "citizens form parties to express their political beliefs and to assist others in casting votes in alignment with those beliefs." *Libertarian Party of N.C. v. State*, 365 N.C. 41, 49, 707 S.E.2d 199, 204-05 (2011). And "for elections to express the popular will, the right to assemble and consult for the common good must be guaranteed." John V. Orth, *The North Carolina State Constitution* 48 (1995).

It is "axiomatic" that the government may not infringe on protected activity based on the individual's viewpoint. *Rosenberger v. Rector & Visitors of Univ. of Va.*, 515 U.S. 819, 828, 115 S. Ct. 2510, 2516 (1995). The guarantee of free expression "stands against attempts to disfavor certain subjects or viewpoints." *Citizens United v. FEC*, 558 U.S. 310, 340, 130 S. Ct. 876, 898 (2010). Viewpoint discrimination is *most* insidious where the targeted speech is political; "in the context of political speech, . . . [b]oth history and logic" demonstrate the perils of permitting the government to "identif[y] certain preferred speakers" while burdening the speech of "disfavored speakers." *Id.* at 340-41, 130 S. Ct. at 899.

The government may not burden the "speech of some elements of our society in order to enhance the relative voice of others" in electing officials. *McCutcheon*, 572 U.S. at 207, 134 S. Ct. at 1450; *see also Winborne v. Easley*, 136 N.C. App. 191, 198, 523 S.E.2d 149, 154 (1999) ("political speech" has "such a high status" that free speech protections have their "fullest and most urgent application" in this context (quotations marks omitted)). The government also may not retaliate based on protected speech and expression. *See McLaughlin*, 240 N.C. App. at 172, 771 S.E.2d at 579-80. Courts carefully guard against retaliation by the party in power. *See Elrod*, 427 U.S. at 356, 96 S. Ct. at 2681; *Branti v. Finkel*, 445 U.S. 507, 100 S. Ct. 1287 (1980); *Rutan v. Republican Party of Ill.*, 497 U.S. 62, 110 S. Ct. 2729 (1990). When patronage or retaliation restrains citizens' freedoms of belief and association, it is "at war with the deeper traditions of democracy embodied in the First Amendment." *Elrod*, 427 U.S. at 357, 96 S. Ct. at 2682 (quotation marks omitted).

When a legislature engages in extreme partisan gerrymandering, it identifies certain preferred speakers (e.g. Republican voters) while targeting certain disfavored speakers (e.g. Democratic voters) because of disagreement with the views they express when they vote. Then, disfavored speakers are packed and cracked into legislative districts with the aim of diluting their votes and, in cracked districts, ensuring that these voters are significantly less likely, in comparison to favored voters, to be able to elect a candidate who shares their views. Moreover, a legislature that engages in extreme partisan gerrymandering burdens the associational rights of disfavored voters to "instruct their representatives, and to apply to the General Assembly for redress of grievances." N.C. Const. art. I, § 12. As such, extreme partisan gerrymandering runs afoul of these important guarantees in the North Carolina Constitution of the freedom of speech and the right of the people of our State to assemble together to consult for their common good, to instruct their

representatives, and to apply to the General Assembly for redress of grievances. *See Common Cause*, 18-CVS-014001, slip. op. at 317-31.

Injunctive Relief

"It is well settled in this State that the courts have the power, and it is their duty in proper cases, to declare an act of the General Assembly unconstitutional—but it must be plainly and clearly the case. If there is any reasonable doubt, it will be resolved in favor of the lawful exercise of their powers by the representatives of the people." *City of Asheville v. State*, 369 N.C. 80, 87-88, 794 S.E.2d 759, 766 (2016) (quoting *Glenn v. Bd. of Educ.*, 210 N.C. 525, 529-30, 187 S.E. 781, 784 (1936)); *State ex rel. Martin v. Preston*, 325 N.C. 438, 449, 385 S.E.2d 473, 478 (1989).

"The purpose of a preliminary injunction is ordinarily to preserve the *status quo* pending trial on the merits. Its issuance is a matter of discretion to be exercised by the hearing judge after a careful balancing of the equities." *State ex rel. Edmisten v. Fayetteville Street Christian School*, 299 N.C. 351, 357, 261 S.E.2d 908, 913 (1980). A preliminary injunction is an "extraordinary remedy" and will issue "only (1) if a plaintiff is able to show *likelihood* of success on the merits of his case and (2) if a plaintiff is likely to sustain irreparable loss unless the injunction is issued, or if, in the opinion of the Court, issuance is necessary for the protection of a plaintiff's rights during the course of litigation." *A.E.P. Industries, Inc. v. McClure*, 308 N.C. 393, 401, 302 S.E.2d 754, 759-60 (1983) (emphasis in original); *see also* N.C.G.S. § 1A-1, Rule 65(b). When assessing the preliminary injunction factors, the trial judge "should engage in a balancing process, weighing potential harm to the plaintiff if the injunction is not issued against the potential harm to the defendant if injunctive relief is granted. In effect, the harm alleged by the plaintiff must satisfy a

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standard of relative substantiality as well as irreparability." *Williams v. Greene,* 36 N.C. App. 80, 86, 243 S.E.2d 156, 160 (1978).

<center>*Status Quo*</center>

The 2011 congressional districts, enacted by the General Assembly on July 28, 2011, were struck down as unconstitutional racial gerrymanders and ordered to be redrawn on February 5, 2016. *See Harris v. McCrory,* 159 F. Supp. 3d 600, 627 (M.D.N.C. 2016). As a result, the 2016 congressional districts were then enacted by the General Assembly on February 19, 2016. N.C. Sess. Laws 2016-1. Plaintiffs' challenge to the 2016 congressional districts is a challenge to S.L. 2016-1 as enacted; hence, the status quo which Plaintiffs desire to preserve is the existing state of affairs prior to the enactment of S.L. 2016-1. Therefore, the existing state of affairs—*i.e.*, the status quo—prior to the enactment of S.L. 2016-1 was the period in which no lawful congressional district map for North Carolina existed absent the enactment of a remedial map by the General Assembly.

<center>*Plaintiffs are Likely to Succeed on the Merits*</center>

Quite notably in this case, the 2016 congressional districts have already been the subject of years-long litigation in federal court arising from challenges to the districts on partisan gerrymandering grounds. *See Rucho,* 318 F. Supp. 3d 777. As such, there is a detailed record of both the partisan intent and the intended partisan effects of the 2016 congressional districts drawn with the aid of Dr. Thomas Hofeller and enacted by the General Assembly. *See Rucho,* 318 F. Supp. 3d at 803-10 (detailing the history of the drawing and enactment of the 2016 congressional districts); *see also* Declaration of Elisabeth S. Theodore (attaching as exhibits a number of documents from the record in federal court); *Rucho,* 139 S. Ct. at 2491-93.

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For instance, Dr. Hofeller was directed by legislators "to use political data —
precinct-level election results from all statewide elections, excluding presidential elections,
dating back to January 1, 2008 — in drawing the remedial plan," and was further
instructed to "use that political data to draw a map that would maintain the existing
partisan makeup of the state's congressional delegation, which, as elected under the
racially gerrymandered plan, included 10 Republicans and 3 Democrats." *Rucho*, 318 F.
Supp. 3d at 805 (internal citations omitted).

As another example, the redistricting committee approved several criteria for the
map-drawing process, including the use of past election data (*i.e.,* "Political Data") and
another labeled "Partisan Advantage," which was defined as "The partisan makeup of the
congressional delegation under the enacted plan is 10 Republicans and 3 Democrats. The
Committee shall make reasonable efforts to construct districts in the 2016 Contingent
Congressional Plan to maintain the current partisan makeup of North Carolina's
congressional delegation." *Id.* at 807. In explaining these two criteria, Representative
David Lewis "'acknowledged freely that this would be a political gerrymander,' which he
maintained was 'not against the law,'" *id.* at 808 (citation omitted), while also going on to
state that he "propose[d] that [the Committee] draw the maps to give a partisan advantage
to 10 Republicans and 3 Democrats because [he] d[id] not believe it[would be] possible to
draw a map with 11 Republicans and 2 Democrats," *id.* (alterations in original).

Moreover, when drawing the 2016 congressional districts, Dr. Hofeller used "an
aggregate variable he created to predict partisan performance" all while "constantly aware
of the partisan characteristics of each county, precinct, and VTD." *Id.* at 805-06.

Finally, the redistricting committee, and ultimately the General Assembly as a
whole, approved the 2016 congressional districts by party-line vote. *Id.* at 809.

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In light of the above, this Court agrees with Plaintiffs and finds there is a substantial likelihood that Plaintiffs will prevail on the merits of this action by showing beyond a reasonable doubt that the 2016 congressional districts are extreme partisan gerrymanders in violation of the North Carolina Constitution's Free Elections Clause, Art. I, § 10; Equal Protection Clause, Art. I, § 19; and Freedom of Speech and Freedom of Assembly Clauses, Art. I, §§ 12 & 14.

Plaintiffs Will Suffer Irreparable Loss Unless the Injunction is Issued

The loss to Plaintiffs' fundamental rights guaranteed by the North Carolina Constitution will undoubtedly be irreparable if congressional elections are allowed to proceed under the 2016 congressional districts. As discussed above, Plaintiffs' have shown a likelihood of succeeding on the merits of their claims that these districts violate multiple fundamental rights guaranteed by the North Carolina Constitution. And as Defendants have emphasized, the 2020 primary elections for these congressional districts—the final congressional elections of this decade before the 2020 census and subsequent decennial redistricting—are set to be held in March of 2020 with the filing period beginning December 2, 2019.

As such, this Court finds that Plaintiffs are likely to sustain irreparable loss to their fundamental rights guaranteed by the North Carolina Constitution unless the injunction is issued, and likewise, issuance is necessary for the continued protection of Plaintiffs' fundamental rights guaranteed by the North Carolina Constitution during the course of the litigation.

A Balancing of the Equities Weighs in Favor of Plaintiffs

On one hand, Legislative Defendants contend a general harm to them will result from issuing the injunction because the General Assembly will be prevented from

effectuating an act of the General Assembly. On the other hand, Plaintiffs' and all North Carolinians' fundamental rights guaranteed by the North Carolina Constitution will be irreparably lost, as discussed above, if the injunction is not granted. Simply put, the people of our State will lose the opportunity to participate in congressional elections conducted freely and honestly to ascertain, fairly and truthfully, the will of the people. The Court finds that this specific harm to Plaintiffs absent issuance of the injunction outweighs the potential harm to Legislative Defendants if the injunction is granted.

Legislative Defendants and Intervenor Defendants also contend the issuance of the injunction will result in disruption, confusion, and uncertainty in the electoral process for them, candidates, election officials, and the voting public. But, again, such a proffered harm does not outweigh the specific harm to Plaintiffs from the irreparable loss of their fundamental rights guaranteed by the North Carolina Constitution. Moreover, while State Defendants would prefer not to move elections or otherwise change the current schedule for the 2020 congressional primary election, they recognize that proceeding under the 2016 congressional districts "would require the Board to administer an election that violates the constitutional rights of North Carolina voters" and acknowledge that the election schedule can be changed if necessary. State Defs. Response Brief at 2. In that vein, State Defendants agree with Plaintiffs that "it would be appropriate for this Court to issue an injunction that relieves the Board of any duty to administer elections using an unconstitutionally gerrymandered congressional redistricting plan." *Id.*

Finally, Legislative Defendants and Intervenor-Defendants contend Plaintiffs simply waited too long to bring their challenge to the 2016 congressional districts in state court. Plaintiffs, however, filed this action in state court only a matter of months after litigation reached its conclusion in federal court, at a time still prior to the candidate filing

period. While the timing of Plaintiffs' action does weigh against Plaintiffs, the Court does not find that the timing of Plaintiffs' filing of this action should bar them from seeking equitable relief in the form of the requested preliminary injunction.

Consequently, after weighing the potential harm to Plaintiffs if the injunction is not issued against the potential harm to Defendants if injunctive relief is granted, this Court concludes the balance of the equities weighs in Plaintiffs' favor. Indeed, the harm alleged by Plaintiffs is both substantial and irreparable should congressional elections in North Carolina proceed under the 2016 congressional districts.

<u>Conclusion</u>

Under these circumstances, the Court, in its discretion and after a careful balancing of the equities, concludes that the requested injunctive relief shall issue in regard to the 2016 congressional districts. The Court further concludes that security is required of Plaintiffs pursuant to Rule 65(c) of the North Carolina Rules of Civil Procedure to secure the payment of costs and damages in the event it is later determined this relief has been improvidently granted.

This Court recognizes the significance and the urgency of the issues presented by this litigation, particularly when considering the impending 2020 congressional primary elections and all accompanying deadlines, details, and logistics. This Court also is mindful of its responsibility not to disturb an act of the General Assembly unless it plainly and clearly, without any reasonable doubt, runs counter to a constitutional limitation or prohibition. For these reasons, the Court will, upon the forthcoming filing of Plaintiffs' motion for summary judgment, provide for an expedited schedule so that Plaintiffs' dispositive motion may be heard prior to the close of the filing period for the 2020 primary election.

This Court observes that the consequences, as argued by Legislative Defendants and Intervenor-Defendants, resulting from a delay in the congressional primary—*e.g.*, decreased voter turnout, additional costs and labor for the State Board of Elections—would be both serious and probable should the primary schedule be adjusted as a result of this Order and Plaintiffs' ultimate success on the merits of this action. But as discussed above, should Plaintiffs prevail through motion or trial, these consequences pale in comparison to voters of our State proceeding to the polls to vote, yet again, in congressional elections administered pursuant to maps drawn in violation of the North Carolina Constitution.

This Court, however, notes that these disruptions to the election process need not occur, nor may an expedited schedule for summary judgment or trial even be needed, should the General Assembly, on its own initiative, act immediately and with all due haste to enact new congressional districts. This Court does not presume, at this early stage of this litigation, to have any authority to compel the General Assembly to commence a process of enacting new Congressional districts, and this Court recognizes that such a decision is wholly within the discretion of a co-equal branch of government. The General Assembly, however, has recently shown it has the capacity to enact new legislative districts in a short amount of time in a transparent and bipartisan manner, and that the resulting legislative districts, having been approved by this Court, are districts that are more likely to achieve the constitutional objective of allowing for elections to be conducted more freely and honestly to ascertain, fairly and truthfully, the will of the people. *See Common Cause v. Lewis*, 18-CVS-014001 (N.C. Sup. Ct., October 28, 2019). The Court respectfully urges the General Assembly to adopt an expeditious process, as it did in response to this Court's mandate in the September 3, 2019, Judgment in *Common Cause v. Lewis*, that ensures full transparency and allows for bipartisan participation and consensus to create new

17

congressional districts that likewise seek to achieve this fundamental constitutional objective.

Accordingly, the Court, in its discretion and for good cause shown, hereby ORDERS that Plaintiffs' motion for preliminary injunction is GRANTED as follows:

1. Legislative Defendants and State Defendants, their officers, agents, servants, employees and attorneys and any person in active concert or participation with them are hereby enjoined from preparing for or administering the 2020 primary and general elections for congressional districts under the 2016 congressional districts established by S.L. 2016-1.
2. Security in an amount of $1,000 shall be required of Plaintiffs pursuant to Rule 65.
3. The Court retains jurisdiction to move the primary date for the congressional elections, or all of the State's 2020 primaries, including for offices other than Congressional Representatives, should doing so become necessary to provide effective relief in this case.

SO ORDERED, this the 28th day of October, 2019.

/s/ **Paul C. Ridgeway**
Paul C. Ridgeway, Superior Court Judge

/s/ **Joseph N. Crosswhite**
Joseph N. Crosswhite, Superior Court Judge

/s/ **Alma L. Hinton**
Alma L. Hinton, Superior Court Judge

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served upon the parties by

emailing a copy thereof to the address below, in accordance with the October 10, 2019 Case

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This the 28th day of October, 2019.

Kellie Z. Myers
Trial Court Administrator – 10th Judicial District
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Admitted Pro Hac Vice

2

EXHIBIT B

STATE OF NORTH CAROLINA   IN THE GENERAL COURT OF JUSTICE
WAKE COUNTY   SUPERIOR COURT DIVISION
                                     19 CVS 012667

REBECCA HARPER, *et al.*   )
                    Plaintiffs,)
)
            v.   )   ORDER
)
Representative DAVID R. LEWIS,   )
in his official capacity as Senior)
Chairman of the House Standing   )
Committee on Redistricting, *et al.,*)
                    Defendants.)

THIS MATTER comes before the undersigned three-judge panel upon its own

motion pursuant to its inherent authority and discretion to manage proceedings before the

Court.

Plaintiffs in this litigation challenge the congressional districts established by an act

of the North Carolina General Assembly in 2016, N.C. Sess. Laws 2016-1 (hereinafter S.L.

2016-1), claiming the districts violate the rights of Plaintiffs and all Democratic voters in

North Carolina under the North Carolina Constitution.

On October 28, 2019, this Court granted Plaintiffs' motion for a preliminary

injunction, enjoining Legislative Defendants and State Defendants from preparing for or

administering the 2020 primary and general elections for Congressional Representatives

under the 2016 congressional districts established by S.L. 2016-1. Plaintiffs seek to

permanently enjoin the future use of the 2016 congressional districts and have filed a

motion for summary judgment, scheduled to be heard on December 2, 2019.

In this Court's October 28, 2019, Order granting the preliminary injunction, the

Court noted that summary judgment or trial may not be needed in the event the General

Assembly, on its own initiative, acted immediately and with all due haste to enact new

congressional districts. The Court suggested the General Assembly proceed in a manner that ensured full transparency and allowed for bipartisan participation and consensus that would result in congressional districts more likely to achieve the constitutional objective of allowing for those elections to be conducted more freely and honestly to ascertain, fairly and truthfully, the will of the people. On November 15, 2019, new congressional districts were established by an act of the General Assembly. N.C. Sess. Laws 2019-249 (hereinafter S.L. 2019-249). Shortly thereafter on November 15, 2019, Legislative Defendants filed a motion for summary judgment arguing Plaintiffs' present action—challenging the constitutionality of S.L. 2016-1—is moot, and Plaintiffs filed a response and motion for expedited review of the newly-enacted congressional districts.

Section 163-106.2 of our General Statutes provides that "[c]andidates seeking party primary nominations for the following offices shall file their notice of candidacy with the State Board no earlier than 12:00 noon on the first Monday in December and no later than 12:00 noon on the third Friday in December preceding the primary: . . . Members of the House of Representatives of the United States." N.C.G.S. § 163-106.2(a). In the Court's October 28, 2019, Order, the Court retained jurisdiction to adjust the State's 2020 congressional primary elections should doing so become necessary to provide effective relief in this case. In light of the recent developments in this litigation, including the enactment of S.L. 2019-249, Legislative Defendants' motion for summary judgment, and Plaintiffs' motion for the Court's review of S.L. 2019-249, and to allow the Court sufficient opportunity to fully consider the significant issues presented by the parties, the Court will enjoin the filing period for the 2020 congressional primary elections in North Carolina until further order of the Court.

Accordingly, the Court, in its discretion and pursuant to its inherent authority,

hereby ORDERS that:

1. On the Court's own motion, the filing period provided by N.C.G.S. § 163-106.2(a) is hereby enjoined for only the 2020 congressional primary elections, and the North Carolina State Board of Elections shall not accept for filing any notices of candidacy from candidates seeking party primary nominations for the House of Representatives of the United States until further order of the Court.

2. Any party to this action may respond to Plaintiffs' motion for review of the newly-enacted congressional districts, S.L. 2019-249, by submitting a response brief to the Court by 11:59 p.m. on November 22, 2019, in the manner set forth in the Case Management Order. Plaintiffs shall have until 11:59 p.m. on November 26, 2019, to submit a reply to any response brief in the manner set forth in the Case Management Order.

3. The Court's November 1, 2019, Order establishing a briefing schedule for summary judgment motions remains in effect.

4. The following will be heard by the Court at 9:00 a.m. on December 2, 2019:
   a. Plaintiffs' motion for summary judgment;
   b. Legislative Defendants' motion for summary judgment; and,
   c. Plaintiffs' motion for review of S.L. 2019-249.

SO ORDERED, this the 20th day of November, 2019.

<div align="right">

/s/ **Paul C. Ridgeway**
Paul C. Ridgeway, Superior Court Judge

/s/ **Joseph N. Crosswhite**
Joseph N. Crosswhite, Superior Court Judge

/s/ **Alma L. Hinton**
Alma L. Hinton, Superior Court Judge

</div>

EXHIBIT C

STATE OF NORTH CAROLINA   IN THE GENERAL COURT OF JUSTICE
WAKE COUNTY   SUPERIOR COURT DIVISION
                      Case No. 19-CVS-12667

REBECCA HARPER, et al.,   )
)
        Plaintiffs,   )
)
   vs.   )
)
REPRESENTATIVE DAVID R. LEWIS,)
et al.,   )
)
        Defendants.   )

DECISION ON NEW CONGRESSIONAL DISTRICTS

HONORABLE JUDGES PAUL C. RIDGEWAY, JR.,

ALMA L. HINTON AND JOSEPH N. CROSSWHITE

MONDAY, DECEMBER 2, 2019

By: Denise Myers Byrd, CSR 8340, RPR

1   JUDGE RIDGEWAY: All right. Ladies and

2 gentlemen, we've had an opportunity to review these

3 matters and confer among ourselves, and I will read to

4 you the unanimous decision of this Court, which is

5 comprised of Judge Joseph Crosswhite and

6 Judge Alma Hinton and myself, and my colleagues have

7 asked that I read this into the record.

8   Three months ago on September 3rd, 2019, this

9 court announced its judgment in Common Cause versus

10 Lewis, and declared that extreme partisan gerrymandering

11 was unconstitutional under the North Carolina

12 constitution. In the 90 days following that ruling, the

13 voters of North Carolina now have new General Assembly,

14 House, and Senate maps drafted by the General Assembly

15 and approved by the courts that remedy the extreme

16 partisan gerrymandering of past maps. And as a result

17 of this litigation that brings us here today, this

18 Court -- after this Court preliminarily enjoined the

19 further use of the 2016 congressional maps, the voters

20 of North Carolina now have a new congressional map,

21 namely the one enacted by the General Assembly on

22 November 15, 2019.

23   Moreover, in this same 90-day period, the

24 citizens of North Carolina, for the first time, were

25 witnesses to the drafting of their voting districts.

2

1   The new General Assembly districts and the congressional

2   districts were not drawn in the basement of a political

3   operative's home, as was the case with prior maps, but

4   were drawn in open by the General Assembly in public

5   hearings with live-stream audio and video, in a process

6   that began with non-partisan base maps, which were then

7   amended without reference to past election data.

8   Much has changed with respect to North Carolina

9   redistricting in the past three months. Three months

10 from today, voters in North Carolina are scheduled to

11 vote in the March 2nd, 2020, primary election. Among

12 the many important constitutional and legal issues

13 argued today, the most critical one for the Court is a

14 practical question: Whether the Court should exercise

15 its broad equitable authority to delay the primary

16 election for congressional elections.

17   The Court has considered the nature of the

18 claims likely to be asserted should further review of

19 the newly enacted congressional maps be undertaken. In

20 sum, Plaintiffs contend the 2019 congressional districts

21 bear many of the same constitutional infirmities as its

22 predecessor, the 2016 constitutional map --

23 congressional map, and that these infirmities compel

24 further remedy.

25   In the short time that the parties have had

3

1   since the enactment of the new congressional districts

2   to frame the issues surrounding the challenge to the

3   newly enacted congressional districts, it is evident

4   that many of these challenges raise significant factual

5   issues that must be resolved prior to the Court reaching

6   the legal conclusion of the constitutionality of these

7   maps.

8   For example, just one of the significant

9   factual disputes that must be resolved by the Court is

10 as follows: Legislative Defendants, while denying any

11 partisan intent in drawing the new congressional

12 districts, argue that the ultimate result of the

13 map-drawing process is a map that shows no extreme

14 partisan gerrymandering because it yields eight

15 Republican-leaning districts and five Democratic-leaning

16 districts, as opposed to the 2016 map which yielded 10

17 Republican-leaning districts and 3 Democrat. This

18 8-to-5 split, the Legislative Defendants point out, is

19 the same as the most frequent and most likely outcome of

20 the thousands of simulations generated by Plaintiffs'

21 experts. Legislative Defendants argue that to advocate

22 for a different split, say 7 to 6, is to advocate for a

23 partisan result far less likely to occur through

24 non-partisan map drafting, according to Plaintiffs' own

25 expert simulations.

4

1   Plaintiffs, on the other hand, argue that one

2 should not focus on the numerical split but rather

3 concentrate on -- or rather the concentration of

4 Democrats in the 5 Democratic-leaning districts and the

5 concentration of Republicans in the 8 Republican-leaning

6 districts which show, according to the Plaintiffs, an

7 intention to pack voters in into districts making each

8 district impervious to the true will of voters and to

9 lock in the 8-to-5 split in virtually all realistic

10 election environments.

11   But Legislative Defendants disagree, saying

12 that the districts are not as impervious as the

13 plaintiffs contend because when their expert used widely

14 cited online redistricting tool planscore.org to analyze

15 the newly enacted districts, he reported that

16 the PlanScore analysis of the 2019 congressional maps

17 show 7 Democratic-leaning districts to 6 Republican

18 districts. Plaintiffs challenge the accuracy of the

19 PlanScore algorithm.

20   Rulings on factual issues such as this cannot

21 be hastily made by this Court. Our judicial system

22 operates under a rule of law. Our judicial decision --

23 decisions are forged in the crucible of an adversarial

24 process. The decision of this Court in Common Cause

25 versus Lewis that declared the legislative districts

5

1   enacted by the legislative -- by the General Assembly

2   for House and Senate districts to be unconstitutional

3   was the week of nearly a year of vigorous adversarial

4   litigation culminating in a two-week trial.

5   Likewise, the record before the Court

6   supporting its preliminary injunction of the 2016

7   congressional maps was based on a record compiled before

8   a federal three-judge panel through vigorous adversarial

9   litigation that spanned nearly three years. The

10   thorough and methodical judicial review of redistricting

11   issues is not merely necessitated by the complexity of

12   redistricting challenges, which is certainly a factor,

13   but more importantly is necessary because the

14   Plaintiffs, in challenging maps crafted by the General

15   Assembly, are required through evidence and law to

16   overcome the strong presumption of the constitutionality

17   of acts of the General Assembly and to persuade the

18   Court that there is no reasonable doubt that the

19   districts are unconstitutional and cannot be upheld on

20   any ground. Due process does not allow shortcuts to a

21   thorough and complete judicial review.

22   Much has been argued as to whether this action

23   is moot due to the enactment of the new congressional

24   districts. The Court does not reach that issue today but

25   takes this issue under advisement.

6

1   But one thing is for certain: The Court, in

2   entering its preliminary injunction on October 28, 2019,

3   expressed grave concerns about delaying and disrupting

4   the voting process and urged the General Assembly to

5   adopt a new congressional map through a process similar

6   to the one undertaken to remedy the House and Senate

7   maps in the Common Cause versus Lewis litigation. The

8   General Assembly did enact a new congressional map, and

9   although one can certainly argue that the process was

10 flawed or that the result is far from ideal, the net

11 result is that the grievous -- grievously flawed 2016

12 congressional map has been replaced.

13   This Court's concern about delaying the

14 electoral process is even more pronounced today than on

15 October 28th. In this regard, the Court finds that the

16 balance of equities has shifted over the past month.

17 This action was commenced by the Plaintiffs on

18 September 27, 2019, late in the election cycle. Had it

19 been commenced earlier, say immediately after the

20 United States Supreme Court June 2019 ruling in Rucho

21 versus Common Cause, the adversarial process could more

22 fully have run its course to allow for a more thoughtful

23 and informed decision. As a practical matter, in the

24 Court's view, there's simply not sufficient time to

25 fully develop the factual record necessary to decide the

7

1 constitutional challenges to the new congressional

2 districts without significantly delaying the primary

3 elections.

4   After fully considering the record proper and

5 the arguments of counsel, the Court has determined that

6 it will not invoke its equitable authority to further

7 delay the election of members of Congress in

8 North Carolina. It is time for the citizens to vote.

9 The injunction entered by the Court on November 20,

10 2019, delaying the filing period for congressional

11 candidates until further order of this Court is set

12 aside, and it is ordered that the North Carolina State

13 Board of Elections may immediately accept for filing any

14 notices of candidacy from candidates seeking party

15 primary nominations for the United States House of

16 Representatives for congressional districts as defined

17 by the newly enacted Session Law 2019-249, which we've

18 also referred to as House Bill 1028.

19   Much has changed with respect to redistricting

20 in North Carolina in the past 90 days, both with respect

21 to the law and with respect to the process by which maps

22 have been drawn. The results are not perfect, and

23 indeed some may contend that the results are far from

24 perfect, but the current legislative and congressional

25 maps resulting from a decade of litigation will

8

1   themselves be replaced after the 2020 election cycle

2   because of the upcoming decennial census. It is the

3   Court's fervent hope that the past 90 days becomes a

4   foundation for future redistricting in North Carolina

5   and that future maps are crafted through a process

6   worthy of public confidence and a process that yields

7   elections that are conducted freely and honestly to

8   ascertain fairly and truthfully the will of the people.

9   So ordered.

10   --oOo--

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1   STATE OF NORTH CAROLINA   )
)   C E R T I F I C A T E
2   COUNTY OF WAKE   )

3

4   I, DENISE MYERS BYRD, Court Reporter and Notary

5   Public, do hereby certify that the transcription of the

6   recorded Decision by Superior Court Three-Judge Panel for

7   Redistricting Challenges was taken down by me

8   stenographically to the best of my ability and thereafter

9   transcribed under my supervision; and that the foregoing

10 pages, inclusive, constitute a true and accurate

11 transcription of said recording.

12   Signed this the 22nd day of April 2020.

13

14

15

16   Denise Myers Byrd
                            CSR 8240, RPR, CLR 102409-2
17

18

19

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EXHIBIT D

2016 Contingent Congressional Plan Committee Adopted Criteria

Equal Population

The Committee will use the 2010 federal decennial census data as the sole basis of population for the establishment of districts in the 2016 Contingent Congressional Plan. The number of persons in each congressional district shall be as nearly as equal as practicable, as determined under the most recent federal decennial census.

Contiguity

Congressional districts shall be comprised of contiguous territory. Contiguity by water is sufficient.

Political data

The only data other than population data to be used to construct congressional districts shall be election results in statewide contests since January 1, 2008, not including the last two presidential contests. Data identifying the race of individuals or voters shall not be used in the construction or consideration of districts in the 2016 Contingent Congressional Plan. Voting districts ("VTDs") should be split only when necessary to comply with the zero deviation population requirements set forth above in order to ensure the integrity of political data.

Partisan Advantage

The partisan makeup of the congressional delegation under the enacted plan is 10 Republicans and 3 Democrats. The Committee shall make reasonable efforts to construct districts in the 2016 Contingent Congressional Plan to maintain the current partisan makeup of North Carolina's congressional delegation.

Twelfth District

The current General Assembly inherited the configuration of the Twelfth District from past General Assemblies. This configuration was retained because the district had already been heavily litigated over the past two decades and ultimately approved by the courts. The Harris court has criticized the shape of the Twelfth

District citing its "serpentine" nature. In light of this, the Committee shall construct districts in the 2016 Contingent Congressional Plan that eliminate the current configuration of the Twelfth District.

Compactness

In light of the Harris court's criticism of the compactness of the First and Twelfth Districts, the Committee shall make reasonable efforts to construct districts in the 2016 Contingent Congressional Plan that improve the compactness of the current districts and keep more counties and VTDs whole as compared to the current enacted plan. Division of counties shall only be made for reasons of equalizing population, consideration of incumbency and political impact. Reasonable efforts shall be made not to divide a county into more than two districts.

Incumbency

Candidates for Congress are not required by law to reside in a district they seek to represent. However, reasonable efforts shall be made to ensure that incumbent members of Congress are not paired with another incumbent in one of the new districts constructed in the 2016 Contingent Congressional Plan.

EXHIBIT E

Joint Meeting of Committees
August 12, 2021
House Committee on Redistricting
Senate Committee on Redistricting and Elections

Criteria Adopted by the Committees

- **Equal Population.** The Committees will use the 2020 federal decennial census data as the sole basis of population for the establishment of districts in the 2021 Congressional, House, and Senate plans. The number of persons in each legislative district shall be within plus or minus 5% of the ideal district population, as determined under the most recent federal decennial census. The number of persons in each congressional district shall be as nearly as equal as practicable, as determined under the most recent federal decennial census.

- **Contiguity.** No point contiguity shall be permitted in any 2021 Congressional, House, and Senate plan. Congressional, House, and Senate districts shall be compromised of contiguous territory. Contiguity by water is sufficient.

- **Counties, Groupings, and Traversals.** The Committees shall draw legislative districts within county groupings as required by *Stephenson v. Bartlett*, 355 N.C. 354, 562 S.E.2d 377 (2002) (*Stephenson I*), *Stephenson v. Bartlett*, 357 N.C. 301, 582 S.E.2d 247 (2003) (*Stephenson II*), *Dickson v. Rucho*, 367 N.C. 542, 766 S.E.2d 238 (2014) (*Dickson I*) and *Dickson v. Rucho*, 368 N.C. 481, 781 S.E. 2d 460 (2015) (*Dickson II*). Within county groupings, county lines shall not be traversed except as authorized by *Stephenson I*, *Stephenson II*, *Dickson I*, and *Dickson II*.

  Division of counties in the 2021 Congressional plan shall only be made for reasons of equalizing population and consideration of double bunking. If a county is of sufficient population size to contain an entire congressional district within the county's boundaries, the Committees shall construct a district entirely within that county.

- **Racial Data.** Data identifying the race of individuals or voters *shall not* be used in the construction or consideration of districts in the 2021 Congressional, House, and Senate plans. The Committees will draw districts that comply with the Voting Rights Act.

- **VTDs.** Voting districts ("VTDs") should be split only when necessary.

- **Compactness.** The Committees shall make reasonable efforts to draw legislative districts in the 2021 Congressional, House and Senate plans that are compact. In doing so, the Committee may use as a guide the minimum Reock ("dispersion") and Polsby-Popper ("permiter") scores identified by Richard H. Pildes and Richard G. Neimi in *Expressive Harms, "Bizarre Districts," and Voting Rights: Evaluating Election-District Appearances After Shaw v. Reno*, 92 Mich. L. Rev. 483 (1993).

- **Municipal Boundaries.** The Committees may consider municipal boundaries when drawing districts in the 2021 Congressional, House, and Senate plans.

- **Election Data.** Partisan considerations and election results data *shall not* be used in the drawing of districts in the 2021 Congressional, House, and Senate plans.

- **Member Residence.** Member residence may be considered in the formation of legislative and congressional districts.

- **Community Consideration.** So long as a plan complies with the foregoing criteria, local knowledge of the character of communities and connections between communities may be considered in the formation of legislative and congressional districts.

EXHIBIT F

TRANSCRIPTION OF AUDIO FILE

NORTH CAROLINA HOUSE COMMITTEE

ON REDISTRICTING

OCTOBER 5, 2021

_____

DIGITAL EVIDENCE GROUP

1730 M Street, NW, Suite 812

Washington, D.C. 20036

(202) 232-0646

 1   UNKNOWN MALE: House Committee on

 2   Redistricting, Tuesday, October 5, 2021, 643 LOB.

 3   CHAIRMAN HALL: Committee will come to

 4   order. The Chair apologizes for delay in getting

 5   started this afternoon. Thanks to the committee

 6   members for their patience.

 7   Members, I want to start off by thanking

 8   you all, the members, staff, and the public who

 9   chose to participate in our public hearings across

10   the state over the last several weeks. I think we

11   heard varying opinions. It was great to see folks

12   engaged, and we had members, many -- many member,

13   not even just the folks on this committee, but

14   several members of the House and the Senate, who are

15   not on this committee, who attended those meetings

16   and gave folks a chance to be heard about what they

17   want this process to look like.

18   The purpose of today's meeting is to --

19   just to do some Housekeeping to give folks an idea

20   of what the map-drawing process is going to look

21   like. And we anticipate, beginning tomorrow,

22   starting the map-drawing process, and so we want to

23   lay out very clearly what the criteria will be -- or

24   rather the rules will be for this committee for

25   drawing maps.

 1   So we'll just jump right into it. We're

 2   going to have four terminals. And if you look

 3   around this room, you see the big screens. There

 4   are going to be four of those. One will be

 5   dedicated to the chair of this committee. One will

 6   be dedicated to the minority leader, or his

 7   designee. I should have said on the first station,

 8   it will be dedicated to the chairman or chair's

 9   designee. And then the other two will be for any

10   other committee member, or any member of the House

11   who wishes to come in and draw on those terminals.

12   For now, the plan is to go from 9:00 to

13   5:00 each day. So we'll come in, gavel in at 9

14   o'clock. This committee room will stay open

15   throughout the day. Those of you who have been

16   through this before, you know it's not like a

17   typical committee where we're always with a chair

18   standing up here, like I am right now. What we

19   typically do, we'll gavel in, and folks can go draw.

20   We may take breaks throughout the day. We

21   may just leave the committee room open. We want to

22   be cognizant of staff, let them be able to eat

23   lunch, and that sort of thing, so we may take a few

24   breaks and there. But by and large, the committee

25   room is going to be open from 9:00 to 5:00. We're

Page 4

1   going to plan to do that Monday through Friday, for

2   now.

3   So, as of right now, chair anticipates

4   having this committee room open throughout the rest

5   of this week, until Friday at 5 o'clock. But the

6   chair will say that if significant progress is made,

7   we may not keep the committee open all day on

8   Friday, so that we don't have to keep staff here.

9   And obviously, folks will be -- members will be

10 traveling back to their districts. To prevent them

11 from having to travel back on Friday night, we may

12 go ahead and may not have a committee meeting Friday

13 or may end the committee early on Friday. So just

14 wait and see on that front.

15   And this is a rule that I want to make sure

16 all members are clear on, but this committee, and

17 the House as a whole, will only consider maps that

18 are drawn in this committee room, on one of the four

19 stations. So if a map is not drawn on one of these

20 four stations, in this committee room, during those

21 committee hours that the committee is open, then

22 those maps will not be considered for a vote by this

23 committee, and of course, will not be considered for

24 a vote by the House.

25   And we'll be able to know because when you

 1   put a map into one of these computers, that becomes

 2   a matter of public record, and we can tell which

 3   were drawn on these computers. It has to be drawn

 4   in this committee room.

 5   When this committee is open, we'll maintain

 6   a live stream and live audio during the whole time

 7   of map-drawing, so that the process will be, we

 8   believe, just about as transparent as we humanly can

 9   do. And that's what we heard in public comment. We

10   heard folks say, "We want a transparent process."

11   Well, that's what we're going to give the

12   public. We're going to give the members of this

13   body and the public a transparent process where we

14   draw maps in this room with a live audio feed and a

15   live video feed. And we're going to create a rule

16   that we're only going to consider the maps that are

17   drawn in this room, in the House, in this committee,

18   and ultimately, in the House.

19   Members, we're going to continue to have

20   session, of course, regular session, throughout this

21   process. As the members know, we're still dealing

22   with the budget right now. And so, obviously, the

23   speaker is aware that this process of redistricting

24   takes a lot of labor, and we'll give us ample time

25   to do that. But we have to continue with the

1   business of the House in general, so we'll do just

2   the best we can on that, understanding we're

3   operating under a tight time line.

4   And we've talked about that a lot

5   throughout this committee process that, because of

6   the delay in the census data, we're just now getting

7   to a point where we can draw these maps, after doing

8   the public comment we wanted to do. But with filing

9   coming in December, we really need to get these maps

10 drawn as close as we can, or at least by the end of

11 this month, if not sooner.

12   That's going to be our goal to try to get

13 these things done by the end of the month. That way

14 we can give the board of elections time to get

15 ballots printed and let folks know what districts

16 they're going to be in, so they can decide if they

17 want to run or not run. Whether they be members of

18 this committee, or folks who are not in the General

19 Assembly at all.

20   Members, with that being said --

21   REPRESENTATIVE RICHARDSON: Mr. Chairman,

22 can I have a quick question?

23   CHAIRMAN HALL: I'm going to take questions

24 in a little while, but you know, if it's something

25 that's really important right now, okay. All right.

 1   I'm going to take questions at the end.

 2   So for ground rules, that's it for now. I

 3   may have left something out, and if so, members can

 4   ask me in a moment.

 5   The second step in today's committee is

 6   going to be the presentation of the optimum county

 7   groupings that have been come up with by the non-

 8   partisan staff. And so the chair is going to turn

 9   this over to Erika Churchill, in just a moment, to

10   make a presentation on the optimum county groupings

11   that have been crafted by the non-partisan staff.

12   But what the chair will ultimately say

13   about these groupings is: in years past, if you've

14   been on this committee, you know that we have

15   adopted certain groupings. Chair does not

16   anticipate adopting any particular grouping this

17   time around because there are multiple options

18   within the county groupings. And that's what you've

19   got in front of you, and that Ms. Churchill is going

20   to explain in more detail here in just a bit.

21   Rather than limit any member of this

22   committee into just certain groupings, what the

23   chair anticipates is that members can use whichever

24   combination of the groupings that you see before

25   you, in drawing whichever map a member sees fit to

1 draw.

2   The only groupings that will be considered

3 are those that are in the packet that's in front of

4 you.   These were initially put forth by Duke

5 University, and a non-partisan staff has also drawn

6 their own groupings and confirmed that the Duke

7 groupings were correct. And so we're confident that

8 using the algorithm, as required in the law, that

9 these are the possible groupings -- the possible

10 optimum groupings.

11   Again, I'll answer questions momentarily on

12 that front. But with that, the chair is going to

13 turn it over to Erika Churchill to speak to the

14 county groupings and to also show an example of how

15 to use the terminals when drawing the maps.

16   Ms. Churchill, you're recognized.

17   MS. CHURCHILL: Thank you, Mr. Chair. As

18 you mentioned, central staff, were asked to take a

19 presentation by Christopher Cooper, Blake Esselstyn,

20 Gregory Herschlag, Jonathan Mattingly, and Rebecca

21 Tippett from the quantifying gerrymandering group,

22 which is a non-partisan research group centered at

23 Duke Math.

24   And they produced a paper entitled, "North

25 Carolina General Assembly County Clusterings from

1   the 2020 Census." It was posted by Mr. Herschlag on

2   August 17, 2021. And we took it as a recipe,

3   because throughout this, they gave instructions as

4   to what they believed were the optimum county

5   groupings.

6   I would note that they particularly say,

7   "However, there are often multiple optimal county

8   clusterings that minimize county splitting." And

9   they reference two other blogs that they have

10   posted. The release of the 2020 census data allows

11   us to determine the possible county clusterings for

12   both the North Carolina State House and State Senate

13   redistricting processes.

14   The one part of Stephenson v. Bartlett

15   which this analysis does not reflect, is compliance

16   with the Voting Rights Act. To determine the county

17   clusters, we used the implementation of the court

18   order procedure described in Carter, et al." The

19   site they gave for Carter, et al. is "Optimal

20   Legislative County Clustering in North Carlina" by

21   Daniel Carter, Zach Hunter, Dan Teague, Gregory

22   Herschlag, and Jonathan Mattingly. Statistics and

23   Public Policy Volume 7, 2020.

24   For the state House, what you have before

25   you in hardcopy, on the screen, and I believe they

1   will be posted to the web, are the nine maps that

2   resulted from this paper with respect to the North

3   Carolina State House. The very first one does not

4   have the entire state assigned. They call this the

5   fixed groupings. Throughout the maps that we'll go

6   through, you will find that these will be hash

7   tagged. A little bit of crosshatching on them to

8   identify these are the ones that this particular

9   group say are the optimal.

10   They created 33 clusters containing 107 of

11 the 120 districts that are fixed based on

12 determining optimal county clusters. 11 of these

13 clusters contain 1 district, meaning that 11 of the

14 120 House districts are fixed.

15   So as you're looking at the map, whether in

16 hardcopy or online, you will see that there is a

17 letter assigned to each. I'm just going to pick on

18 Carteret and Craven, in the eastern part of the

19 state, in the blue shading, it is Q2. The Q is just

20 an easy letter reference if you need to talk about

21 that particular grouping with anyone. The 2 means

22 that that is population sufficient for 2 House

23 members. The same if you look just to the left, in

24 the gray, the green Lenore Jones BB cluster, or

25 grouping, has a 1 underneath it, meaning that would

1   be a single member grouping.

2   So the white areas that are left can each

3   be assigned two different ways. So that would get

4   you to the lovely House maps that are left.

5   (Sound interruption)

6   So starting with the Western area that was

7   left kind of unassigned, needs to be grouped. As

8   you will see it on the Duke House 01 map, it would

9   be districts HH and II. The first option here would

10 be to combine Surry, Wilkes, and Alexander to create

11 a two-member district. And Alleghany, Ashe,

12 Watauga, and Caldwell to create a two-member

13 district.

14   If you will skip over to Duke House 05,

15 this would give you a visual of the second option

16 for this particular grouping. It would be a

17 combination of Surry, Alleghany, Ashe, and Wilkes

18 for a two-member grouping. And Watauga, Caldwell,

19 and Alexander for a two-member grouping.

20   Staying on the Duke House 05, and heading

21 east to the southeast, the options in that southeast

22 area here would be to combine Wayne and Sampson into

23 a two-member district. Duplin and Onslow into a

24 three-member district. And Pender and Bladen into a

25 one-member district.

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1   And so if you just fast forward one to Duke

2   House 08, the second option in the southeastern

3   corner would be to combine Wayne and Duplin into a

4   two-member district. Sampson and Bladen into a one-

5   member district and Onslow and Pender into a three-

6   member district.

7   Duke House 05 will be our example of the

8   northeastern corner. Option one would be to combine

9   Hertford, Gates, Pasquotank, and Camden into a

10   single-member district. And Currituck, Dare, Hyde,

11   Pamlico, Beaufort, Washington, Tyrrell, Perquimans,

12   and Chowan into a two-member district.

13   The other option in the northeastern

14   corner, if you will go to Duke House 06, you can see

15   a visual of that. The single member district would

16   be Currituck, Pasquotank, Perquimans, and Tyrrell.

17   The two-member district would be Beaufort, Pamlico,

18   Hyde, Dare, Washington, Chowan, Camden, Gates, and

19   Hertford.

20   Each of the multimember districts

21   throughout all of these would need to be divided

22   into single-member districts for compliance with

23   Stephenson opinion.

24   I should probably note, just so that

25   everybody is aware, the ideal population for a North

1   Carolina House district is 86,995 people, according

2   to the 2020 Decennial Census, with a plus or minus 5

3   percent deviation. That leaves a range of 82,645 to

4   91,345 people.

5   CHAIRMAN HALL: Okay, members. The chair

6   is going to give Ms. Churchill an opportunity in a

7   moment to display and give an example of how the

8   terminals will work.

9   But if that is it for your presentation on

10 groupings, if you'll stand there for just a second.

11   MS. CHURCHILL: Yes, sir.

12   CHAIRMAN HALL: Committee members, do any

13 members have any questions for legislative staff at

14 this point about groupings? And again, chair's

15 going to take some questions at the end.

16   Representative Torbett.

17   REPRESENTATIVE TORBETT: Just if she could

18 repeat the numbers she used there at the last time.

19 There was three. There was a total and the range.

20   MS. CHURCHILL: Okay. Ideal population for

21 a North Carolina House of Representatives districts,

22 86,995. Creating a plus or minus 5 percent range of

23 82,645 to 91,345 people.

24   CHAIRMAN HALL: The chair is going to make

25 sure that all committee members have a document

 1   showing the ideal population for each level of

 2   grouping. So for one-member grouping, two-member.

 3   And I know we've had that in the past, and it may

 4   have already been passed out at one of the meetings

 5   we've had. So let's make sure, if we will -- we'll

 6   send that out to the committee via email, and we'll

 7   have some paper copies at the meeting tomorrow.

 8   MS. CHURCHILL: We will actually have a

 9   laminated copy at every station.

10   CHAIRMAN HALL: Okay, great.

11   MS. CHURCHILL: And we will also be glad to

12   email that out to everyone. It has been passed out

13   at a previous meeting.

14   CHAIRMAN HALL: And we're going to go ahead

15   and have paper copies for folks to be able to take

16   with them if they want to.

17   MS. CHURCHILL: Glad to take care of that.

18   CHAIRMAN HALL: Representative Harrison.

19   REPRESENTATIVE HARRISON: Thank you,

20   Mr. Chair. Thank you, Erika.

21   If I heard you right, so did you -- when

22   you started -- and I've got the article in front of

23   me from Doctors Mattingly, et al. -- did you say

24   that the fixed -- the fixed clusters -- we're

25   working from a basis of the fixed clusters, and

 1   those represent 107 of the 120 members; is that

 2   right?

 3   MS. CHURCHILL: Yes, ma'am.

 4   REPRESENTATIVE HARRISON: And then our

 5   options are to figure out how to manipulate the

 6   other white, unshaded counties, and that's what

 7   we're going to be doing with the other map options?

 8   MS. CHURCHILL: Mr. Chair?

 9   CHAIRMAN HALL: Lady is recognized to

10   respond.

11   MS. CHURCHILL: Yes, Representative

12   Harrison. With the crosshatched districts in the

13   Duke House fixed, that would establish the groupings

14   for 107 of the 120 districts. Of that 107, 11 -- or

15   of the 33 clusters, 11 of those clusters would be

16   single-member districts. The remainder would still

17   need to be divided into single-member districts. So

18   the counties in white that have no shading, no

19   crosshatching, would be the options to combine

20   together to create the remaining 13 House districts.

21   CHAIRMAN HALL: And members, and for those

22   folks listening at home, the chair has often

23   referred to these maps as groupings, and you hear

24   Ms. Churchill refer to them as clusters, and those

25   are synonymous terms, just for those listening, to

1   make sure everybody understands. If you've been

2   through this before, you know that. But if you're

3   new to this committee, or you're listening online

4   and haven't watched this committee before, that may

5   be confusing.

6   But is that your understanding,

7   Ms. Churchill?

8   MS. CHURCHILL: Yes, sir. There's actually

9   three terms that I've heard for it. There's the

10   clustering, which is the phrase that the group from

11   Duke used in their paper, which is what I was

12   reading from. There's also groupings, which is kind

13   of in the court orders, as well as clustering. The

14   other phrase I've heard used to describe this is

15   podding, or creating a pod. I believe all three to

16   be completely interchangeable.

17   CHAIRMAN HALL: That's right. That's the

18   chair's understanding as well.

19   Representative Harrison.

20   REPRESENTATIVE HARRISON: Mr. Chair, if we

21   have questions about the clusters and the process,

22   should we ask them now of you and the committee, or

23   do you want her to talk about the technical and then

24   have the questions after that?

25   CHAIRMAN HALL: At this point, if you've

1 got a question for the chair, let's just wait. This

2 is just questions for right now to Ms. Churchill.

3 She's not going to leave after this. She'll be

4 right up here, so if we have another question for

5 her later. But while they're there at the podium,

6 the chair thinks it's appropriate to give members

7 the opportunity to ask them questions.

8   Representative Warren.

9   REPRESENTATIVE WARREN: I've got a question

10 for Ms. Churchill.

11   I'm sorry, when you look at the white

12 clusters, and the different iterations of them on

13 the following maps, I noticed that the numbers stay

14 the same within those configurations. So is this

15 just a matter of looking at those particular

16 counties in terms of their connection to each other,

17 continuity of it, or the contiguousness of it, or

18 whatever the word is we're looking for there?

19   MS. CHURCHILL: So, Mr. Chair, if I might?

20   CHAIRMAN HALL: Lady may answer.

21   MS. CHURCHILL: So you are absolutely

22 correct. So starting kind of in that western

23 corner, the counties of Surry, Alleghany, Ashe,

24 Watauga, Wilkes, Caldwell, and Alexander, that white

25 area has a population in it sufficient to support

 1   four single-member districts. So it becomes a

 2   question of how to group those counties together to

 3   best create districts that are in compliance with

 4   Stephenson. And there are two options there. Both

 5   would be two-member districts. It's just a matter

 6   of what the committee chose to use.

 7   REPRESENTATIVE WARREN: And follow-up?

 8   CHAIRMAN HALL: The gentleman is

 9   recognized.

10   REPRESENTATIVE WARREN: So, Ms. Churchill,

11   one of the things I noticed in the hearings I

12   attended was some folks in the general public not

13   having an understanding that we try to do these in

14   terms of, not breaking down counties or

15   municipalities, but to stay within the mandates of

16   the population, and you're staying within this

17   cluster. That, in some cases, creates a situation

18   where you have no choice but to comply with the

19   district's population; is that correct?

20   CHAIRMAN HALL: The lady is recognized.

21   MS. CHURCHILL: I will attempt that one.

22   And I'm going to pick on the chair for just a

23   moment. His home county of Caldwell --

24   CHAIRMAN HALL: Join the club.

25   MS. CHURCHILL: -- as an example.

 1   According to the federal decennial census, it's

 2   80,652 people, which is outside that ideal range of

 3   82,645 to 91,345 for a single-member district. So

 4   it would need to be combined with some other

 5   contiguous county to create a single-member

 6   district. Or it would need to be divided with some

 7   other contiguous counties to create two

 8   single-member districts. That would be up to the

 9   committee how they wanted to do that.

10   REPRESENTATIVE WARREN: Thank you very

11   much.

12   CHAIRMAN HALL: Further questions or any

13   comments for legislative staff?

14   Representative Dixon.

15   REPRESENTATIVE DIXON: Thank you,

16   Mr. Chair.

17   Ms. Churchill, without having to add them

18   up, how many House seats are there in the white area

19   including Duplin and then this white area with

20   Tyrrell?

21   MS. CHURCHILL: So --

22   Mr. Chair?

23   The area --

24   CHAIRMAN HALL: The lady is recognized.

25   MS. CHURCHILL: -- including Duplin, Wayne,

1   Sampson, Bladen, Pender, and Onslow is population

2   sufficient to support six single-member House

3   districts. That northeastern corner beginning at

4   Pamlico, running all the way up to Currituck and

5   over to Hertford, is population sufficient to

6   support three single-member districts.

7   REPRESENTATIVE DIXON: Thank you.

8   CHAIRMAN HALL: Further discussion or any

9   questions for legislative staff?

10   Okay. Ms. Churchill, if you want to give

11   us an example of how to use these terminals, the

12   lady is recognized to do that.

13   MS. CHURCHILL: I'm going to ask Will.

14   He's going to come up and help me.

15   CHAIRMAN HALL: Along with -- yeah,

16   absolutely.

17   MS. CHURCHILL: So I would note a couple of

18   things, as Will is getting us started. Each one of

19   these terminals will be directly fed to a

20   livestream. An audio from that terminal will be fed

21   to the livestream. There will not be a video

22   associated with that terminal. There will be a

23   video of the room that will be seen by the public.

24   The public here in the room can choose to use the

25   screens here, or they can choose to use the North

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1　Carolina General Assembly Wi-Fi to log on, if they

2　wanted to focus on just one of the four terminals.

3　　　　　And I'm going to walk over to the terminal,

4　so we can turn that on, so you'll see what it's

5　going to look like. So from here, you will be able

6　to see a House plan. And so, these are just

7　examples that we have been testing to make sure that

8　everything works. These are existing plans; they

9　are nothing new. We just wanted to make sure that

10　everyone had a map that could be seen, can be used;

11　the software works.

12　　　　　So this is what you would see on the screen

13　in the room. We will leave this up and going until

14　after the committee adjourns, so that someone can

15　walk around and see what an actual drawing station

16　would look like as you were sitting at it to engage

17　with the staff to instruct us how to draw a map of

18　your choosing.

19　　　　　CHAIRMAN HALL: And, Ms. Churchill, if you

20　will describe what's the large TV to your right for?

21　　　　　MS. CHURCHILL: They are identical. So a

22　staff member will be sitting at the smaller screen.

23　Member, or whoever -- whatever group of members are

24　together, will have the larger screen available to

25　them to stand behind, to sit behind, just so that

 1   it's a little larger, a little easier to see.

 2   CHAIRMAN HALL: Members, do we have any

 3   questions for -- questions or debate about how the

 4   process will work in terms of what Ms. Churchill has

 5   just described? Again, I'm going to stand for some

 6   questions.

 7   Representative Torbett.

 8   REPRESENTATIVE TORBETT: Just for

 9   reference, it's my understanding -- I think she

10   eluded to it -- the staffer is there to actually to

11   the map drawing with assistance and information from

12   the member; is that how that's going to work?

13   Because some of us in here have never done map

14   drawing.

15   CHAIRMAN HALL: The staff folks are there

16   because they understand how to use the software, but

17   it will be completely up to the member to direct the

18   staff member as to how to draw those maps. And

19   staff will -- it wouldn't be appropriate, of course,

20   for staff to make decisions about how to draw. But

21   to answer your question, yeah. You're absolutely

22   right. It will be up to the member to tell the

23   staff member, who knows how to use the technology,

24   how to draw.

25   Representative Carney.

1   REPRESENTATIVE CARNEY: So I'm not sure if

2   this question is for now or later, but. So if I

3   come in as a member and I'm drawing on a map, and I

4   leave the room, somebody else comes in, draws

5   another map, and then I want to make an amendment,

6   how does that work?

7   CHAIRMAN HALL: The chair is going to

8   initially respond to that and let Ms. Churchill

9   respond to sort of the mechanics of how that works.

10   But, in the past, what has happened is, if you go in

11   and draw a map, and let's say you want to take a

12   break and go eat lunch, or whatever it is you want

13   to do, you can save your map in the system, so that

14   somebody doesn't come behind you and start drawing

15   on the map that you've already created. So you'll

16   be able to save that. You'll be able to come back

17   later on and draw that map.

18   Now, Ms. Churchill, is that correct, in

19   terms of technology?

20   And I'm going to continue on with that to

21   try to answer what I think your whole question is,

22   but yeah.

23   REPRESENTATIVE CARNEY: Okay.

24   MS. CHURCHILL: So, yes, sir. Unlike with

25   our drafting system where you were used to us being

1   able to get to any prior iteration that we have

2   drafted for you, the mapping software doesn't work

3   quite like that. But we are set up internally to

4   make sure that the map that you closed out before

5   you stepped away to get a bite to eat or go to a

6   committee meeting is always there.

7   When you come back, we will be copying that

8   map to pick up exactly where you left off, so that

9   we will always have that first map, just in case

10 something goes wrong, and you just need to go back

11 to it. So there will be an option for you to pick

12 up wherever you left off and continue going from

13 there. There will be an option for you, if you

14 really like what you -- hated what you did in that

15 second session, you can go back to the first session

16 and pick up again and start over.

17   CHAIRMAN HALL: And to answer your question

18 about how to, perhaps, change a member that another

19 member's drawn -- and I guess the real question is

20 amendments -- there will be an opportunity for

21 members of the committee to put forth amendments on

22 whatever map or maps this committee ultimately takes

23 up.

24   And the chair anticipates, as we've done in

25 the past, members can decide whether they want to

1   put forth a whole map of the state as an amendment,

2   or whether they're just wanting to amend certain

3   groups or I guess even certain districts. Members

4   will be given an opportunity to put those forth.

5   REPRESENTATIVE CARNEY: So just a follow-

6   up.

7   CHAIRMAN HALL: Yes. Lady is recognized.

8   REPRESENTATIVE CARNEY: And I have never

9   drawn these maps before, so that's why I have all

10 these questions. So these amendments would come --

11 our amendments would come after we have a map?

12   CHAIRMAN HALL: Yeah. So if the lady will

13 think about it just like a normal committee meeting,

14 where a bill is before the committee --

15   REPRESENTATIVE CARNEY: Right.

16   CHAIRMAN HALL: -- and members are putting

17 forth their own amendments, or perhaps they're

18 wanting their own bills to be put forth at a given

19 time. Really, the easier way to think of it is,

20 members are wanting to put forth their amendments to

21 the bill that's on the floor. The opportunity to do

22 that will be there.

23   If, let's just say that you like the map

24 that's before the committee, but for a couple of the

25 groupings, and you know, rather -- if you just want

1   to focus your argument, or whatever the case may be,

2   on those two groupings, the lady can say, look, here

3   are the two groupings. I'm just putting those forth

4   as an amendment. I'm okay with the rest of the map.

5   The opportunity to do that will be given.

6   REPRESENTATIVE CARNEY: Thank you very

7   much.

8   CHAIRMAN HALL: And let me say with that,

9   obviously, we're under a tight time constraint. And

10 so we don't have time for the committee to consider

11 100 maps from every member, you know, who's on

12 there. So at some point, the chair will have to

13 limit that. But as of now, the chair doesn't

14 anticipate having to limit members amendments or

15 proposed maps. Chair thinks that we'll be able to

16 do that in a time efficient way, and still get our

17 work done in time for filing.

18   Other questions or debate again for

19 legislative staff?

20   REPRESENTATIVE RICHARDSON: Mr. Chairman?

21   CHAIRMAN HALL: Representative Richardson.

22   REPRESENTATIVE RICHARDSON: If I might.

23 Would it be the best practice if when we're drawing

24 -- if we're doing a map, that we articulate our

25 reasonings? Like the criteria that we have listed

 1   and adopted, like communities of interest, should we

 2   -- if we do an amendment, or do part of a map, or do

 3   part of a district, should we state the reasoning on

 4   there that it follows the criteria and which

 5   criteria it follows or just not comment? Or what

 6   are we -- give us some guidance on that.

 7   CHAIRMAN HALL: You know, that's really up

 8   to each individual member as to what they want to

 9   say while they're drawing the map. And if a member

10   wants to say, "Here's why I'm doing this," every

11   member is free to do that. This committee has

12   adopted a set of criteria that's to be used in

13   drawing the maps, and so that will be the member's

14   choice whether they think that is a best practice or

15   not a best practice.

16   Further questions or debate?

17   Representative Carney.

18   REPRESENTATIVE CARNEY: Thank you,

19   Mr. Chairman. So if -- did I hear you or Erika say

20   that the public is going to have access to all these

21   portals; is that correct?

22   CHAIRMAN HALL: So --

23   REPRESENTATIVE CARNEY: As we are drawing.

24   CHAIRMAN HALL: -- I'll let --

25   Ms. Churchill, go ahead and answer that,

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 1   and I may weigh in.

 2   MS. CHURCHILL: Okay.

 3   So, Representative Carney, as this is set

 4   up currently, a member of the public can choose to

 5   look at what is happening at station one online. A

 6   member of the public could choose to come to the

 7   room and sit in the back and could see all four

 8   stations going simultaneously. But to the best of

 9   our knowledge, the public will not be standing

10   behind a station, over your back, over staff's back,

11   instructing, conversating, that kind of thing.

12   REPRESENTATIVE CARNEY: Okay. Just a

13   follow-up.

14   CHAIRMAN HALL: The lady is recognized.

15   REPRESENTATIVE CARNEY: So will that --

16   each time a member comes and draws a map, is that

17   archived for the public?

18   CHAIRMAN HALL: So the chair's

19   understanding is that any map that's drawn by a

20   member of this committee in this committee room

21   becomes a public record.

22   Ms. Churchill, will you speak to that?

23   MS. CHURCHILL: Yes, sir.

24   Our understanding, as well, because this

25   map is being drawn in public before the committee,

1   it is a public record. We will have a copy of it.

2   It will be saved forevermore. At this time, we have

3   not been instructed to place any of those maps

4   online. If the committee so instructs, we will be

5   happy to do that.

6   REPRESENTATIVE CARNEY: So that -- may I

7   just comment why I'm asking that question?

8   CHAIRMAN HALL: The lady is recognized.

9   REPRESENTATIVE CARNEY: Is through the

10 public hearings, I was -- attended a lot of those,

11 and that was one of the questions that kept coming

12 up over and over again is, will the public have an

13 opportunity to be a part of drawing these maps, or

14 seeing, actually having access to the drawing of

15 these maps, publicly. That was why I was going that

16 way.

17   CHAIRMAN HALL: Representative Cooper-

18 Suggs.

19   REPRESENTATIVE COOPER-SUGGS: Thank you,

20 Mr. Chair.

21   And thank you, Erika.

22   Still on that same vein, in talking about

23 the public, and the maps that we're going to see, we

24 know that the public has had that keen interest, by

25 attending the sessions, as well as the feedback that

1 they have given. So what steps are you proposing to

2 assure that the public be involved in these maps

3 that represent them?

4 CHAIRMAN HALL: And if the lady will

5 indulge me to wait just a minute, until I can let

6 Ms. Churchill sit down. Because the chair is going

7 to take questions like that one, for example.

8 If there are any other questions for

9 Ms. Churchill --

10 And I will come back to you, Representative

11 Cooper-Suggs.

12 REPRESENTATIVE COOPER-SUGGS: Thank you so

13 much.

14 CHAIRMAN HALL: Representative Torbett.

15 REPRESENTATIVE TORBETT: Thank you. I was

16 going hope I think this one fits in this segment.

17 Is there intent -- should we have an anomaly or a

18 glitch in the technology, do we think the mapping

19 should suspend until such time that that glitch will

20 reconnect or --

21 CHAIRMAN HALL: We'll deal with that if and

22 when it happens at the time. Let's hope it doesn't.

23 Representative Brockman.

24 REPRESENTATIVE BROCKMAN: I'm not really

25 sure if this question was answered, but

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1 Representative Carney asked if members of the public

2 would know who was drawing maps at the specific

3 time. Will they know, say, for example,

4 Representative Brockman is working on a map at this

5 time; will they know that?

6   CHAIRMAN HALL: Ms. Churchill?

7   MS. CHURCHILL: At this time, the way it is

8 set up, no, sir. They will know that -- they will

9 be able to see what is being drawn on station one.

10 From the audio, they would be able to hear your

11 voice, your instructions, but there would not be a

12 label that was there at all times to say that this

13 is Representative Brockman speaking. We can try to

14 work on something of that nature, if the committee

15 would like.

16   CHAIRMAN HALL: The gentlemen is

17 recognized.

18   REPRESENTATIVE BROCKMAN: But there would

19 be something that says, at the end of the day, that

20 this is Representative Brockman's map; is that

21 correct?

22   CHAIRMAN HALL: Yes. So the chair will

23 speak to that. There will be something on the final

24 map that says who has drawn that map, at least the

25 original part of it. It may be amended, but the

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1 amendment will have the member's name on that. And

2 we've done that in the past.

3   Ms. Churchill.

4   MS. CHURCHILL: And I might kind of step in

5 just a little bit to remind everyone that the maps

6 are not what the General Assembly enacts. It is the

7 bill that is sponsored by a bill sponsor, just like

8 every other bill in the institution. The amendments

9 the same way. For an amendment offered by

10 Representative Brockman, the amendment will state

11 that it was offered by Representative Brockman. It

12 will have attached with it a visual of the map, but

13 it is still technically the amendment that the

14 General Assembly is voting on. So yes, sir. All of

15 that will come together.

16   CHAIRMAN HALL: Okay, members. Are there

17 any questions that are just for Ms. Churchill, at

18 this point? I know another one may arise, so she's

19 not leaving.

20   Okay. If not, Ms. Churchill, thank you

21 very much for your eloquent presentation.

22   Members, the chair is going to hand the

23 gavel over to Representative Saine and stand for

24 questions.

25   VICE CHAIR SAINE: All right,

 1   Representative Hall. Are you ready?

 2   CHAIRMAN HALL: I am. And, Mr. Chairman,

 3   if you will start with Representative Cooper-Suggs.

 4   She had a question that was appropriate for the

 5   chair, but I wanted to wait until I got over here to

 6   answer it.

 7   VICE CHAIR SAINE: The chair would be happy

 8   to do that.

 9   Representative Cooper-Suggs.

10   REPRESENTATIVE COOPER-SUGGS: I can wait.

11   I can hold off for a moment. If that's all right.

12   CHAIRMAN HALL: Okay. Fair enough.

13   VICE CHAIR SAINE: Fair enough. Thank you,

14   Representative Cooper-Suggs.

15   Representative Richardson, I think I've got

16   you, and then maybe Representative Harrison.

17   REPRESENTATIVE RICHARDSON: Mr. Chairman,

18   thank you for taking these questions. When we went

19   to these public hearings, I heard over, and over,

20   and over again several things, you know, communities

21   of interest, you know, and the like. But one thing

22   I heard repeatedly was -- is that the public wanted

23   input after we came up with maps, before we voted on

24   them. I know we're on a tight budget, a tight

25   schedule, you know, with this, and it's going to be

1   tough. But is it your plan to have some public

2   hearings after -- before we vote on the final maps,

3   but while the maps are up for consideration?

4   CHAIRMAN HALL: Thank you, Representative

5   Richardson. So what I will say is that I do

6   anticipate there being some manner of public hearing

7   on whatever the final proposed version of the map

8   is, before the House approves that. And we've done

9   that in the past.

10   But, you know, I want to speak to what I

11   think is often missed sort of in the story about

12   when or how we're going to do public comment this

13   time around. And that is, the way that we're doing

14   this, the way this committee, as well as the Senate

15   committee, has decided to do this process is simply

16   unprecedented.

17   The folks on this committee could decide as

18   a committee that we're not going to do this out in

19   the open. The law would allow committee members, we

20   could just simply have somebody draw these maps

21   behind closed doors, as has been done in the past.

22   The law would allow the use of election data to be

23   used in these maps, and there's no binding

24   precedent, whatsoever, that prevents this committee

25   from using election data in drawing those maps and

 1   preventing the committee from doing it behind closed

 2   doors.

 3   We are voluntarily saying we don't think

 4   that's the best way to do this. We think the best

 5   way to do this is in this committee room, with these

 6   screens, the technology to allow members of the

 7   public to watch what's going on, to listen to what

 8   we're saying as we're drawing these maps, to

 9   literally, in real time, watch us draw these maps.

10   That has never been done before in a voluntary

11   manner.

12   In 2019, you were here, Representative

13   Richardson, and many members of this committee were

14   here, we did that in some fashion because we were

15   court ordered to. Gentleman's a lawyer, I think

16   he'll agree, there's no binding precedent from that

17   decision, and this committee would be free to go

18   right back to having some consultant draw these

19   behind closed doors, put them on the floor here, and

20   vote on them. But we're choosing not to do that.

21   We're taking the unprecedented step of

22   being as transparent as I believe we possibly can

23   with the way that we're doing this committee

24   process. Obviously, you know, things can always be

25   done better. We want to do that, if we can. But

1 the unprecedented amount of transparency should not

2 be lost, not only on the members of this committee,

3 but the members of the public, as they watch us do

4 our business.

5   REPRESENTATIVE RICHARDSON: Thank you.

6   VICE CHAIR SAINE: Thank you.

7   Representative Harrison.

8   REPRESENTATIVE HARRISON: Thank you,

9 Mr. Chair.

10   Thank you, Chair Hall. Looking at --

11 looking at Doctors Carter, Mattingly, et al.'s

12 article -- and Erika Churchill mentioned this --

13 they say they want -- that's the one part of the

14 Stephenson v. Bartlett decision this analysis does

15 not reflect its compliance with is the Voting Rights

16 Act.

17   So I sort of skimmed Stephenson v.

18 Bartlett, in anticipation of this meeting, and I'm

19 just wondering, because that seems a very important

20 point of the Stephenson decision is compliance with

21 the Voting Rights Act. So how -- so we're starting

22 with maps that don't take that into account at all,

23 and I'm just wondering how we're complying with

24 that?

25   CHAIRMAN HALL: Thank you for the question,

1   Representative Harrison. As the lady knows, this

2   committee has made a decision to not use race at all

3   in the drawing of our maps. I'll also note that, as

4   you know, there's been a lot of litigation in this

5   state over the redistricting process in general.

6   We've had many, many lawsuits going back to when

7   Democrats were in the majority and since Republicans

8   have been the majority. It's really been no

9   different. We've had many, many lawsuits.

10   What we've seen in those lawsuits, at least

11   in the last few lawsuits that we've seen, is the

12   plaintiffs in those suits that were trying to set

13   aside those maps have said that there is no legally

14   significant racially polarized voting in North

15   Carolina. That's the plaintiffs and their own

16   experts who are saying that.

17   We've drawn maps in both 2017 and 2019, not

18   using racial data at all. And those maps have been

19   approved -- groupings, rather -- the lady's question

20   is specifically as to groupings, and I'm sort of

21   answering the grouping and map question in one. But

22   we've used groupings in 2017 and in 2019, not taking

23   into account any sort of racial data at all. And

24   courts have uniformly upheld those groupings that

25   we've used, without using racial data.

1   So we are going to stick with the criteria

2   of the committee and not consider any racial data at

3   all. And based on the past precedent of doing this,

4   we're confident that that will comply with the

5   Voting Rights Act.

6   REPRESENTATIVE HARRISON: Follow up?

7   VICE CHAIR SAINE: You're recognized.

8   REPRESENTATIVE HARRISON: I appreciate that

9   very thoughtful answer. I actually meant with

10   regard actually to the whole mapping process, so you

11   anticipated my question. But I'm looking at section

12   two, that provides to states that "political

13   subdivisions can't impose any voting qualification

14   or prerequisite that impairs or dilutes, on account

15   of race or color, a citizen's opportunity to

16   participate in the political process to elect the

17   representative of his or her choice."

18   So how do we know -- if we don't take into

19   account race, how do we know that we're complying

20   with the Voting Rights Act? And I kind of

21   understood you to say that we're relying on past,

22   but I'm just -- can you respond to that, please?

23   CHAIRMAN HALL: And that's the way -- the

24   way we know is because we've already done it. We've

25   done it before and courts have upheld the drawings

1   of these maps, the groupings and the districts

2   themselves, without this committee using any racial

3   data at all. We've done that twice now, so I'm

4   confident that, without using racial data, we will

5   comply with the Voting Rights Act.

6   REPRESENTATIVE HARRISON: One more follow-

7   up, I think.

8   VICE CHAIR SAINE: You're recognized for

9   follow-up.

10   REPRESENTATIVE HARRISON: Thank you.

11   And I guess a lot of my questions have to

12 do with compliance with the Voting Rights Act, and I

13 think I understand your answer is going to be the

14 same, so I'll move to the Common Cause decision that

15 you referenced earlier. And I appreciate the

16 committee's commitment to transparency.

17   You did say it's an non-binding precedent,

18 so you all don't anticipate -- do you anticipate

19 using any of the ruling from the holding from that

20 decision to guide this process? Do you all feel

21 bound by any of that decision in terms of following

22 the process that the court ordered?

23   CHAIRMAN HALL: From a strictly legal

24 stance, it's not a binding precedent that anyone is

25 required to follow. But as the lady knows, based on

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1 the criteria the committee has adopted, that is

2 something that this committee has to follow. And

3 we've taken a lot of language out of that opinion

4 and put it into this committee's criteria.

5   The computers that you see here and the

6 online audio and video, none of that is binding. We

7 are voluntarily doing that. You know, frankly, we

8 learned from that case that perhaps a better process

9 is one that is just like we're doing -- like we did

10 then, like we're doing now, as an open and

11 transparent process. So, you know, while it may not

12 be binding, the committee has chosen to impose upon

13 itself some of the principle outlined in the Common

14 Cause case.

15   REPRESENTATIVE HARRISON: I think I'm going

16 stop for now and let somebody else ask questions. I

17 might have more. Thank you.

18   VICE CHAIR SAINE: Thank you,

19 Representative Harrison.

20   I have Representative Cooper-Suggs and then

21 Representative Hawkins.

22   Representative Cooper-Suggs, you're

23 recognized.

24   REPRESENTATIVE COOPER-SUGGS: Thank you so

25 much, Mr. Chair, and Representative Hall. Thank you

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1   so much.

2   My question was -- it goes back to the

3   public's input and that the keen interest that

4   they've had in this process, and we've seen that,

5   you know, as I stated earlier, through the

6   districting process as well as through the online

7   portals too. Over 3000 people have responded, so we

8   know that there's interest out there.

9   And so my question deals with, what steps

10 are you proposing to assure that the public be

11 involved in the efforts to create maps that

12 represent them?

13   CHAIRMAN HALL: Thank you, Representative

14 Cooper-Suggs, for the question. So I'll go back to

15 what I said previously in response to, you know,

16 what efforts are we making to make sure those folks

17 can follow this process to make sure that it's doing

18 whatever they feel like it should do. Because some

19 of members of the public feel one way about what

20 this process should ultimately end up with, and

21 others feel in different ways. They're differing

22 opinions.

23   Again, I think it's important to understand

24 context of what's happened in the past, in this

25 building, for the past 200 years when this body has

1 drawn maps. What has happened in the past is some

2 outside entity, a consultant, goes and they draw the

3 map behind closed doors. We would come into this

4 committee, just like we're in right now, and throw a

5 map down in front of the committee members and say,

6 "Here's the map that we propose."

7   We're not doing that this time. What we're

8 going to do this time is a more open and

9 deliberative process for this committee. We will

10 literally be drawing on the stations that you see,

11 so members of the public across the state and, in

12 fact, across the world, can log onto the website and

13 watch these maps as we draw them in live fashion.

14   And then we've seen that the public

15 comment portal is actually much more popular than

16 the in-person public comment method, for one reason

17 or the other. We get many more comments through

18 that portal. We get many more emails, as members of

19 this committee can attest. You receive emails all

20 the time from folks and, you know, probably messages

21 in many different ways and phone calls.

22   So the public has favored that online

23 portal in telling us how they want to see this done.

24 That portal is going to stay open throughout this

25 process, so an individual sitting anywhere in our

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 1 state, and again, anywhere in the world, can sit and

 2 watch what's happening. Can literally send a

 3 comment right then, simultaneous with that drawing

 4 going on and say, "I'm watching station four. I

 5 don't like what I see in X district," or "I do like

 6 what I see in X district."

 7   That's going to be time-stamped. The

 8 committee members are going to have a chance to read

 9 every one of those. And so, there is ample

10 opportunity for members of the public to weigh in on

11 these maps. Again, in the past, there's been little

12 opportunity because the maps are already drawn.

13 Folks can come in here and talk all they want, but

14 the map has been drawn.

15   That's not the case here. We had public

16 comment ahead of time. We're going to draw these in

17 public. And I do anticipate at least some in-person

18 public comment moving forward. With all of that

19 said, I do anticipate at least some form of in-

20 person public comment at the end of this.

21   REPRESENTATIVE COOPER-SUGGS: Follow-up

22 question.

23   VICE CHAIR SAINE: You're recognized for a

24 follow-up.

25   REPRESENTATIVE COOPER-SUGGS: I just want

1   to make sure I fully understand this. So how are we

2   going to use the comments -- the public comments

3   when drawing these maps? Their actual comments, how

4   are we going to use those?

5   CHAIRMAN HALL: So that's up to each member

6   of this committee to decide what they want to

7   discern from a given comment. We know that if you

8   read all of these comments, there are some of them

9   that you can't do what both of them say. So you can

10   pick out two messages, and one person wants you to

11   do one thing; and the other person wants you to do

12   something else. So what do you do? Well, that's

13   the decision for each member of this committee to

14   make, what they want to do in response to that

15   public comment. What I can tell you this committee

16   has done in response to that is to ensure that we

17   have the most transparent process in the history of

18   this state.

19   REPRESENTATIVE COOPER-SUGGS: Thank you so

20   much.

21   VICE CHAIR SAINE: Thank you.

22   Representative Hawkins.

23   REPRESENTATIVE HAWKINS: Thank you,

24   Mr. Chairman.

25   Thank you, Chairman Hall. I really

 1   appreciate you taking the time, and not only to sort

 2   of travel across the state for these public

 3   hearings, but to take these questions.

 4   And so, one of the things that you

 5   mentioned that I want to follow up on is you said,

 6   "throughout this process." Meaning that the public

 7   comment portal will be opening throughout this --

 8   can you define what that is? Because I know I've

 9   actually received that question on our start and

10   ending time, so that people know how to engage it

11   fully, and sort of when their last time is to do so.

12   CHAIRMAN HALL: I anticipate that public

13   comment portal being open until at least the time

14   that this body adopts -- meaning the House and the

15   Senate, the General Assembly, at least until the

16   time the General Assembly adopts state House maps,

17   state Senate maps, and congressional maps. That

18   public comment portal will stay open until at least

19   that time.

20   REPRESENTATIVE HAWKINS: Follow-up.

21   VICE CHAIR SAINE: You're recognized for a

22   follow-up.

23   REPRESENTATIVE HAWKINS: Thank you,

24   Mr. Chairman.

25   So a follow-up question is around I think,

1   you know, earlier, yourself or Erika Churchill

2   mentioned hearings. And so, of course that's

3   probably the most popular question is if we're going

4   to have hearings after this. And you said that that

5   would be up to this body.

6   Can you give us a time line in the way you

7   see this and when we would kind of make that

8   decision? And when you think that this body should,

9   you know, between now and when we actually have to

10   file, when we need to do that? Because I think,

11   again, a lot of folks would want to know if we're

12   going to sort of go back out on the road and talk

13   about these again.

14   CHAIRMAN HALL: You know, I'll answer that

15   by saying, you know, as the gentleman knows, we're

16   on an extremely truncated time line, and that's

17   nobody's fault in this body, on either side of the

18   aisle. We just simply didn't get the data in time

19   to do this in the way that it's been done in the

20   past. And especially when you couple it with the

21   fact that the maps aren't being drawn by a

22   consultant somewhere and being delivered here, and

23   us going and voting on them. We're going to do

24   that.

25   We're going to take the time to draw these

 1 in this committee, out in the open, and that takes

 2 time. As the gentleman knows, you know, we've drawn

 3 these maps together in years past. We haven't done

 4 it this year, for everybody listening at home. He

 5 and I, in the past, we've worked together on drawing

 6 maps in prior sessions.

 7   So it's difficult to say and commit to some

 8 form of public comment afterwards because the

 9 reality is we've got to get these done in time for

10 the state board of elections to get ballots

11 finalized. I don't know, frankly, how long it's

12 going to take us to draw these maps. I expect to

13 hopefully start to get some gauge as we get in this

14 thing tomorrow, but for all I know, you know, it may

15 be the last week of October and we're still in this

16 room trying to finalize one version of these maps.

17   And they really need to all be done in the

18 sense that we need to have some final map in place

19 before that public comment comes in, so that they

20 can comment on whatever it is that we're

21 considering.

22   Again, I will say that I do anticipate at

23 least some form of in-person public comment. I just

24 don't know the method, where it will be at, and how

25 much it will be, because of our truncated time line.

 1   But I will just again say, the online version has

 2   been extremely popular. We've had a lot more

 3   comments there than we've had at some of the in-

 4   person sites, where we didn't have a ton of people

 5   show up. Some sites, we did have a lot, and others,

 6   not so much.

 7   So, you know, folks across the state still

 8   have the ability to directly communicate with us and

 9   they've got the chance to watch this happen live.

10   So, you know, I am satisfied that the public's got

11   ample opportunity to weigh in on what we're doing

12   in.

13   REPRESENTATIVE HAWKINS: Thank you.

14   One last follow-up, Mr. Chairman.

15   REPRESENTATIVE SAINE: You're recognized

16   for a follow-up.

17   REPRESENTATIVE HAWKINS: Again, to be

18   clear, in 2019, when we worked on this project

19   together on behalf of the citizens of North

20   Carolina, we both had -- and everyone did -- had a

21   keen interest in groupings because we understand

22   that the way that counties are grouped directly

23   relates to how districts are potentially drawn.

24   And so one thing that came up last time,

25   but I think we can sort of potentially get ahead of

 1   it this time, is how, you know -- how the committee

 2   will approve the entire map. Or is it possible for

 3   us to go and approve grouping by grouping, once we

 4   go through this process?

 5   Because I think, again, if you remember, a

 6   division of the vote in the 2019 session, that would

 7   have given us the ability to isolate and really draw

 8   down on each individual grouping, which I think

 9   could be really helpful. But I wanted to see what

10   the chairman thought about that ability for us to do

11   that this go round, sort of understanding how we did

12   operate in 2019.

13   CHAIRMAN HALL: You know, I anticipate, as

14   I said earlier, taking up member's amendments that

15   they have, in whatever format that they want to put

16   forth, whether that be an entirely new map or a

17   specific grouping, with the only caveat of saying we

18   can't take up -- every member of this committee

19   can't up with 50 or 100 amendments and us possibly

20   have time to get this done.

21   So assuming that doesn't take place --

22   which it hasn't in the past, and so I don't

23   anticipate that being the case this time around -- I

24   think it will be similar to what we saw last time,

25   and that is, you know, members can put the amendment

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1   in whatever form they really saw fit.

2   REPRESENTATIVE HAWKINS: I keep saying one

3   last follow-up, Mr. Chairman.

4   VICE CHAIR SAINE: Well we'll give you one

5   last follow-up.

6   REPRESENTATIVE HAWKINS: And so, you know,

7   I, like you, native North Carolinian, and my

8   birthday is in May, so I was always used to having a

9   May primary. And I understood, you know, why we

10 moved it to March, to play in the presidential. But

11 this is a mid-term, and so, is there any appetite,

12 potentially, to move the primary back to May, in the

13 mid-term, versus the way we do it in presidential

14 years? To give us the ample amount of time to work

15 on these maps and have the potential public comment

16 and have the fun that we did last go round on this

17 project.

18   CHAIRMAN HALL: You know, I'll answer that

19 question by saying you know, I haven't seen that

20 appetite from the body. You know, I chair

21 redistricting and rules and I will leave it at that.

22 You know, I don't anticipate us moving that deadline

23 back, I think for a number of reasons.

24   But one of the best reasons, I think, is

25 folks have planned for that for some time now, and I

 1 certainly understand the gentleman's argument that

 2 perhaps it gives us more time to get it done. But

 3 on the same token, you've got folks who have been

 4 running for maybe statewide offices, and you've got

 5 folks who have planned to run at given times, and

 6 so, at this point in the game, I anticipate keeping

 7 our filing deadlines as is.

 8   REPRESENTATIVE HAWKINS: Sure. Well I

 9 would just argue, Mr. Chairman, that it gives those

10 people -- North Carolina has ten and a half million

11 people, and it's a pretty big state, so that would

12 give those statewide folks a lot of time to know the

13 people of North Carolina. But I really appreciate

14 your time, Mr. Chairman. And thank you for the

15 ability to ask questions.

16   CHAIRMAN HALL: Thank you, sir.

17   VICE CHAIR SAINE: Thank you.

18   Any other questions?

19   Representative Harrison, and then

20 Representative Carney.

21   REPRESENTATIVE HARRISON: Thank you, Mr.

22 Chair.

23   And Chair Hall, when you were talking about

24 us being bound by the criteria of not using race or

25 partisan data, so any individual can -- any member

 1 of the House can draw a district, will they be bound

 2 by the same criteria?

 3   CHAIRMAN HALL: Yes. So to be clear, only

 4 a map that's drawn in this room is going to be

 5 considered by this committee. And on these

 6 computers in this room, you essentially are bound by

 7 that criteria because there is no racial data or

 8 election data that's loaded into these computers.

 9   But to answer your question, yes.

10 Everybody will be bound by the same criteria. It's

11 not that a member that's not on the committee can go

12 draw whatever map they want to and sort of get

13 around our rules because they're not on the

14 committee. They must follow the criteria.

15   REPRESENTATIVE HARRISON: For a follow-up?

16   VICE CHAIR SAINE: You're recognized for

17 follow-up.

18   REPRESENTATIVE HARRISON: But it seems

19 like if you come in, and you might have the material

20 with you, it might not be actually loaded in the

21 software, but you might actually have -- I just

22 didn't know if there was some way to enforce that,

23 or how do you plan to do that?

24   CHAIRMAN HALL: Well, you know, I don't

25 plan to search every member who comes into this

1   committee room, nor do I want to do that. I don't

2   want to know what some of you all have in there.

3   But, you know, it's one of those things where, at

4   the end of the day, the members of this committee

5   are elected representatives. You're elected by your

6   constituents to come up here and do a job. And, you

7   know, I'm not going to -- I always try not to

8   question people's motives when they do something,

9   and I think this falls in that same vein.

10   So, you know, members can -- are free to

11   handle those issues as they see fit, but they will

12   follow the criteria in the sense that that data is

13   not in these computers. But I'm not going to -- I'm

14   not going to search their bags when they walk in.

15   VICE CHAIR SAINE: Recognized for a follow-

16   up.

17   REPRESENTATIVE HARRISON: Thank you.

18   Appreciate that.

19   And I think in 2019 we had a portal open

20   for the public to draw maps. Are we planning on

21   doing that this time around?

22   CHAIRMAN HALL: We are.

23   And if the chair will recognize

24   Ms. Churchill to speak to that.

25   MS. CHURCHILL: Yes, ma'am. Representative

1   Harrison, there will be two public terminals

2   available for use starting tomorrow morning at 9:00

3   a.m.   The public will be asked to schedule in

4   advance, so that they can assure that a terminal is

5   there during the time that they want to use it.

6   They will be asked to bring a thumb drive, or other

7   device where they can save their work, because the

8   terminal will be reduced back to its original state

9   when they leave.

10   REPRESENTATIVE HARRISON: I appreciate

11 that.

12   I think I have two more questions, and

13 they're quick, hopefully.   I don't want to belabor

14 the point, but in the last meeting we had on August

15 18th, several of us had gotten together and

16 advocates had proposed a public participation

17 process and a transparency process.

18   We also all received a letter from Caroline

19 Fry, on Friday, that came from a large group of

20 advocates asking for procedures to be followed by

21 this committee.   One of those is transparency

22 related to third-party participation, disclosure of

23 that.   Is there any plan to the extent that folks

24 are consulting with counsel or data people, or -- is

25 there any plan for disclosure of that sort of issue?

1   CHAIRMAN HALL: You know, in the same vein

2 of -- as chair of this committee, I'm not going to

3 make it a practice to search people's folders or

4 their bags when they come into this room. I'm also

5 not going to inquire into everybody that they're

6 talking to one way or the other. Again, we're all

7 elected here. You've got a duty to your

8 constituents, and you've got the decision to make as

9 to how you want to carry out that duty. But I, as

10 the chair of this committee, I'm not going to police

11 who folks are talking to.

12   REPRESENTATIVE HARRISON: I appreciate

13 that. And just last follow-up. I don't think I was

14 asking about policing, but just disclosure. And I

15 think that was what the public was asking for.

16 Thank you.

17   VICE CHAIR SAINE: Thank you.

18   I've got Representative Carney and then

19 Representative Hawkins.

20   Representative Carney.

21   REPRESENTATIVE CARNEY: Thank you,

22 Mr. Chairman, and Representative Saine.

23   And Mr. Chairman, thank you for taking all

24 of our questions this afternoon. I want to go back

25 to the drawing of these maps in this room. And I

1   guess I am one that envisioned, at first, that this

2   committee would come in here for two weeks, gathered

3   around the maps, work together in a non-partisan way

4   to draw these maps out in the public, as you've

5   stated. But I'm hearing now, and I'm understanding,

6   member -- when you said any member can come in here

7   from 9:00 to 5:00 Monday through Friday for two

8   weeks -- correct me if I'm wrong.

9   CHAIRMAN HALL: That's right.

10   REPRESENTATIVE CARNEY: But any member of

11 the legislature. House members in here, and I guess

12 the Senate will be doing the same. So it is going

13 to be beyond -- the map drawing will go beyond just

14 the committee members; is that correct?

15   CHAIRMAN HALL: Yes. And one thing I do

16 what to correct that you said. You said Monday

17 through Friday for two weeks. I don't know if it's

18 going to be two weeks or not. I don't know how long

19 it's going to take. But -- and I understand why the

20 lady is asking the question.

21   And, you know, having done this in a

22 similar fashion in 2019, what ends up happening when

23 you leave this committee room open for that long, it

24 gives members an opportunity to come in and draw as

25 they see fit. Just as you and I have the right as

1 House members to draft -- to have drafted whatever

2 bill we want to have drafted.

3   The reason that we're doing it that way is,

4 you know, we wouldn't tell members, prior to the

5 filing or bill drafting deadline, we wouldn't say,

6 you know, only certain members can file bills. You

7 know, sometimes that may be preferable for our given

8 caucuses, but unfortunately, maybe unconstitutional.

9   So, in the same vein, I want to give every

10 member of the House an opportunity to be able to

11 draft their bill, so to speak, if they want to do

12 that. But you also see happening, especially sort

13 of in peak hours, so to speak -- so, you know, in

14 the mornings I would anticipate on like Tuesday,

15 Wednesday, Thursday, you're going to have several

16 people in here. And Representative Hawkins and I

17 have done this in the past. Some of those parts of

18 the maps that we're under right now, he and I

19 literally drew together in this committee room. I

20 mean, substantial parts of them. We didn't have to

21 agree on every single thing, but substantial parts

22 of them, you know, we sat down and drew them

23 together.

24   So some of that will happen. You know,

25 members may ask members from given districts to come

 1 over and say, "Hey, what do you think about, you

 2 know, this given area? You know it better than I

 3 do." So that's going to be allowed, I mean, that

 4 teamwork, so to speak. But the reason for leaving

 5 it open so much is just to give members the

 6 opportunity to have their voice heard, so to speak,

 7 in this committee room.

 8   REPRESENTATIVE CARNEY: So a follow-up?

 9   VICE CHAIR SAINE: You're recognized.

10   REPRESENTATIVE CARNEY: If there are 120

11 members out of 120 -- let's say every member decided

12 to come in and put something in to these maps, a

13 little section, or their own, or whatever, their own

14 districts, how do we pull all of that together? And

15 I know staff will be the ones that will pull that so

16 that it meets all of the criteria, and pass all the

17 must, or whatever. Will we come up with one map, or

18 two, or three maps that then the committee would

19 vote on? I'm just asking.

20   CHAIRMAN HALL: I think we'll have multiple

21 maps that the committee will vote on. You know,

22 just like with any other committee, if you're not a

23 member of this committee, if you want to draw a map,

24 you're going to need to get a member of this

25 committee to present that for you. Just like on any

 1   other committee, if you've got a bill that, if you

 2   can't be in a given committee, or you're not on it,

 3   you just want somebody on it to present, they need

 4   to present it for you.

 5   That's probably -- and actually, now that I

 6   say that, it depends on the timing. Let me actually

 7   take that back. Because if we have time, you know,

 8   to let other members come in and speak to that, just

 9   like we would other committees, we'll do that. But

10   I do anticipate that sort of creating a time crunch

11   for us. And so most likely what we're going to do

12   is limit it to the members of this committee

13   presenting amendments and presenting their various

14   maps.

15   REPRESENTATIVE CARNEY: And one final. How

16   will this be -- how will we let the other members

17   know -- and of the course the public that is

18   listening -- how will be let them know about this

19   process? Is there going to be an email sent out to

20   everyone that they will understand what we're doing?

21   CHAIRMAN HALL: We will probably send

22   something out just to say, you know, if you want to

23   come in and draw, that you can. But I think that,

24   you know, the rules are fairly simple. Once you get

25   in here you see, you know, you can go to the station

1 and draw as you see fit. But we will make it known

2 that all House members have the ability to come in

3 here and draw maps during the committee period.

4   REPRESENTATIVE CARNEY: Thank you.

5   REPRESENTATIVE SAINE: Thank you.

6   Representative Hawkins.

7   REPRESENTATIVE HAWKINS: Yes, sir. Thank

8 you, so much, for the second opportunity to ask

9 questions about redistricting. The first question

10 is around the ability for multiple language speakers

11 to use this portal and have their languages

12 translated properly.

13   Representative Torbett and I were in

14 Durham, and he was so kind to allow for a

15 translator, a Spanish speaking translator, for our

16 Spanish speaking population to take part. And maybe

17 this is a question for staff, since we potentially

18 may not have in-person public hearings in the

19 future, how are multiple languages being transferred

20 into the English language, so that we can decipher

21 it and make sure that they have a part in the

22 process?

23   VICE CHAIR SAINE: Ms. Churchill.

24   MS. CHURCHILL: Representative Hawkins, I'm

25 not going to commit to anything, because I'm not

1　sure what we can do with the technology, but we are

2　absolutely happy to look into what our options are,

3　and report that back to the chair.

4　　　　　REPRESENTATIVE HAWKINS:　Okay.　I also

5　heard you were Erika Churchill, and you can do all

6　things, but just putting that out there.

7　　　　　MS. CHURCHILL:　Speaking French is not one

8　of those things.

9　　　　　REPRESENTATIVE HAWKINS:　Okay.　10-4.　Just

10　--

11　　　　　CHAIRMAN HALL:　I believe she said not yet.

12　　　　　REPRESENTATIVE HAWKINS:　Follow up,

13　Mr. Chairman.

14　　　　　VICE CHAIR SAINE:　You're recognized for a

15　follow-up.

16　　　　　REPRESENTATIVE HAWKINS:　And this is just,

17　you know, full transparency, Mr. Chairman, so that

18　the public can know that we're, you know, working

19　with all cards up.　Is there, you know, any -- I

20　want to make sure that there have been no maps drawn

21　outside of this building that any of us have been

22　privy to.　Can we say that unequivocally that that's

23　been the case?

24　　　　　CHAIRMAN HALL:　I can't speak for other

25　members of this committee.　What I'll say is that I

 1   have not contributed to the drawing of any map, at

 2   all.

 3   REPRESENTATIVE HAWKINS: Awesome. Thank

 4   you, Mr. Chair.

 5   VICE CHAIR SAINE: Thank you.

 6   Representative Warren.

 7   REPRESENTATIVE WARREN: Thank you. I

 8   propose this to the Chair, but probably going to

 9   deflect it to Ms. Churchill. Can you explain what

10   the matrix is on page 2 of this stack of maps?

11   VICE CHAIR SAINE: Ms. Churchill.

12   REPRESENTATIVE WARREN: I knew it. She can

13   do anything.

14   CHAIRMAN HALL: When we're using the word

15   "matrix," generally I'm going to go ahead and

16   deflect that one on over.

17   MS. CHURCHILL: So, Representative Warren,

18   I'm not sure that it is a matrix in the form that

19   many people think of when you say that word. But it

20   was our attempt to keep up with how the group from

21   Duke was allocating the options to create the eight

22   different combinations for a fully assigned

23   statewide map.

24   So when you see the A1 option in the Duke

25   House 01 through 04, that is associated with the

 1 western part of the state, that northwestern corner

 2 that was unassigned in the fixed map. The option

 3 one, the combination is Surry, Wilkes, Alexander,

 4 for two members. And Alleghany, Ashe, Watauga, and

 5 Caldwell for two members. And so it's just, we

 6 wanted you all to know that we were trying to

 7 methodical and systematic, following the recipe. So

 8 it's just simply the designations they were using to

 9 tell us whether to add salt or to add sugar.

10   VICE CHAIR SAINE: Thank you, sir.

11   Any other questions for Chairman Hall?

12   Representative Brockman.

13   Representative Brockman, Representative

14 Reives, and then Representative Harrison.

15   REPRESENTATIVE BROCKMAN: I know we're not

16 considering race, but are we considering party

17 registration when we're drawing the maps, as

18 criteria?

19   CHAIRMAN HALL: Nope.

20   VICE CHAIR SAINE: Representative Reives.

21   REPRESENTATIVE REIVES: Thank you, Mr.

22 Chair. I had a -- I wouldn't call them a series,

23 but you may call them a series of questions --

24   VICE CHAIR SAINE: You're recognized for a

25 series, sir.

 1   REPRESENTATIVE REIVES: All right. Thank

 2   you.

 3   I wanted to make sure, and I apologize if

 4   this is repeating anything, I don't know that I have

 5   the answer in my head, and I know that when we walk

 6   out of this room, that I'm going to get all these

 7   questions, so I'm trying to kind of figure out where

 8   we are.

 9   So on the drawing of the maps, I think my

10   big question is -- and I've got to get my glasses

11   back on because I had to type this because I can't

12   see, and I can't read anymore. See what you guys

13   did to me in 10 months. I had 2020 vision when I

14   got here.

15   But I guess first following up on

16   Representative Hawkins' question, and again, it's

17   just the question we've got to ask. He asked if

18   there have been any maps drawn outside this

19   building. I would like to know if there have been

20   any maps drawn inside the building?

21   CHAIRMAN HALL: No. Great lawyer question.

22   But no.

23   REPRESENTATIVE REIVES: Just making sure.

24   I got to ask.

25   CHAIRMAN HALL: You know, again, I'm

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1 speaking for myself, as the gentleman understands.

2 I can't speak for what other members have done, on

3 either side of the aisle, or in the Senate, but I

4 have not participated inside or outside of the

5 drawing of any maps, for this session.

6   REPRESENTATIVE REIVES: That's good. I

7 appreciate that. And going on that same issue, and

8 you really, you and I have talked, and now I want to

9 say publicly, you have been very good about keeping

10 me up to date with what we're trying to do, how

11 we're trying to do it, and I appreciate that. And

12 we had this discussions, but I want to kind of get

13 it clearer now.

14   So my concern is similar to Representative

15 Harrison's concern because here seems to be the

16 problem that you run into. So let's say somebody --

17 and I'll use somebody who would never do this. I'm

18 going to use Representative Bell. So let's say

19 Representative Bell comes in and he's gone, and he's

20 talked to, you know, non-member Billy Richardson,

21 and Billy has said, "Oh, man. This would be a great

22 map for you, John Bell, because, you know, you put

23 all the democrats over here. You put all the

24 republicans here. And then you got you all the

25 black people here and the white people here, and all

1   that stuff." Obviously using racial and partisan

2   data that we're not using.

3   And so then he says, "Here's my map, so you

4   don't have to worry about drawing it." Well if

5   Representative Bell, under what I'm hearing, brings

6   that map in, sits it down in front of him at the

7   terminal, and just draws it on a computer, then he,

8   at that time, has been allowed to draw a map that's

9   been drawn on a computer, so it can be used, but

10 it's still using racial and partisan data.

11   And I'm just like Representative Harrison,

12 I'm definitely not asking anybody to police anyone,

13 but do we have anything in place that would kind of

14 help prevent that? Because to me, that sounds an

15 easy get around, in a legal sense, around the

16 criteria that we've set up.

17   CHAIRMAN HALL: Well, you know, I would

18 initially say that the problem that you face at the

19 end of the day, as the gentleman already knows, and

20 as I've said, I don't think I have the ability to

21 police members of this committee, nor do I want to

22 try to do that. I don't think it can effectively be

23 done.

24   The committees of this -- the members of

25 this committee have an elective duty to do things, I

1   think in the right way. And we have a set of

2   criteria that we have used in here. I know I'm not

3   going to bring in a map and sit down and draw it,

4   but you know, the reality is, we're elected

5   officials, and people will talk to us, and they call

6   us all the time. And throughout this process, many

7   members of the committee and the body are going to

8   be told by folks, whether in their district or in

9   the halls out here, what they think they should do.

10   And in fact, as many of the questions today

11   have shown us, the members of this committee really

12   want the public's comment. And, you know, those

13   members of the public may say, "Representative

14   Reives, I want you to draw the district this way and

15   I want you to do this precinct." And that's up to

16   you to determine how you want to handle doing that.

17   But at the end of the day, I think we've

18   done all that we can, in the sense of we're only

19   putting the data that's allowed to be used in the

20   computers, in this room, and we've got a live audio

21   feed, and a live video feed. I'm not sure that we

22   can do a whole lot else, humanly, to prevent any

23   sort of noise, so to speak, from coming in, other

24   than doing those things.

25   REPRESENTATIVE REIVES: Is it possible,

1   just as a follow-up, that we could at least prevent

2   the bringing in of a physical map to draw from? Is

3   that something possible?

4   CHAIRMAN HALL: Yeah. You know, and you

5   and I talked about this the other day, and I thought

6   it was a great question, something I hadn't really

7   thought about. And, you know, and I certainly, I

8   see your point. But what I don't want to get into,

9   as the chair of this committee, is when, you know,

10   Representative Warren comes in here and he's got

11   this big spread, me, you know, telling the sergeant

12   in arms to take Representative Warren, you know --

13   or take his map away from him or take him out of

14   this committee room. You know, I want to avoid

15   that.

16   And, you know, it's one of those things

17   that there might be a scenario where, you know, you

18   draw one map in here -- you've been through this

19   before -- you draw a map, you have it printed out,

20   and you might take it with you to study it and think

21   about it, and to determine what you want to do to

22   perhaps change it. Maybe you want to take it to

23   your constituents and say, "Look, here's what I'm

24   thinking. What do you think about this?" And maybe

25   they give you input.

1   And you might want to bring that very map

2   back in here, that you drew in this committee, and

3   sit down and, based on the changes -- the input,

4   rather -- the input you've got from other folks, and

5   make those changes. And I don't know how we would -

6   - again, I go back to the word policing it -- how I

7   -- I can't stand over somebody's shoulder and say,

8   "Now that's not the map you drew in here. That's a

9   map -- I don't know where that came from." I just

10   don't -- I don't think it's possible to do that.

11   But what I can tell the members of this

12   committee, as the chair, I won't be brining any maps

13   in here to draw off of. But I want to be clear that

14   when members of the public that are watching these

15   live video feeds, or members who are sitting in the

16   back, they're going to see members of this committee

17   walking around with maps in their hands. Some

18   people like to have a sheet of paper in front of

19   them. You know, you're probably like me. I like to

20   read, you know, a statue printed out, rather than

21   read it on a computer screen, so that I can write on

22   it, and think about it a little easier.

23   So, because of that, I'm afraid, you know,

24   even if we tried to do that, the optics of removing

25   members from this committee, and people seeing

 1 people walking around with maps that have been

 2 printed out because they were drawn in here, I think

 3 it ultimately results in the best path forward to

 4 just say, you know, look folks, the map you draw has

 5 got to be the one that you do in here and nowhere

 6 else. And that's up to the members and their

 7 integrity as to how they want to handle that.

 8   REPRESENTATIVE REIVES: And I would say

 9 then, based on that, I'm assuming we will be

10 instructing members that you are not to use racial

11 or partisan data in the drawing of the maps that you

12 do in here.

13   CHAIRMAN HALL: Absolutely.

14   REPRESENTATIVE REIVES: And I would also, I

15 guess, say that once we're down to the maps that

16 we're going to be voting on, I mean, I would think

17 that's something that we can ask members when

18 they're presenting a map. You know, if a member

19 comes up and says, "This is my map we're voting on,"

20 you could say, "Okay. You didn't use racial or

21 partisan data," and that won't be considered out of

22 line.

23   CHAIRMAN HALL: I think that's, you know, a

24 fair question for any member of this committee or

25 anyone in the House to ask those very questions.

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1   REPRESENTATIVE REIVES: All right. Well

2   then that gets us to the next question I've got.

3   We've got criterion that we've put in place that we

4   set up for the whole map drawing process. What my

5   question is is what criteria are we going to use to

6   choose between grouping options? Are we going to

7   have some plain set out criteria saying this is what

8   gives us the best grouping options?

9   CHAIRMAN HALL: So the committee is not

10   going to adopt any specific of the options and

11   groupings. We have said, as I said a moment ago

12   when I was chairing, the only groupings that we're

13   going to consider, are those that's in this packet.

14   But as you know, and the committee members know,

15   there are multiple possible groupings within that

16   packet. We're not going to vote on which one

17   members have to use.

18   So that's going to be up to the members of

19   this committee what combination of groupings each

20   member wants to use in drawing their maps. Within

21   that, there might be, you know, one particular

22   grouping, or set of groupings, that somehow results

23   in a map that more fairly meets the criteria, over

24   some other set of groupings. But that's -- you

25   know, in large part, some of that is subjective.

1   Not all of it, but some of it is subjective.

2   But it's going to be up to the committee

3   members to decide what set of groupings they want to

4   use. We're not going to limit the committee to any

5   one combination of groupings.

6   REPRESENTATIVE REIVES: Thank you for that.

7   And back to some of Pricey's questions on the Voting

8   Rights Act. Because I'll be the first to say, I

9   don't practice in that area, so I don't profess to

10   completely understand what we're supposed to do.

11   I think what my question would be is, what

12   do you feel like our obligations are under the

13   Voting Rights Act, at this point? Because I

14   understand that you're saying that we won't be using

15   racial data to determine what those districts look

16   like, initially, which I think was done before. So

17   what do you think our obligations would be and how

18   are we going to comply?

19   CHAIRMAN HALL: Well, obviously, you know,

20   we're obligated to comply with section two of the

21   Voting Rights Act. But as I said earlier, we've

22   seen a lot of litigation in this state, and you've

23   followed that, I've followed it. I can't say I've

24   read every line of every single case, because that's

25   all you would ever do, you know, if you were going

1   to go do that. But I've read a lot of it, and in my

2   opinion, what the plaintiffs have said -- so those

3   folks who have tried to set aside maps -- have said

4   -- and their experts, by the way. The experts that

5   they hired to go to court for them. They've all

6   said that there is no legally significant racially

7   polarized voting in North Carolina.

8   That's the evidence in the record from past

9   cases that we have. In my opinion, that's what the

10 Covington Court found. So Judge Wynne found that

11 there was no legally significant racially polarized

12 voting in North Carolina. But certainly, the

13 plaintiffs and their experts made that claim.

14   So without that, we believe, as we've done

15 in the past two sessions that we've redrawn, not

16 considering race is actually, not only proper, but

17 it's the best way forward to make sure that we are

18 complying with, not only the Voting Rights Act, but

19 other state and federal laws.

20   REPRESENTATIVE REIVES: And also, based on

21 the court decisions, I heard you earlier say that we

22 are choosing not to use partisan data, but since

23 there's no binding precedent -- was your statement

24 about   that -- then what obligations do

25 you feel like we have, based on the case that talked

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1   about partisan gerrymander? Do you feel like that

2   we have any obligations based on that case, or

3   that's just something we all have to talk about?

4   CHAIRMAN HALL: It's not a legally binding

5   precedent. It's not an appellant, because the

6   gentleman knows it wasn't an appellate court that

7   made any of those decisions. So to answer the

8   technical aspect of your question, it is not legally

9   binding.

10   However, we have adopted some of the

11 opinion in our criteria, so to the extent that we

12 adopted it into our criteria, that's binding on this

13 committee. We've also taken some things that we

14 didn't really adopt as criteria, but simple

15 instructions to the committee that was in that case,

16 and that is all of these computer stations that we

17 see around, the live audio, live video, we're

18 voluntarily doing that.

19   Again, not binding on us at all. There is

20 certainly no state law that requires this body to

21 have TV cameras to watch us do anything. I mean, we

22 can have -- we have to have open meetings, when the

23 body's meeting, but there's no law that requires us

24 to be transparent in this process. We are

25 voluntarily choosing, at every single step along

1 this line. We are going above and beyond what the

2 law requires us to do, in my opinion, in terms of

3 transparency.

4   REPRESENTATIVE REIVES: All right. And I

5 think I've got one follow-up that may be more

6 appropriate for staff, but if you'll just determine,

7 Mr. Chair, who is best to do it. Because while you

8 were talking, I was also thinking back on the Voting

9 Rights Act. I guess my question is, how do we know

10 we're in compliance with the Voting Rights Act with

11 a map then, if we're not using racial data during

12 this time?

13   CHAIRMAN HALL: Well, again, I would fall

14 back on what we've done in the past. And we have

15 done this in the past in the very method -- with the

16 very method that we're using right now. We haven't

17 used racial data. And those courts have upheld that

18 process. So we're essentially sticking with what

19 works.

20   As the gentleman knows, this is an

21 ever-evolving body of law around redistricting. All

22 we can do is try to stick with what we know works

23 based on past precedent. And in this particular

24 instance, we're confident, just as we've done in the

25 past, that we should not use racial data at all, and

1   that doing so, we'll be in compliance with all state

2   and federal laws.

3   REPRESENTATIVE REIVES: Okay. And I'm

4   going to repeat what I think I'm hearing, and just

5   tell me if I'm accurate. So, if I'm hearing you

6   correctly, we won't be doing anything proactively to

7   see if we're in compliance. What we'll be doing is

8   we'll draw maps, and it's our believe that those

9   maps will comply. And then if the courts tell us

10   they're not in compliance, then that would be when

11   remedial measures would be taken.

12   CHAIRMAN HALL: In my opinion, not using

13   racial data will ensure that we are in compliance

14   with those laws. So yes.

15   REPRESENTATIVE REIVES: Okay. Got it. And

16   when we get down to the point on voting on these

17   maps, I mean, are we going to do any kind of culling

18   -- I'm with you in the sense I want this to be more

19   of an efficient process, and if I'm hearing

20   correctly, what our process is, in theory, 120

21   members can walk in here and draw 120 maps, and then

22   can have 120 amendments, which could really kind of

23   have us all over the place. Is there anything that

24   we're doing to kind of cull this down so that we're

25   not voting on 120 maps when we make our committee

1　vote?

2　　　　　　CHAIRMAN HALL: Well, you know, the

3　gentleman may want to address that in caucus, before

4　we vote on these maps. But outside of that, you

5　know, it's one of those things that I don't know how

6　many we're going to have. I don't want to sit here

7　and say, now look, we're not going to consider --

8　we're only going to consider 10 maps, so come up

9　with your best 10. I don't want to do that. I want

10　to give members of this body who are elected the

11　opportunity to be heard.

12　　　　　　You know, on the floor, people can put

13　forth amendments all day, just like, you know, we

14　see them often do. And so we don't want to limit

15　that. But what I'll say is, you know, if we get in

16　here as a committee, and we've got a ton of these

17　amendments and proposed maps coming in, at some

18　point -- and the chair -- I will say, I will talk to

19　you about this ahead of time -- at some point, you

20　and I are going to have to get together and say, you

21　know, we're going to have to talk to the folks in

22　our respective caucuses and limit the number of maps

23　and amendments that we're putting forth in this

24　committee, and tell them, save it for the floor. If

25　you want to put it forth on the floor, they're

1   certainly welcome to do that.

2   But what I'll commit to is an interactive

3   process with you, especially, and really all the

4   members of this committee, that we try to get it

5   done in an efficient process. And that may take,

6   you know, you and I putting our heads together and

7   figuring out which amendments we should take up on

8   this committee, and which may need to wait for the

9   floor.

10   REPRESENTATIVE REIVES: All right. Well I

11   think those are my questions. Thank you.

12   VICE CHAIR SAINE: Thank you, sir.

13   Next, Representative Harrison.

14   REPRESENTATIVE HARRISON: Thank you, Mr.

15   Chair.

16   And Mr. Chair, I apologize for the barrage.

17   I think these are really simple questions. If I

18   heard Erika correctly, the public can draw maps on

19   public terminals that are set up, but not in this

20   room or in 544; is that accurate?

21   REPRESENTATIVE SAINE: Ms. Churchill.

22   MS. CHURCHILL: Yes, Representative

23   Harrison. That is accurate. The drawing stations

24   in room 544 and 643 are reserved solely for members

25   of the General Assembly.

1   REPRESENTATIVE HARRISON: So as a follow-up

2   to that, did I hear that we're only considering maps

3   that are drawn in this room and in 544? And if

4   that's the case, then what are we doing with the

5   public's maps?

6   CHAIRMAN HALL: So --

7   Mr. Chairman, sorry.

8   REPRESENTATIVE SAINE: Go ahead.

9   CHAIRMAN HALL: So if a member of the

10   public comes in, and as I've said earlier, just like

11   any other bill, you know, one of your constituents

12   or the member of the public may say, "Look,

13   Representative Harrison, here's what I think you

14   should do," you're obviously welcome to take a look

15   at that. And herein lies sort of the friction

16   between the position that Representative Reives

17   talked about, and what you're saying right now.

18   So if I'm to say, as the chair of this

19   committee, you cannot bring a map in here, period,

20   well, if one of your constituents says,

21   "Representative Harrison, I went to the portal

22   downstairs, I drew this map, and I really think this

23   is a good idea," and you agree with it, if we have

24   that rule in place, you wouldn't be able to bring

25   that map in this room. You wouldn't be able to take

 1   into account the -- and that's literally public

 2   input that you wouldn't be able to take into

 3   account.

 4   So the maps that we take up must be drawn

 5   in this committee room. Now, we'll talk about maps

 6   that are drawn, you know, downstairs, but with the

 7   same data loaded into the computers, and how we'll

 8   go about handling that, you know, if a member

 9   literally wants to take one of those up. But what I

10   anticipate right now is requiring that it be drawn

11   in this committee room.

12   REPRESENTATIVE HARRISON: I appreciate

13   that, and I just have one question and I think I'm

14   done. I must have missed the congressional map

15   discussion. Have we talked about that? When does

16   it happen?

17   CHAIRMAN HALL: So one thing I do want to

18   clarify. So in this room, we won't be drawing any

19   state Senate maps. Just as, you know, we're not

20   going to let them screw up our state House maps, so

21   they're not going to be able to draw ours. The

22   congressional maps, so I think technically, and

23   staff can correct me if I'm wrong, I think the data

24   is in there right now to be able to draw a

25   congressional map.

 1   Is that right, Ms. Churchill, just in

 2   general --

 3   Okay. So you could start on a

 4   congressional map if you wanted to. That's up to

 5   each member of this committee. I know my hope is is

 6   that we sort of tackle the state House map first, as

 7   a committee. So if you're drawing, just know, the

 8   first map that I anticipate taking up as a chair, is

 9   going to be the state House map. So you need to

10   work on that one first if you want it to be ready to

11   go to put forth whatever your amendment may be. And

12   then after that, at some point, we'll do the

13   congressional map.

14   REPRESENTATIVE HARRISON: If I could follow

15   up --

16   VICE CHAIR SAINE: You're recognized for a

17   follow-up.

18   REPRESENTATIVE HARRISON: And I'm sorry if

19   you said this -- so when do you think we're going to

20   be done with all these maps, in terms of us enacting

21   them?

22   CHAIRMAN HALL: Yeah. You know, I really

23   don't know when we're going to be done. What I'll

24   say is that I believe we need to be done by the end

25   of this month. We may have a few more days past

1   that, that the state board of elections can still

2   give us turnaround. But the mindset that I've had

3   is let's get this done by the end of October, that

4   way everyone gets ample time to know what districts

5   are going to look like and the state board of

6   elections can get things done.

7   But, you know, the problem is, you know, we

8   are drawing the whole map for the first time, I

9   guess since 2011. And what we've done, you know,

10   since I've been in this body -- I've been through

11   this process a number of times, but it's always

12   typically been with a more limited part of the map

13   that we're required to redraw. So that's one of the

14   issues. And that is, this is so unprecedented, we

15   have never done it this way. This body has never

16   drawn the whole map in complete public view with

17   live audio, live video. We don't know how long that

18   process is going to take. But, you know, the goal

19   is to get it done by the end of October.

20   REPRESENTATIVE SAINE: Representative

21   Carney.

22   REPRESENTATIVE CARNEY: Just one last

23   question, and Mr. Chairman, thank you so much for

24   your indulgence. And we're about to beat the Senate

25   on this committee meeting length of all of us being

1 able to answer questions, so I appreciate that.

2   I'm just hung up on the maps being drawn in

3 this room, and I'm trying not to be. Because on one

4 hand we're stating that the only maps we will

5 consider will be the maps that are drawn on these

6 computers, in these rooms. But now I'm hearing that

7 it doesn't preclude someone coming to me, from the

8 public, and giving me information and a map, and

9 then I come in here and transport it into the

10 portal.

11   That takes that to the level of there can

12 be maps -- and help me understand if I'm wrong --

13 there can be maps drawn outside of this building,

14 from any group, and given to a member, or a group of

15 members, and they can come in and put it into the

16 portal. It would be under their name. Is that

17 correct?

18   CHAIRMAN HALL: Well, I guess in a literal

19 sense, you certainly could hear from somebody else,

20 and come in here, and draw a map. And there's

21 really nothing we can do about that. It's a first

22 amendment issue. The members of this committee have

23 a first amendment right to go talk and hear from

24 their constituents. Their constituents have a first

25 amendment right to talk to their legislatures. Well

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1   even if you're not their legislature. The folks of

2   this country have a right to say what they want to,

3   and if you're walking down the street, they can come

4   up to you and say, "Representative Carney, here's

5   what I think you should do."

6   It's then up to you, as a member of this

7   committee, to handle that in whatever way you see

8   fit. Just like you would a bill. Some individual

9   in your district, or not your district, may write

10 out a bill for you. You're not going to go

11 introduce that, obviously, and us vote on it to go

12 through the bill drafting process. So in some ways,

13 you know, it's very similar.

14   The other thing that I'll say though, I

15 think what may be getting lost in the weeds is, when

16 you actually sit down to do this, this is a big

17 state. There's a bunch of precincts on the

18 congressional maps. You have to get things -- with

19 zero deviation it's going to be very difficult to

20 sit down and memorize an entire map, and come in

21 here and sit down and pinpoint, you know, wherever

22 an outside map was that you saw.

23   But I think, fundamentally, the issue is

24 going back to the law would allow exactly what

25 you're saying, but even on another level. It would

1   allow you to go hire somebody to draw whatever map

2   you felt like was the best map, and bring it in

3   here, and put it before this committee. But we're

4   going above and beyond what the law requires, in

5   terms of transparency. We're going to require them

6   to be drawn in here.

7   REPRESENTATIVE CARNEY: Thank you.

8   REPRESENTATIVE SAINE: Any other questions

9   for Chairman Hall? Seeing none, I believe the

10 business of the committee is completed today.

11   Is that right, Chairman Hall?

12   CHAIRMAN HALL: That's right, Chairman

13 Saine. And the members, we'll be back in here at 9

14 o'clock in the morning. We'll gave in, and members

15 will be able to draw. And let's see how much we can

16 get done tomorrow and perhaps part of Thursday and

17 see if we need to work on Friday.

18   REPRESENTATIVE SAINE: You've heard the

19 gentleman. Come in tomorrow ready to work. With

20 that --

21   I'm sorry. Representative Carney.

22   REPRESENTATIVE CARNEY: So that turned into

23 one more question.

24   VICE CHAIR SAINE: You're recognized.

25   REPRESENTATIVE CARNEY: Does that mean that

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 1   the full committee, Monday through maybe Friday, if

 2   we have a duration, we are to be present in here

 3   every day that the maps are being drawn?

 4               CHAIRMAN HALL:   No.   You don't have to

 5   present.   That's completely up to you as a committee

 6   member.   You can come for all of it or come for none

 7   of it.   But it's up to you.

 8               REPRESENTATIVE CARNEY:   We have a choice.

 9   Thank you.

10               VICE CHAIR SAINE:   We stand adjourned.

11   Thank you.

12               (END OF AUDIO FILE)

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1   CERTIFICATE OF TRANSCRIPTIONIST

2   I certify that the foregoing is a true and

3 accurate transcript of the digital recording

4 provided to me in this matter.

5   I do further certify that I am neither a

6 relative, nor employee, nor attorney of any of the

7 parties to this action, and that I am not

8 financially interested in the action.

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Julie Thompson, CET-1036

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EXHIBIT G

Expert Report on North Carolina's Enacted Congressional Districts

Christopher A. Cooper

November 29, 2021

Introduction

My name is Christopher A. Cooper. I have been asked to provide a brief analysis of the partisan characteristics of North Carolina's congressional maps, enacted on November 4, 2021, for purposes of Plaintiffs' motion for preliminary relief in *Harper v. Hall*, No. 21 CVS 500085. I am conducting this analysis as a private citizen and am not speaking for my employer, nor am I conducting this work on university time, or using university resources.

I am the Robert Lee Madison Distinguished Professor of Political Science and Public Affairs at Western Carolina University, where I have been a tenured or tenure-track professor since 2002. I hold a PhD and MA in Political Science from the University of Tennessee, Knoxville and a BA in Political Science and Sociology from Winthrop University. My academic research focuses on state politics and policy, elections, and southern politics—with particular application to North Carolina. To date, I have published over 50 academic journal articles and book chapters, co-edited one book, and co-authored one book (both with the University of North Carolina Press). I teach courses on state and local politics, political parties, campaigns, and elections, southern politics, research methods, and election administration. In 2013, I was named the North Carolina Professor of the Year by the Carnegie Foundation for the Advancement of Teaching and I have received Western Carolina University's highest honors in teaching (Board of Governors Teaching Award) and scholarship (University Scholar).

Much of my academic and applied research relates to North Carolina politics and policy and I am a frequent source for news media seeking comments about politics in the Old North State. My quotes have appeared in national and international outlets including the New York Times, Washington Post, Politico, BBC, and the New Yorker, as well as in North Carolina-based outlets including the News and Observer, Charlotte Observer, Asheville Citizen Times, Carolina Journal, Spectrum News, and National Public Radio affiliates in Chapel Hill, Charlotte, and Asheville. I have written over 100 op-eds on North Carolina, southern and national elections and politics, including pieces in the Atlanta Journal Constitution, NBC.com, the News and Observer, Charlotte Observer, and Asheville Citizen Times, and regularly give talks about North Carolina politics, North Carolina elections, and the redistricting process to groups throughout the state. I previously served as an expert witness in *Common Cause v. Lewis*.

I am being compensated at a rate of $300 per hour.

The bulk of the analysis that follows analyzes the consequences of the choices made district by district. Before proceeding into this analysis, however, a few points of context:

- North Carolina is, by virtually any measure, a "purple state" with healthy two-party competition. The North Carolina Governor is a Democrat, while the US Senators are Republicans. There are more registered Democrats than Republicans in the state, and in the 2020 election, the two-party vote share difference between Trump and Biden was the smallest of any state that Donald Trump won.

- North Carolina does not show as much evidence of "natural clustering" as other states. According to Stanford University political geographer Jonathan Rodden, "Due to the presence of a sprawling knowledge-economy corridor, a series of smaller automobile cities with relative low partisan gradients, and the distribution of rural African Americans, Democrats are relatively efficiently distributed in North Carolina at the scale of congressional districts."[1] In other words, massive partisan disparities in election outcomes in favor of one party or the other cannot be discounted as simply a result of where Democrats and Republicans happen to live.

- Gerrymandering, drawing districts to benefit one party at the expense of the other, is generally accepted as a threat to democracy in North Carolina and across the nation. This statement is true regardless of partisanship. For example, a 2018 Elon Poll found that just 10% of registered voters in North Carolina believe the current redistricting system is "mostly fair." A recent op-ed in the *News and Observer* by Republican Carter Wrenn and Democrat Gary Pearce illustrates bi-partisan agreement on the evils of gerrymandering in clear terms. They explain, "We agree that gerrymandering is a major problem that undermines the foundations of our democracy. We agree that districts shouldn't be drawn to help one political party, no more than college basketball games should be rigged to favor one team."[2] The preference for fair maps is not a partisan one.

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[1] Rodden, Jonathan, Why Cities Lose (New York: Basic Books, 2019), 173.

[2] Gary Pearce and Carter Wrenn. "We're usually on opposite sides of political battles. But we agree on NC voting maps." News and Observer. October 21, 2021.

While the district-by-district analysis is key to understanding the ways in which the map will translate into advantage for one party or the other in any given district, the map is best thought of as a single organism, rather than 14 separate congressional districts---when one district moves in one direction, another district must shift in response. As a result, it is worth pausing and considering some of the general characteristics of the map before moving into a district-by-district analysis.

- North Carolina earned an additional congressional seat because of population growth that occurred mostly in urban areas: according to an analysis of U.S. census data by the News and Observer, more than 78% of North Carolina's population growth came from the Triangle area and the Charlotte metro area.[3] Despite that fact, the number of Democratic seats actually *decreases* in the current map, as compared to the last map. The last map produced 5 Democratic winss and 8 Republican wins; this map is expected to produce 3 Democratic wins, 10 Republican wins and 1 competitive seat.

- Democratic strongholds Mecklenburg, Guilford, and Wake Counties are each divided across three districts, despite the fact that there is no population-based reason to divide them this many times. In the previous map, Mecklenburg was divided into two districts, Wake into two districts, and Guilford fell completely in one district. The strategic splits in the enacted map ensure that large numbers of voters will have no chance of being represented by a member of their own party. These splits will also lead to voter confusion and fractured representational linkages. The shaded red-and-blue maps that follow this introductory section provide a graphical representation of each of these county splits.

- The map produces geographic contortions that combine counties in ways that, in some circumstances, have never existed before.

- The double-bunking that occurs in the enacted map advantages the Republican Party. A Republican (Virginia Foxx) and a Democrat (Kathy Manning) are both drawn into in an overwhelmingly Republican district, thus virtually guaranteeing that the Democrat (Manning) will lose her seat. There are no cases where two Republican incumbents seeking re-election are double-bunked. The map also produces at least one district with no incumbents, but that district overwhelmingly favors the Republican Party.

- Neutral, third-party observers have been uniform in their negative assessment of the map. For example, The Princeton Gerrymandering Project gives the map an "F" overall, an "F" in partisan fairness and a "C" in competitiveness. Dave's Redistricting App assess the map as "very bad" in proportionality and "bad" in terms of competitiveness. Both of these groups are nonpartisan and have given similar grades to Democratic gerrymanders in other states.

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[3] David Raynor, Tyler Dukes, and Gavin Off. "From population to diversity, see for yourself how NC changed over 10 years." News and Observer, Oct. 18, 2021, https://www.newsobserver.com/news/local/article253546964.html.

In the text that follows, I refer to the "current" maps as the maps that were used in the 2020 election and the "enacted" maps as the maps that have been approved by the North Carolina General Assembly for use in the 2022 elections. While I conducted all of the analysis that follows and wrote all of the verbiage, the shaded red-and-blue maps were produced by John Holden, a GIS expert, using a composite measure of partisanship that I selected and describe below.

I use three different metrics in the analysis that follows. The first is the Cook Political Report's Partisan Voter Index (PVI), a standard metric of the expected "lean" of a district using a composite of past elections. The second is a metric created for this analysis that combines the results of the Secretary of Labor and Attorney General races, the two closest Council of State races in North Carolina in 2020, into one measure, which I term the Competitive Council of State Composite (CCSC). This measure allows us to use relatively low-profile elections to get a sense of the "true partisanship" of the district. It is presented below as the raw difference in votes and is used in the shaded red-and-blue maps that follow. Finally, I mention the percent of the electorate that voted for Donald Trump in the 2020 election to give yet another sense of the partisan lean of the district. As the table below shows, the metrics all tell a similar story: the enacted map will produce 10 Republican seats, 3 Democratic seats, and one competitive seat. At most, the enacted map could be expected to elect four Democrats to office in 2022—fewer than in the current map and far below Democratic representation statewide, or the results of other recent statewide elections.

Table 1. Summary Data for Each Enacted Congressional District

District	PVI	CCSC	Trump Perc
1	R+10	R + 98,969	57%
2	Even	D +40,396	48%
3	R+10	R +111,451	58%
4	R+5	R + 28,045	53%
5	D+12	D +227,327	34%
6	D+22	D + 374,786	25%
7	R+11	R + 115,682	57%
8	R+11	R +125,842	57%
9	D+23	D + 325,717	25%
10	R+14	R + 156,833	60%
11	R+9	R + 94,407	57%
12	R+9	R + 102,404	56%
13	R+13	R + 150,187	60%
14	R+7	R + 58,387	53%

I begin by showing shaded red-and-blue maps demonstrating the trisection of Wake County, Mecklenburg County, and Guilford County. These maps show county lines in black, VTD lines in gray, and district lines in orange. The red and blue shading represents the relative vote margin using my CCSC composite—the composite of the Secretary of Labor and Attorney General races in North Carolina in 2020—in each VTD, with darker blue shading representing larger Democratic vote margins and darker shades of red indicating larger Republican vote margins (both normalized by acreage).

Map 1. Close-Up of Wake County VTD CCSC estimates across three districts
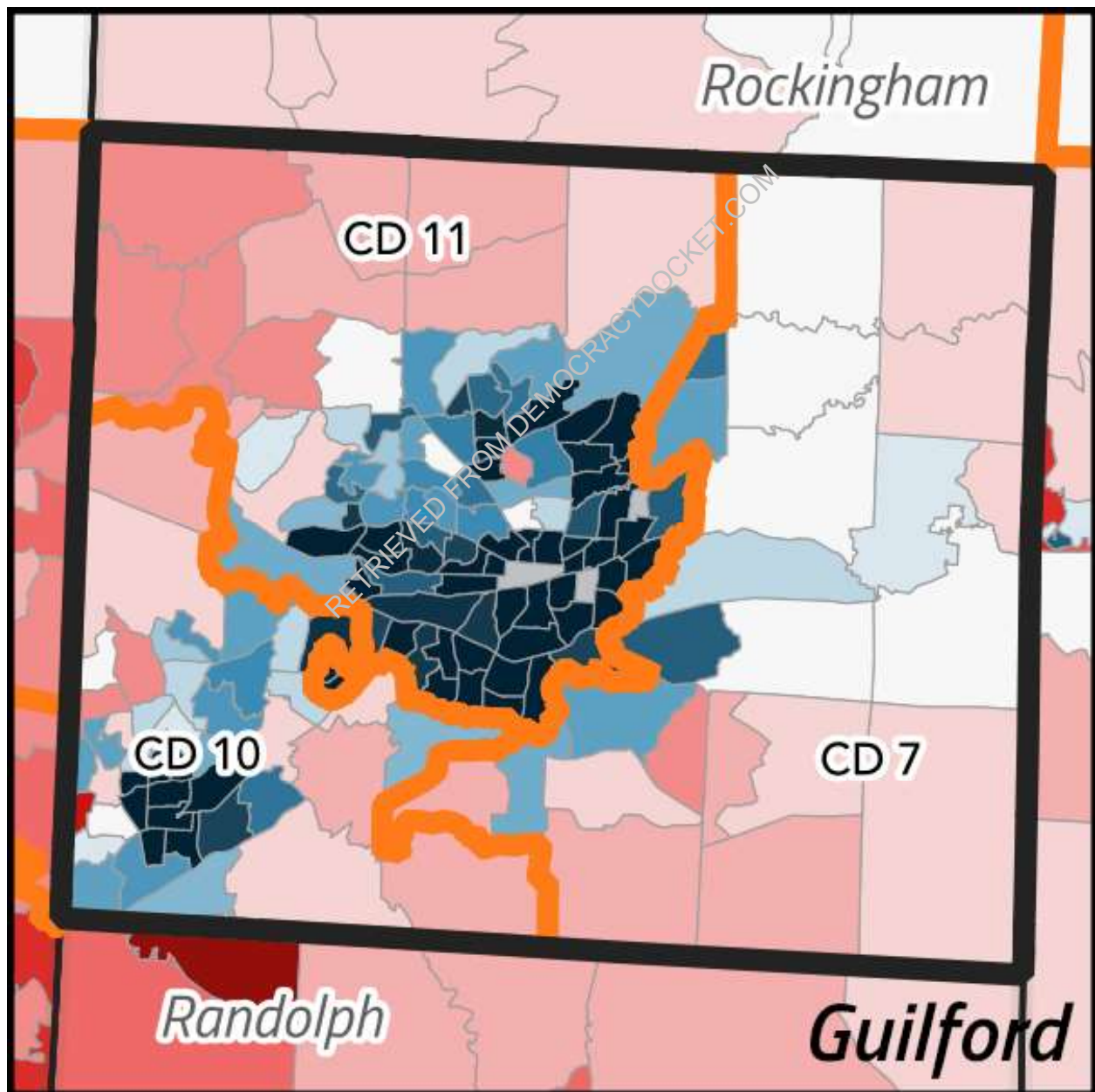
Map 2. Close-Up of Mecklenburg County VTD CCSC estimates across three districts
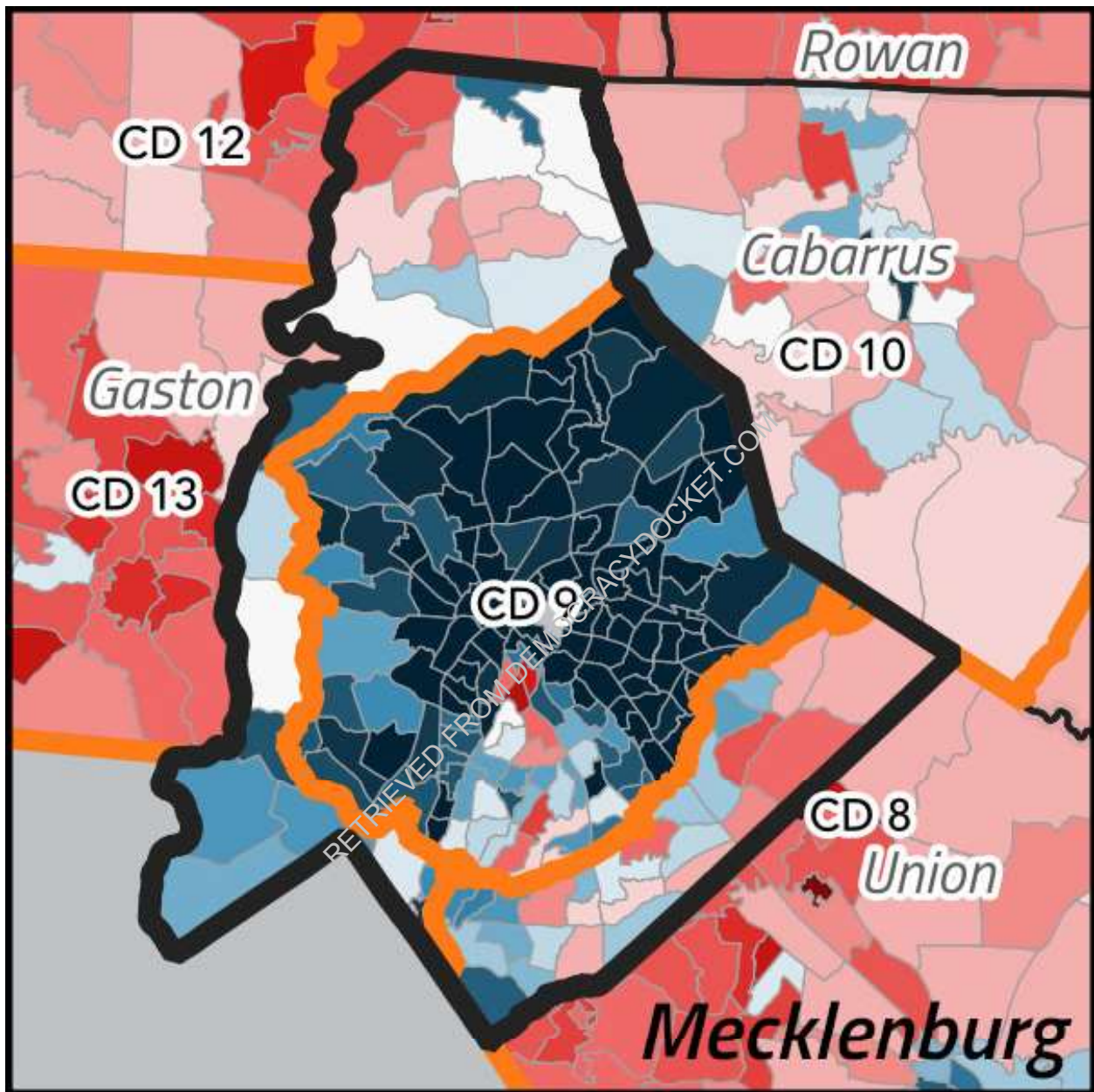
Map 3. Close-Up of Guilford County VTD CCSC estimates across three districts
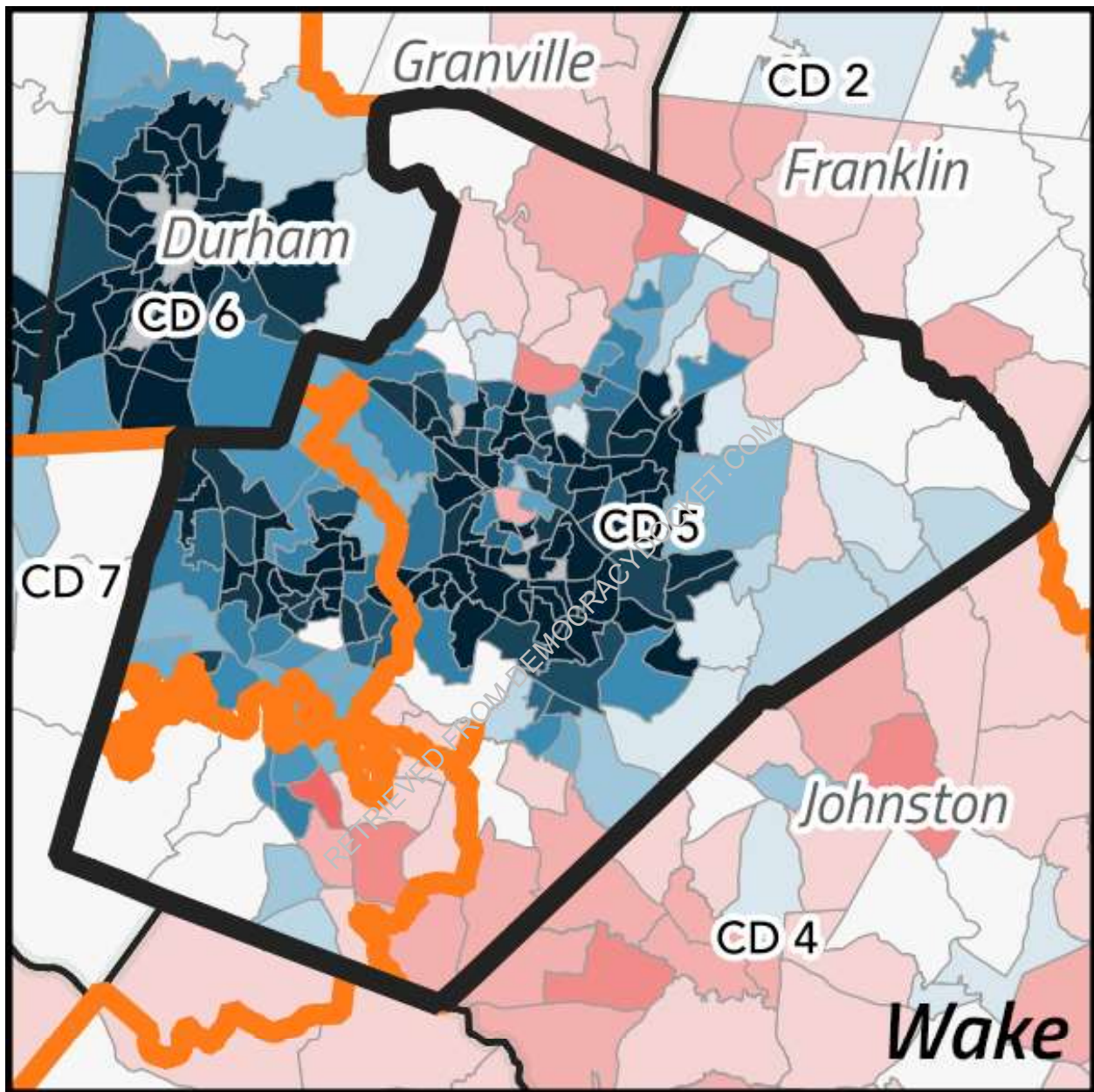
NC-1

The enacted 1st congressional district is mostly comprised of the current NC-3, but also includes part of the current NC-1. Most potential congressional districts in this part of North Carolina would likely lean towards the Republican Party, but to create extra advantage for the Republican Party in other parts of the map, the current map brings the Democratic-leaning areas of Pitt County into District 1, thus removing them from NC-2 and allowing NC-2 to become much more competitive for the Republican Party.

Despite moving the district line westward to include the Democratic portion of Pitt County, the enacted district remains virtually a guaranteed Republican victory with a PVI of R+10 (the current NC-3 is R+14). No Democratic member of Congress in the country represents a district that leans this far towards the Republican Party.

Map 4: VTD CCSC estimates for NC-1
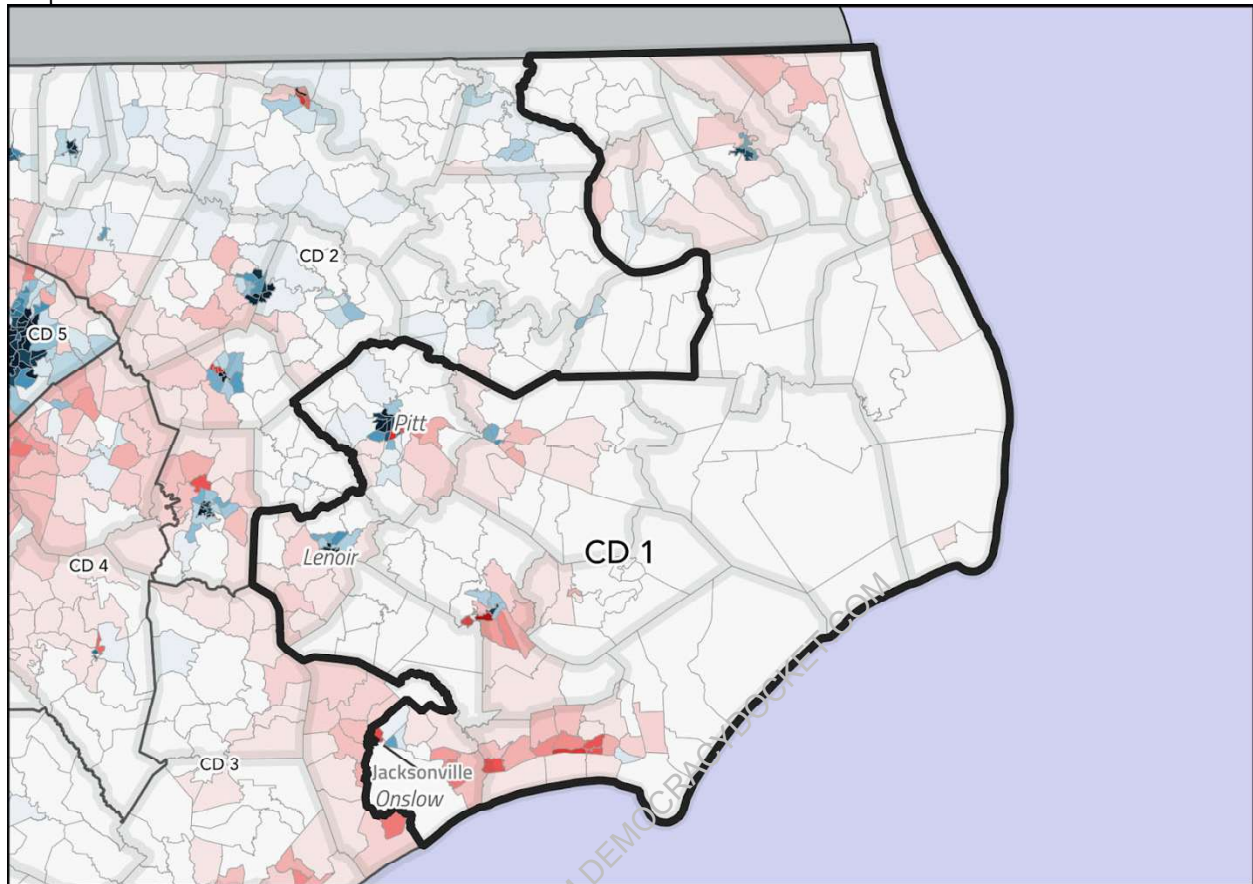
NC-2

The enacted 2nd congressional district includes the core of the current NC-1, along with portions of the current NC-4 and NC-13 districts. The area that largely comprises the new 2nd district is currently represented by Democrat GK Butterfield and is considered a D +12 district by the Cook Political Report, making it a safe Democratic seat. Butterfield has the longest uninterrupted tenure of any member of North Carolina's congressional delegation. Under the enacted map, however, Butterfield's district changes radically, loses many of its Democratic strongholds (including the aforementioned loss of the Democratic areas in Pitt County) and now picks up enough Republican voters to move the district to "even," according to the Cook Political Report. For example, it picks up Caswell County, which does not include a single Democratic-leaning VTD, according to the 2020 Attorney General/Secretary of Labor "CCSC" composite in the map shown below. The 2020 Presidential vote share and composite score reinforce that this is an extremely competitive district. This is an enormous shift for what was formerly a Democratic stronghold.

In addition to producing a clear partisan shift, the district is difficult to understand from a communities of interest perspective. The enacted district no longer includes any of Pitt County nor the campus of East Carolina University, which provided much of the economic engine of the district, and now stretches from the Albemarle Sound to the Raleigh-Durham-Chapel Hill metropolitan area, and eventually terminates in Caswell County, just northeast of Greensboro. Notably, Washington County and Caswell Counties have never been paired together in a congressional map in the history of North Carolina, further illustrating how little these counties have in common.

At a micro-level, the changes will split communities in important ways. For example, the cut-out in Wayne County, just west of Goldsboro, NC, splits the students and families in Westwood Elementary School (which is located in NC-2) into two separate districts (NC-2 and NC-4). At one point, NC-2 passes through a narrow cut-off between the Neuse River to Old Smithfield Road that is less than one-third of a mile wide.

After the maps were enacted, G.K. Butterfield announced that he will not seek re-election,[4] making the district even more likely to shift to the Republican Party. If the Republicans take over this seat, it will be the first time that this part of North Carolina has been represented by a Republican since the late 19th Century.

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[4] Bryan Anderson, "Democrat Rep. Butterfield to Retire, New District is a Toss-Up." Associate Press News. https://apnews.com/article/elections-voting-north-carolina-voting-rights-redistricting-e221c0732f457b2273f54ef102424eca

Map 5. VTD CCSC estimates for NC-2
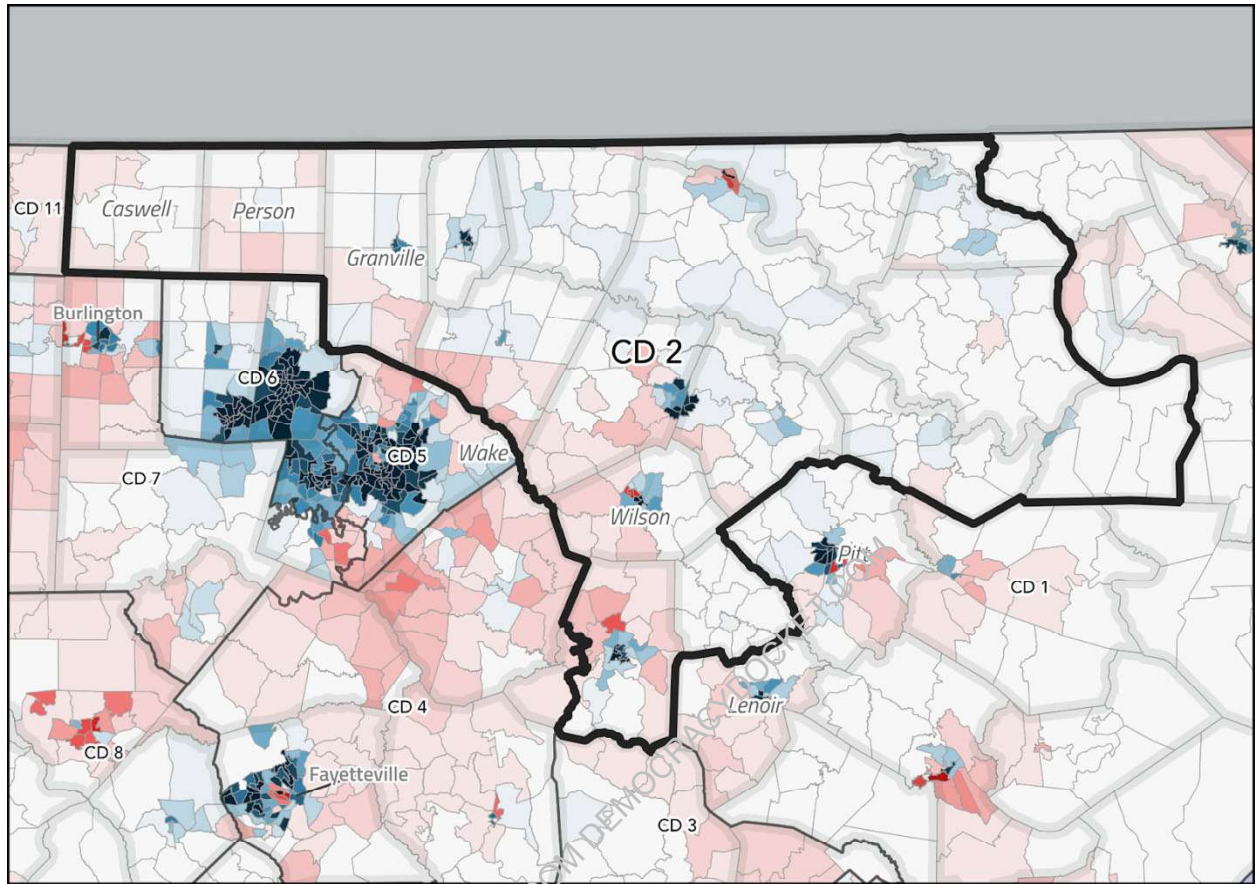
NC-3

The enacted third congressional district is mostly carved out of the current 7th congressional district, but also includes portions of the 3rd, and 9th districts. The current 7th district is considered R+11 by the Cook Political Report.

This district once again denies North Carolina's Sandhills a consistent district of their own, despite repeated calls during the redistricting process,[5] and instead places portions of the Sandhills with the coastal enclave in and around Wilmington. The enacted map also creates an odd appendage in Onslow County that, as described in the section on NC-1, makes little sense from a communities of interest perspective.

The enacted district will almost certainly elect a Republican. It is slightly less Republican than the current NC-7 but still is considered R+10 district by the Cook Political Report, favored the Republicans by over 110,000 votes in the 2020 Attorney General/Secretary of Labor "CCSC" composite, and Donald Trump won the district with 58% of the vote. It is currently represented by Republican David Rouzer and is expected to remain in Republican hands.

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[5] See, for example, Dreilinger, Danielle, "1 woman, 1 North Carolina address, 5 congressional districts. As North Carolina prepares to add a 14th congressional seat, Sandhills residents asked: why can't it be theirs? *Fayetteville Observer*. Nov 5, 2021.

Map 6. VTD CCSC estimates for NC-3
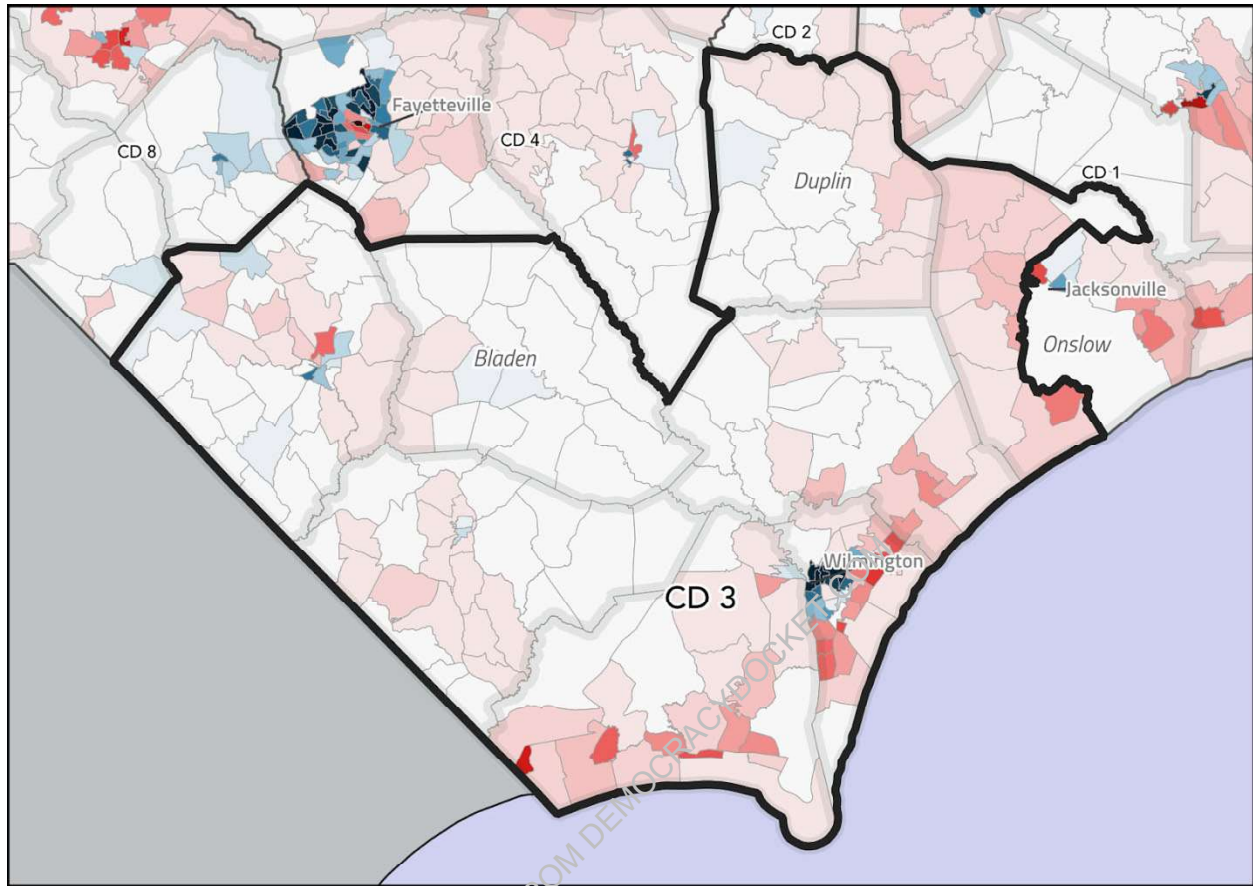
NC-4

The enacted 4th congressional district is carved out of a pocket of North Carolina that includes Johnston County and a portion of Harnett County, both of which are adjacent to Wake County, as well as portions of the Sandhills. The district is carved out of leftover portions from districts 7 and 8 which were R+11 and R+6, respectively. It combines the Democratic-leaning area of Fayetteville with those areas to create a Republican-leaning district.

In addition to the carve out of Republican-leaning VTDs in Wayne County referenced above, this district takes a series of confusing jogs in the Northwest part of Harnett County. A citizen driving Southwest on Cokesbury Road would begin in NC-7, then rest on the line between NC-7 and NC-3, then into NC-4, then back on the line between the two, just before Cokesbury turns into Kipling Road whereupon the driver would move back into NC-7.

This district, which has no incumbent, is considered an R+5 district by the Cook Political Report, gave 53% of its vote share to Donald Trump in 2020, and gave an advantage to Republicans of about 28,000 votes in the 2020 Attorney General/Secretary of Labor "CCSC" composite.

Map 7. VTD CCSC estimates for NC-4
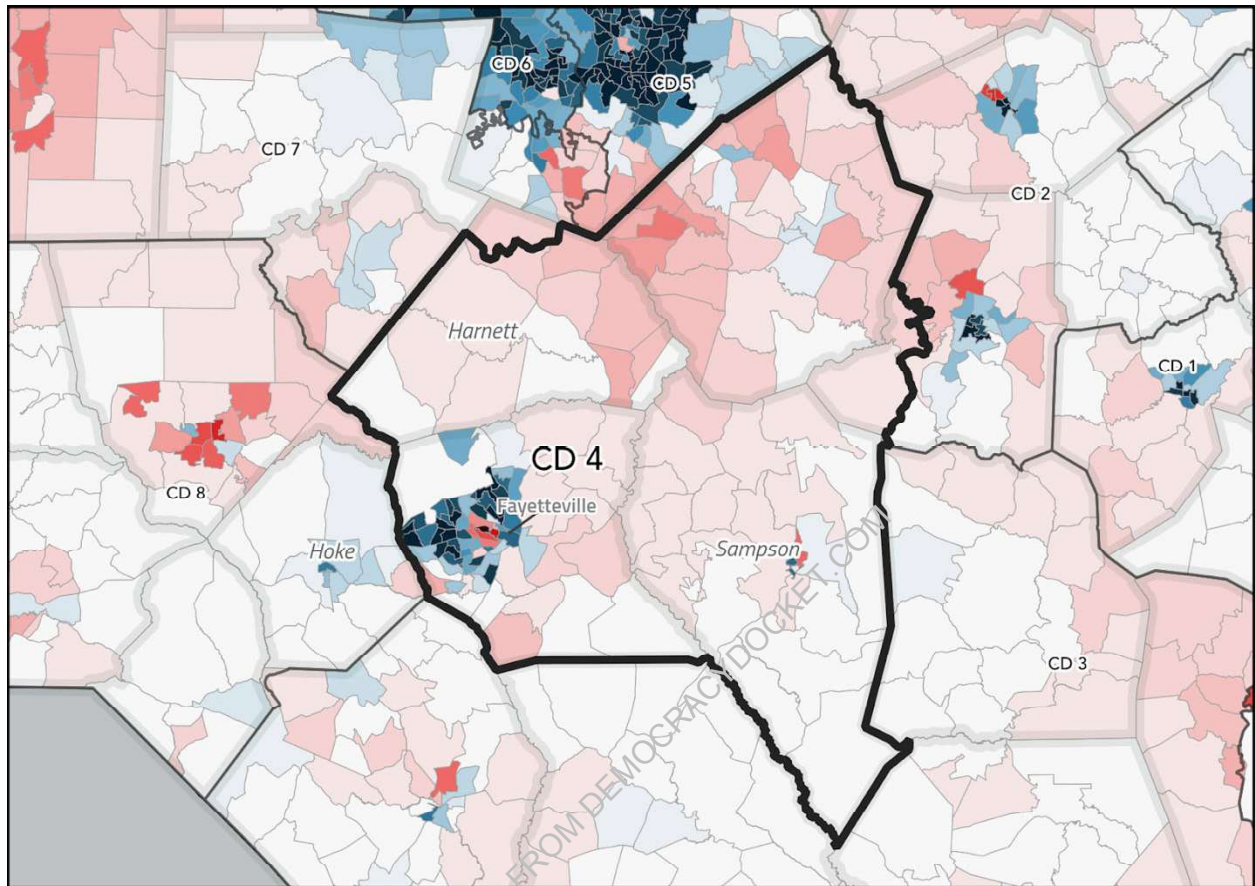
NC-5

  The enacted map cracks Democrats in Wake County into three districts. Unlike NC-6 and NC-7, NC-5 is situated completely within Wake County and is made up of portions of current NC-2 and NC-4, districts that were D+12 and D+16. The effects of this are to pack Democratic voters into one district, thus increasing the probability that Republicans can win at least one of the adjacent districts. The enacted district is rated by the Cook Political Report as D+12, the CCSC shows a Democratic advantage of over 227,000 votes and Donald Trump won just 34% of the vote.

  This map clearly splits communities of interest. In one particularly egregious example, a small vein runs up Fayetteville Road by McCuller's Crossroads in Fuquay-Varina, where the vein itself is in NC-7 and the areas on either side of it are in NC-5.

Map 8. VTD CCSC estimates for NC-5
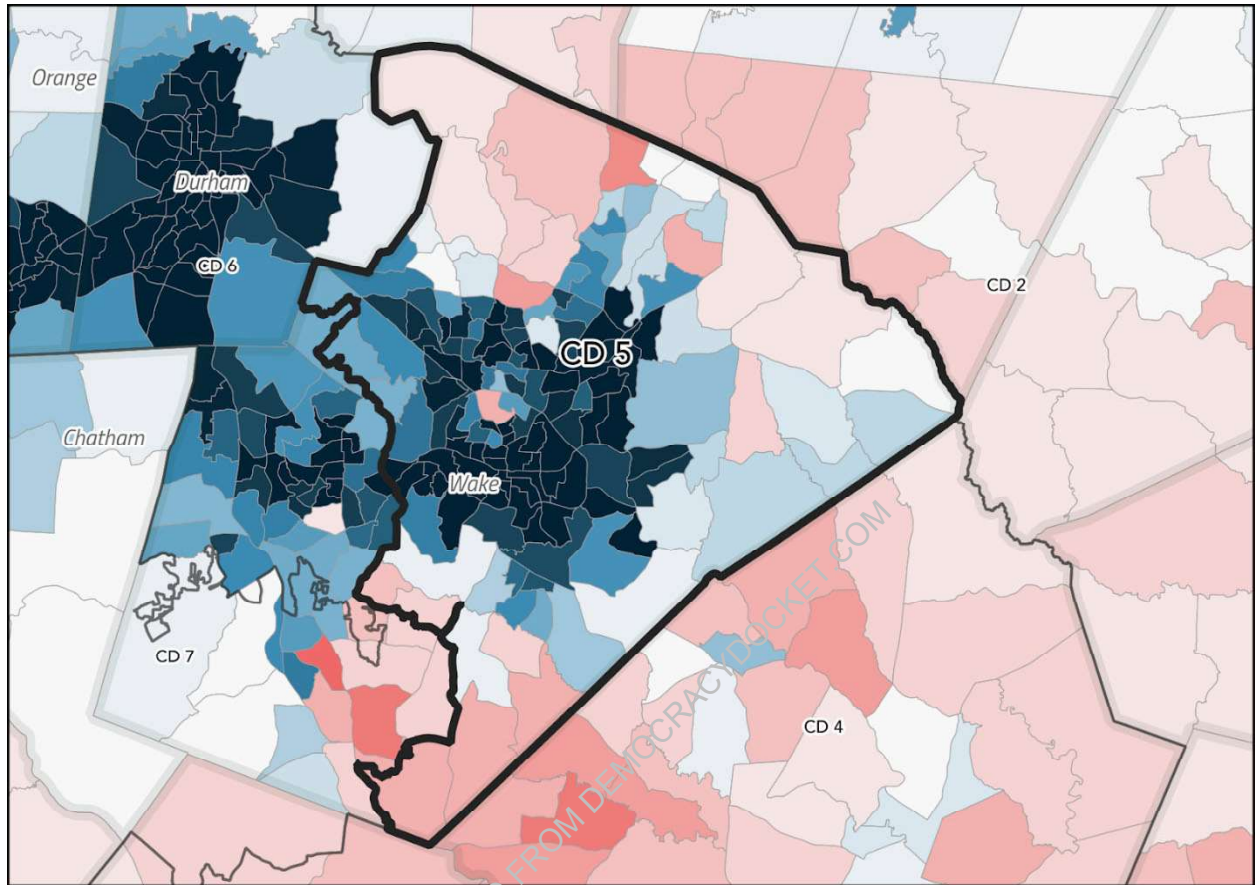
NC-6

The 6th district packs all of Orange, Durham counties and part of Wake County together into one overwhelmingly Democratic district, which is created out of portions of the current Districts 4 and 2 (previously D+16 and D+12, respectively). As the map below demonstrates, the district only includes four marginally Republican VTDs, according to the 2020 Attorney General/Secretary of Labor "CCSC" composite. Cook Political Report estimates this to be a D+22 district, Democrats had more than a 374,000 vote advantage in the CCSC and Donald Trump won only 25% of the vote in 2020. This district packs a greater proportion of Democratic voters in a single district than any district from the previous map. This district, like NC-5, includes Wake County, which is divided across three districts in the enacted map. The packing of Democrats in this district enables adjacent districts, in particular NC-7, to be drawn in ways that make it easier for Republican candidates to win.

The contours of this district border with NC-7 on the southern end splits communities of interest in almost comical ways. In one example, a person traveling south on New Hill Olive Chapel Road would, in a matter of a few miles, move from enacted NC-7 to the line between NC-6 and -7, back into NC-7, through NC-6, back into NC-7, back to the border between the two, back into NC-7, back to the border between the two, then back into NC-7. The contours of these lines are confusing to voters, and, as the map demonstrates, serve to pack as many Democratic precincts as possible into NC-6.

Map 9. VTD CCSC estimates for NC-6
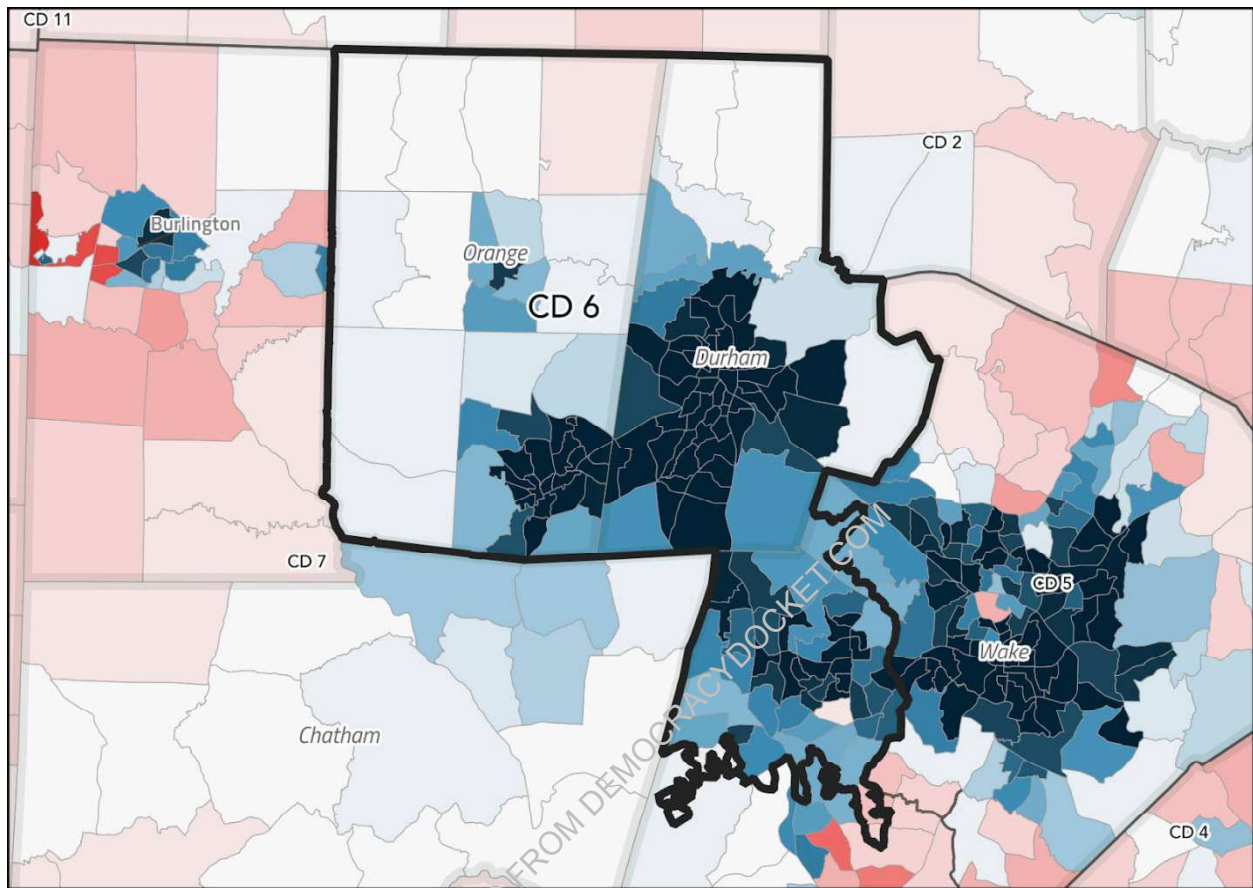
NC-7

The enacted 7th district includes the Republican-leaning Randolph, Alamance, Chatham and Lee Counties as well as portions of Guilford, Wake, and Davidson Counties. It is carved out of districts 13, 6, 4 and 2 from the current map. This district as it is drawn splits both Guilford and Wake Counties (each of which of is divided three times in the map as a whole). Despite including portions of two of the most Democratic counties in North Carolina, the district studiously avoids the Democratic-leaning areas of both counties. The eastern portion of the district in Wake County, near Apex, takes the unusual and confusing contours described in the description of NC-6 above.

The enacted NC-7 is considered R + 11 by the Cook Political Report, it gave Republicans a 115,682 vote advantage in the CCSC, and Donald Trump won 57% of the vote in this district. A Democratic candidate has virtually no chance of victory in the enacted 7th.

Map 10: VTD CCSC estimates for NC-7
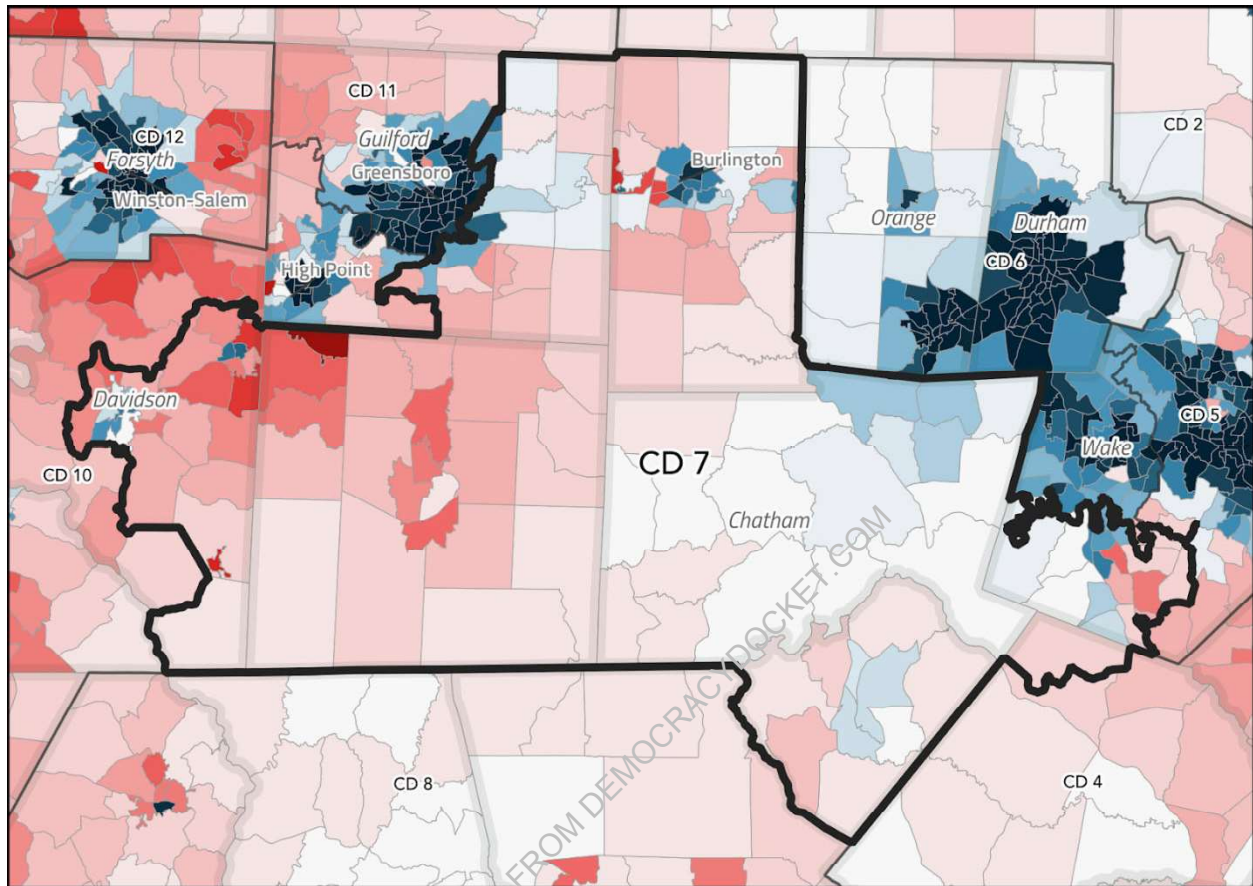
NC-8

The 8th congressional district stretches from the Sandhills into Mecklenburg County and includes portions of the current 9th, 12th, and 8th districts. The core of the district comes from NC-9, currently R+6. The enacted NC-8 includes the entirety of Scotland, Hoke, Moore, Montgomery, Anson, Union, and Stanley counties as well as the southern and eastern edge of Mecklenburg County. Although it includes portions of Mecklenburg County, one of the most Democratic-leaning areas in the state, as well as Democratic municipalities of Union, Anson, and Hoke, the 8th district is unlikely to elect a Democrat under any reasonable scenario. The enacted map stops just shy of the some of the darkest blue VTDs in Mecklenburg County.

The Cook Political Report calls the enacted NC-8 an R+11 district, the CCSC shows that the Republican candidate garnered over 115,000 more votes than the Democratic candidates for the two closest Council of State races, and Donald Trump won approximately 57% of the vote in the 2020 election.

Map 11: VTD CCSC estimates for NC-8
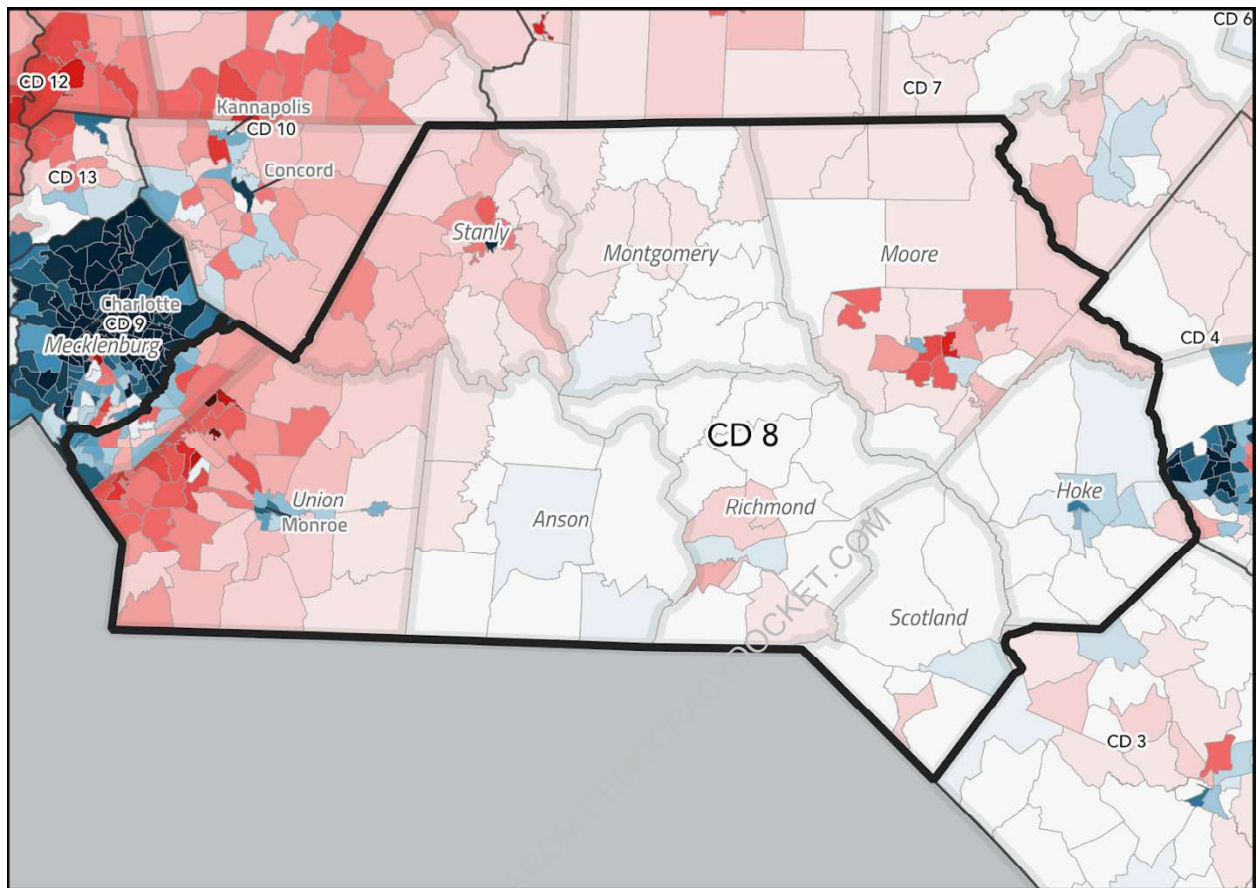
NC-9

The core of the enacted 9th congressional district come from NC-12, but it also includes portions of the current NC-9. The result is the most packed district in the enacted map. The Cook Political Report rates the enacted NC-9 as a D+23 district, meaning that it leans more heavily towards the Democratic Party than any district in the last map. Donald Trump won just 25% of the vote in this district in the 2020 Presidential election and the CCSC indicates that the Democrats won over 325,000 more votes than the Republicans in the two closest Council of State races in 2020.

As with all examples of packing, the key to understanding this district is its effects on the surrounding districts. By ensuing that the Democratic candidate in NC-9 wins by an overwhelming margin, Republican voters will be more efficiently distributed across other districts, where they can affect the outcome. This ensures that neighboring district 8, for example, will not be competitive. This also has the effect of ensuring that Republican voters in NC-9 have no chance of securing representation from a member of their own party.

The geographic contortions of this district are most apparent on its western edge, where a mere 8 miles separates the western edge of district 9 and the Mecklenburg County line.

Map 12. VTD CCSC estimates for NC-9
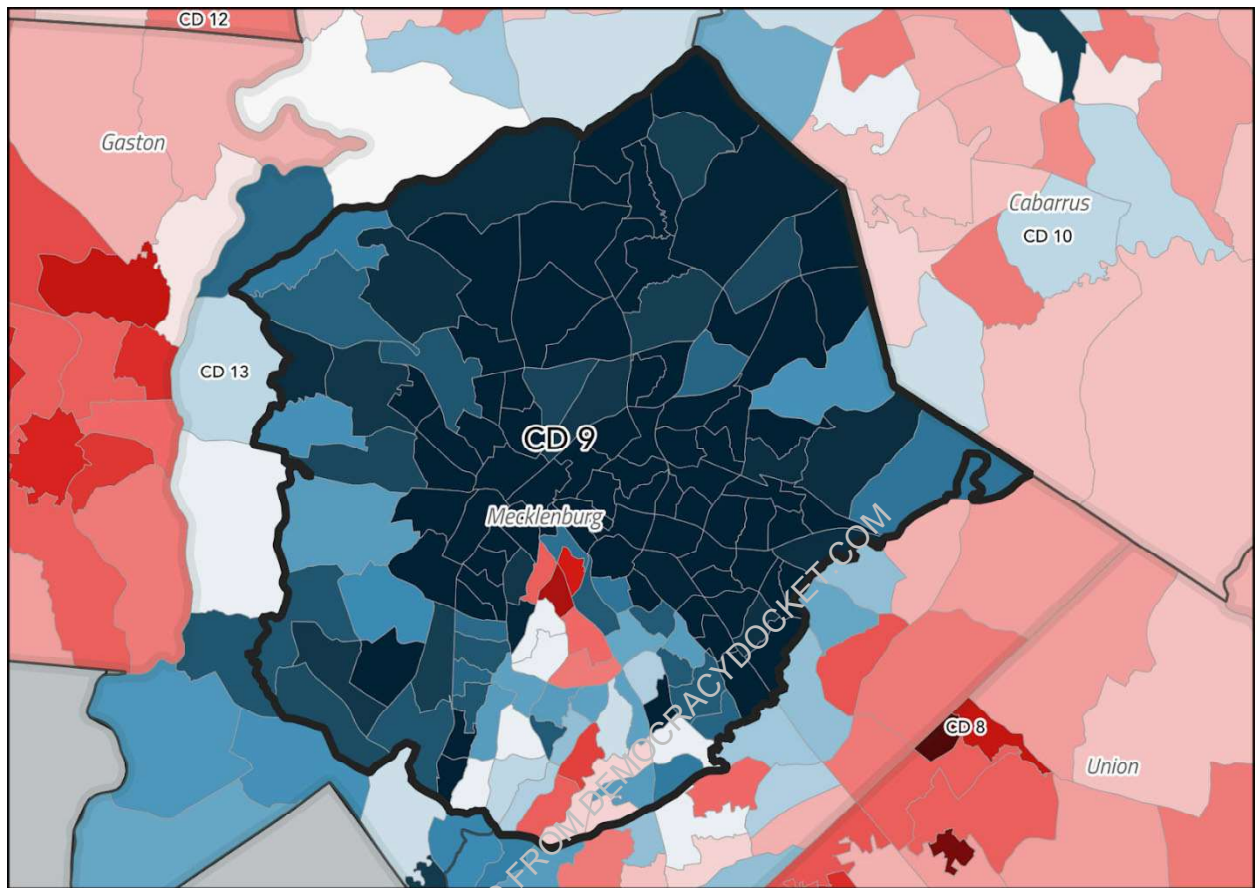
NC-10

The enacted NC-10 includes all of Rowan, Cabarrus and David County and parts of Iredell, Davidson and Guilford Counties. It is drawn out of portions of the current 10th, 9th, 6th, and 13th districts. Despite the inclusion of carefully curated portions of Democratic Guilford County, this district is a safe Republican seat and effectively removes any possibility that Democratic voters in High Point, Salisbury, Kannapolis, Concord, and Cabarrus can elect a member of their own political party. The Cook Political Report rates this district as R+14, the CCSC indicates that Republicans won more than 156,000 additional votes in the two key council of state races, and Donald Trump won over 60% of the Presidential vote in the enacted district.

The enacted NC-10 includes High Point, while NC-11 includes most of Greensboro and NC-12 contains Winston-Salem, meaning that the enacted map splits all three points of North Carolina's Piedmont Triad into separate congressional districts that favor Republicans. In the current map, this community of interest is together in NC-6, represented by Democrat Kathy Manning.

Map 13: VTD CCSC estimates for NC-10
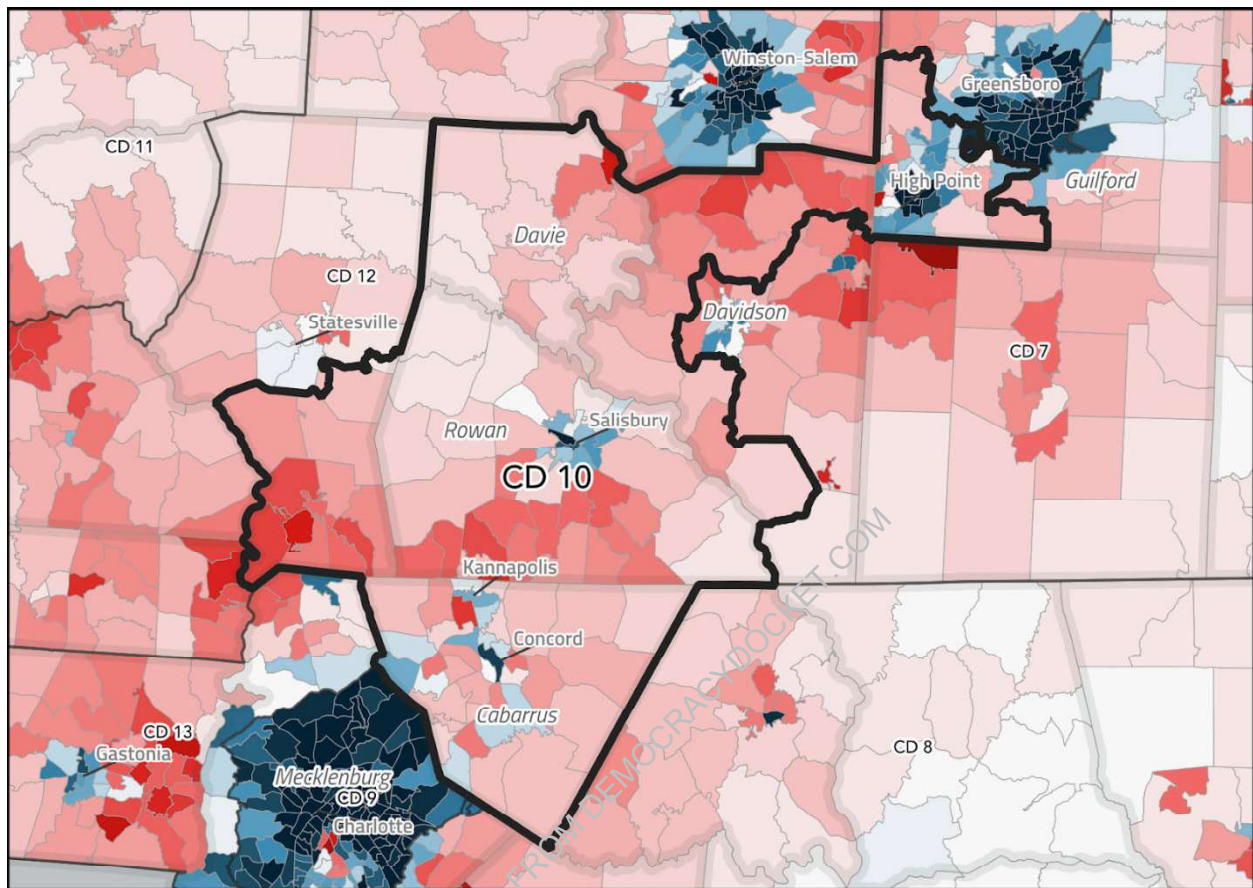
NC-11

The enacted 11th congressional district is carved out of the 5th, 10th, and 6th districts. This map places a portion of Guilford County, including the City of Greensboro in a district with Rockingham, Stokes, Surrey, Alleghany, Ashe, Wilkes, Caldwell, and Alexander counties as well as a tiny boot-shaped sliver of Watauga County.

As discussed elsewhere, the enacted map splits Guilford County across three districts (the 10th, 11th, and 7th) and puts all three points of the Piedmont triad in separate districts. By placing most of Greensboro in this overwhelmingly Republican district, this ensures that the City of Greensboro, among the most Democratic and racially diverse cities in the state of North Carolina, will not be represented by a Democrat.

The enacted district is rated by Cook as R+9, 57% of the district voted for Donald Trump in the 2020 election, and Republicans held a 94,000 vote lead in the two closest Council of State elections. No Democrat in the current Congress represents a district that leans this heavily Republican.

It is difficult to imagine any sense in which this district has shared interests. Geographically, it spans radically different parts of the state. Greensboro is firmly in the Piedmont, resting at under 900 feet elevation. Watauga and Ashe counties, by comparison, reside in the high country, with elevations that consistently run above 5500 feet. The corners of the district have different area codes, are served by different media markets, and share virtually no characteristics in common other than the fact that they are both within North Carolina. In the history of North Carolina, Caldwell and Rockingham Counties have never shared a congressional representative.

In addition to its geographic span, the enacted district stands out for its double-bunking of Republican Virginia Foxx and Democrat Kathy Manning. To shoe-horn Virginia Foxx into the new district, the mapmakers carved out a tiny sliver of Watauga County to allow her house to fall into the redrawn district. This passage is so narrow, in fact, that is connected by a stretch of land that is roughly 3 miles wide and requires a traverse of the Daniel Boone Scout Trail.

Map 14: VTD CCSC estimates for NC-11
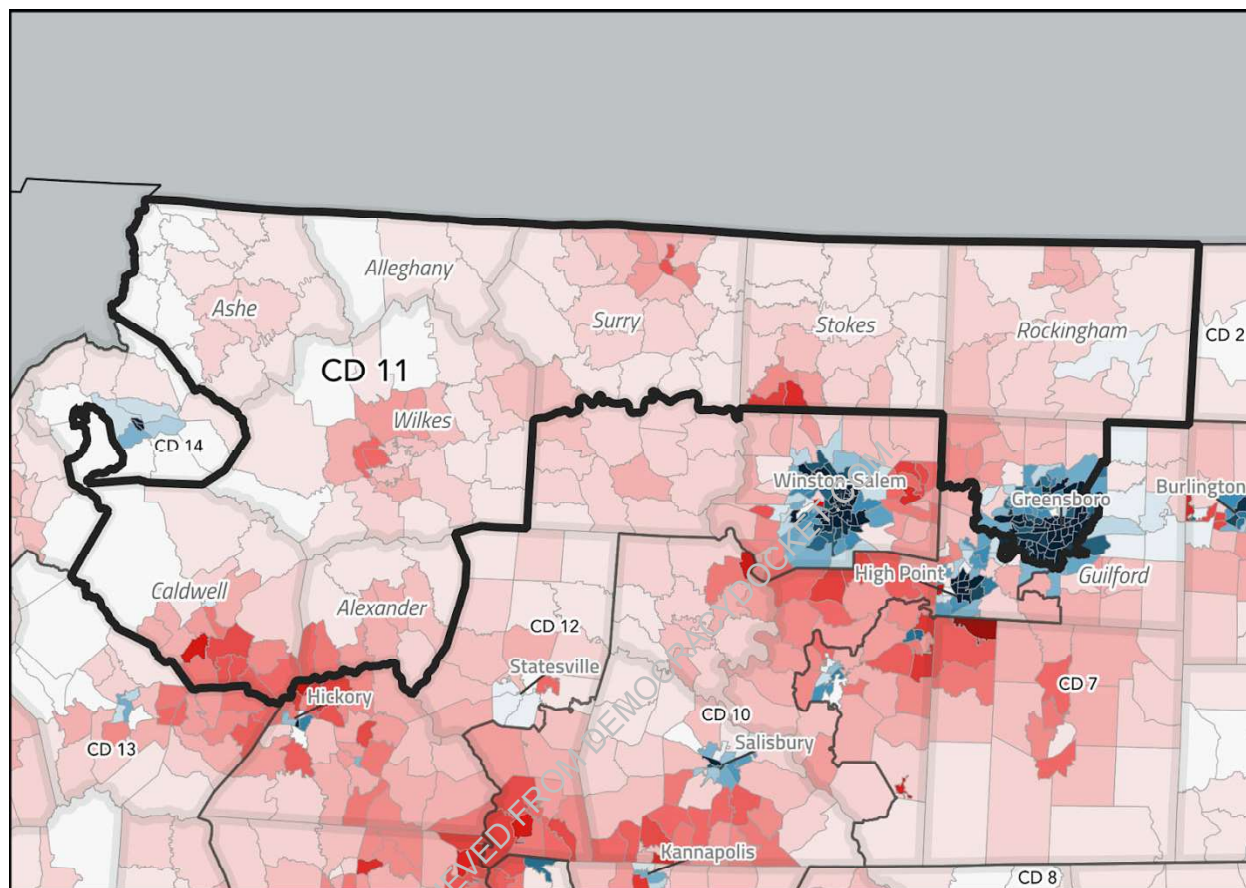
NC-12

The 12th congressional district stretches from Lincoln County at the southwestern corner through Catawba, the Northern part of Iredell, Yadkin, and Forsyth Counties. As the map below makes clear, by including Winston-Salem with this overwhelmingly red swath of geography and walling it off from Democratic voters in High Point, the enacted map ensures that Republican member of Congress Patrick McHenry, who lives at the southeast corner of this district, will maintain his seat and the Democratic voters in Winston-Salem will have virtually no chance to elect a member of their own party.

The Cook Political Report rates this district as R+9, Republicans had over a 100,000 vote margin in the two closest Council of State races, and Donald Trump won over 56% of the vote in this district.

Map 15: VTD CCSC estimates for NC-12
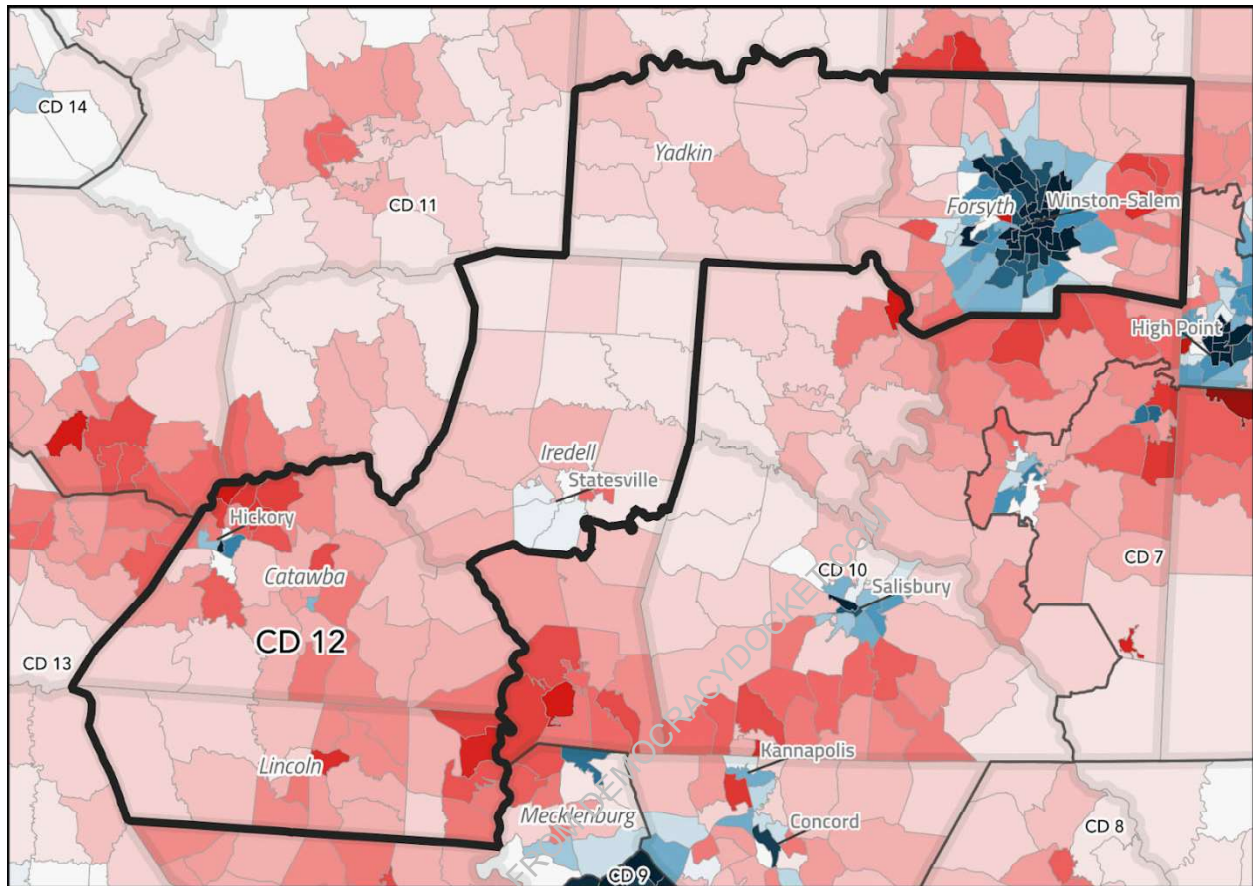
NC-13

The 13th congressional district is carved out of portions of the old 11th, 5th, and 12th, and 10th districts. As the map that follows demonstrates, the district includes Polk, Rutherford, McDowell, Burke, Cleveland, Gaston, and part of Mecklenburg County.

The district was generally understood to be created for Republican Speaker of the House Tim Moore who lives in Cleveland County—the *Charlotte Observer*'s editorial board even referred to it as "Moore's designer district."[6] Republican Madison Cawthorn recently announced that he will run in the 13th, and Moore soon noted that he would stay in the General Assembly. While the specifics of the candidates have changed, the fact that this is a Republican district that will elected a Republican candidate has not. This district was rated by the Cook Political Report as R+13, has a CCSC of R+150,187 votes, and gave 60% of its votes to Donald Trump in 2020.

As mentioned in the discussion of NC-9, the narrow passageway that is necessary to squeeze NC-13 into Mecklenburg County only consists of a few miles at one point--stretching from a Food Lion to the Mecklenburg County line. The enacted district also creates unusual pairings of counties that share little in common. For example, Polk and Mecklenburg Counties have never resided in the same district.

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[6] https://www.charlotteobserver.com/opinion/article255769626.html

Map 16. VTD CCSC estimates for NC-13
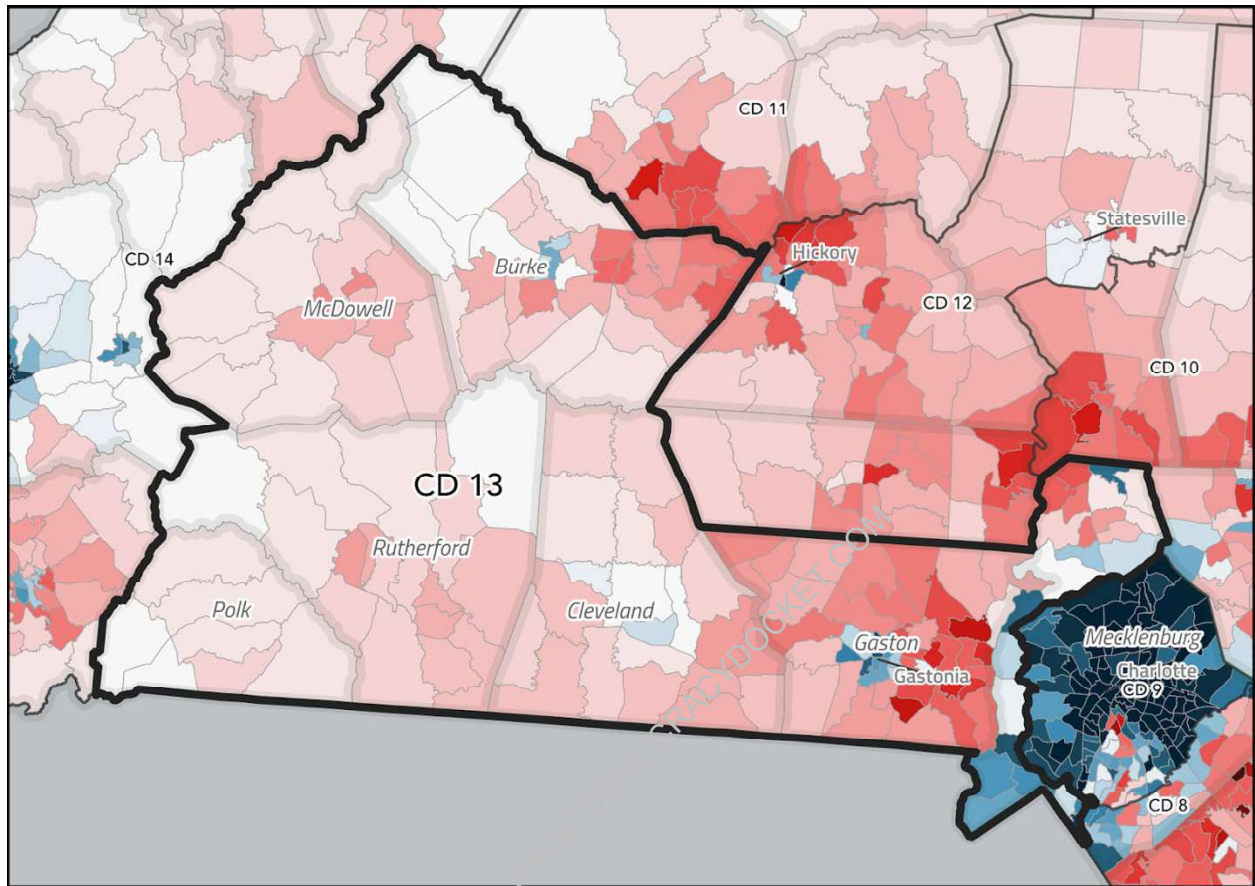
NC-14

The enacted 14th district includes most of the 11th congressional district and includes part of Watauga County, which previously sat in the 5th congressional district. The former 11th congressional district also lost the Republican strongholds of Polk and McDowell counties, as well as part of Rutherford County. These changes shifted the district slightly in the Democratic direction (from a PVI of R+9 to R+7), although not enough to give a Democratic candidate a reasonable chance of victory. No Democrat in Congress represents a district that has a PVI score that leans this heavily towards the Republican Party. As a result, the 14th is expected to stay squarely in Republican hands.

Geographically, the 14th is a sprawling district that includes three media markets. Traversing the district from its western end in Murphy to its northeastern corner in Stony Fork would take approximately four hours. Perhaps because of the geographic incompatibility, Watauga has not been in a district with the western end of the state since 1871—before Graham and Swain Counties were even in existence. Adequately representing this massive swath of geography would be difficult for any member of Congress—Republican or Democrat.

Map 17. VTD CCSC estimates for NC-14
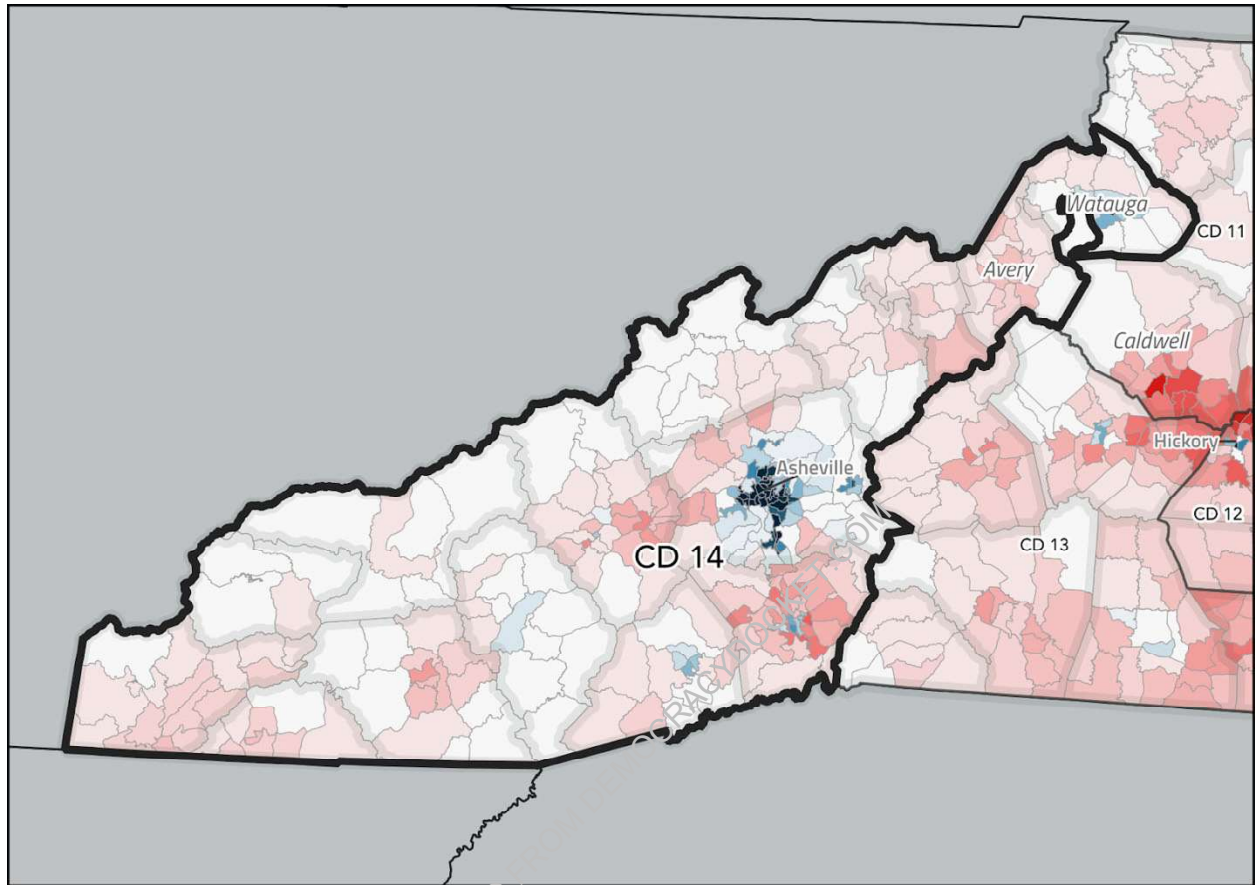
Conclusion

After analyzing the characteristics of the map as a whole as well as the characteristics of each district in isolation, it is clear that the enacted map will increase the number of Republican members of Congress and decrease the number of Democratic members of Congress in North Carolina's congressional delegation. Democratic voters in the vast majority of the districts will have no chance at representation from a member of their own party and Republican voters in the districts that pack Democrats will have no chance of representation from a member of their own party. This is not a result of natural packing, or geographic clustering, but rather because the congressional district lines shifted in ways that, taken together, benefit the Republican Party. Not only does the enacted map create a substantial partisan advantage for which there is no apparent explanation other than gerrymandering, but it unnecessarily splits communities of interest and will alters representational linkages in ways that, in some cases, have never been seen in North Carolina's history.

Christopher A. Cooper

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Christopher A. Cooper

EXHIBIT H

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE

SUPERIOR COURT DIVISION

No.21 CVS 500085

REBECCA HARPER; AMY CLARE
OSEROFF; DONALD RUMPH; JOHN
ANTHONY BALLA; RICHARD R. CREWS;
LILY NICOLE QUICK; GETTYS COHEN
JR.; SHAWN RUSH; JACKSON THOMAS
DUNN, JR.; MARK S. PETERS; KATHLEEN
BARNES; VIRGINIA WALTERS BRIEN;
DAVID DWIGHT BROWN,

          Plaintiffs,

    v.

REPRESENTATIVE DESTIN HALL, IN
HIS OFFICIAL CAPACITY AS CHAIR OF
THE HOUSE STANDING COMMITTEE
ON REDISTRICTING; SENATOR
WARREN DANIEL, IN HIS OFFICIAL
CAPACITY AS CO-CHAIR OF THE
SENATE STANDING COMMITTEE ON
REDISTRICTING AND ELECTIONS;
SENATOR RALPH HISE, IN HIS
OFFICIAL CAPACITY AS CO-CHAIR OF
THE SENATE STANDING COMMITTEE
ON REDISTRICTING AND ELECTIONS;
SENATOR PAUL NEWTON, IN HIS
OFFICIAL CAPACITY AS CO-CHAIR OF
THE SENATE STANDING COMMITTEE
ON REDISTRICTING AND ELECTIONS;
SPEAKER OF THE NORTH CAROLINA
HOUSE OF REPRESENTATIVES
TIMOTHY K. MOORE; PRESIDENT PRO
TEMPORE OF THE NORTH CAROLINA
SENATE PHILIP E. BERGER; THE
NORTH CAROLINA STATE BOARD OF
ELECTIONS; DAMON CIRCOSTA, IN
HIS OFFICIAL CAPACITY AS
CHAIRMAN OF THE NORTH

**EXPERT REPORT OF DR. JOWEI
CHEN**

1

CAROLINA STATE BOARD OF
ELECTIONS; STELLA ANDERSON, IN
HER OFFICIAL CAPACITY AS
SECRETARY OF THE NORTH
CAROLINA STATE BOARD OF
ELECTIONS; JEFF CARMON III, IN HIS
OFFICIAL CAPACITY AS MEMBER OF
THE NORTH CAROLINA STATE
BOARD OF ELECTIONS; STACY
EGGERS IV, IN HIS OFFICIAL
CAPACITY AS MEMBER OF THE
NORTH CAROLINA STATE BOARD OF
ELECTIONS; TOMMY TUCKER, IN HIS
OFFICIAL CAPACITY AS MEMBER OF
THE NORTH CAROLINA STATE
BOARD OF ELECTIONS,

                Defendants.

I, Dr. Jowei Chen, upon my oath, declare and say as follows:

1.   I am over the age of eighteen (18) and competent to testify as to the matters set forth herein.

2.   I am an Associate Professor in the Department of Political Science at the University of Michigan, Ann Arbor. I am also a Research Associate Professor at the Center for Political Studies of the Institute for Social Research at the University of Michigan and a Research Associate at the Spatial Social Science Laboratory at Stanford University. In 2007, I received a M.S. in Statistics from Stanford University, and in 2009, I received a Ph.D. in Political Science from Stanford University.

3.   I have published academic papers on legislative districting and political geography in several political science journals, including The American Journal of Political Science and The American Political Science Review, and Election Law Journal. My academic areas of expertise include legislative elections, spatial statistics, geographic information systems

(GIS) data, redistricting, racial politics, legislatures, and political geography. I have expertise in the use of computer simulations of legislative districting and in analyzing political geography, elections, and redistricting.

4.   I have authored expert reports in the following redistricting court cases: *The League of Women Voters of Florida v. Detzner* (Fla. 2d Judicial Cir. Leon Cnty. 2012); *Romo v. Detzner* (Fla. 2d Judicial Cir. Leon Cnty. 2013); *Missouri National Association for the Advancement of Colored People v. Ferguson-Florissant School District & St. Louis County Board of Election Commissioners* (E.D. Mo. 2014); *Raleigh Wake Citizens Association v. Wake County Board of Elections* (E.D.N.C. 2015); Brown v. Detzner (N.D. Fla. 2015); *City of Greensboro v. Guilford County Board of Elections* (M.D.N.C. 2015); *Common Cause v. Rucho* (M.D.N.C 2016); *The League of Women Voters of Pennsylvania v. Commonwealth of Pennsylvania* (No. 261 M.D. 2017); *Georgia State Conference of the NAACP v. The State of Georgia* (N.D. Ga. 2017); *The League of Women Voters of Michigan v. Johnson* (E.D. Mich. 2017); *Whitford v. Gill* (W.D. Wis. 2018); *Common Cause v. Lewis* (N.C. Super. 2018); *Harper v. Lewis* (N.C. Super. 2019); *Baroody v. City of Quincy, Florida* (N.D. Fla. 2020); *McConchie v. Illinois State Board of Elections* (N.D. Ill. 2021). I have testified either at deposition or at trial in the following cases: *Romo v. Detzner* (Fla. 2d Judicial Cir. Leon Cnty. 2013*); Missouri National Association for the Advancement of Colored People v. Ferguson-Florissant School District & St. Louis County Board of Election Commissioners* (E.D. Mo. 2014); *Raleigh Wake Citizens Association v. Wake County Board of Elections* (E.D.N.C. 2015); *City of Greensboro v. Guilford County Board of Elections* (M.D.N.C. 2015); *Common Cause v. Rucho* (M.D.N.C. 2016); *The League of Women Voters of Pennsylvania v. Commonwealth of Pennsylvania* (No. 261 M.D. 2017); *Georgia State Conference of the NAACP* v. *The State of Georgia* (N.D. Ga. 2017); *The*

League of Women Voters of Michigan v. Johnson (E.D. Mich. 2017); *Whitford v. Gill* (W.D. Wis. 2018); *Common Cause v. Lewis* (N.C. Super. 2018); *Baroody v. City of Quincy, Florida* (N.D. Fla. 2020).

5.   I have been retained by Plaintiffs in the above-captioned matter. I am being compensated $550 per hour for my work in this case.

6.   Plaintiffs' counsel asked me to analyze the SB 740 districting plan for North Carolina's congressional districts (the "Enacted Plan"), as passed on November 4, 2021. Plaintiffs' counsel asked me to produce a set of computer-simulated plans for North Carolina's congressional districts by following the criteria adopted by the North Carolina General Assembly's Joint Redistricting Committee on August 12, 2021 (the "Adopted Criteria"). Plaintiffs' counsel asked me to compare the district-level partisan attributes of the Enacted Plan to those of the computer-simulated plans and to identify any districts in the Enacted Plan that are partisan outliers. Plaintiffs' counsel also asked me to compare the partisan composition of the individual Plaintiffs' congressional districts under the Enacted Plan to the partisan composition of Plaintiffs' districts under the computer-simulated plans and to identify any Plaintiffs whose Enacted Plan districts are partisan outliers.

7.   ***The Use of Computer-Simulated Districting Plans:*** In conducting my academic research on legislative districting, partisan and racial gerrymandering, and electoral bias, I have developed various computer simulation programming techniques that allow me to produce a large number of nonpartisan districting plans that adhere to traditional districting criteria using US Census geographies as building blocks. This simulation process ignores all partisan and racial considerations when drawing districts. Instead, the computer simulations are programmed to draw districting plans following various traditional districting goals, such as equalizing

population, avoiding county and Voting Tabulation District (VTD) splits, and pursuing geographic compactness. By randomly generating a large number of districting plans that closely adhere to these traditional districting criteria, I am able to assess an enacted plan drawn by a state legislature and determine whether partisan goals motivated the legislature to deviate from these traditional districting criteria. More specifically, by holding constant the application of nonpartisan, traditional districting criteria through the simulations, I am able to determine whether the enacted plan could have been the product of something other than partisan considerations. With respect to North Carolina's 2021 Congressional Enacted Plan, I determined that it could not.

8. I produced a set of 1,000 valid computer-simulated plans for North Carolina's congressional districts using a computer algorithm programmed to strictly follow the required districting criteria enumerated in the August 12, 2021 Adopted Criteria of the General Assembly's Joint Redistricting Committee. In following these Adopted Criteria, the computer algorithm uses the same general approach that I employed in creating the simulated state House and state Senate plans that I analyzed in *Common Cause v. Lewis* (2019) and the simulated congressional plans that I used in *Harper v. Lewis* (2019).

9. By randomly drawing districting plans with a process designed to strictly follow nonpartisan districting criteria, the computer simulation process gives us an indication of the range of districting plans that plausibly and likely emerge when map-drawers are not motivated primarily by partisan goals. By comparing the Enacted Plan against the distribution of simulated plans with respect to partisan measurements, I am able to determine the extent to which a map-drawer's subordination of nonpartisan districting criteria, such as geographic compactness and preserving precinct boundaries, was motivated by partisan goals.

10.   These computer simulation methods are widely used by academic scholars to analyze districting maps. For over a decade, political scientists have used such computer-simulated districting techniques to analyze the racial and partisan intent of legislative map-drawers.[1] In recent years, several courts have also relied upon computer simulations to assess partisan bias in enacted districting plans.[2]

11.   ***Redistricting Criteria:*** I programmed the computer algorithm to create 1,000 independent simulated plans adhering to the following the seven districting criteria, as specified in the Adopted Criteria:

a) Population Equality: Because North Carolina's 2020 Census population was 10,439,388, districts in every 14-member congressional plan have an ideal population of 745,670.6. Accordingly, the computer simulation algorithm populated each districting plan such that precisely six districts have a population of 745,670, while the remaining eight districts have a population of 745,671.

b) Contiguity: The simulation algorithm required districts to be geographically contiguous. Water contiguity is permissible. I also programmed the simulation algorithm to avoid double-traversals within a single county. In other words, for every simulated district, the portion of that district within any given county will be geographically contiguous.

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[1] E.g., Carmen Cirincione, Thomas A. Darling, Timothy G. O'Rourke. "Assessing South Carolina's 1990s Congressional Districting," Political Geography 19 (2000) 189–211; Jowei Chen, "The Impact of Political Geography on Wisconsin Redistricting: An Analysis of Wisconsin's Act 43 Assembly Districting Plan." Election Law Journal

[2] *See, e.g.*, *League of Women Voters of Pa. v. Commonwealth*, 178 A. 3d 737, 818-21 (Pa. 2018); *Raleigh Wake Citizens Association v. Wake County Board of Elections*, 827 F.3d 333, 344-45 (4th Cir. 2016); *City of Greensboro v. Guilford County Board of Elections*, No. 1:15-CV-599, 2017 WL 1229736 (M.D.N.C. Apr 3, 2017); *Common Cause v. Rucho*, No. 1:16-CV-1164 (M.D.N.C. Jan 11, 2018*); The League of Women Voters of Michigan v. Johnson* (E.D. Mich. 2017); *Common Cause v. David Lewis* (N.C. Super. 2018).

c) <u>Minimizing County Splits:</u> The simulation algorithm avoided splitting any of North Carolina's 100 counties, except when doing so is necessary to avoid violating one of the aforementioned criteria. When a county is divided into two districts, the county is considered to have one split. A county divided into three districts is considered to have two splits. A county divided into four districts is considered to have three splits, and so on. For the purpose of creating equally populated districts, each newly drawn congressional district requires only one county split. But the fourteenth and final district drawn in North Carolina does need not create an additional county split, since this final district should simply be the remaining area unassigned to the first thirteen districts. Therefore, an entire plan of 14 congressional districts requires only 13 county splits. Accordingly, I require that every simulated plan contain only 13 county splits. The 2021 Adopted Criteria do not prohibit splitting a county more than once, so I allow some of these 13 county splits to occur within the same county. As a result, the total number of counties containing one or more splits may be fewer than 13.

d) <u>Minimizing VTD Splits:</u> North Carolina is divided into 2,666 VTDs. The computer simulation algorithm attempted to keep these VTDs intact and not split them into multiple districts, except when doing so is necessary for creating equally populated districts. For the purpose of creating equally populated districts, each newly drawn congressional district requires one VTD split. But the fourteenth and final district drawn in North Carolina does need not create an additional VTD split, since this final district should simply be the remaining area unassigned to the first thirteen districts. Therefore, an entire plan of 14

congressional districts requires only 13 VTD splits. I therefore require that every

simulated plan split only 13 VTDs in total.

e) <u>Geographic Compactness:</u> The simulation algorithm prioritized the drawing of

geographically compact districts whenever doing so does not violate any of the

aforementioned criteria.

f) <u>Avoiding Incumbent Pairings:</u> North Carolina's current congressional delegation

includes two incumbents, Representatives Ted Budd and David Price, who

announced before the Enacted Plan was adopted that they will not run for

reelection in 2022. For the remaining eleven congressional incumbents, the

simulation algorithm intentionally avoids pairing multiple incumbents in the same

district. Hence, in every computer-simulated plan, each district contains no more

than one incumbent's residence.

g) <u>Municipal Boundaries:</u> The simulation algorithm generally favors not splitting

municipalities, but this consideration is given lower priority than all of the

aforementioned criteria. For example, the algorithm would not intentionally split a

VTD in order to preserve a municipality, as the Adopted Criteria clearly

prioritizes VTD preservation over municipal boundaries.

12.   On the following page of this report, Map 1 displays an example of one of the

computer-simulated plans produced by the computer algorithm. The lower half of this Map also

reports the population of each district, the compactness scores for each district, and the county

splits and VTD splits created by the plan. As with every simulated plan, this plan contains

exactly 13 VTD splits and 13 county splits, with 11 counties split into two or more districts.

Map 1:
Example of a Computer–Simulated Congressional Plan Protecting all 11 Incumbents
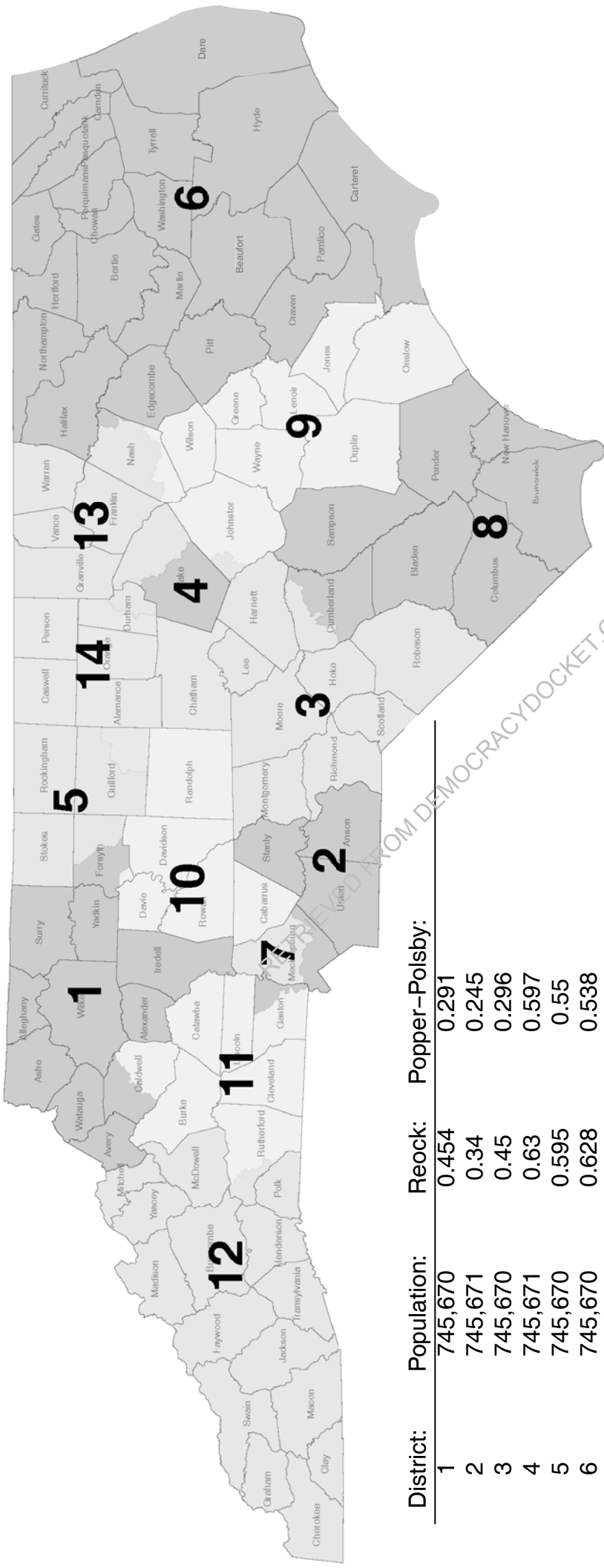
District:	Population:	Reock:	Popper–Polsby:
1	745,670	0.454	0.291
2	745,671	0.34	0.245
3	745,670	0.45	0.296
4	745,671	0.63	0.597
5	745,670	0.595	0.55
6	745,670	0.628	0.538
7	745,671	0.555	0.44
8	745,671	0.555	0.402
9	745,671	0.494	0.345
10	745,671	0.527	0.535
11	745,670	0.592	0.295
12	745,671	0.354	0.313
13	745,671	0.629	0.396
14	745,670	0.513	0.439
Plan Average:	745,670.6	0.523	0.406

11 Split Counties:
Caldwell (Districts 1, 11)
Cumberland (Districts 3, 8)
Durham (Districts 13, 14)
Forsyth (Districts 1, 10, 5)
Gaston (Districts 11, 2)
Guilford (Districts 14, 5)
Johnston (Districts 3, 9)
Mecklenburg (Districts 2, 7)
Nash (Districts 13, 6, 9)
Rutherford (Districts 11, 12)
Wake (Districts 13, 4)

13 Split VTD's:
VTD 00PR32 in Caldwell County (Districts 1 and 11)
VTD 00CC17 in Cumberland County (Districts 3 and 8)
VTD 055–11 in Durham County (Districts 13 and 14)
VTD 000051 in Forsyth County (Districts 1 and 10)
VTD 000301 in Forsyth County (Districts 1 and 5)
VTD 000025 in Gaston County (Districts 11 and 2)
VTD 000PG1 in Guilford County (Districts 14 and 5)
VTD 00PR33 in Johnston County (Districts 3 and 9)
VTD 000216 in Mecklenburg County (Districts 2 and 7)
VTD 00P16A in Nash County (Districts 13 and 6)
VTD 00P22A in Nash County (Districts 13 and 9)
VTD 000018 in Rutherford County (Districts 11 and 12)
VTD 001–36 in Wake County (Districts 13 and 4)

The Enacted Plan's Compliance with the Adopted Criteria:

13.   Although all seven of the criteria listed above are part of the General Assembly's

Adopted Criteria, five of these criteria are ones that the Joint Redistricting Committee "shall" or

"should" follow in the process of drawing its Congressional districting plan. These five

mandated criteria are: equal population; contiguity, minimizing county splits, minimizing VTD

splits, and geographic compactness.[3]

14.   I assessed whether the 2021 Enacted Plan complies with these five mandated

criteria, and I describe my findings in this section. I found that the Enacted Plan does not violate

the equal population requirement, nor do any of its districts violate contiguity.

15.   However, by comparing the Enacted Plan to the 1,000 computer-simulated plans,

I found that the Enacted Plan fails to minimize county splits, fails to minimize VTD splits, and is

significantly less geographically compact than is reasonably possible. I describe these findings

below in detail.

16.   *Minimizing County Splits:* In comparing the total number of county splits in the

Enacted Plan and in the computer-simulated plans, I counted the total number of times a county

is split into more than one district. Specifically, a county fully contained within a single district

counts as zero splits. A county split into two full or partial districts counts as one split. And a

county split into three full or partial districts counts as two splits. And so on.

17.   Using this standard method of accounting for total county splits, I found that the

Enacted Plan contains 14 total county splits, which are detailed in Table 1. These 14 total county

splits are spread across 11 counties. Eight of these 11 counties are split only once, but Guilford,

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[3] In listing these five mandated criteria, I am not including the Adopted Criteria's prohibitions on the use of racial data, partisan considerations, and election results data. I did not assess whether the Enacted Plan complies with the prohibition on racial considerations.

Mecklenburg, and Wake Counties are each split into three districts, thus accounting for two splits each. Thus, the Enacted Plan has 14 total county splits, as listed in Table 1.

Table 1: Total Number of County Splits in the 2021 Enacted Plan

	County:	Congressional Districts:	Total County Splits:
1	Davidson	7 and 10	1
2	Guilford	7, 10, and 11	2
3	Harnett	4 and 7	1
4	Iredell	10 and 12	1
5	Mecklenburg	8, 9, and 13	2
6	Onslow	1 and 3	1
7	Pitt	1 and 2	1
8	Robeson	3 and 8	1
9	Wake	5, 6, and 7	2
10	Watauga	11 and 14	1
11	Wayne	2 and 4	1
Total County Splits:			**14**

18. As explained in the previous section, a congressional plan in North Carolina needs to contain only 13 county splits if the map-drawer is attempting to minimize the splitting of counties. The Enacted Plan's 14 county splits is therefore one more split than is necessary. This "extra" split is specifically found at the border between District 7 and District 10. In general, the border between any two congressional districts in North Carolina needs to split only one county, at most. But in the Enacted Plan, the border between Districts 7 and 10 creates two county splits: One split of Davidson County and one split of Guilford County. Creating two county splits of Davidson and Guilford Counties was not necessary for equalizing district populations. Nor was it necessary for protecting incumbents, as no incumbents reside in the

portions of Davidson and Guilford Counties within District 7 and District 10. Hence, the "extra" county split in Davidson and Guilford Counties does not appear to be consistent with the 2021 Adopted Criteria, which mandate that "Division of counties in the 2021 Congressional plan shall only be made for reasons of equalizing population and consideration of double bunking."

19.   Indeed, I found that the computer simulation algorithm was always able to draw districts complying with the Adopted Criteria without using an "extra" 14th county split. As the upper half of Figure 1 illustrates, all 1,000 computer-simulated plans contain exactly 13 county splits. The Enacted Plan clearly contains more county splits than one would expect from a map-drawing process complying with the Adopted Criteria. Therefore, I conclude that the Enacted Plan does not comply with the Adopted Criteria's rule against unnecessary division of counties.

20.   The Adopted Criteria do not explicitly limit the number of county splits within any single county. Nevertheless, it is notable that under the Enacted Plan, three different counties (Guilford, Mecklenburg, and Wake) are split multiple times. These three counties are each split into three districts under the Enacted Plan. This is an outcome that rarely occurs under the computer-simulated plans. As the lower half of Figure 1 illustrates, only 2.5% of the computer-simulated plans similarly split three or more counties multiple times. Thus, it is clear that the Enacted Plan's level of concentrating multiple county splits within a single county is an outcome that generally does not occur in a vast majority of the simulated plans drawn according to the Adopted Criteria.

Figure 1:

Comparison of Total County Splits in Enacted SB 740 Plan and 1,000 Computer–Simulated Plans

Total Number of County Splits in Each Congressional Plan
(Counting Multiple Splits in Counties Divided into Three or More Districts)

**Number of Counties Split Multiple Times
in Enacted SB 740 Plan and 1,000 Computer–Simulated Plans**

Number of Counties Split into Three or More Districts
Within in Each Congressional Plan

13
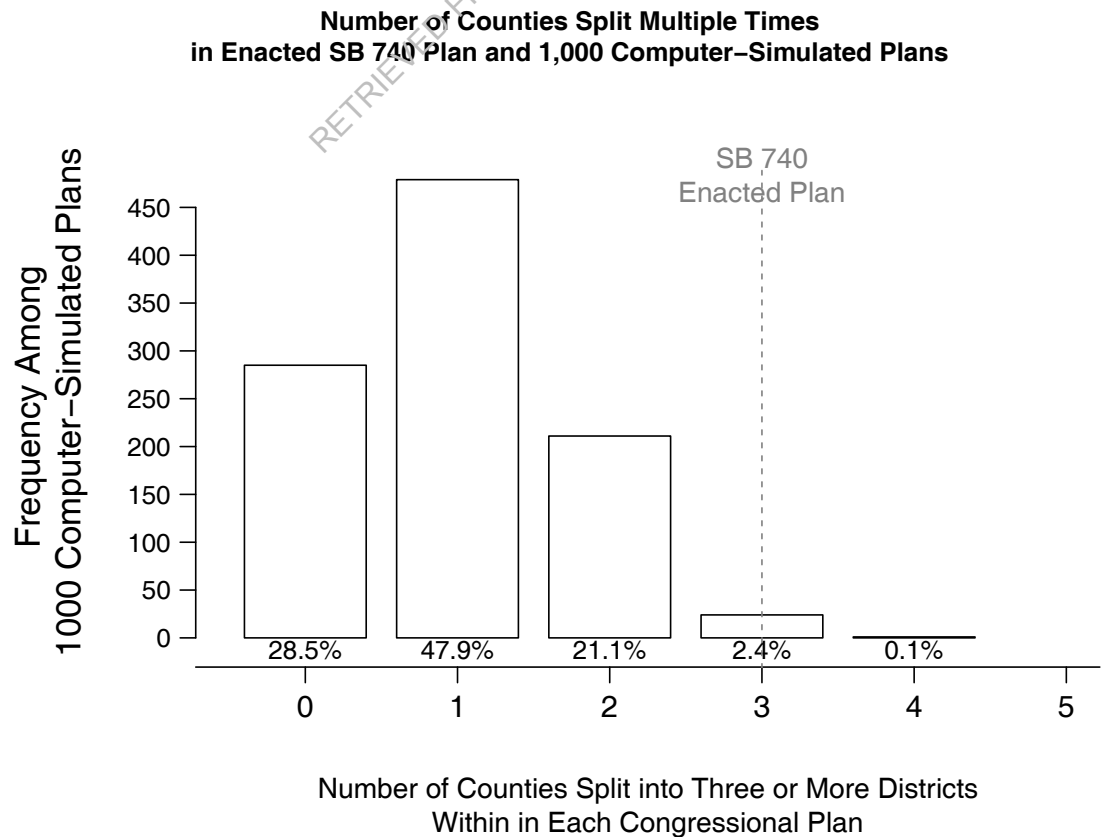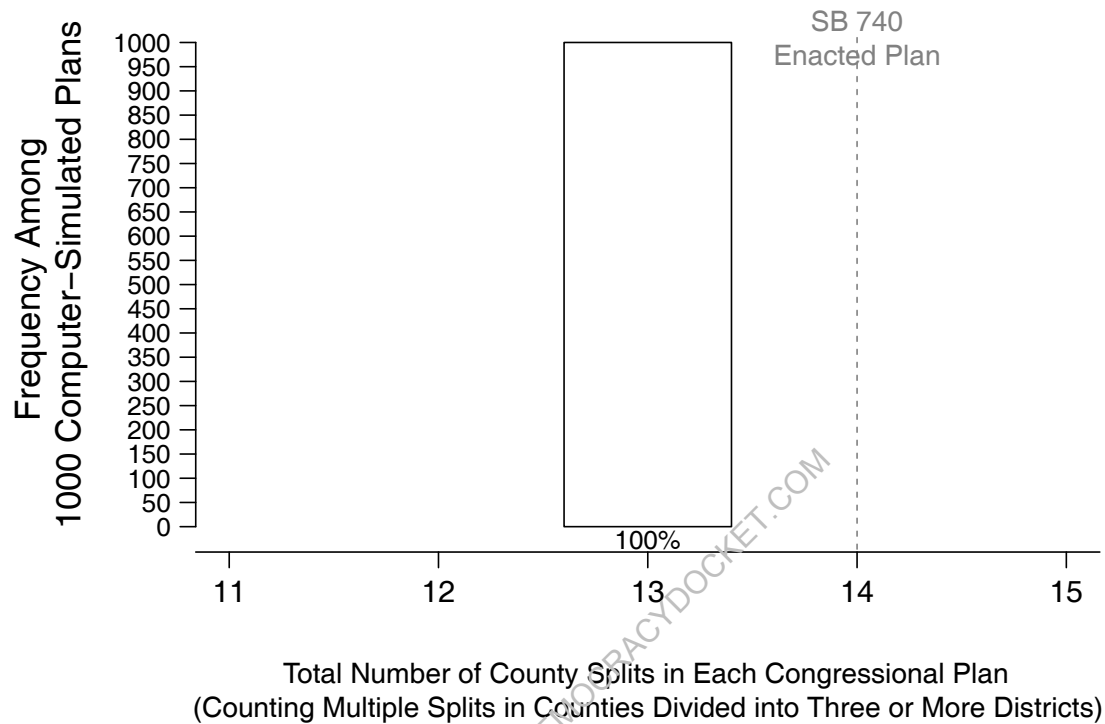
21.   **Minimizing VTD Splits**: The Adopted Criteria mandates that "Voting districts ("VTDs") should be split only when necessary." As explained earlier in this report, each newly drawn congressional district needs to create only one VTD split for the purpose of equalizing the district's population. But the fourteenth and final district drawn in North Carolina does need not create an additional VTD split, since this final district should simply be the remaining area unassigned to the first thirteen districts. Therefore, an entire plan of 14 congressional districts needs to create only 13 VTD splits.
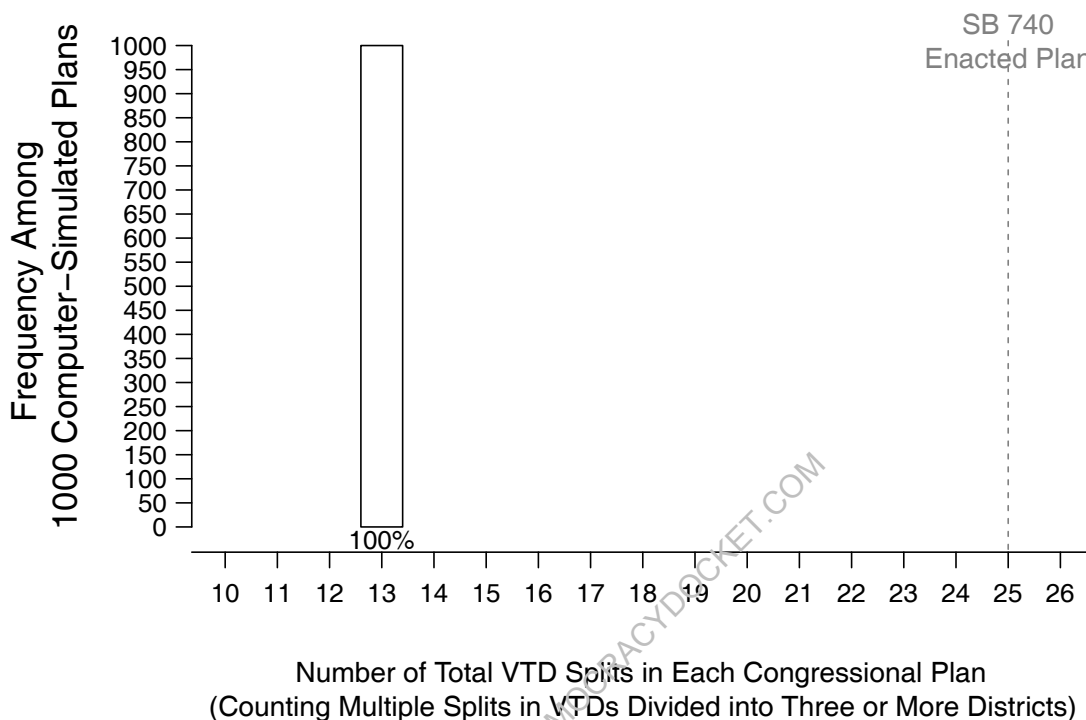
22.   However, the Enacted Plan creates far more VTD splits than is necessary. As the General Assembly's "StatPack" Report[4] for the Enacted SB 740 Plan details, the Enacted plan splits 24 VTDs into multiple districts. Among these 24 split VTDs, 23 VTDs are split into two districts, while one VTD (Wake County VTD 18-02) is split into three districts. Thus, using the same method of accounting for splits described earlier, the Enacted Plan contains 25 total VTD splits, and 24 VTDs are split into two or more districts.

23.   The Enacted Plan's 25 total VTD splits is far more than is necessary to comply with the Adopted Criteria' equal population requirement. As explained earlier, only 13 VTD splits are necessary in order to produce an equally-populated congressional plan in North Carolina. Thus, as Figure 2 illustrates, every one of the 1,000 computer-simulated plans contains exactly 13 VTD splits, and the Enacted Plan's 25 total VTD splits is clearly not consistent with the Adopted Criteria's requirement that "Voting districts ('VTDs') should be split only when necessary."

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[4] Available at:
https://webservices.ncleg.gov/ViewBillDocument/2021/53447/0/SL%202021-174%20-%20StatPack%20Report.

Comparison of Total VTD Splits in Enacted SB 740 Plan and 1,000 Computer−Simulated Plans

24.   ***Measuring Geographic Compactness***: The August 12, 2021 Adopted Criteria

mandates that the Joint Redistricting Committee "shall" attempt to draw geographically compact

congressional districts. The Adopted Criteria also specify two commonly used measures of

district compactness: the Reock score and the Polsby-Popper score.

25.   In evaluating whether the Enacted Plan follows the compactness requirement of

the Adopted Criteria, it is useful to compare the compactness of the Enacted Plan and the 1,000

computer-simulated plans. The computer-simulated plans were produced by a computer

algorithm adhering strictly to the traditional districting criteria mandated by the Adopted Criteria

and ignoring any partisan or racial considerations. Thus, the compactness scores of these

computer-simulated plans illustrate the statistical range of compactness scores that could be

reasonably expected to emerge from a districting process that solely seeks to follow the Adopted Criteria while ignoring partisan and racial considerations. I therefore compare the compactness of the simulated plans and the Enacted Plan using the two measures of compactness specified by the 2021 Adopted Criteria.

26.   First, I calculate the average Polsby-Popper score of each plan's districts. The Polsby-Popper score for each individual district is calculated as the ratio of the district's area to the area of a hypothetical circle whose circumference is identical to the length of the district's perimeter; thus, higher Polsby-Popper scores indicate greater district compactness. The 2021 Enacted Plan has an average Polsby-Popper score of 0.3026 across its 14 congressional districts. As illustrated in Figure 3, every single one of the 1,000 computer-simulated House plans in this report exhibits a higher Polsby-Popper score than the Enacted Plan. In fact, the middle 50% of these 1,000 computer-simulated plans have an average Polsby-Popper score ranging from 0.36 to 0.39, and the most compact computer-simulated plan has a Polsby-Popper score of 0.43. Hence, it is clear that the Enacted Plan is significantly less compact, as measured by its Polsby-Popper score, than what could reasonably have been expected from a districting process adhering to the Adopted Criteria.

27.   Second, I calculate the average Reock score of the districts within each plan. The Reock score for each individual district is calculated as the ratio of the district's area to the area of the smallest bounding circle that can be drawn to completely contain the district; thus, higher Reock score indicate more geographically compact districts. The 2021 Enacted Plan has an average Reock score of 0.4165 across its 14 congressional districts. As illustrated in Figure 3, 97.7% of the 1,000 computer-simulated plans exhibit a higher Reock score than the Enacted Plan. In fact, the middle 50% of these 1,000 computer-simulated plans have an average Reock

score ranging from 0.44 to 0.47, and the most compact computer-simulated plan has an average

Reock score of 0.52. Hence, it is clear that the Enacted Plan is significantly less compact, as

measured by its Reock score, than what could reasonably have been expected from a districting
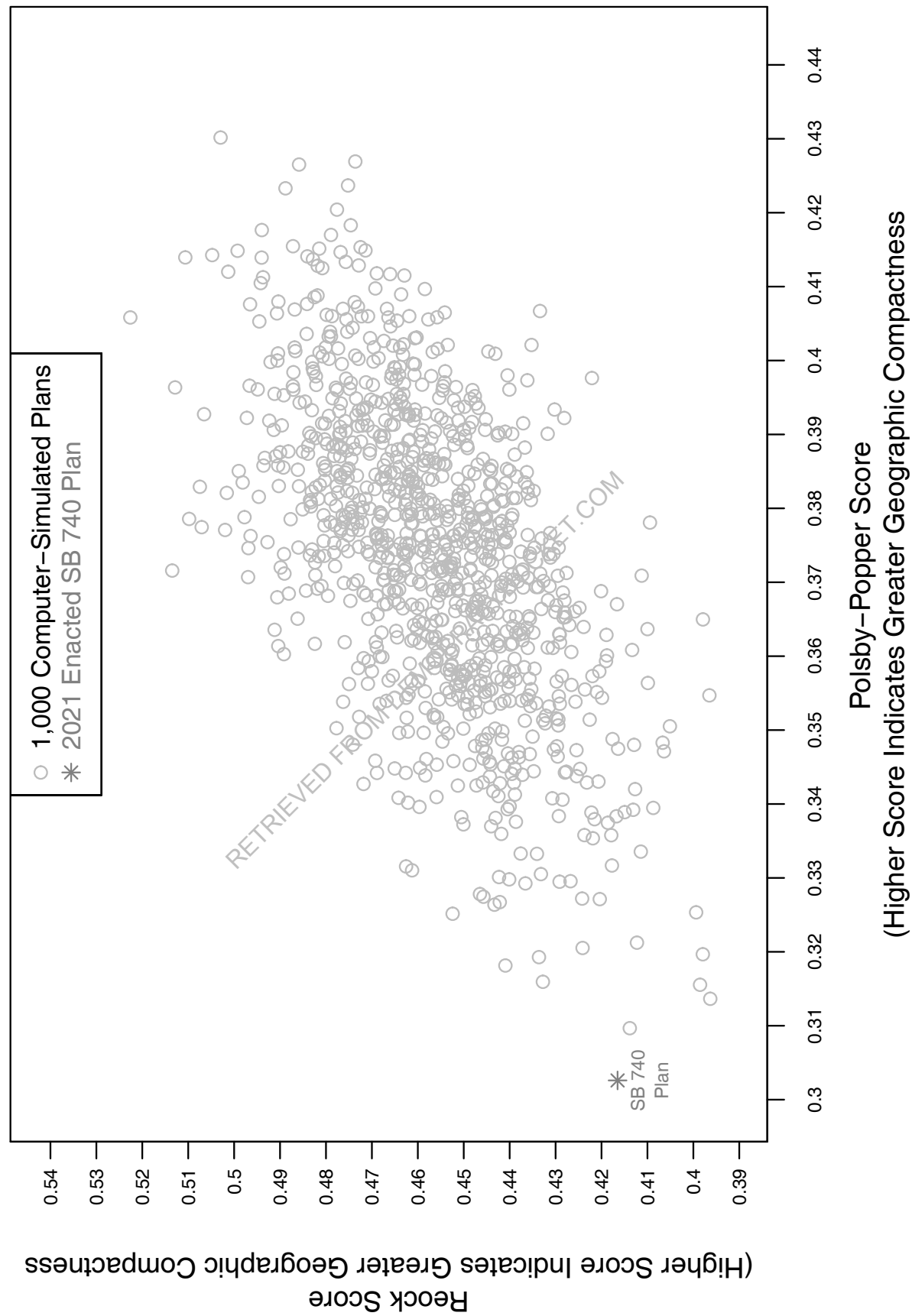
process adhering to the Adopted Criteria.

Figure 3:

Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans on Polsby–Popper and Reock Compactness Scores

Measuring the Partisanship of Districting Plans

28.   In general, I use actual election results from recent, statewide election races in North Carolina to assess the partisan performance of the Enacted Plan and the computer-simulated plans analyzed in this report. Overlaying these past election results onto a districting plan enables me to calculate the Republican (or Democratic) share of the votes cast from within each district in the Enacted Plan and in each simulated plan. I am also able to count the total number of Republican and Democratic-leaning districts within each simulated plan and within the Enacted Plan. All of these calculations thus allow me to directly compare the partisanship of the Enacted Plan and the simulated plans. These partisan comparisons allow me to determine whether or not the partisanship of individual districts and the partisan distribution of seats in the Enacted Plan could reasonably have arisen from a districting process adhering to the Adopted Criteria and its explicit prohibition on partisan considerations. Past voting history in federal and statewide elections is a strong predictor of future voting history. Mapmakers thus can and do use past voting history to identify the class of voters, at a precinct-by-precinct level, who are likely to vote for Republican or Democratic congressional candidates.

29.   In the 2011, 2016, and 2017 rounds of state legislative and congressional redistricting last decade, the North Carolina General Assembly publicly disclosed that it was relying solely on recent statewide elections in measuring the partisanship of the districting plans being created. I therefore follow the General Assembly's past practice from last decade by using results from a similar set of recent statewide elections in order to measure the partisanship of districts in the Enacted Plan and in the computer-simulated plans.

30.   ***The 2016-2020 Statewide Election Composite:*** During the General Assembly's 2017 legislative redistricting process, Representative David Lewis announced at the Joint

Redistricting Committee's August 10, 2017 meeting that the General Assembly would measure

the partisanship of legislative districts using the results from some of the most recent elections

held in North Carolina for the following five offices: US President, US Senator, Governor,

Lieutenant Governor, and Attorney General.

31.   To measure the partisanship of all districts in the computer-simulated plans and

the 2021 Enacted Plan, I used the two most-recent election contests held in North Carolina for

these same five offices during 2016-2020. In other words, I used the results of the following ten

elections: 2016 US President, 2016 US Senator, 2016 Governor, 2016 Lieutenant Governor,

2016 Attorney General, 2020 US President, 2020 US Senator, 2020 Governor, 2020 Lieutenant

Governor, and 2020 Attorney General. I use these election results because these are the same

state and federal offices whose election results were used by the General Assembly during its

2017 legislative redistricting process, and the 2017 redistricting process was the most recent one

in which the leadership of the General Assembly's redistricting committees publicly announced

how the General Assembly would evaluate the partisanship of its own districting plans.

32.   I obtained precinct-level results for these ten elections, and I disaggregated these

election results down to the census block level. I then aggregated these block-level election

results to the district level within each computer-simulated plan and the Enacted Plan, and I

calculated the number of districts within each plan that cast more votes for Republican than

Democratic candidates. I use these calculations to measure the partisan performance of each

simulated plan analyzed in this report and of the Enacted Plan. In other words, I look at the

census blocks that would comprise a particular district in a given simulation and, using the actual

election results from those census blocks, I calculate whether voters in that simulated district

collectively cast more votes for Republican or Democratic candidates in the 2016-2020 statewide

election contests. I performed such calculations for each district under each simulated plan to measure the number of districts Democrats or Republicans would win under that particular simulated districting map.

33.   I refer to the aggregated election results from these ten statewide elections as the "2016-2020 Statewide Election Composite." For the Enacted Plan districts and for all districts in each of the 1,000 computer-simulated plans, I calculate the percentage of total two-party votes across these ten elections that were cast in favor of Republican candidates in order to measure the average Republican vote share of the district. In the following section, I present district-level comparisons of the Enacted Plan and simulated plan districts in order to identify whether any individual districts in the Enacted Plan are partisan outliers. I also present plan-wide comparisons of the Enacted Plan and the simulated plans in order to identify the extent to which the Enacted Plan is a statistical outlier in terms of common measures of districting plan partisanship.

District-Level and Plan-Wide Partisan Comparisons of the Enacted Plan and Simulated Plans

34.　　　In this section, I present partisan comparisons of the Enacted Plan to the computer-simulated plans at both a district-by-district level as well as a plan-wide level using several common measures of districting plan partisanship. First, I compare the district-level Republican vote share of the Enacted Plan's districts and the districts in the computer-simulated plans. Next, I compare the number of Republican-favoring districts in the Enacted Plan and in the computer-simulated plans. Finally, I use several common measures of partisan bias to compare the Enacted Plan to the computer-simulated plans. Overall, I find that the several individual districts in the Enacted Plan are statistical outliers, exhibiting extreme partisan characteristics that are rarely or never observed in the computer-simulated plan districts drawn with strict adherence to the Adopted Criteria. Moreover, I find that at the plan-wide level, the Enacted Plan creates a degree of partisan bias favoring Republicans that is more extreme than the vast majority of the computer-simulated plans. I describe these findings in detail below:

35.　　　*Partisan Outlier Districts in the Enacted Plan*: In Figure 4, I directly compare the partisan distribution of districts in the Enacted Plan to the partisan distribution of districts in the 1,000 computer-simulated plans. I first order the Enacted Plan's districts from the most to the least-Republican district, as measured by Republican vote share using the 2016-2020 Statewide Election Composite. The most-Republican district appears on the top row, and the least-Republican district appears on the bottom row of Figure 4. Next, I analyze each of the 1,000 computer-simulated plans and similarly order each simulated plan's districts from the most- to the least-Republican district. I then directly compare the most-Republican Enacted Plan district (CD-10) to the most-Republican simulated district from each of the 1,000 computer-simulated plans. In other words, I compare one district from the Enacted Plan to 1,000 computer-simulated

districts, and I compare these districts based on their Republican vote share. I then directly compare the second-most-Republican district in the Enacted Plan to the second-most-Republican district from each of the 1,000 simulated plans. I conduct the same comparison for each district in the Enacted Plan, comparing the Enacted Plan district to its computer-simulated counterparts from each of the 1,000 simulated plans.

Figure 4:

Comparisons of Enacted SB 740 Plan Districts to 1,000 Computer–Simulated Plans' Districts

Percent of Simulated Districts with a Lower/Higher Republican Vote Share
Than Each Enacted Plan District

(0%, 100%)
(1.3%, 98.7%)
(54.7%, 45.2%)
(83%, 17%)
(95.6%, 4.4%)
(100%, 0%)
(100%, 0%)
(100%, 0%)
(98.6%, 1.4%)
(100%, 0%)
(84.9%, 15.1%)
(19.5%, 80.5%)
(0%, 100%)
(0%, 100%)

○ Districts in 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan Districts

CD–10
CD–13
CD–8
CD–7
CD–1
CD–3
CD–12
CD–11
CD–14
CD–4
CD–2
CD–5
CD–6
CD–9

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75%

District's Republican Vote Share Measured Using the 2016–2020 Statewide Election Composite
(50.8% Statewide Republican 2–Party Vote Share)

24

36.   Thus, the top row of Figure 4 directly compares the partisanship of the most-Republican Enacted Plan district (CD-10) to the partisanship of the most-Republican district from each of the 1,000 simulated plans. The two percentages (in parentheses) in the right margin of this Figure report the percentage of these 1,000 simulated districts that are less Republican than, and more Republican than, the Enacted plan district. Similarly, the second row of this Figure compares the second-most-Republican district from each plan, the third row compares the third-most-Republican district from each plan, and so on. In each row of this Figure, the Enacted Plan's district is depicted with a red star and labeled in red with its district number; meanwhile, the 1,000 computer-simulated districts are depicted with 1,000 gray circles on each row.

37.   As the bottom row of Figure 4 illustrates, the most-Democratic district in the Enacted Plan (CD-9) is more heavily Democratic than 100% of the most-Democratic districts in each of the 1,000 computer-simulated plans. This calculation is numerically reported in the right margin of the Figure. Every single one of the computer-simulated counterpart districts would have been more politically moderate than CD-9 in terms of partisanship: CD-9 exhibits a Republican vote share of 27.2%, while all 1,000 of the most-Democratic districts in the computer-simulated plans would have exhibited a higher Republican vote share and would therefore have been more politically moderate. It is thus clear that CD-9 packs together Democratic voters to a more extreme extent than the most-Democratic district in 100% of the computer-simulated plans. I therefore identify CD-9 as an extreme partisan outlier when compared to its 1,000 computer-simulated counterparts, using a standard threshold test of 95% for statistical significance.

38.   The next-to-bottom row of Figure 4 reveals a similar finding regarding CD-6 in the Enacted Plan. This row illustrates that the second-most-Democratic district in the Enacted

Plan (CD-6) is more heavily Democratic than 100% of the second-most-Democratic districts in each of the 1,000 computer-simulated plans. Every single one of its computer-simulated counterpart districts would have been more politically moderate than CD-6 in terms of partisanship: CD-6 exhibits a Republican vote share of 27.5%, while 100% of the second-most-Democratic districts in the computer-simulated plans would have exhibited a higher Republican vote share and would therefore have been more politically moderate. In other words, CD-6 packs together Democratic voters to a more extreme extent than the second-most-Democratic district in 100% of the computer-simulated plans. I therefore identify CD-6 as an extreme partisan outlier when compared to its 1,000 computer-simulated counterparts, using a standard threshold test of 95% for statistical significance.

39.   Meanwhile, the top two rows of Figure 4 reveal a similar finding: As the top row illustrates, the most-Republican district in the Enacted Plan (CD-10) is less heavily Republican than 100% of the most-Republican districts in each of the 1,000 computer-simulated plans. A similar pattern appears in the second-to-top row of Figure 4, which illustrates that the second-most-Republican district in the Enacted Plan (CD-13) is less heavily Republican than 98.7% of the second-most-Republican districts in each of the 1,000 computer-simulated plans.

40.   It is especially notable that these four aforementioned Enacted Plan districts – the two most Republican districts (CD-10 and CD-13) and the two most Democratic districts (CD-9 and CD-6) in the Enacted Plan – were drawn to include more Democratic voters than virtually all of their counterpart districts in the 1,000 computer-simulated plans. These "extra" Democratic voters in the four most partisan-extreme districts in the Enacted Plan had to come from the remaining ten more moderate districts in the Enacted Plan. Having fewer Democratic voters in these more moderate districts enhances Republican candidate performance in these districts.

41.   Indeed, the middle six rows in Figure 4 (i.e., rows 5 through 10) confirm this

precise effect. The middle six rows in Figure 4 compare the partisanship of districts in the fifth,

sixth, seventh, eighth, ninth, and tenth-most Republican districts within the Enacted Plan and the

1,000 computer-simulated plans. In all six of these rows, the Enacted Plan district is a partisan

outlier. In each of these six rows, the Enacted Plan's district is more heavily Republican than

over 95% of its counterpart districts in the 1,000 computer-simulated plans. Four of these six

rows illustrate Enacted Plan districts that are more heavily Republican than 100% of their

counterpart districts in the computer-simulated plans. The six Enacted Plan districts in these six

middle rows (CD-1, 3, 4, 11, 12, and 14) are more heavily Republican than nearly all of their

counterpart computer-simulated plan districts because the four most partisan-extreme districts in

the Enacted Plan (CD-6, 9, 10, and 13) are more heavily Democratic than nearly all of their

counterpart districts in the computer-simulated plans.

42.   I therefore identify the six Enacted Plan districts in the six middle rows (CD-1, 3,

4, 11, 12, and 14) of Figure 4 as partisan statistical outliers. Each of these six districts has a

Republican vote share that is higher than over 95% of the computer-simulated districts in its

respective row in Figure 4. I also identify the four Enacted Plan districts in the top rows and the

bottom two rows (CD-6, 9, 10, and 13) of Figure 4 as partisan statistical outliers. Each of these

four districts has a Republican vote share that is lower than over 98% of the computer-simulated

districts in its respective row in Figure 4.

43.   In summary, Figure 4 illustrates that 10 of the 14 districts in the Enacted Plan are

partisan outliers: Six districts (CD-1, 3, 4, 11, 12, and 14) in the Enacted Plan are more heavily

Republican than over 95% of their counterpart computer-simulated plan districts, while four

districts (CD-6, 9, 10, and 13) are more heavily Democratic than over 98% of their counterpart districts in the computer-simulated plans.

44.   The Appendix of this report contains ten additional Figures (Figures A1 through A10) that each contain a similar analysis of the Enacted Plan districts and the computer-simulated plan districts. Each of these ten Figures in the Appendix measures the partisanship of districts using one of the individual ten elections included in the 2016-2020 Statewide Election Composite. These ten Figures generally demonstrate that the same extreme partisan outlier patterns observed in Figure 4 are also present when district partisanship is measured using any one of the ten statewide elections held in North Carolina during 2016-2020.

45.   ***"Mid-Range" Republican Districts:*** Collectively, the upper ten rows in Figure 4 illustrate that the Enacted Plan's ten most-Republican districts exhibit a significantly narrower range of partisanship than is exhibited by the ten most-Republican districts in each of the computer-simulated plans. Specifically, the Enacted Plan's ten most-Republican districts all have Republican vote shares within the narrow range of 52.9% to 61.2%. As explained earlier, this narrow range is the product of two distinct dynamics: In the top two rows of Figure 4, the Enacted Plan's districts are significantly less Republican than nearly all of the simulated plans' districts in these rows. But in the fifth to tenth rows of Figure 4, the Enacted Plan's districts are more safely Republican-leaning than over 95% of the computer-simulated districts within each of these six rows. The overall result of these two distinct dynamics is that the Enacted Plan contains ten districts that all have Republican vote shares within the narrow range of 52.9% to 61.2%. I label any districts within this narrow range of partisanship as "mid-range" Republican-leaning districts, reflecting the fact that these districts have generally favored Republican candidates, but not by overwhelmingly large margins.

46.   Is the Enacted Plan's creation of ten such "mid-range" Republican-leaning districts an outcome that ever occurs in the 1,000 computer-simulated plans? I analyzed the simulated plans and counted the number of districts within each plan that are similarly "mid-range" with a Republican vote share between 52.9% and 61.2%. As Figure 5 illustrates, the Enacted Plan's creation of ten "mid-range" Republican districts is an extreme statistical outlier. None of the 1,000 simulated plans comes close to creating ten such districts. Virtually all of the simulated plans contain from two to six "mid-range" Republican districts, and the most common outcome among the simulations is four such districts. Hence, the Enacted Plan is clearly an extreme partisan outlier in terms of its peculiar focus on maximizing the number of "mid-range" Republican districts, and the Enacted Plan did so to an extreme degree far beyond any of the 1,000 simulated plans created using a partisan-blind computer algorithm that follows the Adopted Criteria.

47.   *Competitive Districts:* The Enacted Plan's maximization of "mid-range" Republican districts necessarily comes at the expense of creating more competitive districts. As Figure 4 illustrates, the Enacted Plan contains zero districts whose Republican vote share is higher than 47.0% and lower than 52.9%, as measured using the 2016-2020 Statewide Election Composite. In other words, there are zero districts in which the Republican vote share is within 5% of the Democratic vote share.

48.   I label districts with a Republican vote share from 47.5% to 52.5% as "competitive" districts to reflect the fact that such districts have a nearly even share of Republican and Democratic voters, and election outcomes in the district could therefore swing in favor of either party. The Enacted Plan contains zero "competitive" districts, as measured using the 2016-2020 Statewide Election Composite.

Figure 5:

**Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
On Number of Mid–Range Republican Districts**

Number of Mid–Range Republican Districts with 52.9% to 61.2% Republican Vote Share Within Each Plan
Using the 2016–2020 Statewide Election Composite
(50.8% Statewide Republican 2–Party Vote Share)

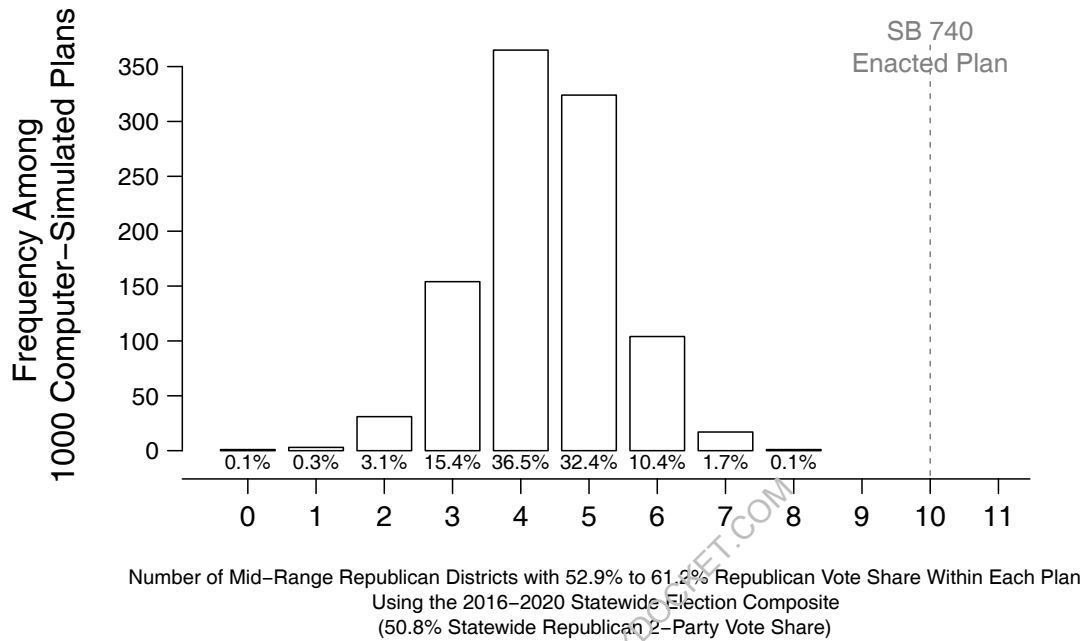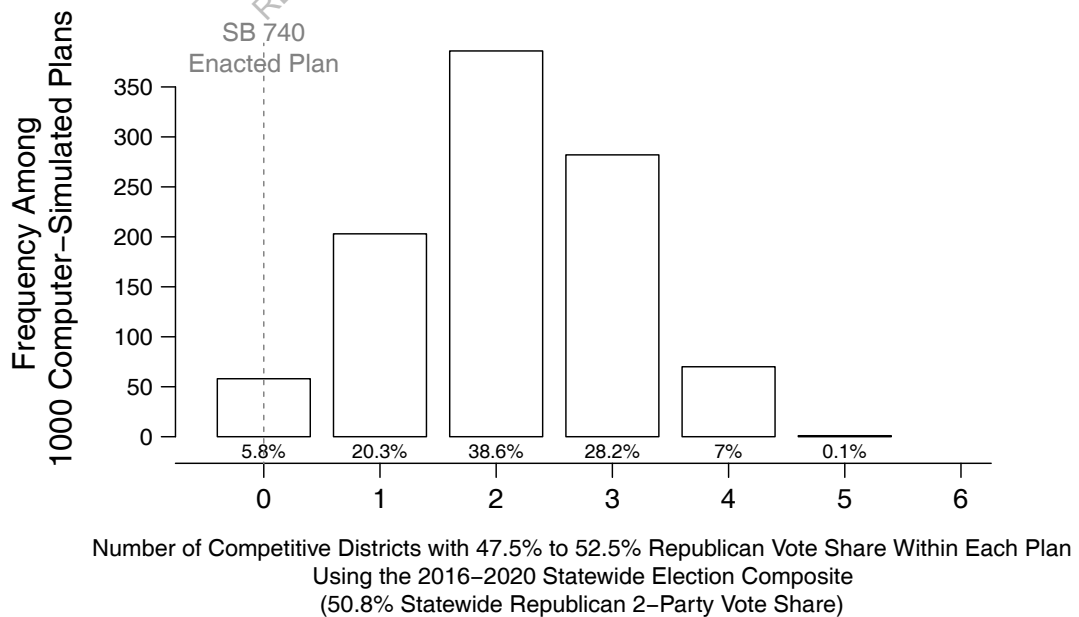## Figure 6:

**Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
On Number of Competitive Districts**

Number of Competitive Districts with 47.5% to 52.5% Republican Vote Share Within Each Plan
Using the 2016–2020 Statewide Election Composite
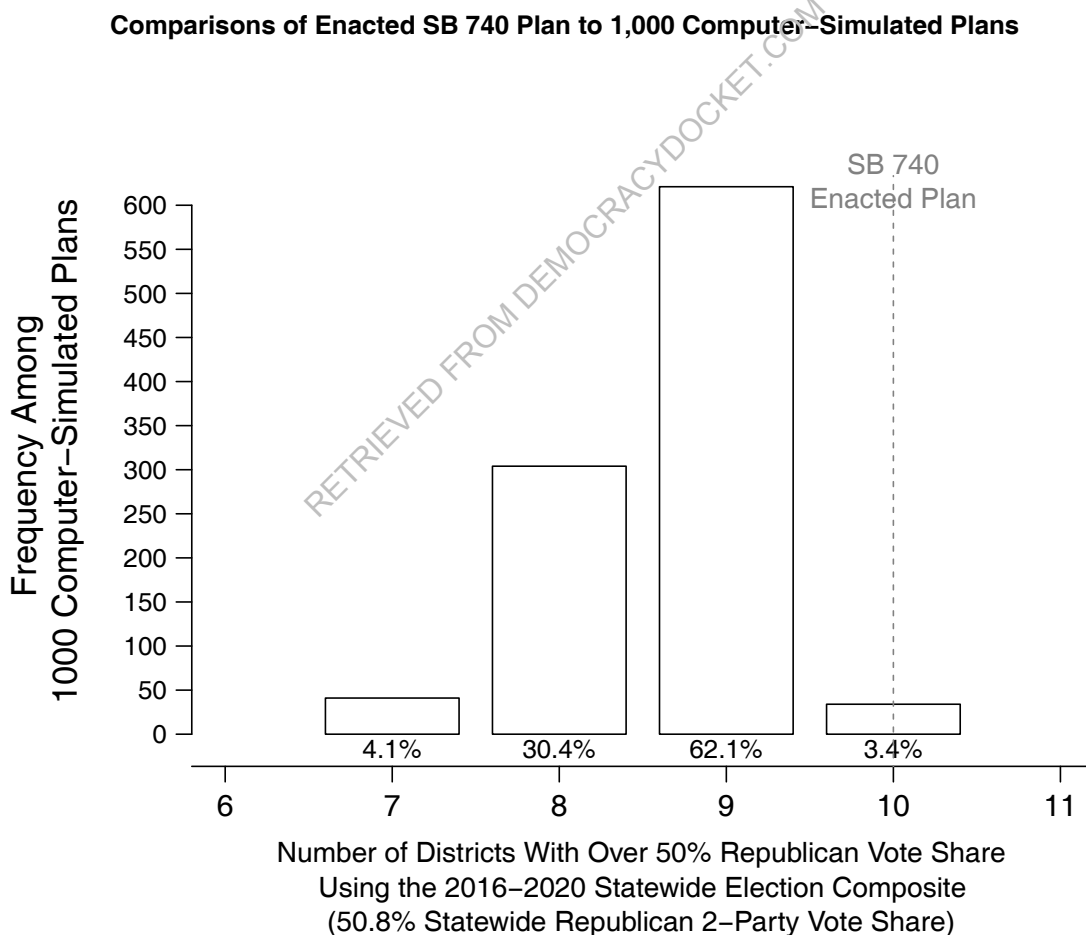(50.8% Statewide Republican 2–Party Vote Share)

49.   Is the Enacted Plan's failure to create any "competitive" districts an outcome that ever occurs in the 1,000 computer-simulated plans? I analyzed the simulated plans and counted the number of districts within each plan that are "competitive" districts with a Republican vote share between 47.5% and 52.5%. As Figure 6 illustrates, the Enacted Plan's creation of zero "competitive" districts is almost a statistical outlier: Only 5.8% of the 1,000 simulated plans similarly fail to have a single "competitive" district. The vast majority of the computer-simulated plans contain two or more "competitive" districts. Over 94% of the computer-simulated plans create more "competitive" districts than the Enacted Plan does.

50.   ***Number of Democratic and Republican Districts:*** Figure 7 compares the partisan breakdown of the computer-simulated plans to the partisanship of the Enacted Plan. Specifically, Figure 7 uses the 2016-2020 Statewide Election Composite to measure the number of Republican-favoring districts created in each of the 1,000 simulated plans. Across the entire state, Republican candidates collectively won a 50.8% share of the votes in the ten elections in the 2016-2020 Statewide Election Composite. But within the 14 districts in the Enacted Plan, Republicans have over a 50% vote share in 10 out of 14 districts. In other words, the Enacted Plan created 10 Republican-favoring districts, as measured using the 2016-2020 Statewide Election Composite.. By contrast, only 3.4% of the computer-simulated plans create 10 Republican-favoring districts, and no computer-simulated plan ever creates more than 10 Republican districts.

51.   Hence, in terms of the total number of Republican-favoring districts created by the plan, the 2021 Enacted Plan is a statistical outlier when compared to the 1,000 computer-simulated plans. The Enacted Plan creates the maximum number of Republican districts that ever occurs in any computer-simulated plan, and the Enacted Plan creates more Republican districts

than 96.6% of the computer-simulated plans, which were drawn using a non-partisan districting process adhering to the General Assembly's 2021 Adopted Criteria. I characterize the Enacted Plan's creation of 10 Republican districts as a statistical outlier among the computer-simulated plans because the Enacted Plan exhibits an outcome that is more favorable to Republicans than over 95% of the simulated plans.

Figure 7:

Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans

Number of Districts With Over 50% Republican Vote Share
Using the 2016–2020 Statewide Election Composite
(50.8% Statewide Republican 2–Party Vote Share)

52.   Notably, the ten elections included in the Statewide Election Composite all occurred in two election years and in electoral environments that were relatively favorable to Republicans across the country (November 2016 and November 2020). North Carolina did not hold any statewide elections for non-judicial offices in November 2018, which was an electoral environment more favorable to Democrats across the country.

53.   Hence, the projected number of Republican seats would be even lower in the computer-simulated plans if one measured district partisanship using a statewide election whose outcome was more partisan-balanced or even favorable to Democrats. In the Appendix, I present ten histograms (labeled as Figures B1 to B10), each presenting the projected number of Republican seats across all of the simulated plans and the Enacted Plan using only one of the ten elections in the Statewide Election Composite.

54.   The ten histograms in Figures B1 to B10 illustrate how the partisanship of the Enacted Plan compares to the partisanship of the 1,000 computer-simulated plans under a range of different electoral environments, as reflected by the ten elections in the Statewide Election Composite. Most notably, under all ten of these elections, the Enacted Plan always contains exactly 10 Republican-favoring districts and 4 Democrat-favoring districts. Hence, it is clear that the Enacted Plan creates a 10-to-4 distribution of seats in favor of Republican candidates that is durable across a range of different electoral conditions.

55.   Moreover, the histograms in Figures B1 to B10 demonstrate that the Enacted Plan becomes a more extreme partisan outlier relative to the computer-simulated plans under electoral conditions that are slightly to moderately favorable to the Democratic candidate. For example, Figure B1 compares the Enacted Plan to the computer-simulated plan using the results of the 2016 Attorney General election, which was a near-tied statewide contest in which Democrat Josh

Stein defeated Republican Buck Newton by a very slim margin. Using the 2016 Attorney General election to measure district partisanship, the 2021 Enacted Plan contains 10 Republican-favoring districts out of 14. The Enacted Plan's creation of 10 districts favoring Republican Buck Newton over Democrat Josh Stein is an outcome that occurs in only 0.2% of the 1,000 computer-simulated plans, indicating that the Enacted Plan is a partisan statistical outlier under electoral conditions that are more favorable for Democrats (and thus relatively more unfavorable for Republicans) than is normal in North Carolina.

56.   An even more favorable election for the Democratic candidate was the 2020 gubernatorial contest, in which Democrat Roy Cooper defeated Republican Dan Forest by a 4.5% margin. Figure B7 compares the Enacted Plan to the computer-simulated using the results of this 2020 gubernatorial election. Using the results from this election, the 2021 Enacted Plan contains 10 Republican-favoring districts out of 14. None of the 1,000 simulated plans ever contain 10 districts favoring the Republican candidate. The Enacted Plan's creation of 10 Republican-favoring districts is therefore an extreme partisan outlier that is durable even in Democratic-favorable electoral conditions. In fact, the 10-to-4 Republican partisan advantage under the Enacted Plan appears to become even more of an extreme partisan outlier under Democratic-favorable elections.

57.   *The Mean-Median Difference:* I also calculate each districting plan's mean-median difference, which is another accepted method that redistricting scholars commonly use to compare the relative partisan bias of different districting plans. The mean-median difference for any given plan is calculated as the mean district-level Republican vote share, minus the median district-level Republican vote share. For any congressional districting plan, the mean is calculated as the average of the Republican vote shares in each of the 14 districts. The median, in

turn, is the Republican vote share in the district where Republican performed the middle-best, which is the district that Republican would need to win to secure a majority of the congressional delegation. For a congressional plan containing 14 districts, the median district is calculated as the average of the Republican vote share in the districts where Republican performed the 7th and 8th-best across the state.

58. Using the 2016-2020 Statewide Election Composite to measure partisanship, the districts in the 2021 Enacted Plan have a mean Republican vote share of 50.8%, while the median district has a Republican vote share of 56.2%. Thus, the Enacted Plan has a mean-median difference of +5.4%, indicating that the median district is skewed significantly more Republican than the plan's average district. The mean-median difference thus indicates that the Enacted Plan distributes voters across districts in such a way that most districts are significantly more Republican-leaning than the average North Carolina congressional district, while Democratic voters are more heavily concentrated in a minority of the Enacted Plan's districts.

59. I perform this same mean-median difference calculation on all computer-simulated plans in order to determine whether this partisan skew in the median congressional districts could have resulted naturally from North Carolina's political geography and the application of the Adopted Criteria. Figure 8 compares the mean-median difference of the Enacted Plan to the mean-median difference for each the 1,000 computer-simulated plans.

60. Figure 8 contains 1,000 gray circles, representing the 1,000 computer-simulated plans, as well as a red star, representing the 2021 Enacted Plan. The horizontal axis in this Figure measures the mean-median difference of the 2021 Enacted Plan and each simulated plan using the 2016-2020 Statewide Election Composite, while the vertical axis measures the average Polsby-Popper compactness score of the districts within each plan, with higher Polsby-Popper

scores indicating more compact districts. Figure 8 illustrates that the Enacted Plan's mean-median difference is +5.4%, indicating that the median district is skewed significantly more Republican than the plan's average district. Figure 8 further indicates that this difference is an extreme statistical outlier compared to the 1,000 computer-simulated plans. Indeed, the Enacted Plan's +5.4% mean-median difference is an outcome never observed across these 1,000 simulated plans. The 1,000 simulated plans all exhibit mean-median differences that range from -0.2% to +4.6%. In fact, the middle 50% of these computer-simulated plans have mean-median differences ranging from +2.0% to +3.0%, indicating a much smaller degree of skew in the median district than occurs under the 2021 Enacted Plan. These results confirm that the Enacted Plan creates an extreme partisan outcome that cannot be explained by North Carolina's voter geography or by strict adherence to the required districting criteria set forth in the General Assembly's Adopted Criteria.

Figure 8:

Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans on Mean–Median Difference and Compactness

Legend:
- ○ 1,000 Computer–Simulated Plans
- ✳ 2021 Enacted SB 740 Plan

SB 740 Plan

X-axis: Mean Minus Median District–Level Republican Vote Share (Using the 2016–2020 Statewide Election Composite)

X-axis values: -0.01, 0, 0.01, 0.02, 0.03, 0.04, 0.05

Y-axis: Polsby–Popper Score (Higher Score Indicates Greater Geographic Compactness)

Y-axis values: 0.27, 0.28, 0.29, 0.3, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.4, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46

61.   Figure 8 illustrates that the Enacted Plan is less geographically compact than every single one of the computer-simulated plans, as measured by each plan's average Polsby-Popper score. The simulated plans have Polsby-Popper scores ranging from 0.31 to 0.43. In fact, the middle 50% of these computer-simulated plans have Polsby-Popper scores ranging from 0.36 to 0.39. Meanwhile, the Enacted Plan exhibits a Polsby-Popper score of only 0.30, which is lower than all 1,000 of the computer-simulated plans. Hence, it is clear that the Enacted Plan did not seek to draw districts that were as geographically compact as reasonably possible. Instead, the Enacted Plan subordinated geographic compactness, which enabled the Enacted Plan to create a partisan skew in North Carolina's congressional districts favoring Republican candidates.

62.   ***The Efficiency Gap:*** Another commonly used measure of a districting plan's partisan bias is the efficiency gap.[5] To calculate the efficiency gap of the Enacted Plan and every computer-simulated plan, I first measure the number of Republican and Democratic votes within each Enacted Plan district and each computer-simulated district, as measured using the 2016-2020 Statewide Election Composite. Using this measure of district-level partisanship, I then calculate each districting plan's efficiency gap using the method outlined in *Partisan Gerrymandering and the Efficiency Gap.*[6] Districts are classified as Democratic victories if, using the 2016-2020 Statewide Election Composite, the sum total of Democratic votes in the district during these elections exceeds the sum total of Republican votes; otherwise, the district is classified as Republican. For each party, I then calculate the total sum of surplus votes in districts

[5] Eric McGhee, "Measuring Partisan Bias in Single-Member District Electoral Systems." Legislative Studies Quarterly Vol. 39, No. 1: 55–85 (2014).

[6] Nicholas O. Stephanopoulos & Eric M. McGhee, *Partisan Gerrymandering and the Efficiency Gap,* 82 University of Chicago Law Review 831 (2015).

the party won and lost votes in districts where the party lost. Specifically, in a district lost by a given party, all of the party's votes are considered lost votes; in a district won by a party, only the party's votes exceeding the 50% threshold necessary for victory are considered surplus votes. A party's total wasted votes for an entire districting plan is the sum of its surplus votes in districts won by the party and its lost votes in districts lost by the party. The efficiency gap is then calculated as total wasted Republican votes minus total wasted Democratic votes, divided by the total number of two-party votes cast statewide across all seven elections.

63.   Thus, the theoretical importance of the efficiency gap is that it tells us the degree to which more Democratic or Republican votes are wasted across an entire districting plan. A significantly positive efficiency gap indicates far more Republican wasted votes, while a significantly negative efficiency gap indicates far more Democratic wasted votes.

64.   I analyze whether the Enacted Plan's efficiency gap arises naturally from a map-drawing process strictly adhering to the mandated criteria in the General Assembly's Adopted Criteria, or rather, whether the skew in the Enacted Plan's efficiency gap is explainable only as the product of a map-drawing process that intentionally favored one party over the other. By comparing the efficiency gap of the Enacted Plan to that of the computer-simulated plans, I am able to evaluate whether or not such the Enacted Plan's efficiency gap could have realistically resulted from adherence to the Adopted Criteria.

65.   Figure 9 compares the efficiency paps of the Enacted Plan and of the 1,000 computer-simulated plans. As before, the 1,000 circles in this Figure represent the 1,000 computer-simulated plans, while the red star in the lower right corner represents the Enacted Plan. Each plan is plotted along the vertical axis according to its efficiency gap, while each plan is plotted along the horizontal axis according to its mean-median difference.

66.   The results in Figure 9 illustrate that the Enacted Plan exhibits an efficiency gap of +19.5%, indicating that the plan results in far more wasted Democratic votes than wasted Republican votes. Specifically, the difference between the total number of wasted Democratic votes and wasted Republican votes amounts to 19.5% of the total number of votes statewide. The Enacted Plan's efficiency gap is larger than the efficiency gaps exhibited by 97.7% of the computer-simulated plans. This comparison reveals that the significant level of Republican bias exhibited by the Enacted Plan cannot be explained by North Carolina's political geography or the Adopted Criteria alone.

Figure 9:

Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
on Mean–Median Difference and Efficiency Gap

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

SB 740
Plan

Mean Minus Median District–Level Republican Vote Share
(Using the 2016–2020 Statewide Election Composite)

Efficiency Gap
(Using the 2016–2020 Statewide Election Composite)

RETRIEVED FROM DEMOCRACYDOCKET.COM
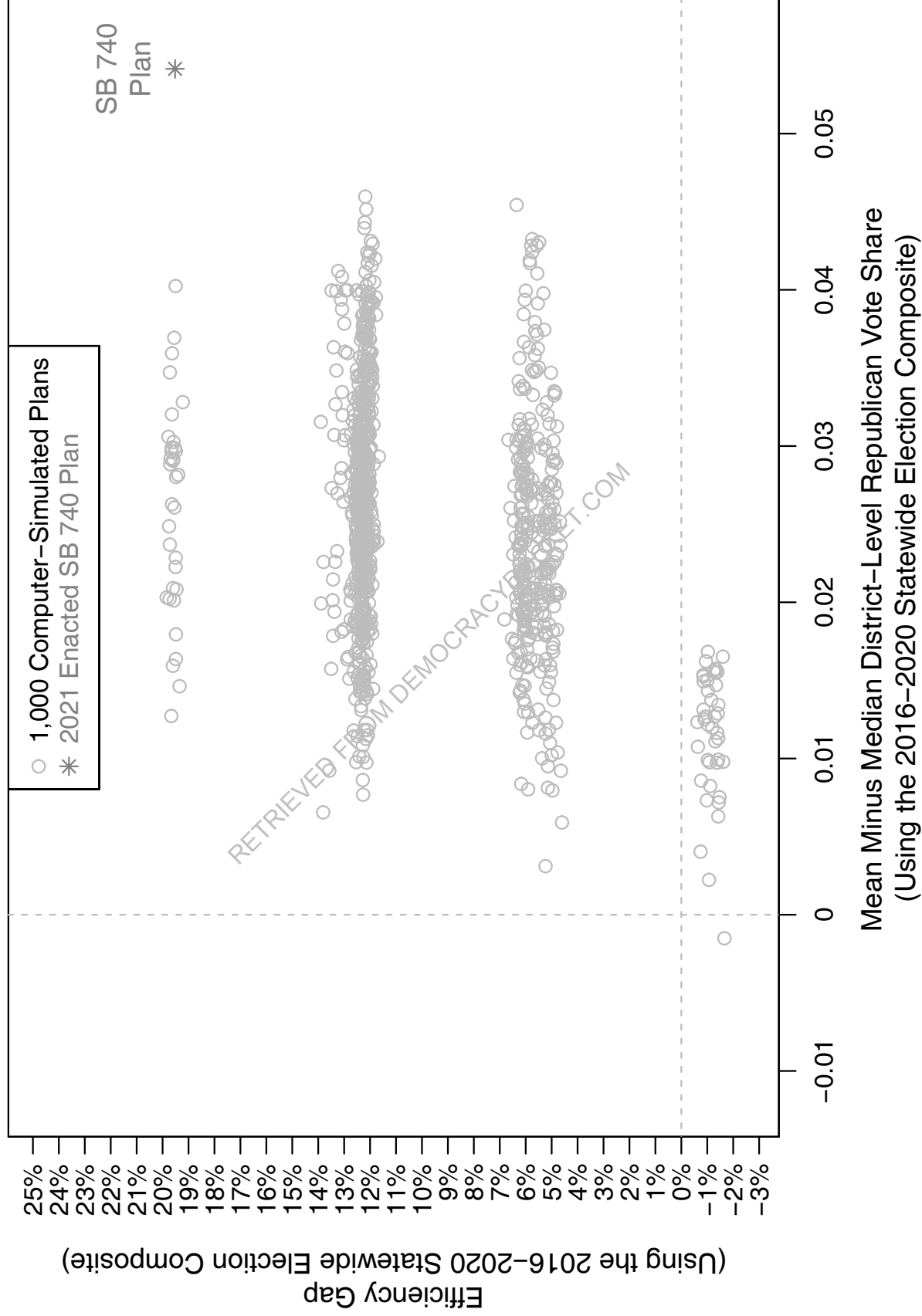
67.   ***The Lopsided Margins Measure:*** Another measure of partisan bias in districting plans is the "lopsided margins" test. The basic premise captured by this measure is that a partisan-motivated map-drawer may attempt to pack the opposing party's voters into a small number of extreme districts that are won by a lopsided margin. Thus, for example, a map-drawer attempting to favor Party A may pack Party B's voters into a small number of districts that very heavily favor Party B. This packing would then allow Party A to win all the remaining districts with relatively smaller margins. This sort of partisan manipulation in districting would result in Party B winning its districts by extremely large margins, while Party A would win its districts by relatively small margins.

68.   Hence, the lopsided margins test is performed by calculating the difference between the average margin of victory in Republican-favoring districts and the average margin of victory in Democratic-favoring districts. The 2021 Enacted Plan contains four Democratic-favoring districts (CD-2, 5, 6, and 9), and these four districts have an average Democratic vote share of 65.4%, as measured using the 2016-2020 Statewide Election Composite. By contrast, the Enacted Plan contains ten Republican-favoring districts (CD-1, 3, 4, 7, 8, 10, 11, 12, 13, and 14), and these ten districts have an average Republican vote share of 57.3%. Hence, the difference between the average Democratic margin of victory in Democratic-favoring districts and the average Republican margin of victory in Republican-favoring districts is +8.1%, which is calculated as 65.4% - 57.3%. I refer to this calculation of +8.1% as the Enacted Plan's lopsided margins measure.

69.   How does the 8.1% lopsided margins measure of the Enacted Plan compare to the same calculation for the 1,000 computer-simulated plans? Figure 10 reports the lopsided margins calculations for the Enacted Plan and for the simulated plans. In Figure 10, each plan is plotted

along the horizontal axis according to its lopsided margins measure and along the vertical axis according to its mean-median difference.

70.   Figure 10 reveals that the Enacted Plan's +8.1% lopsided margins measure is an extreme outlier compared to the lopsided margins measures of the 1,000 computer-simulated plans. All 1,000 of the simulated plans have a smaller lopsided margins measure than the Enacted Plan. In fact, a significant minority (34.5%) of the 1,000 simulated plans have a lopsided margins measure of between -2% to +2%, indicating a plan in which Democrats and Republicans win their respective districts by similar average margins.

71.   By contrast, the Enacted Plan's lopsided margins measure of +8.1% indicates that the Enacted Plan creates districts in which Democrats are extremely packed into their districts, while the margin of victory in Republican districts is significantly smaller. The "lopsidedness" of the two parties' average margin of victory is extreme when compared to the computer-simulated plans. The finding that all 1,000 simulated plans have a smaller lopsided margins measure indicates that the Enacted Plan's extreme packing of Democrats into Democratic-favoring districts was not simply the result of North Carolina's political geography, combined with adherence to the Adopted Criteria.

Figure 10:

Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans on Lopsided Margins Measure and Mean–Median Difference
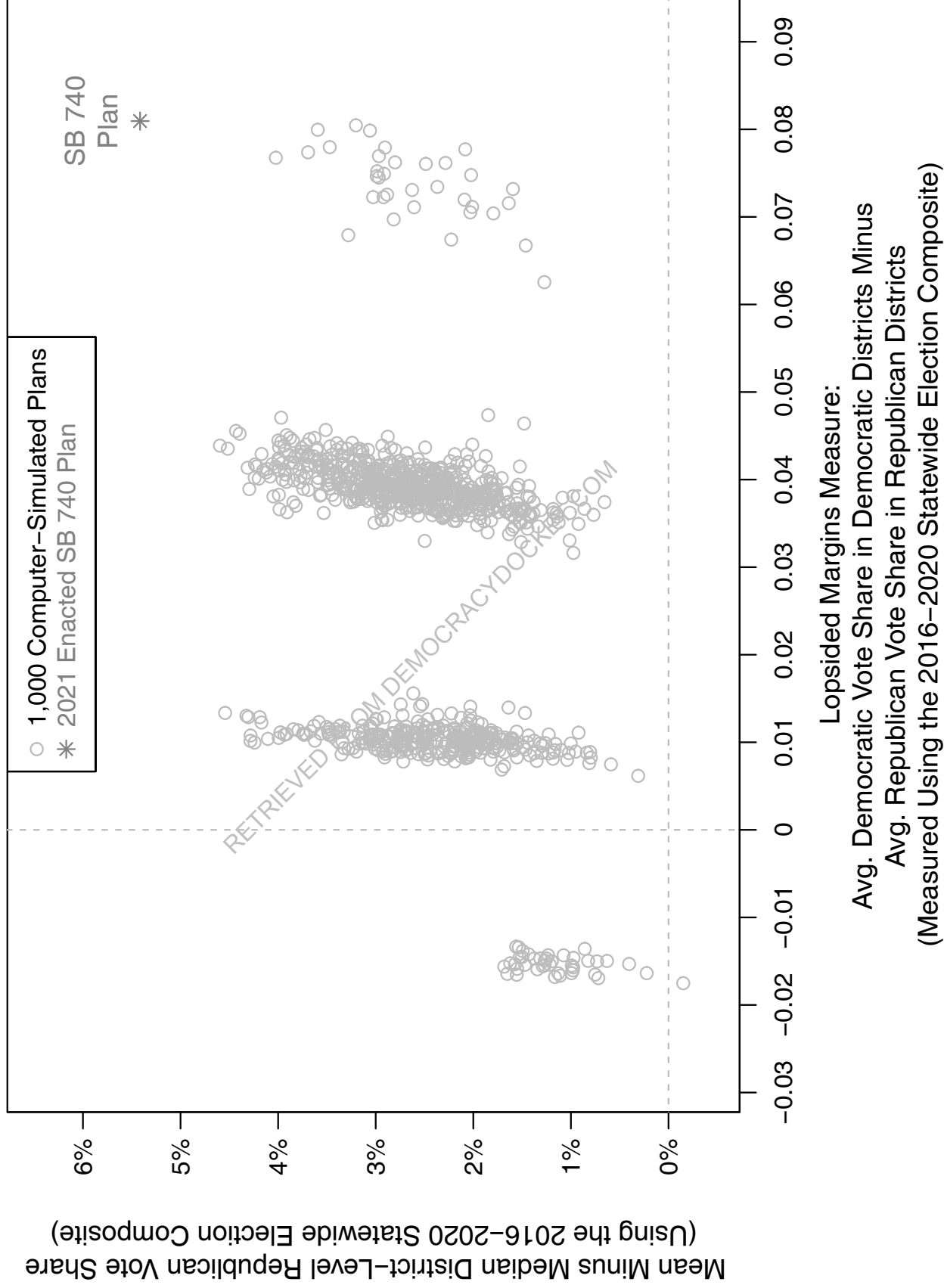
Conclusions Regarding Partisanship and Traditional Districting Criteria:

72.   The analysis described thus far in this report lead me to reach two main findings: First, among the five traditional districting criteria mandated by the General Assembly's 2021 Adopted Criteria, the Enacted Plan fails to minimize county splits, fails to minimize VTD splits, and is significantly less geographically compact than is reasonably possible under a districting process that follows the Adopted Criteria. Second, I found that the Enacted Plan is an extreme partisan outlier when compared to computer-simulated plans produced by a process following the Adopted Criteria. The Enacted Plan contains 10 districts that are partisan outliers when compared to the simulated plans' districts, and using several different common measures of partisan bias, the Enacted Plan creates a level of pro-Republican bias more extreme than in over 95% of the computer-simulated plans. In particular, the Enacted Plan creates more "mid-range" Republican districts than is created in 100% of the computer-simulated plans (Paragraphs 45-46).

73.   Based on these two main findings, I conclude that partisanship predominated in the drawing of the 2021 Enacted Plan and subordinated the traditional districting principles of avoiding county splits, avoiding VTD splits, and geographic compactness. Because the Enacted Plan fails to follow three of the Adopted Criteria's mandated districting principles while simultaneously creating an extreme level of partisan bias, I therefore conclude that the partisan bias of the Enacted Plan did not naturally arise by chance from a districting process adhering to the Adopted Criteria. Instead, I conclude that partisan goals predominated in the drawing of the Enacted Plan. By subordinating traditional districting criteria, the General Assembly's Enacted Plan was able to achieve partisan goals that could not otherwise have been achieved under a partisan-neutral districting process that follows the Adopted Criteria.

The Effect of the Enacted Plan Districts on Plaintiffs

74.   I evaluated the congressional districts in which each Plaintiff would reside under

the 1,000 computer-simulated using a list of geocoded residential addresses for the Plaintiffs that

counsel for the Plaintiffs provided me. I used these geocoded addresses to identify the specific

district in which each Plaintiff would be located under each computer-simulated plan, as well as

under the Enacted Plan. I then compared the partisanship of each individual Plaintiff's Enacted

Plan district to the partisanship of the Plaintiff's 1,000 districts from the 1,000 computer-

simulated plans. Using this approach, I identify whether each Plaintiff's district is a partisan

outlier when compared to the Plaintiff's 1,000 computer-simulated districts.

75.   Figure 11 present the results of this analysis. This Figure lists the individual

Plaintiffs and describes the partisanship of each Plaintiff's district of residence in the Enacted

Plan, as well as the partisanship of the district the Plaintiff would have resided in under each of

the 1,000 simulated congressional plans.

76.   To explain these analyses with an example each row in Figure 11 corresponds to a

particular individual Plaintiff. In the first row, describing Plaintiff David Brown, the red star

depicts the partisanship of the Plaintiff's Enacted Plan district (CD-11), as measured by

Republican vote share using the 2016-2020 Statewide Election Composite. The 1,000 gray

circles on this row depict the Republican vote share of each of the 1,000 simulated districts in

which the Plaintiff would reside in each of the 1,000 computer-simulated plans, based on that

Plaintiff's residential address. In the margin to the right of each row, I list in parentheses how

many of the 1,000 simulated plans would place the plaintiff in a more Democratic-leaning

district (on the left) and how many of the 1,000 simulations would place the plaintiff in a more

Republican-leaning district (on the right) than the Plaintiff's Enacted Plan district. Thus, for

example, the first row of Figure 11 reports that 98% of the 1,000 computer-simulated plans would place Plaintiff David Brown in a more Democratic-leaning district than his actual Enacted Plan district (CD-11). Therefore, I can conclude that Plaintiff David Brown's Enacted Plan district is a partisan statistical outlier when compared to his district under the 1,000 simulated plans.

77.   Figure 11 shows that two Plaintiffs residing in Republican-leaning districts under the Enacted Plan would be placed in a more Democratic-leaning district in over 95% of the computer-simulated plans: David Brown (CD-11) and Lily Nicole Quick (CD-7).

Figure 11:

Plaintiffs' Districts in the SB 740 Plan and in 1,000 Computer–Simulated Plans

Legend:
- ○ Plaintiff's District in each of the 1,000 Computer–Simulated Plans
- ✳ Plaintiff's District in the SB 740 Enacted Plan

Plaintiffs:

David Brown (CD–11)
Virginia Brien (CD–9)
Shawn Rush (CD–10)
Jackson Dunn (CD–9)
Mark Peters (CD–14)
Kathleen Barnes (CD–14)
Gettys Cohen (CD–4)
Richard R. Crews (CD–14)
Lily Nicole Quick (CD–7)
Amy Clare Oseroff (CD–1)
Donald Allan Rumph (CD–1)
Rebecca Harper (CD–6)
John Balla (CD–5)

(98%, 2%)
(0%, 100%)
(9.6%, 90.4%)
(0%, 100%)
(0.1%, 99.9%)
(0.1%, 99.9%)
(73.7%, 26.3%)
(0.1%, 99.9%)
(99.4%, 0.6%)
(53.6%, 46.4%)
(50.7%, 49.3%)
(0%, 100%)
(22.4%, 77.6%)

Percent of Simulated Districts with a Lower/Higher Republican Vote Share than the Plaintiff's Enacted Plan Districts

Republican Vote Share of District in which Plaintiff Resides
(Measured using 2016–2020 Statewide Election Composite)

30% 35% 40% 45% 50% 55% 60% 65% 70%

78.   Additionally, Figure 11 shows that six Plaintiffs would be placed in a more Republican district in 99.9% or more of the simulated plans relative to their districts under the Enacted Plan: Virginia Brien (CD-9), Jackson Dunn (CD-9), Mark Peters (CD-14), Kathleen Barnes (CD-14), Richard R. Crews (CD-14), and Rebecca Harper (CD-6).

I declare under penalty of perjury that the foregoing is true and correct to the best of my

knowledge.

This 30th day of November, 2021.

_____

Dr. Jowei Chen

Jowei Chen
Curriculum Vitae

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Academic Positions:

Associate Professor (2015-present), Assistant Professor (2009-2015), Department of Political Science, University of Michigan.
Research Associate Professor (2016-present), Faculty Associate (2009-2015), Center for Political Studies, University of Michigan.
W. Glenn Campbell and Rita Ricardo-Campbell National Fellow, Hoover Institution, Stanford University, 2013.
Principal Investigator and Senior Research Fellow, Center for Governance and Public Policy Research, Willamette University, 2013 – Present.

Education:

Ph.D., Political Science, Stanford University (June 2009)
M.S., Statistics, Stanford University (January 2007)
B.A., Ethics, Politics, and Economics, Yale University (May 2004)

Publications:

Chen, Jowei and Neil Malhotra. 2007. "The Law of k/n: The Effect of Chamber Size on Government Spending in Bicameral Legislatures."
> ***American Political Science Review*. 101(4): 657-676.**

Chen, Jowei, 2010. "The Effect of Electoral Geography on Pork Barreling in Bicameral Legislatures."
> ***American Journal of Political Science*. 54(2): 301-322.**

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Chen, Jowei and Jonathan Rodden, 2013. "Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures"
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Bonica, Adam, Jowei Chen, and Tim Johnson, 2015. "Senate Gate-Keeping, Presidential Staffing of 'Inferior Offices' and the Ideological Composition of Appointments to the Public Bureaucracy."
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Chen, Jowei and Jonathan Rodden, 2015. "Cutting Through the Thicket: Redistricting Simulations and the Detection of Partisan Gerrymanders."
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Electoral Studies. Volume 44 (December 2016): 329-340.

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Kim, Yunsieg and Jowei Chen, 2021. "Gerrymandered by Definition: The Distortion of 'Traditional' Districting Principles and a Proposal for an Empirical Redefinition."
Wisconsin Law Review, Forthcoming, Volume 2021, Number 1.

Chen, Jowei and Nicholas Stephanopoulos, 2021. "Democracy's Denominator."
California Law Review, Accepted for Publication, Volume 109.

Non-Peer-Reviewed Publication:

Chen, Jowei and Tim Johnson. 2017. "Political Ideology in the Bureaucracy."
Global Encyclopedia of Public Administration, Public Policy, and Governance.

Research Grants:

"How Citizenship-Based Redistricting Systemically Disadvantages Voters of Color". 2020 ($18,225). Combating and Confronting Racism Grant. University of Michigan Center for Social Solutions and Poverty Solutions.

Principal Investigator. National Science Foundation Grant SES-1459459, September 2015 – August 2018 ($165,008). "The Political Control of U.S. Federal Agencies and Bureaucratic Political Behavior."

"Economic Disparity and Federal Investments in Detroit," (with Brian Min) 2011. Graham Institute, University of Michigan ($30,000).

"The Partisan Effect of OSHA Enforcement on Workplace Injuries," (with Connor Raso) 2009. John M. Olin Law and Economics Research Grant ($4,410).

Invited Talks:

September, 2011. University of Virginia, American Politics Workshop.
October 2011. Massachusetts Institute of Technology, American Politics Conference.
January 2012. University of Chicago, Political Economy/American Politics Seminar.
February 2012. Harvard University, Positive Political Economy Seminar.
September 2012. Emory University, Political Institutions and Methodology Colloquium.
November 2012. University of Wisconsin, Madison, American Politics Workshop.
September 2013. Stanford University, Graduate School of Business, Political Economy Workshop.
February 2014. Princeton University, Center for the Study of Democratic Politics Workshop.
November 2014. Yale University, American Politics and Public Policy Workshop.
December 2014. American Constitution Society for Law & Policy Conference: Building the Evidence to Win Voting Rights Cases.
February 2015. University of Rochester, American Politics Working Group.
March 2015. Harvard University, Voting Rights Act Workshop.
May 2015. Harvard University, Conference on Political Geography.
Octoer 2015. George Washington University School of Law, Conference on Redistricting Reform.
September 2016. Harvard University Center for Governmental and International Studies, Voting Rights Institute Conference.
March 2017. Duke University, Sanford School of Public Policy, Redistricting Reform Conference.
October 2017. Willamette University, Center for Governance and Public Policy Research
October 2017, University of Wisconsin, Madison. Geometry of Redistricting Conference.
February 2018: University of Georgia Law School
September 2018. Willamette University.
November 2018. Yale University, Redistricting Workshop.

November 2018. University of Washington, Severyns Ravenholt Seminar in Comparative Politics.
January 2019. Duke University, Reason, Reform & Redistricting Conference.
February 2019. Ohio State University, Department of Political Science. Departmental speaker series.
March 2019. Wayne State University Law School, Gerrymandering Symposium.
November 2019. Big Data Ignite Conference.
November 2019. Calvin College, Department of Mathematics and Statistics.
September 2020 (Virtual). Yale University, Yale Law Journal Scholarship Workshop

Conference Service:

Section Chair, 2017 APSA (San Francisco, CA), Political Methodology Section
Discussant, 2014 Political Methodology Conference (University of Georgia)
Section Chair, 2012 MPSA (Chicago, IL), Political Geography Section.
Discussant, 2011 MPSA (Chicago, IL) "Presidential-Congressional Interaction."
Discussant, 2008 APSA (Boston, MA) "Congressional Appropriations."
Chair and Discussant, 2008 MPSA (Chicago, IL) "Distributive Politics: Parties and Pork."

Conference Presentations and Working Papers:

"Ideological Representation of Geographic Constituencies in the U.S. Bureaucracy," (with Tim Johnson). 2017 APSA.

"Incentives for Political versus Technical Expertise in the Public Bureaucracy," (with Tim Johnson). 2016 APSA.

"Black Electoral Geography and Congressional Districting: The Effect of Racial Redistricting on Partisan Gerrymandering". 2016 Annual Meeting of the Society for Political Methodology (Rice University)

"Racial Gerrymandering and Electoral Geography." Working Paper, 2016.

"Does Deserved Spending Win More Votes? Evidence from Individual-Level Disaster Assistance," (with Andrew Healy). 2014 APSA.

"The Geographic Link Between Votes and Seats: How the Geographic Distribution of Partisans Determines the Electoral Responsiveness and Bias of Legislative Elections," (with David Cottrell). 2014 APSA.

"Gerrymandering for Money: Drawing districts with respect to donors rather than voters." 2014 MPSA.

"Constituent Age and Legislator Responsiveness: The Effect of Constituent Opinion on the Vote for Federal Health Reform." (with Katharine Bradley) 2012 MPSA.

"Voter Partisanship and the Mobilizing Effect of Presidential Advertising." (with Kyle Dropp) 2012 MPSA.

"Recency Bias in Retrospective Voting: The Effect of Distributive Benefits on Voting Behavior." (with Andrew Feher) 2012 MPSA.

"Estimating the Political Ideologies of Appointed Public Bureaucrats," (with Adam Bonica and Tim Johnson) 2012 Annual Meeting of the Society for Political Methodology (University of North Carolina)

"Tobler's Law, Urbanization, and Electoral Bias in Florida." (with Jonathan Rodden) 2010 Annual Meeting of the Society for Political Methodology (University of Iowa)

"Unionization and Presidential Control of the Bureaucracy" (with Tim Johnson) 2011 MPSA.

"Estimating Bureaucratic Ideal Points with Federal Campaign Contributions" 2010 APSA. (Washington, DC).

"The Effect of Electoral Geography on Pork Spending in Bicameral Legislatures," Vanderbilt University Conference on Bicameralism, 2009.

"When Do Government Benefits Influence Voters' Behavior? The Effect of FEMA Disaster Awards on US Presidential Votes," 2009 APSA (Toronto, Canada).

"Are Poor Voters Easier to Buy Off?" 2009 APSA (Toronto, Canada).

"Credit Sharing Among Legislators: Electoral Geography's Effect on Pork Barreling in Legislatures," 2008 APSA (Boston, MA).

"Buying Votes with Public Funds in the US Presidential Election," Poster Presentation at the 2008 Annual Meeting of the Society for Political Methodology (University of Michigan).

"The Effect of Electoral Geography on Pork Spending in Bicameral Legislatures," 2008 MPSA.

"Legislative Free-Riding and Spending on Pure Public Goods," 2007 MPSA (Chicago, IL).

"Free Riding in Multi-Member Legislatures," (with Neil Malhotra) 2007 MPSA (Chicago, IL).

"The Effect of Legislature Size, Bicameralism, and Geography on Government Spending: Evidence from the American States," (with Neil Malhotra) 2006 APSA (Philadelphia, PA).

Figure A1: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2016 Attorney General Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

(0%, 100%)
(2.8%, 97.2%)
(73.4%, 26.5%)
(96.5%, 3.5%)
(98.2%, 1.8%)
(87.2%, 12.8%)
(90.1%, 9.9%)
(93.5%, 6.5%)
(100%, 0%)
(100%, 0%)
(73.6%, 26.3%)
(15.1%, 84.9%)
(0%, 100%)
(0%, 100%)

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

District's Republican Vote Share Measured Using the 2016 Attorney General election
(49.7% Statewide Republican 2–Party Vote Share)

56

Figure A2: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2016 Governor Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

(0%, 100%)   CD–10
(1%, 99%)   CD–13
(61%, 39%)   CD–8
(84%, 16%)   CD–1
(98.9%, 1.1%)   CD–7
(100%, 0%)   CD–3
(97.4%, 2.6%)   CD–12
(98.2%, 1.8%)   CD–4
(99.9%, 0.1%)   CD–11
(100%, 0%)   CD–14
(91.8%, 8.2%)   CD–2
(18.3%, 81.5%)   CD–5
(0%, 100%)   CD–9
(0.2%, 99.8%)   CD–6

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75%

District's Republican Vote Share Measured Using the 2016 Governor election
(49.9% Statewide Republican 2–Party Vote Share)

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Figure A3: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2016 Lieutenant Governor Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

Legend:
○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

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District's Republican Vote Share Measured Using the 2016 Lieutenant Governor election
(53.3% Statewide Republican 2–Party Vote Share)

(0%, 100%)
(3.4%, 96.6%)
(76.7%, 23.3%)
(98.5%, 1.5%)
(67.9%, 32.1%)
(91.4%, 8.6%)
(99.4%, 0.6%)
(99.7%, 0.3%)
(99.6%, 0.4%)
(100%, 0%)
(70.1%, 29.9%)
(17.5%, 82.5%)
(0%, 100%)
(0%, 100%)

58

Figure A4: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2016 US President Election Results
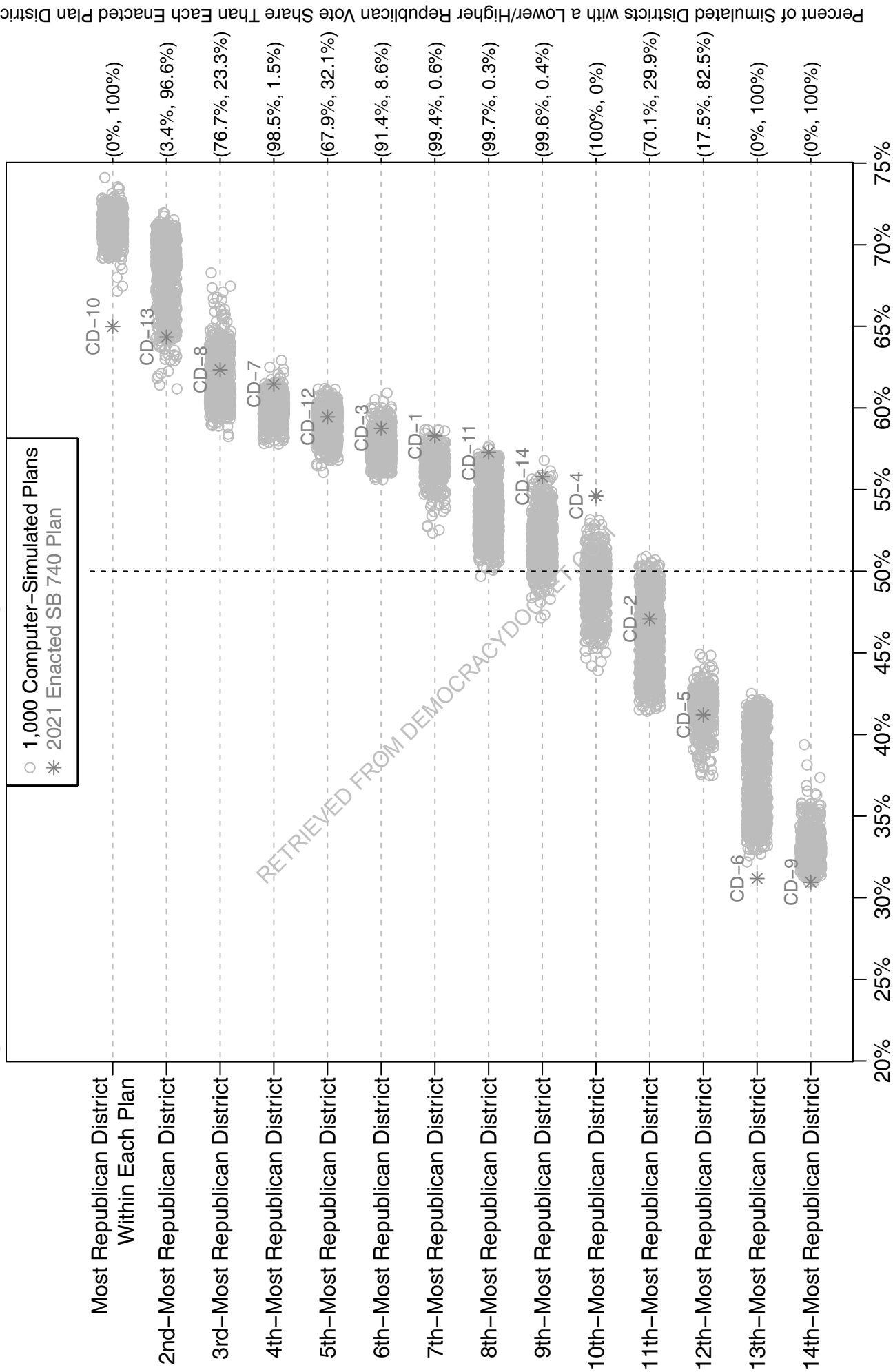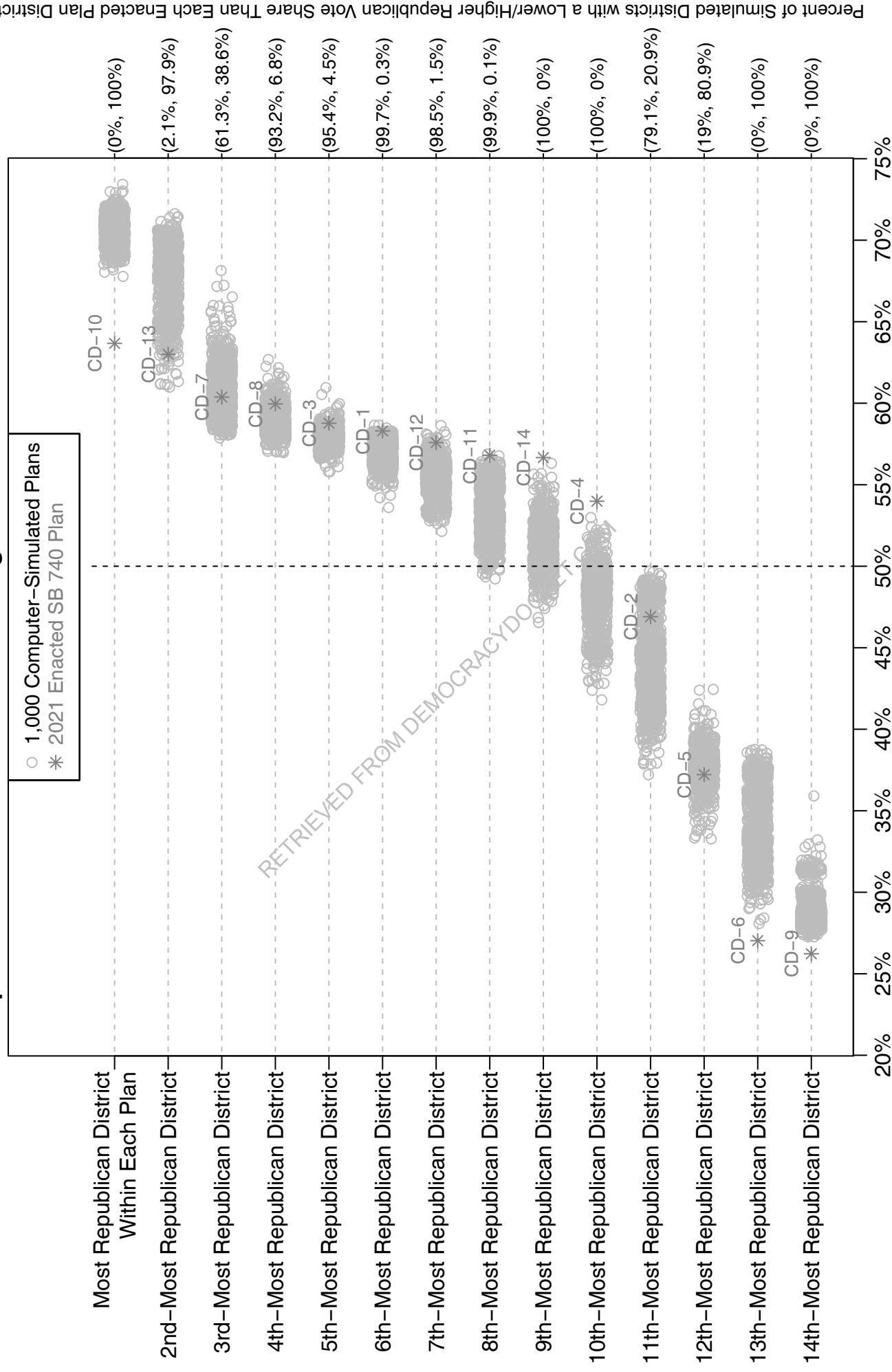
Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

District's Republican Vote Share Measured Using the 2016 US President election (51.9% Statewide Republican 2–Party Vote Share)

Legend:
○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

(0%, 100%)
(2.1%, 97.9%)
(61.3%, 38.6%)
(93.2%, 6.8%)
(95.4%, 4.5%)
(99.7%, 0.3%)
(98.5%, 1.5%)
(99.9%, 0.1%)
(100%, 0%)
(100%, 0%)
(79.1%, 20.9%)
(19%, 80.9%)
(0%, 100%)
(0%, 100%)

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

CD–10, CD–13, CD–7, CD–8, CD–3, CD–1, CD–12, CD–11, CD–14, CD–4, CD–2, CD–5, CD–6, CD–9

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Figure A5: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2016 US Senator Election Results
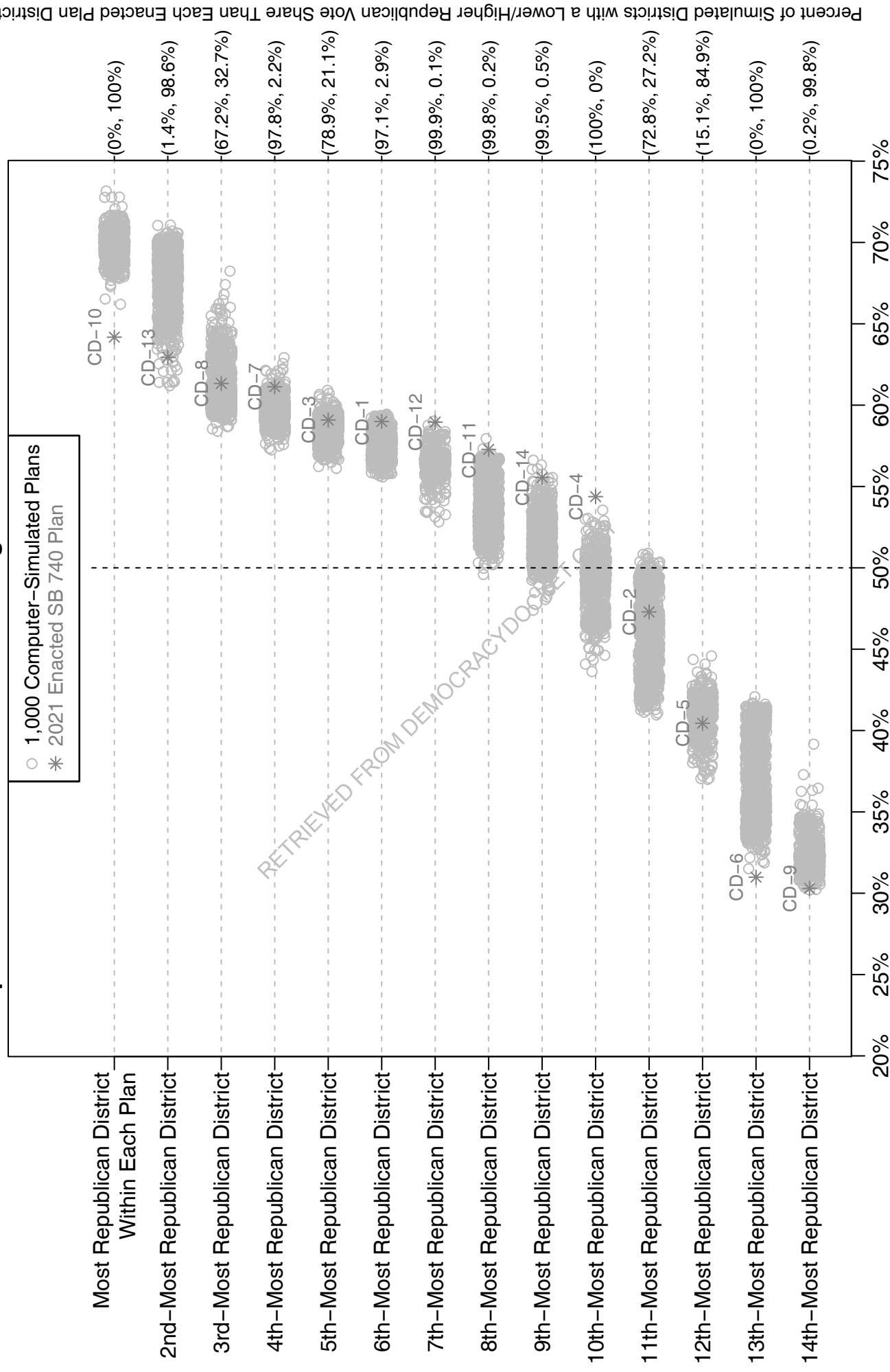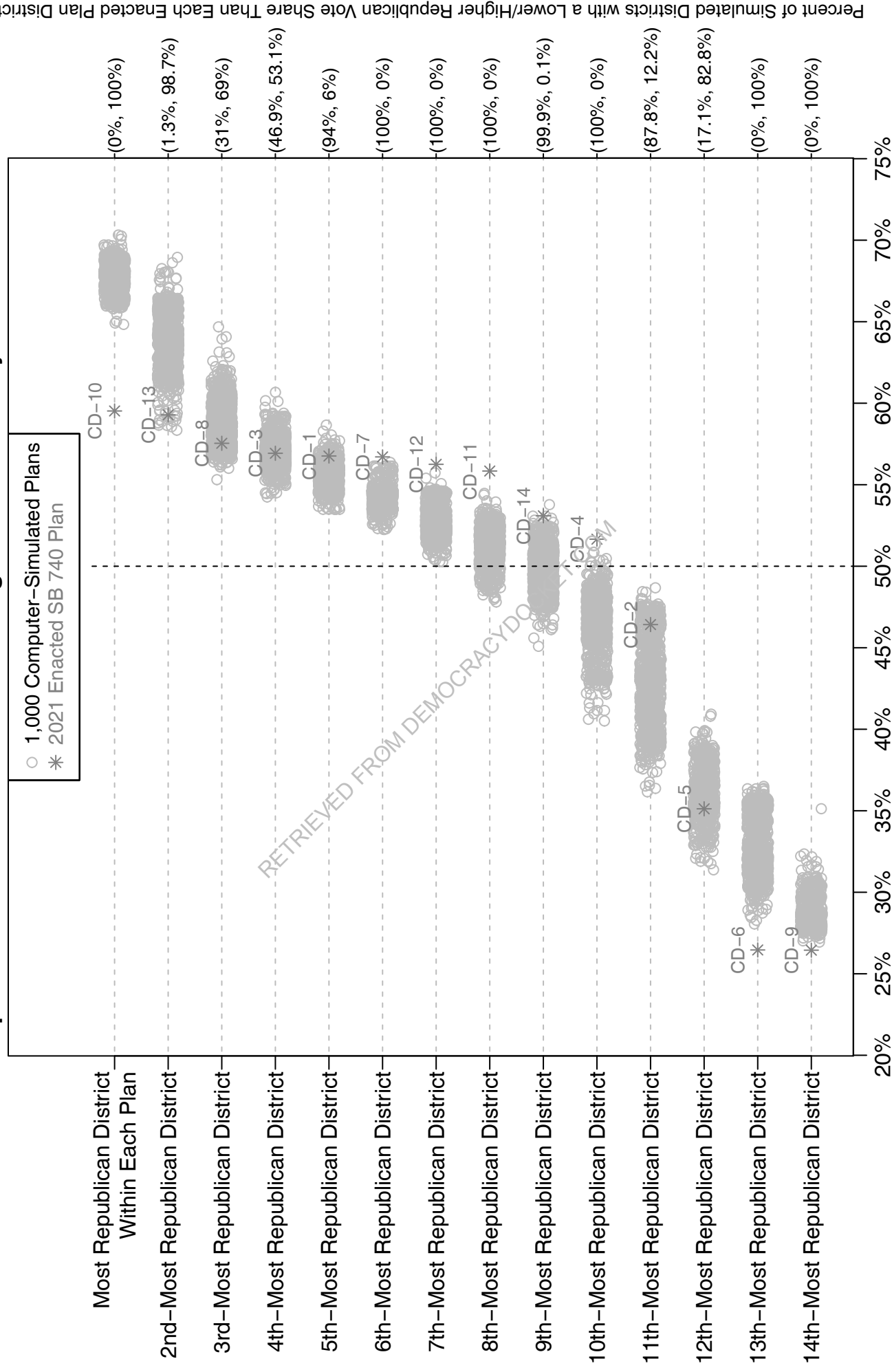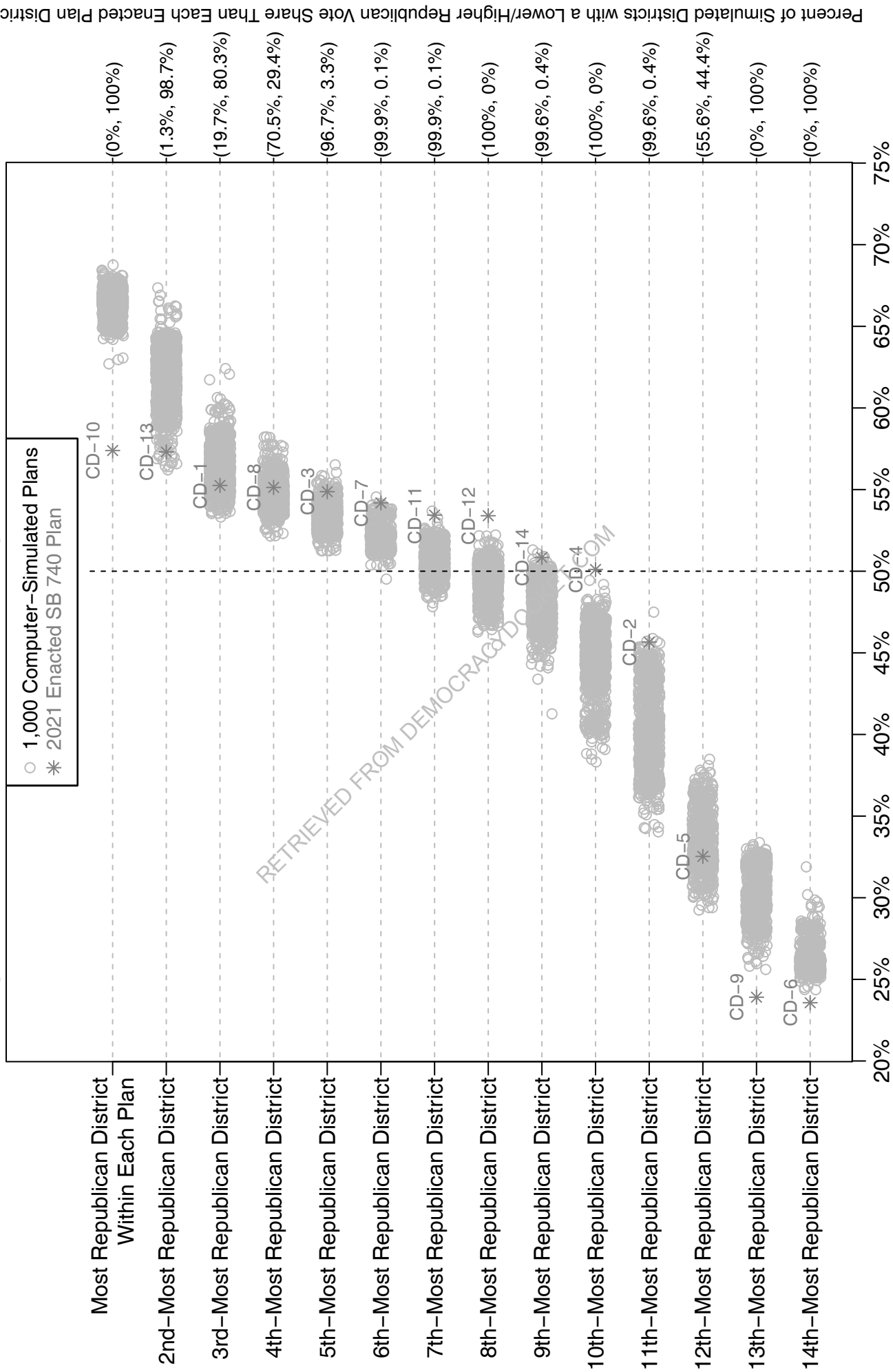
Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

(0%, 100%)
(1.4%, 98.6%)
(67.2%, 32.7%)
(97.8%, 2.2%)
(78.9%, 21.1%)
(97.1%, 2.9%)
(99.9%, 0.1%)
(99.8%, 0.2%)
(99.5%, 0.5%)
(100%, 0%)
(72.8%, 27.2%)
(15.1%, 84.9%)
(0%, 100%)
(0.2%, 99.8%)

○ 1,000 Computer–Simulated Plans
∗ 2021 Enacted SB 740 Plan

CD–10
CD–13
CD–8
CD–7
CD–3
CD–1
CD–12
CD–11
CD–14
CD–4
CD–2
CD–5
CD–6
CD–9

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75%

District's Republican Vote Share Measured Using the 2016 US Senator election
(53% Statewide Republican 2–Party Vote Share)

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Figure A6: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2020 Attorney General Election Results
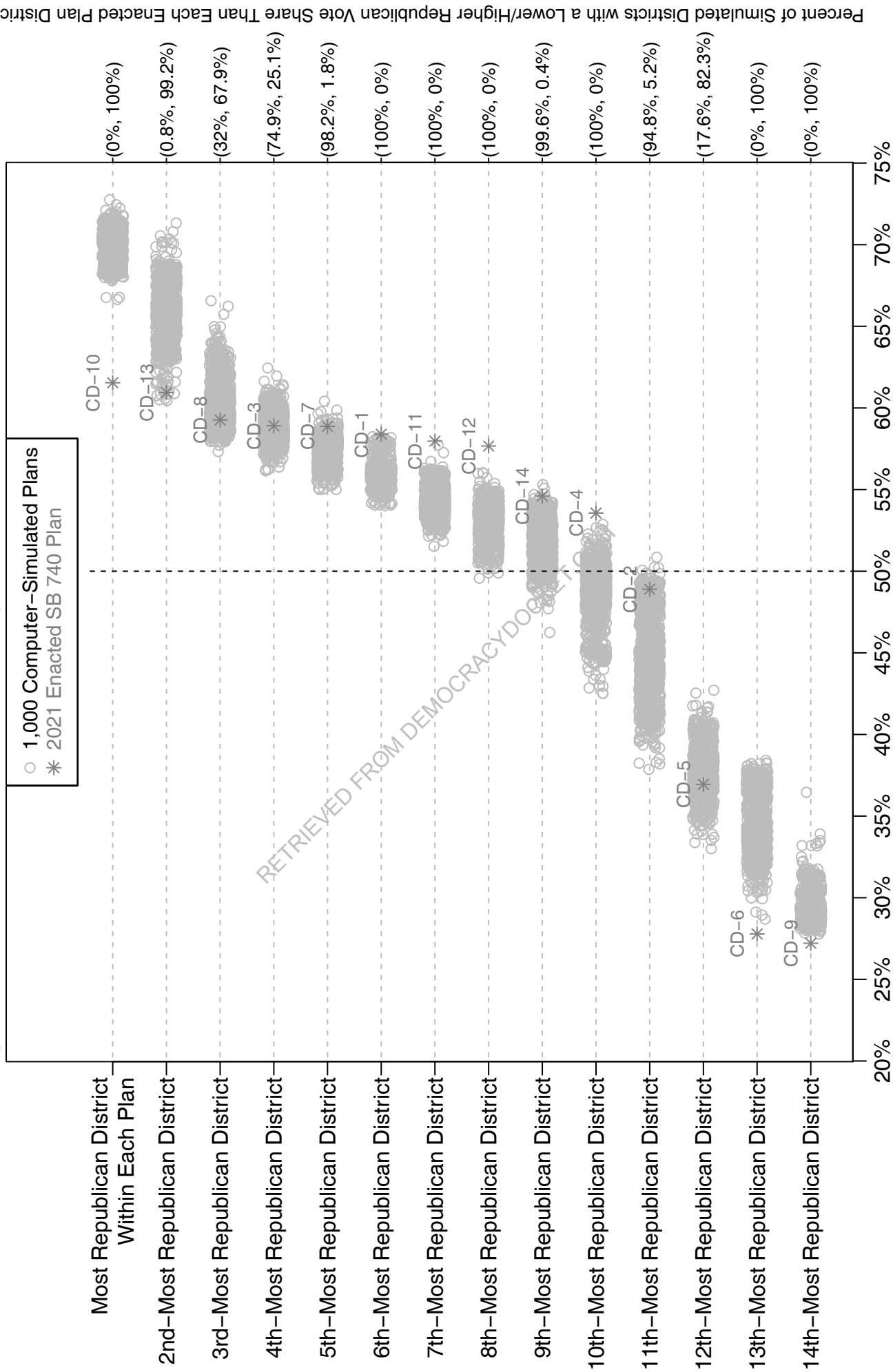
Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

(0%, 100%)
(1.3%, 98.7%)
(31%, 69%)
(46.9%, 53.1%)
(94%, 6%)
(100%, 0%)
(100%, 0%)
(100%, 0%)
(99.9%, 0.1%)
(100%, 0%)
(87.8%, 12.2%)
(17.1%, 82.8%)
(0%, 100%)
(0%, 100%)

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

CD–10
CD–13
CD–8
CD–3
CD–1
CD–7
CD–12
CD–11
CD–14
CD–4
CD–2
CD–5
CD–6
CD–9

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Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75%

District's Republican Vote Share Measured Using the 2020 Attorney General election
(49.9% Statewide Republican 2–Party Vote Share)

61

Figure A7: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2020 Governor Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

Category	Values
Most Republican District Within Each Plan	(0%, 100%)
2nd–Most Republican District	(1.3%, 98.7%)
3rd–Most Republican District	(19.7%, 80.3%)
4th–Most Republican District	(70.5%, 29.4%)
5th–Most Republican District	(96.7%, 3.3%)
6th–Most Republican District	(99.9%, 0.1%)
7th–Most Republican District	(99.9%, 0.1%)
8th–Most Republican District	(100%, 0%)
9th–Most Republican District	(99.6%, 0.4%)
10th–Most Republican District	(100%, 0%)
11th–Most Republican District	(99.6%, 0.4%)
12th–Most Republican District	(55.6%, 44.4%)
13th–Most Republican District	(0%, 100%)
14th–Most Republican District	(0%, 100%)

- ○ 1,000 Computer–Simulated Plans
- ✳ 2021 Enacted SB 740 Plan

District's Republican Vote Share Measured Using the 2020 Governor election
(47.7% Statewide Republican 2–Party Vote Share)

62

Figure A8: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2020 Lieutenant Governor Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

(0%, 100%)
(0.8%, 99.2%)
(32%, 67.9%)
(74.9%, 25.1%)
(98.2%, 1.8%)
(100%, 0%)
(100%, 0%)
(100%, 0%)
(99.6%, 0.4%)
(100%, 0%)
(94.8%, 5.2%)
(17.6%, 82.3%)
(0%, 100%)
(0%, 100%)

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

CD–10
CD–13
CD–8
CD–3
CD–7
CD–1
CD–11
CD–12
CD–14
CD–4
CD–2
CD–5
CD–6
CD–9

RETRIEVED FROM DEMOCRACYDOCKET.COM

Most Republican District Within Each Plan
2nd–Most Republican District
3rd–Most Republican District
4th–Most Republican District
5th–Most Republican District
6th–Most Republican District
7th–Most Republican District
8th–Most Republican District
9th–Most Republican District
10th–Most Republican District
11th–Most Republican District
12th–Most Republican District
13th–Most Republican District
14th–Most Republican District

20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75%

District's Republican Vote Share Measured Using the 2020 Lieutenant Governor election
(51.6% Statewide Republican 2–Party Vote Share)

63

Figure A9: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2020 US President Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

District's Republican Vote Share Measured Using the 2020 US President election (50.7% Statewide Republican 2–Party Vote Share)
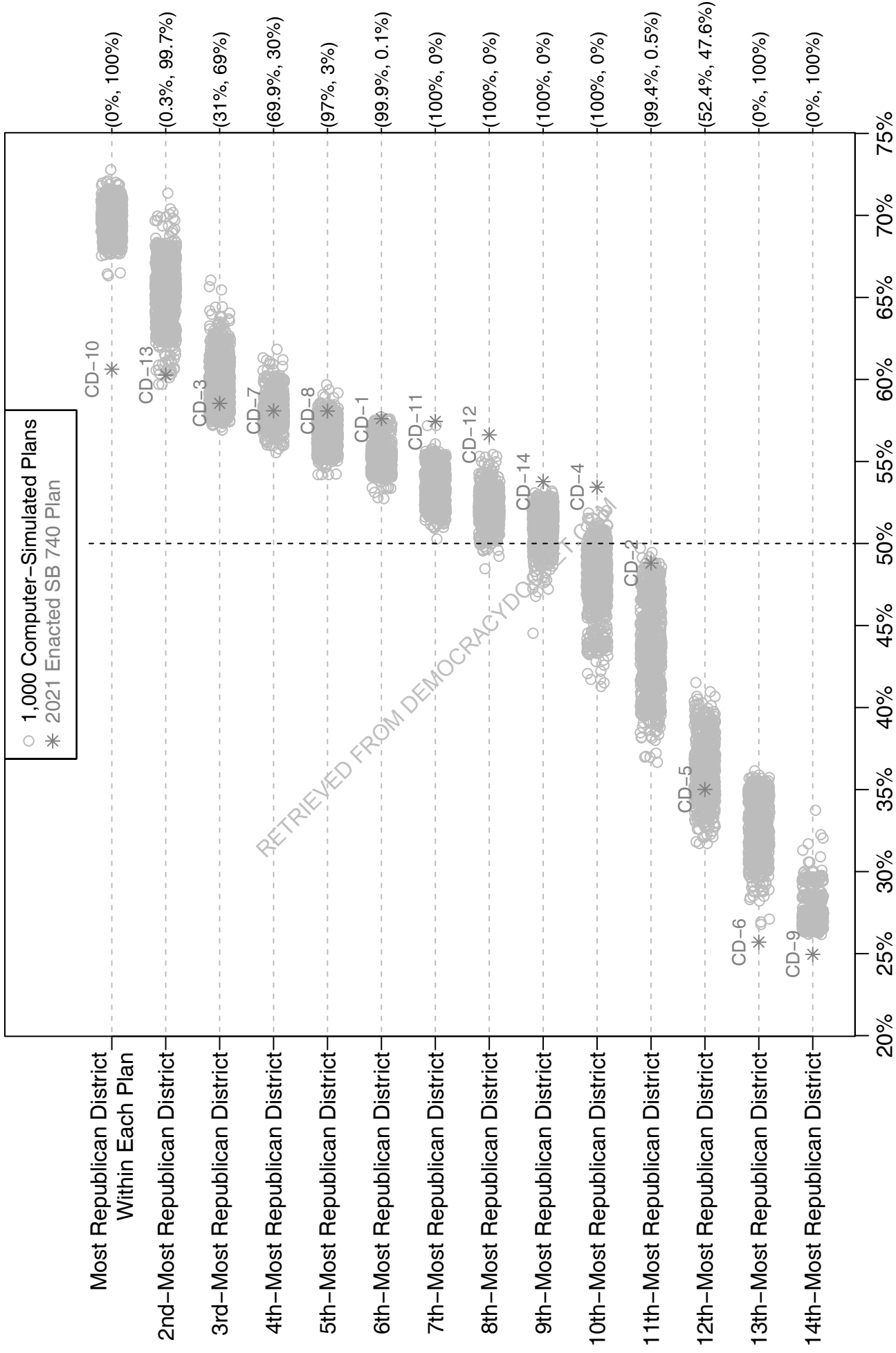
○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

Figure A10: Comparison of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans: Districts' Republican Vote Share Measured Using the 2020 US Senator Election Results

Percent of Simulated Districts with a Lower/Higher Republican Vote Share Than Each Enacted Plan District

District's Republican Vote Share Measured Using the 2020 US Senator election (50.9% Statewide Republican 2–Party Vote Share)

○ 1,000 Computer–Simulated Plans
✳ 2021 Enacted SB 740 Plan

65
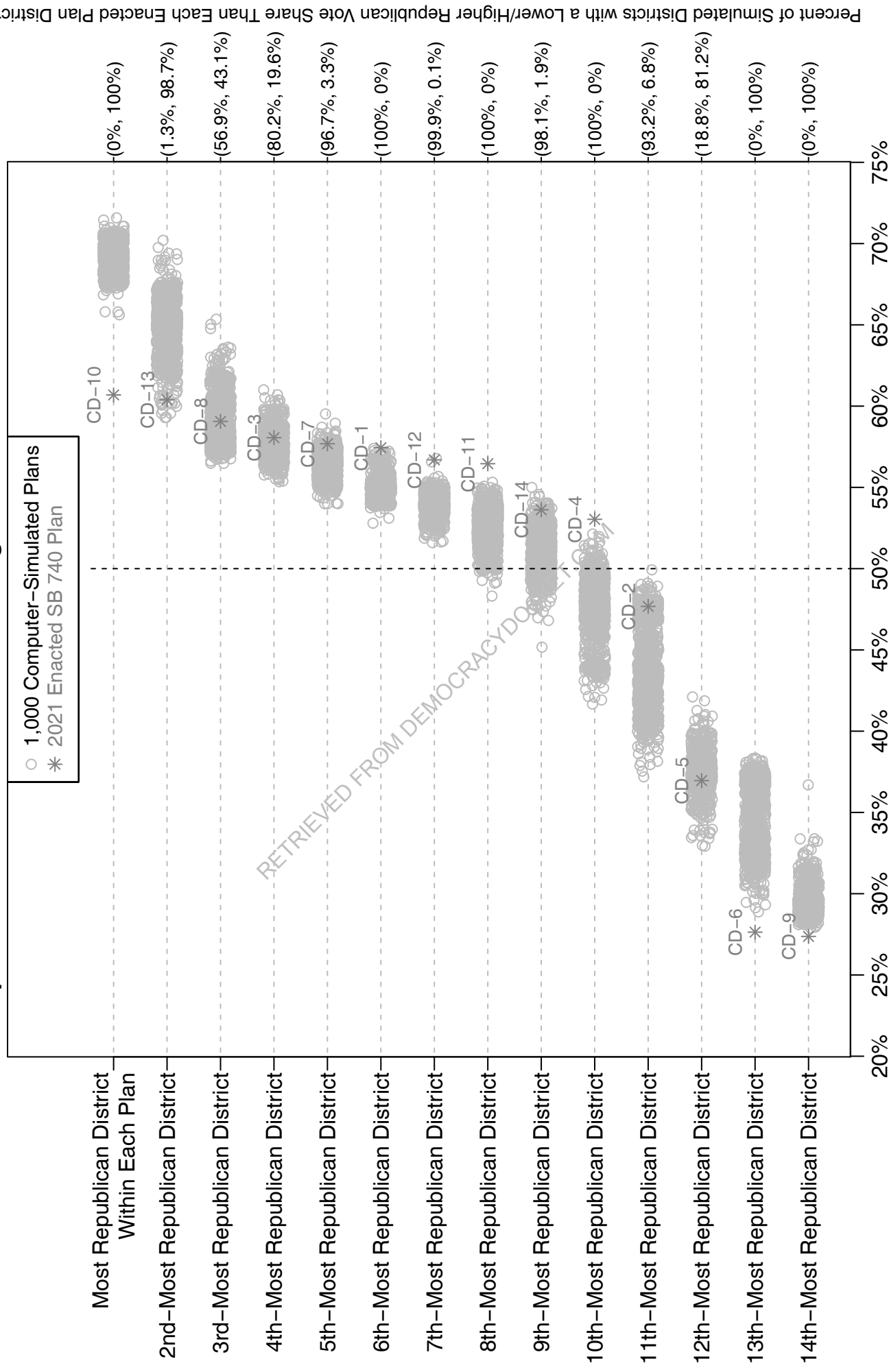
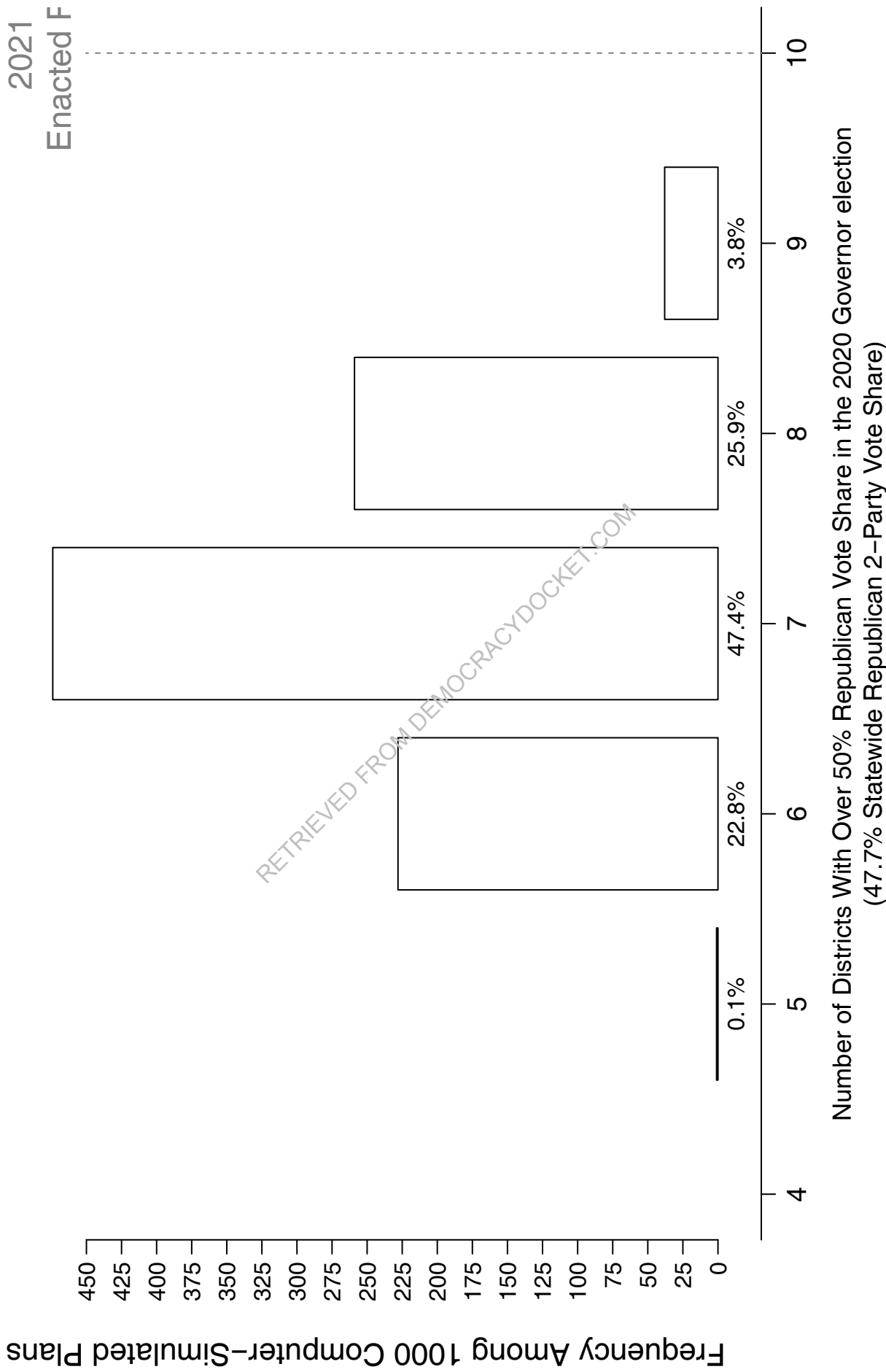**Figure B1: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans**
Number of Districts With Over 50% Republican Vote Share in the 2016 Attorney General election
(49.7% Statewide Republican 2–Party Vote Share)

2021
Enacted Plan

30.7%   49.1%   20%   0.2%

Frequency Among 1000 Computer–Simulated Plans

6   7   8   9   10   11

Number of Districts With Over 50% Republican Vote Share in the 2016 Attorney General election
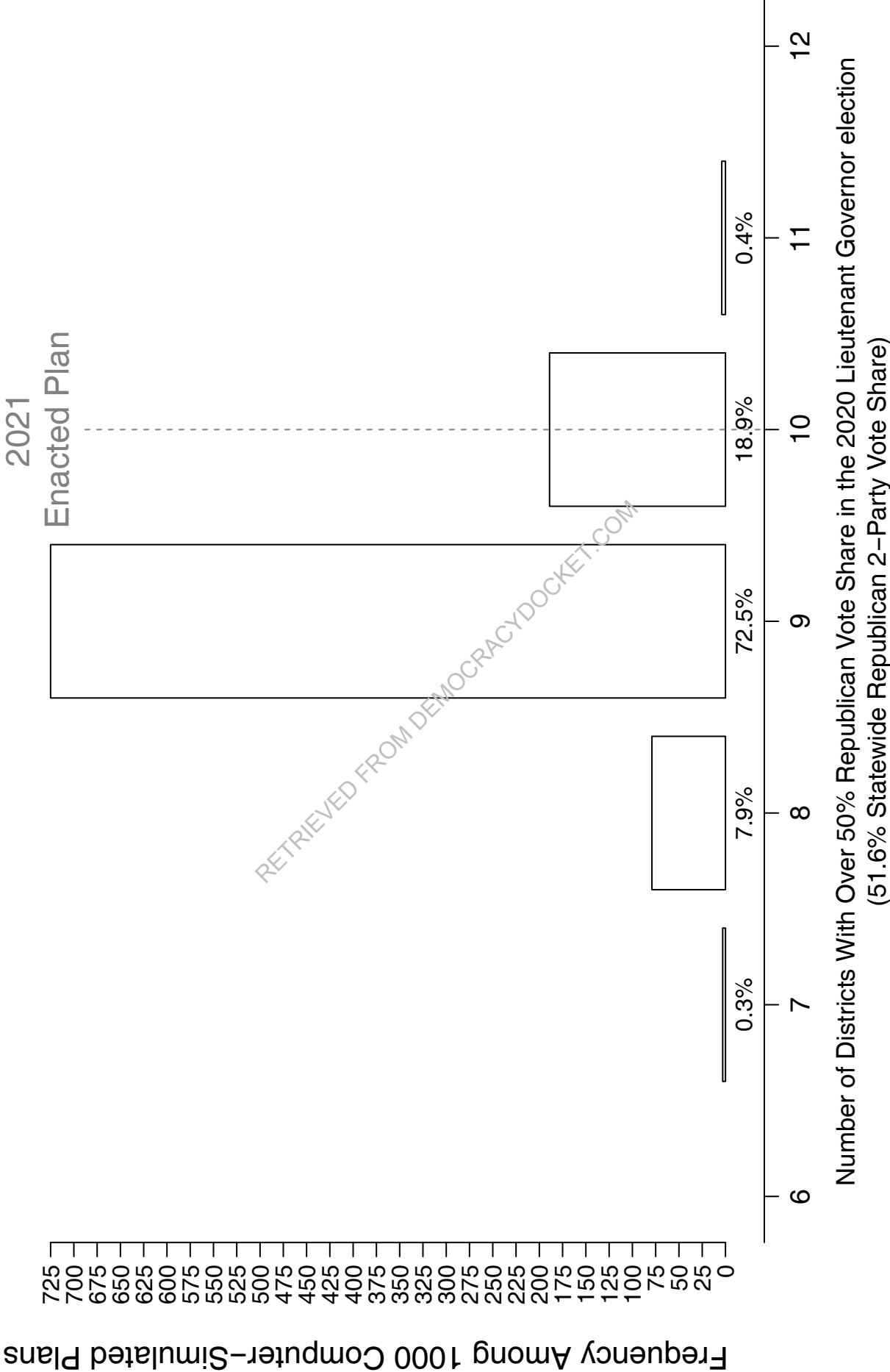(49.7% Statewide Republican 2–Party Vote Share)
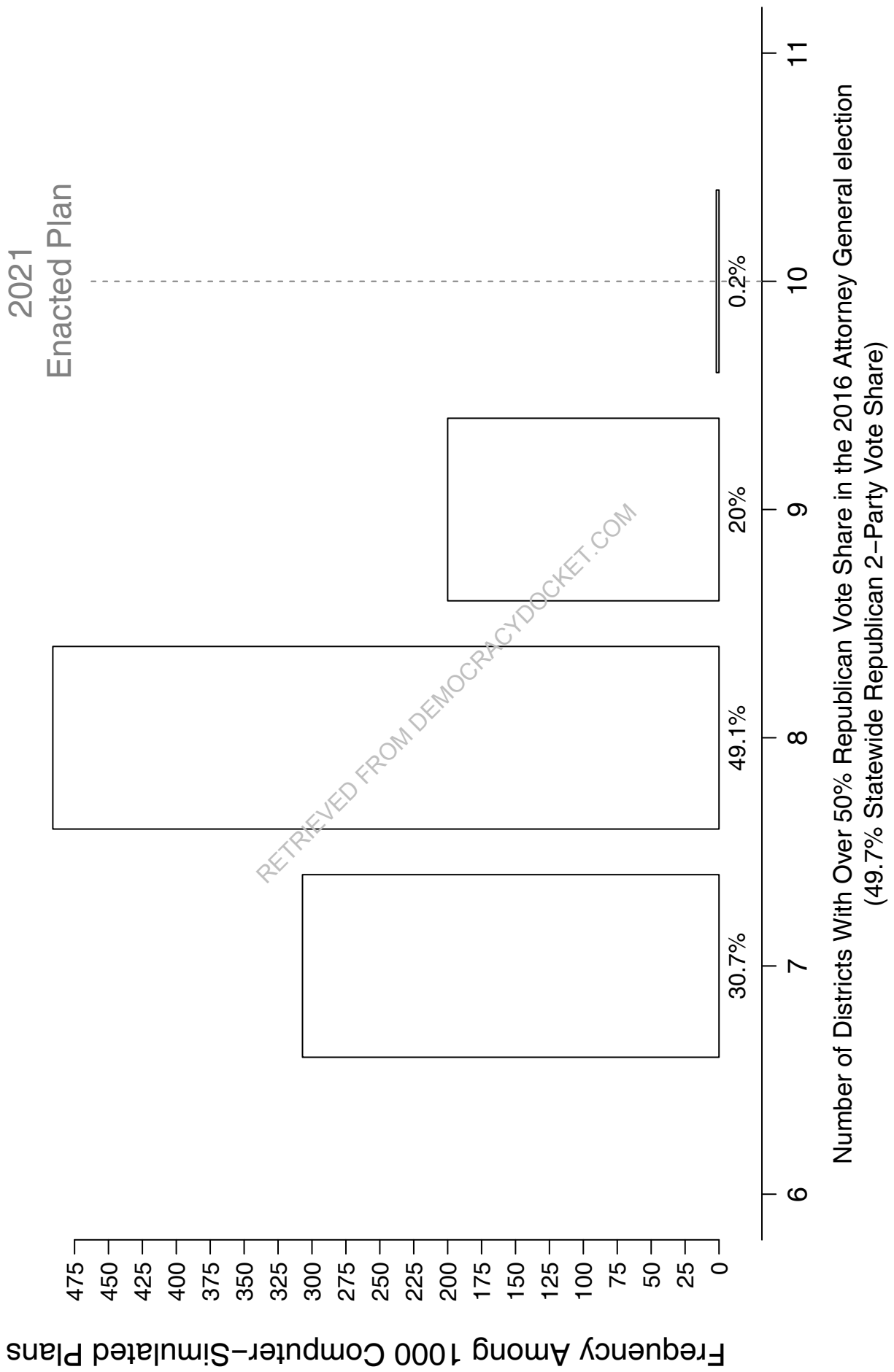
Figure B2: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans Number of Districts With Over 50% Republican Vote Share in the 2016 Governor election (49.9% Statewide Republican 2–Party Vote Share)
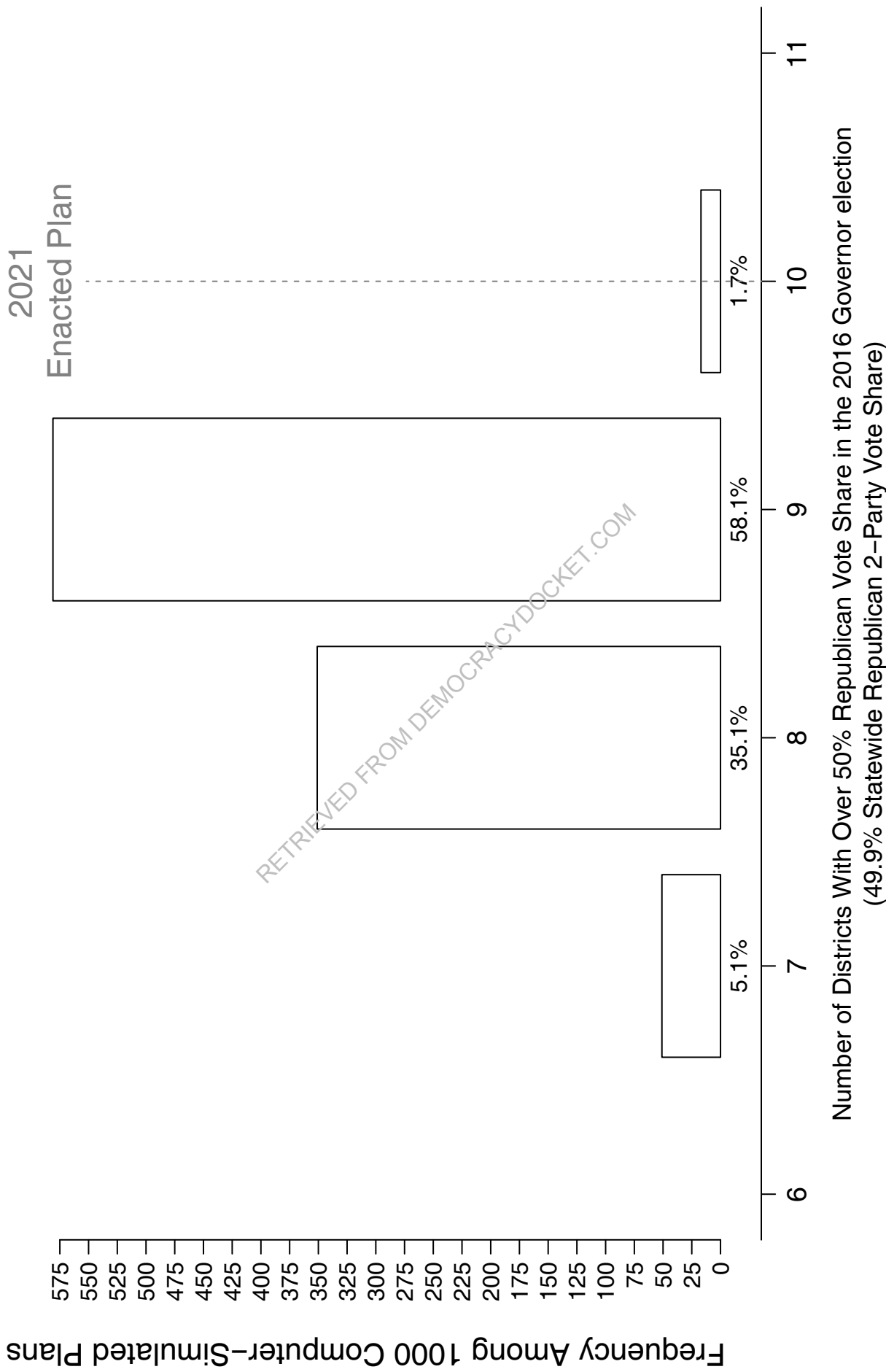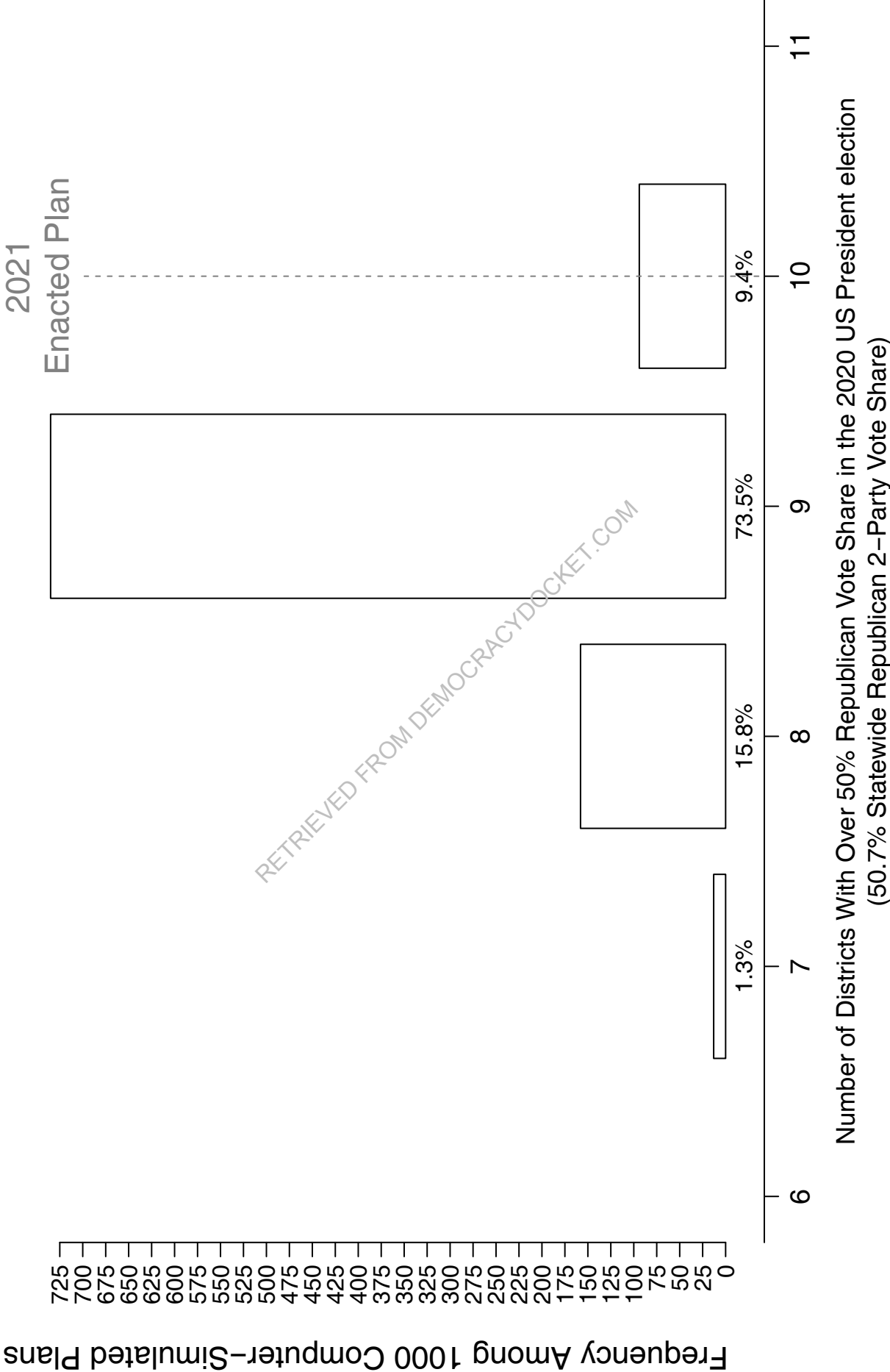
Figure B3: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans Number of Districts With Over 50% Republican Vote Share in the 2016 Lieutenant Governor election (53.3% Statewide Republican 2–Party Vote Share)
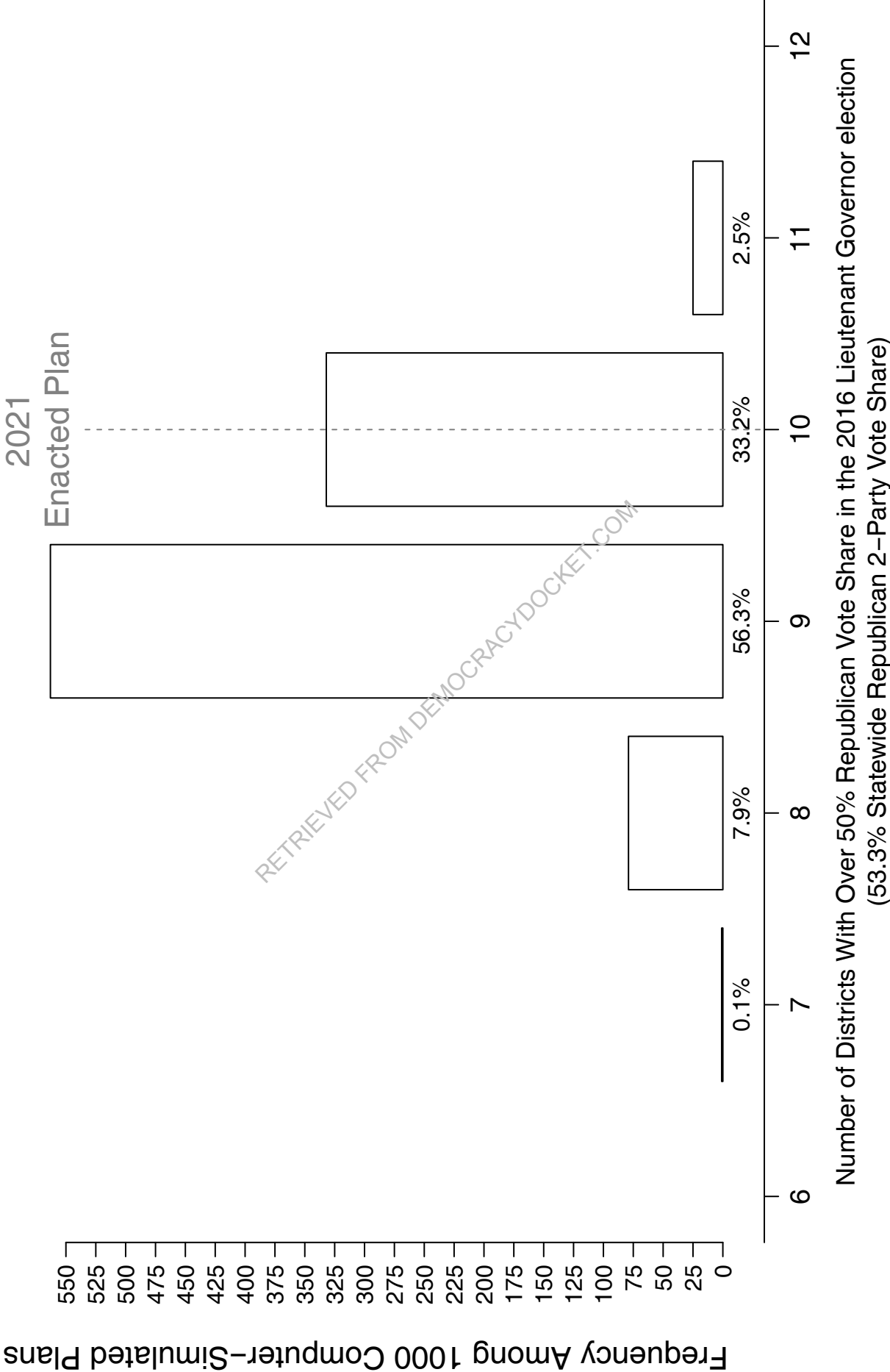
Figure B4: Comparisons of Enacted SB 740 Plan to 1,000 Computer-Simulated Plans Number of Districts With Over 50% Republican Vote Share in the 2016 US President election (51.9% Statewide Republican 2-Party Vote Share)

Frequency Among 1000 Computer-Simulated Plans

Number of Districts With Over 50% Republican Vote Share in the 2016 US President election (51.9% Statewide Republican 2-Party Vote Share)

2021 Enacted Plan

1.4% 18.7% 71.4% 8.5%
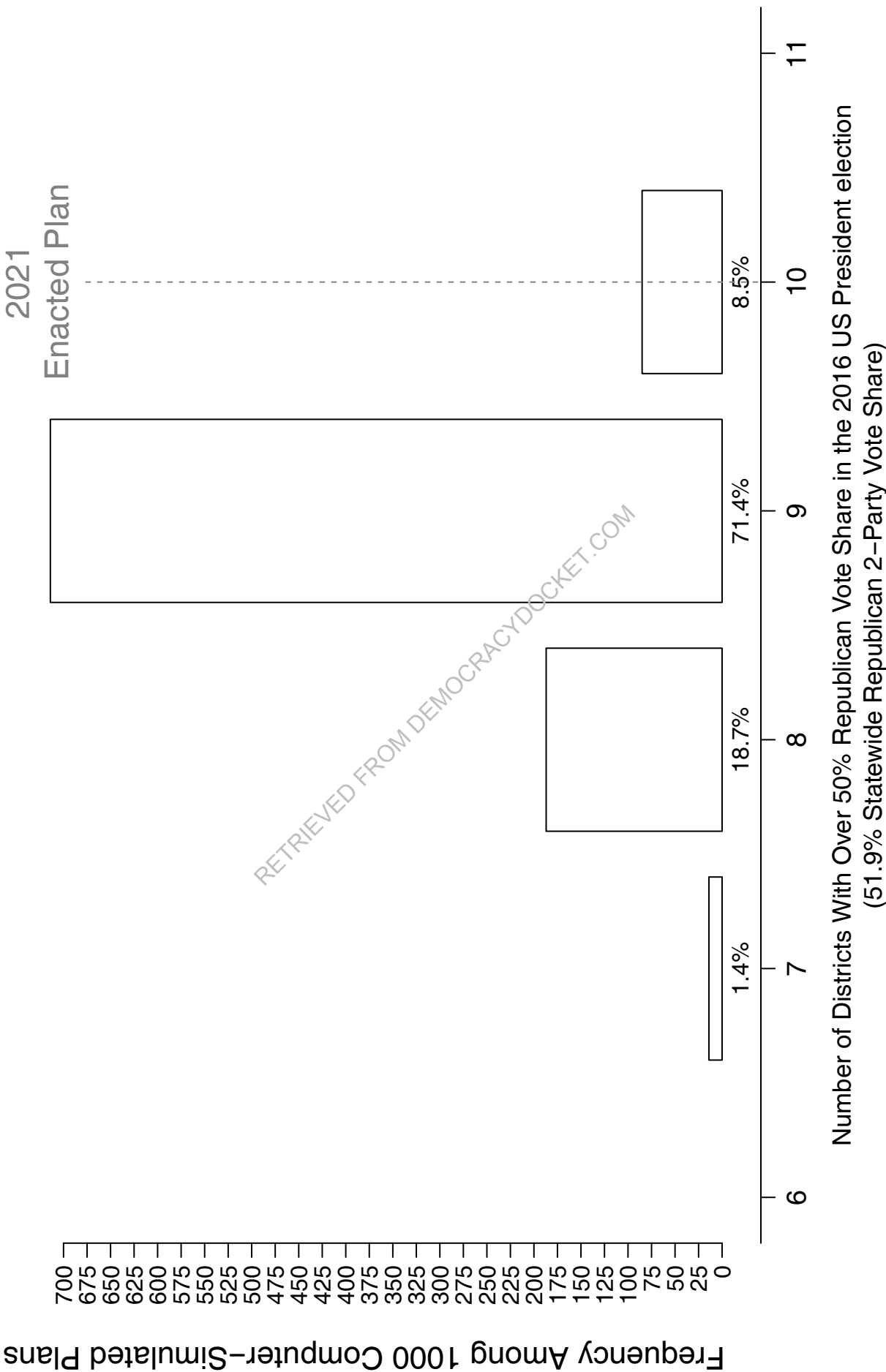
Figure B5: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
Number of Districts With Over 50% Republican Vote Share in the 2016 US Senator election
(53% Statewide Republican 2–Party Vote Share)

Number of Districts With Over 50% Republican Vote Share in the 2016 US Senator election
(53% Statewide Republican 2–Party Vote Share)

Frequency Among 1000 Computer–Simulated Plans
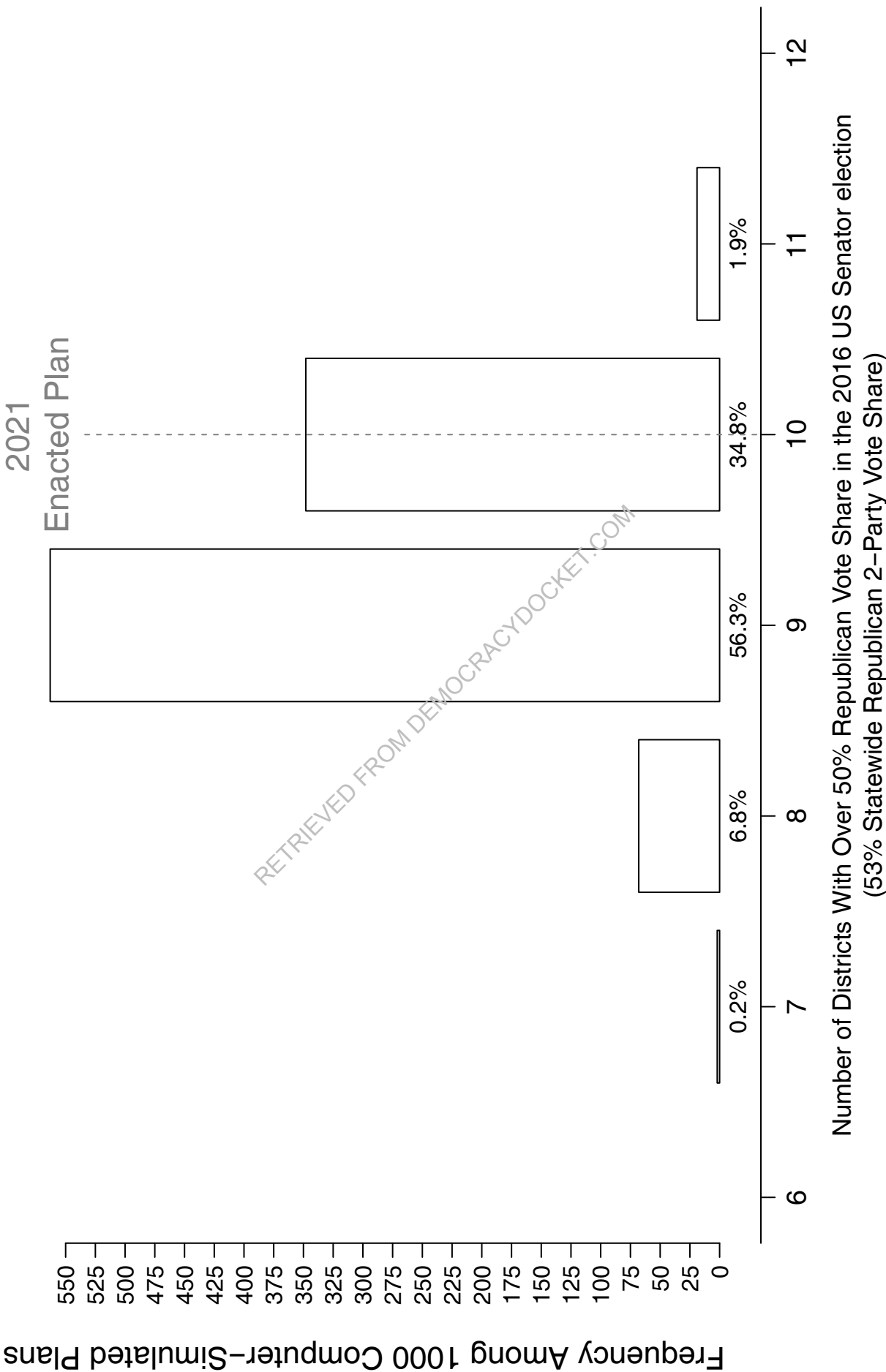
Figure B6: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
Number of Districts With Over 50% Republican Vote Share in the 2020 Attorney General election
(49.9% Statewide Republican 2–Party Vote Share)

2021
Enacted Plan

Frequency Among 1000 Computer–Simulated Plans

Number of Districts With Over 50% Republican Vote Share in the 2020 Attorney General election
(49.9% Statewide Republican 2–Party Vote Share)
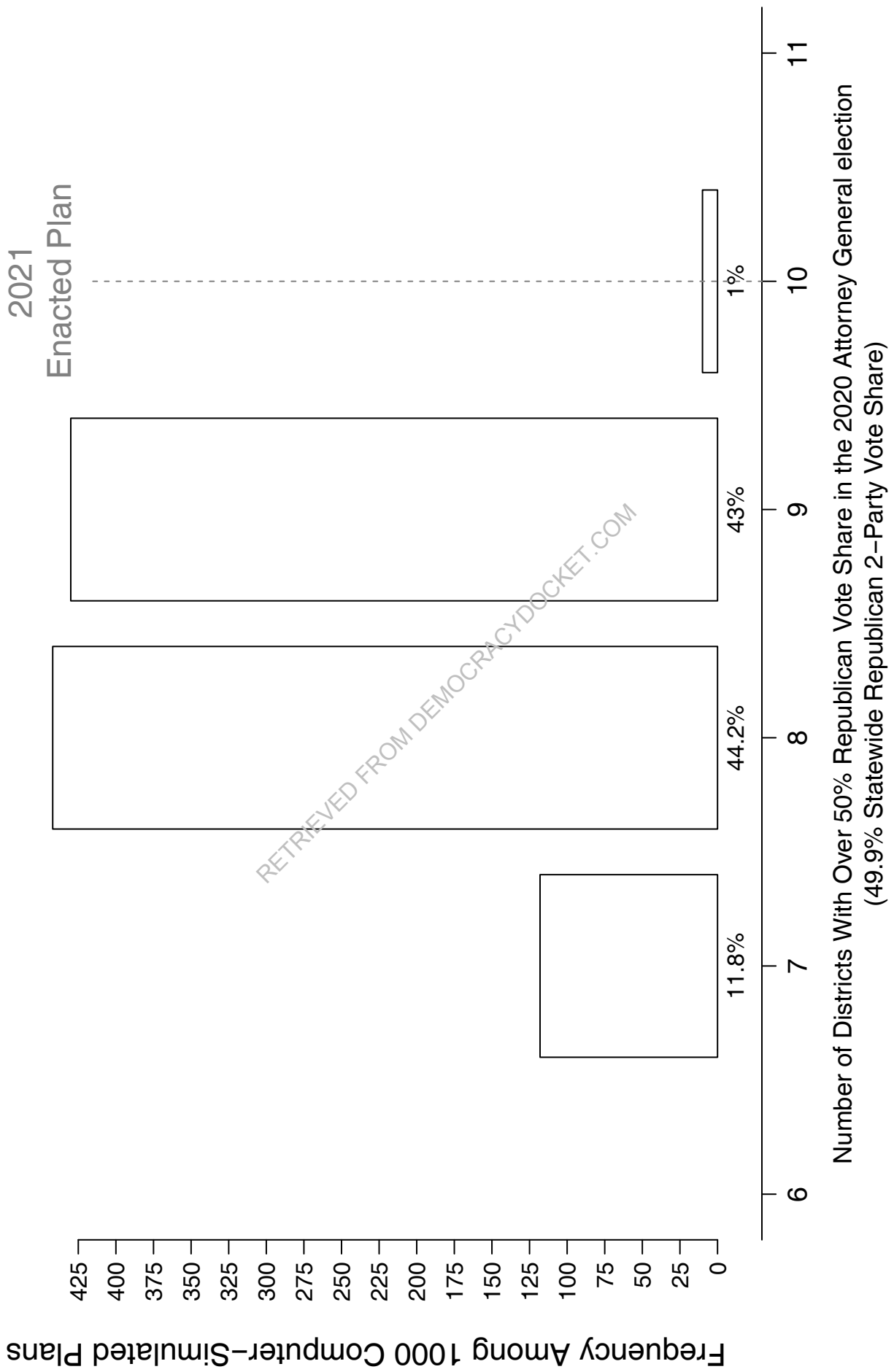
Figure B7: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
Number of Districts With Over 50% Republican Vote Share in the 2020 Governor election
(47.7% Statewide Republican 2–Party Vote Share)

Number of Districts With Over 50% Republican Vote Share in the 2020 Governor election
(47.7% Statewide Republican 2–Party Vote Share)

Frequency Among 1000 Computer–Simulated Plans

Figure B8: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
Number of Districts With Over 50% Republican Vote Share in the 2020 Lieutenant Governor election
(51.6% Statewide Republican 2–Party Vote Share)

Number of Districts With Over 50% Republican Vote Share in the 2020 Lieutenant Governor election
(51.6% Statewide Republican 2–Party Vote Share)

Frequency Among 1000 Computer–Simulated Plans

73

Figure B9: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans Number of Districts With Over 50% Republican Vote Share in the 2020 US President election (50.7% Statewide Republican 2–Party Vote Share)

2021 Enacted Plan

9.4%

73.5%

15.8%

1.3%

Frequency Among 1000 Computer–Simulated Plans

Number of Districts With Over 50% Republican Vote Share in the 2020 US President election (50.7% Statewide Republican 2–Party Vote Share)

74

Figure B10: Comparisons of Enacted SB 740 Plan to 1,000 Computer–Simulated Plans
Number of Districts With Over 50% Republican Vote Share in the 2020 US Senator election
(50.9% Statewide Republican 2–Party Vote Share)

Number of Districts With Over 50% Republican Vote Share in the 2020 US Senator election
(50.9% Statewide Republican 2–Party Vote Share)
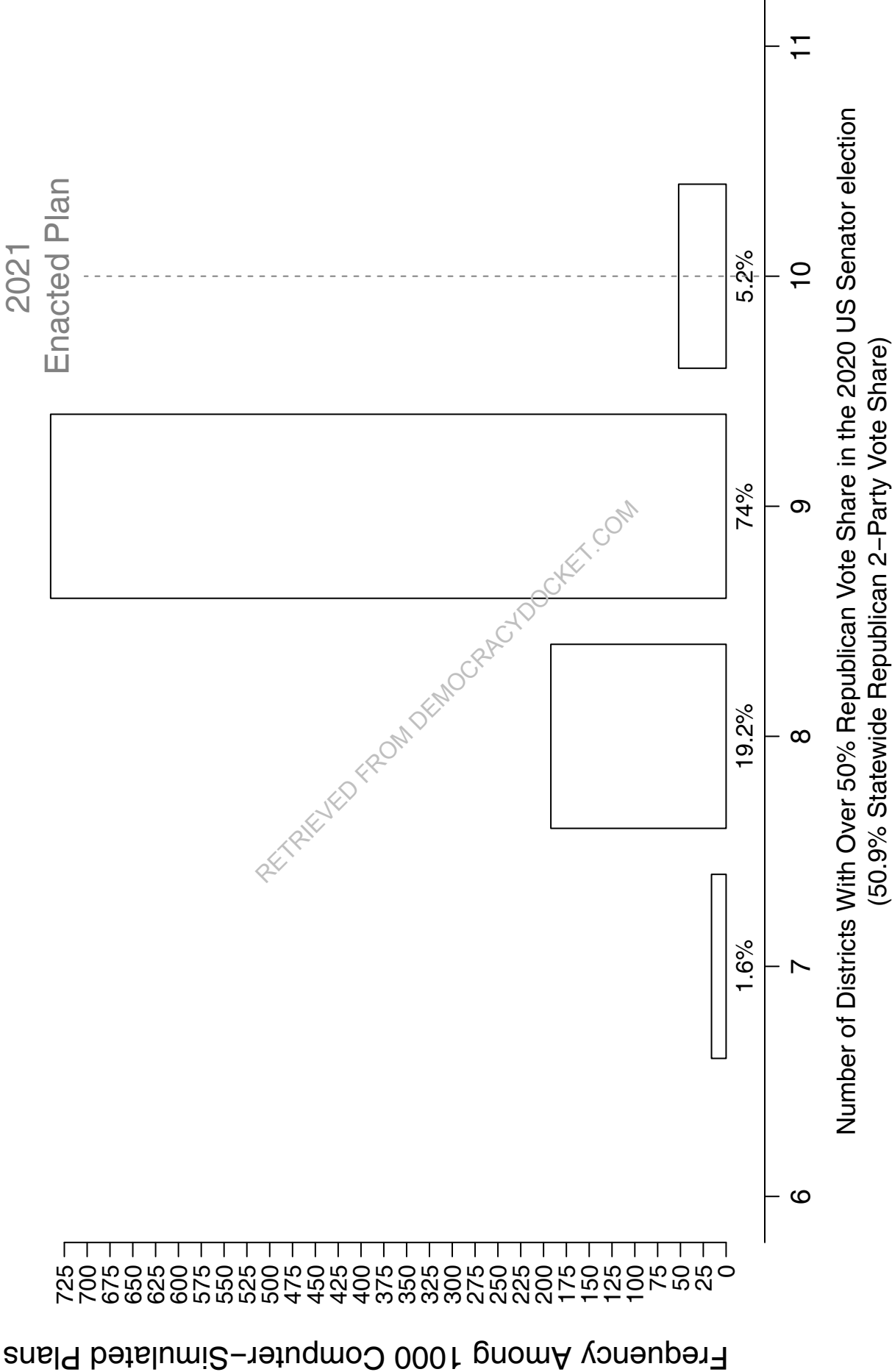
EXHIBIT I

Preliminary analysis of SL 2021-174 Congressional districting

Wesley Pegden

November 29, 2021

1 Qualifications

I am an associate professor in the department of Mathematical Sciences at Carnegie Mellon University, where I have been a member of the faculty since 2013. I received my Ph.D. in Mathematics from Rutgers University in 2010 under the supervision of József Beck, and I am an expert on stochastic processes and discrete probability. My research has been funded by the National Science Foundation and the Sloan Foundation. A list of my publications with links to online manuscripts is also available at my website at `http://math.cmu.edu/~wes`. I am an expert on the use of Markov Chains for the rigorous analysis of gerrymandering, and have published papers[1] developing techniques for this application in *Proceedings of the National Academy of Sciences* and *Statistics and Public Policy*, hereafter referred to by [CFP] and [CFMP], respectively.

I testified as an expert witness in the *League of Women Voters of Pennsylvania v. Commonwealth of Pennsylvania* case in which the 2011 Congressional districting was found to be an unconstitutional partisan gerrymander, and as well as the *Common Cause v. Lewis* case in North Carolina. I previously served as a member of the bipartisan Pennsylvania Redistricting Reform Commission under appointment by the governor.

2 Executive Summary

I was asked to conduct a preliminary analysis of whether the S.L. 2021-174 Congressional Districting passed in North Carolina drawn in a way which made extreme use of partisan considerations.

To conduct my analysis, I take the enacted plan as a starting point and make a sequence of many small random changes to the district boundaries. This methodology is intended to detect whether the district lines were carefully drawn to optimize partisan considerations; in particular, if the plans in question were not intentionally drawn to maximize partisan advantage, then making small random changes should not significantly decrease the plan's partisan bias.

Specifically, my method begins with the enacted plan and uses a Markov Chain—a sequence of random changes—to generate billions of comparison districtings against which I compare the enacted plans. These comparison districtings are generated by making a sequence of small random changes to the enacted plans themselves, and preserve districting criteria such as population deviation, compactness, and splitting of counties.

The analysis I conduct of the enacted plan using this data has two levels. The first level of my analysis consists simply of comparing the partisan properties of the enacted plans to the large sets of comparison maps produced by my Markov Chain, and I report how unusual the enacted plans are with respect to their partisan properties, against this comparison set. **Quantitatively, I find the enacted S.L. 2021-174 Congressional plan exhibits greater partisan bias than** 99.99% **of the billions of comparison districtings of North Carolina produced by my algorithm.**

---

[1]

- M. Chikina, A. Frieze, W. Pegden. Assessing significance in a Markov Chain without mixing, in *Proceedings of the National Academy of Sciences* **114** (2017) 2860–2864
- M. Chikina, A. Frieze, J. Mattingly, W. Pegden. Separating effect from significance in Markov chain tests, in *Statistics and Public Policy* **7** (2020) 101–114.

The next level of my analysis uses the mathematical results I have developed with my co-authors in [CFP] and [CFMP] to translate the results of the above comparison into a statement about how the enacted plans compare against *all* other districtings of North Carolina satisfying the districting criteria I consider in this report. In other words, the theorem that I use in the second level analysis allows me to compare the enacted plan against not only the billions of plans that my simulations produce through making small random changes, but also against all other possible districtings of North Carolina satisfying the districting criteria I consider.

Consider the following: when I make a sequence of small random changes to an enacted plan as described above, this can be viewed as a test of whether the partisan bias in the current districting is fragile, in the sense that it evaporates when the boundary lines of the district are perturbed. The theorems proved in [CFP] and [CFMP] establish that it is mathematically impossible for the political geography of a state to cause such a result. That is: while political geography might conceivably interact with districting criteria to create a situation where typical districtings of a state are biased in favor of one party, it is mathematically impossible for the political geography of a state to interact with districting criteria to create a situation where typical districtings of a state exhibit a *fragile* or *optimized* partisan bias, which quickly evaporates when small changes are made. This allows us to rigorously demonstrate that a districting is optimized with respect to partisanship, and is an outlier among *all* districtings of a state satisfying the criteria I consider, with respect to this property.

2.1 Comparison Criteria

The comparison districtings used by method are required to satisfy various criteria in ways that constrain them to be similar in several respects to the enacted map being evaluated. For the preliminary analysis, all comparison maps were constrained to have population deviation at most 2%, and to have compactness scores at good as the enacted map, up to an error of at most 2%, no more precinct splits than the enacted map, and no more county traversals than the enacted map. These restrictions are denoted "conditions A" in the results below. I also conducted three additional tests which additionally constrain the number of municipality splits ("conditions B"), additionally constrain incumbents protected by the enacted map to be protected by all comparison maps ("conditions C"), or additionally constrain both ("conditions D").

2.2 Note on Population Deviation

My method does not simulate the results of elections for hypothetical elections at the per-person level, and thus do not enforce 1-person population deviation on districts (instead using a cutoff like 2%, as described above), as direct voter preference data is not available at sufficient granularity. Note that this same limitation faces mapmakers who might try to draw a favorable districting for their party; a practical approach is to first use the available data to draw a "coarse" map with the desired properties, and then make small changes to the map (e.g., which split VTDs) to satisfy the population constraint.

I verify that the distinction between 1-person and 2% population deviation do not drive the results of my analysis in two ways.

First, I simply redo my most constrained analysis ("Conditions D") with a 1% population deviation constraint, and obtain similar results.

Second, I analyze a course VTD-level version of the enacted map (itself with nearly 2% population deviation), and show that even this coarse version of the enacted map is an extreme outlier with respect to partisan bias, before small changes are made to it to produce the enacted 1-person-deviation map. This demonstrates that the course VTD-level "blueprint" for the map is an extreme outlier, optimized for partisan considerations, among alternative VTD-level maps with similar population deviation, even before the small changes used to achieve 1-person deviation are accounted for.

These results are shown in Section 3.

2.3 Election data

The partisan characteristics of each of the billions of maps generated by my algorithm is compared to that of the enacted map through the lens of historical election data. I use the 2020 Attorney General race as

a proxy for expected partisan voting patterns given knowledge available at the time the disputed plan was drawn.

2.4 Comparison metric

Using the election data indicated above, my analysis compares the partisanship of districtings according to **the average number of seats Republicans would expect to win in the districting**, based on a random uniform swing model with the historical voting data I use.

The *uniform swing* is a simple model frequently used to make predictions about the number of seats a party might win in an election, based on partisan voting data. Suppose, for example, that given data from a previous Congressional election in North Carolina, we would like to predict how many seats Republicans will win in an upcoming Congressional election with the same districting, assuming that at a statewide level, we expect them to outperform by 1.5 percentage points their results from the last election.

A uniform swing would simply add 1.5 percentage points to Republican performance in every district in data from the last election, and then evaluate how many seats would be won with these shifted voting outcomes.

When I am evaluating the partisanship of a comparison districting (to compare it to the enacted plan), I am interested in the number of seats we expect Republicans might win in the districting, given unknown shifts in partisan support. In particular, the metric I use is:

> How many seats, on average, would Republicans win in the given districting, if a random[2] uniform swing is applied to the historical voting data being used?

2.5 First level analysis

The first level of my analysis simply uses the procedure described above to generate a large set of comparison districtings against which one can compare the enacted plan. As discussed above, these comparison maps adhere to districting criteria in ways that constrain them to be similar in several respects to the enacted map being evaluated.

We will see below that in hundreds of runs of my algorithm, the enacted plan is found to be exhibit more partisan bias than 99.99% of comparison maps, i.e., it is among the most partisan 00.01% of found by the algorithm, since $100\% - 99.99\% = 00.01\%$.

The first level of my analysis simply reports the comparison of the enacted map to the comparison districtings produced in these runs. Even without applying the mathematical theorems we have developed in [CFP] and [CFMP], this gives strong, intuitively clear evidence of intent to create partisan bias in the districting: if the districting had not been drawn to carefully optimize its partisan bias, we would expect naturally that making small random changes to the districting would not have such a dramatic and consistent partisan effect.

2.6 Second level analysis

In the first level of my analysis, I compare enacted plans to comparison districtings produced by my algorithm (which makes random changes to the existing map while preserving districting criteria).

The next level of my analysis goes further than this, and enables a rigorous comparison to *all* alternative districtings of North Carolina satisfying the districting criteria I consider here. It does this by comparing how optimized for partisanship an evaluated plan is to how optimized alternative plans are.

2.6.1 Defining "optimized for partisanship"

Roughly speaking, when I say that a districting is *optimized for partisanship*, I mean that its partisan characteristics are highly sensitive to small random changes to the boundary lines.

---

[2]The random choice of my uniform swing is made from a normal distribution whose standard deviation is 4 percentage points, which is roughly the standard deviation of the swing in the past five North Carolina gubernatorial elections.

Formally, when I say that a districting is *optimized for partisanship* in this report, I mean that there is a high probability that when I make small random changes to the districting, its partisanship will be an extreme outlier among the comparison maps produced by the small random changes.

The yardstick I use to measure this property of a given map is the *ε-fragility* of a map. Given a small threshold ε like $\varepsilon = 00.01\%$, I can ask: what is the probability that when I make a sequence of small random changes to the map, the map will be in the most extreme ε fraction of maps encountered in the sequence of random changes? The probability of this occurrence is the ε-fragility of the map, and it is this probability that I use to quantify how optimized for partisanship a map is.

In other words, **one districting is considered more optimized for partisanship than another if it is more likely to have its partisan qualities consistently reduced when making a random sequence of small changes to its boundary lines.**

2.6.2   Comparing an enacted plan to the set of *all* alternatives

My analysis enables a rigorous comparison of an enacted plan to **all possible districting plans of the state** satisfying the districting criteria I consider, with respect to how optimized for partisanship the districtings are.

My method produces a rigorous p-value (statistical significance level) which precisely captures the confidence one can have in the findings of my "second level" analyses. In particular my second-level claims in this report are all valid at a statistical significance of $p = .002$. This means that the probability that I would report an incorrect number (for example, claiming that a districting is among the most optimized for partisanship 00.01% of all districtings, when in fact it is merely among the most 00.015% optimized for partisanship) is at most 00.2%. To put this in context, clinical trials seeking regulatory approval for new medications frequently target a significance level of $p = .05$ (5%), a much looser standard than I hold myself to in this report.

2.6.3   Some intuition for why this is possible

It should be emphasized that it may seem remarkable that I can make a rigorous quantifiable comparison to *all* possible districtings, without actually generating all such districtings; this is the role of our theorems from [CFP] and [CFMP], which have simple proofs which have been verified by the mathematical community.

To give some nontechnical intuition for why this kind of analysis is possible, these results roughly work by showing that in a very general sense, it is not possible for an appreciable fraction of districtings of a state to appear optimized for partisanship in the sense defined in Section 2.6.1. In other words, it is *mathematically impossible* for any state, with any political geography of voting preferences and any choice of districting criteria, to have the property that a significant fraction of the possible districtings of the state satisfying the chosen districting criteria appear optimized for partisanship (as measured by their ε-fragility).

2.7   Results

For each of the four conditions described in 2.1, I did $2^{35} \approx 34$ billion steps. In this section I give the first-level and second-level analyses of these results, along with the output of each run.

2.7.1 Conditions A

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.999943%	9	99.999943%	17	99.99971%	25	99.9998%
2	99.999973%	10	99.999908%	18	99.999987%	26	99.9999953%
3	99.99978%	11	99.99972%	19	99.99992%	27	99.999962%
4	99.9998%	12	99.99933%	20	99.9994%	28	99.99964%
5	99.999901%	13	99.999927%	21	99.999988%	29	99.999979%
6	99.99967%	14	99.999962%	22	99.99904%	30	99.99964%
7	99.999985%	15	99.999983%	23	99.9999965%	31	99.9989%
8	99.999908%	16	99.99977%	24	99.999986%	32	99.999976%

- **First level analysis:** In *every* run, the districting was in the most partisan 00.0011% of districtings (in other words, 99.9989% were less partisan, in *every* run).

- **Second level analysis:** My theorems imply that the enacted Congressional districting is among the most optimized-for-partisanship 00.003% of all alternative districtings of North Carolina satisfying my districting criteria (in other words, 99.997% are less optimized for partisanship), measured by their ε-fragility for $\varepsilon = 00.0011\%$.

2.7.2 Conditions B

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.999989%	9	99.9995%	17	99.999943%	25	99.9978%
2	99.9986%	10	99.99999981%	18	99.99982%	26	99.999915%
3	99.99962%	11	99.999955%	19	99.99929%	27	99.99957%
4	99.999901%	12	99.999959%	20	99.9985%	28	99.99998%
5	99.999914%	13	99.99988%	21	99.99945%	29	99.999972%
6	99.9999982%	14	99.9998%	22	99.99976%	30	99.999935%
7	99.99986%	15	99.999964%	23	99.99979%	31	99.99964%
8	99.999926%	16	99.9989%	24	99.999996%	32	99.999958%

- **First level analysis:** In *every* run, the districting was in the most partisan 00.0021% of districtings (in other words, 99.9979% were less partisan, in *every* run).

- **Second level analysis:** My theorems imply that the enacted Congressional districting is among the most optimized-for-partisanship 00.0063% of all alternative districtings of North Carolina satisfying my districting criteria (in other words, 99.9937% are less optimized for partisanship), measured by their ε-fragility for $\varepsilon = 00.0021\%$.

2.7.3 Conditions C

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.999998%	9	99.999938%	17	99.999965%	25	99.9999941%
2	99.99964%	10	99.99982%	18	99.99945%	26	99.99982%
3	99.9978%	11	99.99987%	19	99.999924%	27	99.999957%
4	99.9995%	12	99.99984%	20	99.99987%	28	99.99984%
5	99.99998%	13	99.99921%	21	99.999956%	29	99.99987%
6	99.99979%	14	99.99961%	22	99.99949%	30	99.99955%
7	99.999979%	15	99.99972%	23	99.99962%	31	99.99988%
8	99.99982%	16	99.999921%	24	99.99938%	32	99.99984%

- **First level analysis:** In *every* run, the districting was in the most partisan 00.0022% of districtings (in other words, 99.9978% were less partisan, in *every* run).

- **Second level analysis:** My theorems imply that the enacted Congressional districting is among the most optimized-for-partisanship 00.0065% of all alternative districtings of North Carolina satisfying my districting criteria (in other words, 99.9935% are less optimized for partisanship), measured by their ε-fragility for $\varepsilon = 00.0022\%$.

2.7.4 Conditions D

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.9997%	9	99.99976%	17	99.99958%	25	99.99979%
2	99.99989%	10	99.999924%	18	99.9999942%	26	99.999986%
3	99.99962%	11	99.99982%	19	99.99963%	27	99.9978%
4	99.99976%	12	99.9999986%	20	99.9999983%	28	99.99969%
5	99.99988%	13	99.99979%	21	99.99954%	29	99.9995%
6	99.99958%	14	99.999986%	22	99.999904%	30	99.999984%
7	99.999986%	15	99.99954%	23	99.99989%	31	99.999955%
8	99.999956%	16	99.999965%	24	99.99971%	32	99.999962%

- **First level analysis:** In *every* run, the districting was in the most partisan 00.0022% of districtings (in other words, 99.9978% were less partisan, in *every* run).

- **Second level analysis:** My theorems imply that the enacted Congressional districting is among the most optimized-for-partisanship 00.0065% of all alternative districtings of North Carolina satisfying my districting criteria (in other words, 99.9935% are less optimized for partisanship), measured by their ε-fragility for $\varepsilon = 00.0022\%$.

3 Conclusion

Based on my analysis, I find the enacted S.L. 2021-174 Congressional plan is optimized for Republican partisan bias to an extreme degree, moreso than 99.99% of all alternative districtings satisfying the criteria I examined in this report.

Appendix: Population deviation analysis

In this section we show results from running our algorithm under conditions discussed in Section 2.2.

First, we use the most restrictive "Conditions D" but impose a requirement of $\leq 1\%$ population deviation, obtaining the following results:

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.9986%	9	99.99947%	17	99.9975%	25	99.99907%
2	99.99939%	10	99.99987%	18	99.999928%	26	99.99969%
3	99.999961%	11	99.99958%	19	99.99973%	27	99.99984%
4	99.99923%	12	99.9999969%	20	99.99929%	28	99.9996%
5	99.99963%	13	99.9999%	21	99.99916%	29	99.999998%
6	99.9998%	14	99.99989%	22	99.99922%	30	99.99983%
7	99.9989%	15	99.99982%	23	99.9988%	31	99.998%
8	99.999911%	16	99.9988%	24	99.99934%	32	99.99945%

Next, we run our algorithm on a coarse "whole-precinct" version of the enacted map. This is the districting obtained by assigning each split VTD to the district with which its intersection is greatest, and is a coarse starting point from which one can obtain a 1-person deviation map by carefully splitting VTD's. Its population deviation from ideal is 1.8%. In the results below, we see that this coarse version of the enacted map also exhibits extreme partisan bias, demonstrating that the appearance of partisan bias is not created by the maps adherence to strict constraints on population deviation.

Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan	Run	Percentage of comparison maps less partisan than enacted plan
1	99.99937%	9	99.99942%	17	99.99942%	25	99.99939%
2	99.99949%	10	99.99917%	18	99.9997%	26	99.99941%
3	99.9989%	11	99.99942%	19	99.99988%	27	99.99992%
4	99.99921%	12	99.9989%	20	99.99987%	28	99.99986%
5	99.9982%	13	99.99926%	21	99.99976%	29	99.99981%
6	99.99924%	14	99.999904%	22	99.99969%	30	99.999903%
7	99.9995%	15	99.99972%	23	99.99904%	31	99.99954%
8	99.99976%	16	99.9996%	24	99.99976%	32	99.99951%

I hereby certify that the foregoing statements are true and correct to the best of my knowledge, information, and belief.
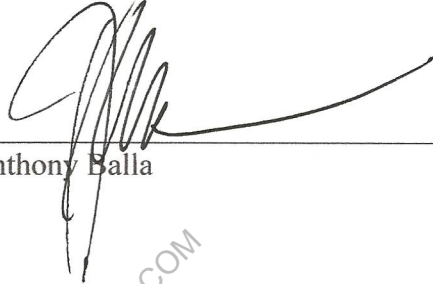
Wesley Pegden
11/29/21

7

EXHIBIT J

AFFIDAVIT

I, John Anthony Balla, hereby state that I am a Plaintiff in the above-titled action. I am a digital marketing strategist residing in Raleigh, North Carolina. My residence was located within District 4 under the 2016 Plan and is now located within District 5 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
John Anthony Balla

Sworn and subscribed before me this the ___10___ day of November, 2021.

Notary Public: _Angel Frink_____

Name: _Angel Frink_____

My commission expires: _5/2/2026_____

ANGEL FRINK
NOTARY PUBLIC
WAKE County
North Carolina
My Commission Expires MAY 2, 2026

EXHIBIT K

AFFIDAVIT

I, Kathleen Barnes, hereby state that I am a Plaintiff in the above-titled action. I am the owner of a small publishing company residing in Brevard, North Carolina. My residence was located within Congressional District 11 under the 2016 Plan and is now located within District 14 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.
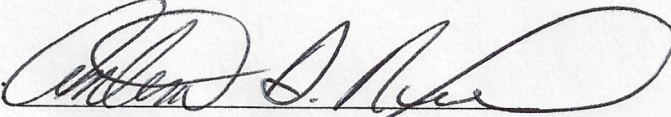
_____
Kathleen Barnes

Sworn and subscribed before me this the 10th day of November, 2021.

Notary Public: _____

Name: _____

My commission expires: June 30th, 2025

JAMIE C. WALL
Notary Public - North Carolina
Buncombe County
My Commission Expires Jun 30, 2025
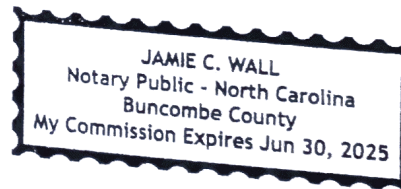
EXHIBIT L

AFFIDAVIT

I, Virginia Walters Brien, hereby state that I am a Plaintiff in the above-titled action. I am a sales manager residing in Charlotte, North Carolina. My residence was located within Congressional District 12 under the 2016 Plan and is now located within District 9 under the 2021 Plan. I am a registered unaffiliated voter and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
Virginia Walters Brien

Sworn and subscribed before me this the 09 day of November, 2021.

Notary Public: _____

Name: __Michelle Rivers__

My commission expires: __August 22, 2023__

EXHIBIT M

AFFIDAVIT

I, David Dwight Brown, hereby state that I am a Plaintiff in the above-titled action. I am a retired computer systems analyst residing in Greensboro, North Carolina. My residence was located within Congressional District 13 under the 2016 Plan and is now located within District 11 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

David Dwight Brown
David Dwight Brown

Sworn and subscribed before me this the 12 day of November, 2021.

KATIE MARIE GRITTON
Notary Public - North Carolina
Guilford County
My Commission Expires November 6, 2024
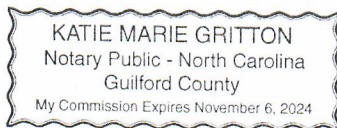
Notary Public: _Katie Gritton_

Name: _Katie Marie Gritton_

My commission expires: _November 6, 2024_
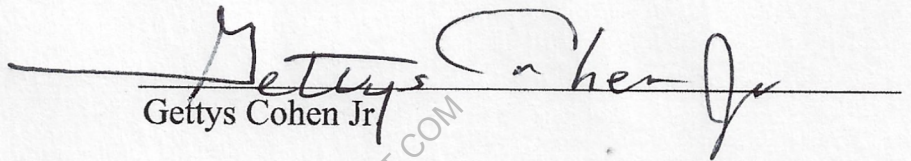
EXHIBIT N

AFFIDAVIT

I, Gettys Cohen Jr., hereby state that I am a Plaintiff in the above-titled action. I am a dentist residing in Smithfield, North Carolina. My residence was located within Congressional District 7 under the 2016 Plan and is now located within District 4 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
Gettys Cohen Jr.

Sworn and subscribed before me this the _10_ day of November, 2021.
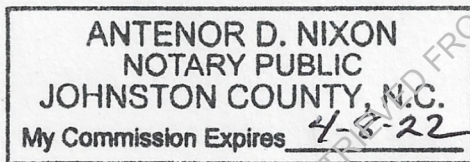
ANTENOR D. NIXON	Notary Public: _____
NOTARY PUBLIC	
JOHNSTON COUNTY, N.C.	Name: _Antenor D. Nixon_
My Commission Expires _4-8-22_	
	My commission expires: _4-8-22_

EXHIBIT O

AFFIDAVIT

I, Richard R. Crews, hereby state that I am a Plaintiff in the above-titled action. I am a retired stockbroker residing in Newland, North Carolina. My residence was located within Congressional District 5 under the 2016 Plan and is now located within District 14 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

Richard R. Crews
Richard R. Crews

Sworn and subscribed before me this the 12th day of November, 2021.

Notary Public: _Felece Prather_
Name: _Felece Prather_
My commission expires: _July 5th 2025_

Send to: SAM. CALLAHAN@ ARNoLdporter. CoM

EXHIBIT P
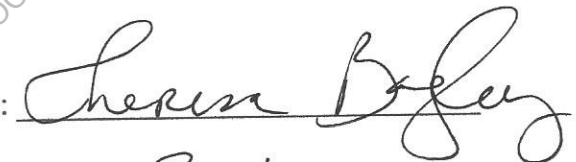
AFFIDAVIT

I, Rebecca Harper, hereby state that I am a Plaintiff in the above-titled action. I am a real estate agent residing in Cary, North Carolina. My residence was located within Congressional District 2 under the 2016 Plan and is now located within District 6 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
Rebecca Harper

Sworn and subscribed before me this the 11ᵗʰ day of November, 2021.
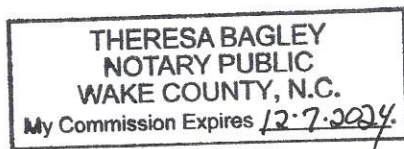
Notary Public: _____

Name: Theresa Bagley

My commission expires: 12.7.2024

EXHIBIT Q

AFFIDAVIT

I, Amy Clare Oseroff, hereby state that I am a Plaintiff in the above-titled action. I am a retired teacher residing in Greenville, North Carolina. My residence was located within Congressional District 1 under the 2016 Plan and remains in District 1 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____

Amy Clare Oseroff

Sworn and subscribed before me this the _9th_ day of November, 2021.

RONNIE PEO
NOTARY
PUBLIC
PITT COUNTY, NC

Notary Public: _Ronnie Peo_

Name: _Ronnie Peo_

My commission expires: _February 10, 2023_

EXHIBIT R

AFFIDAVIT

I, Mark S. Peters, hereby state that I am a Plaintiff in the above-titled action. I am a

retired physician assistant residing in Fletcher, North Carolina. My residence was located within

Congressional District 10 under the 2016 Plan and is now located within District 14 under the

2021 Plan. I am registered as an unaffiliated voter and have consistently voted for Democratic

candidates for the U.S. House of Representatives.

_____
Mark S. Peters

Sworn and subscribed before me this the _12_ day of November, 2021.
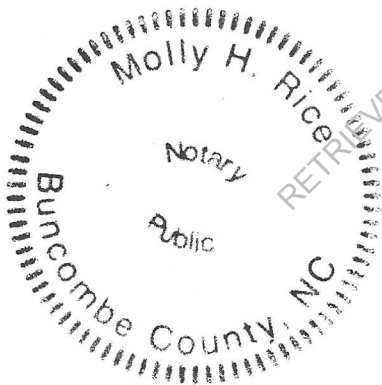
Notary Public: _____

Name: Molly H. Rice

My commission expires: 9.20.22

Molly H. Rice
Notary Public
Buncombe County, NC
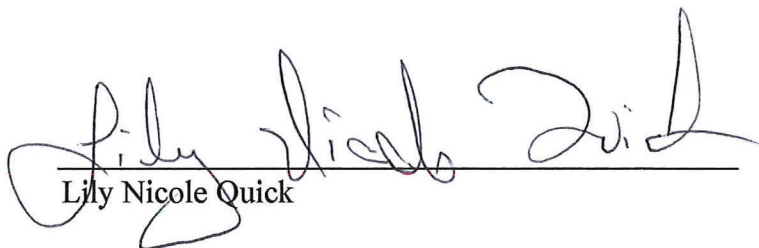
EXHIBIT S
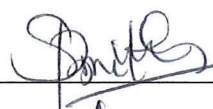
AFFIDAVIT

I, Lily Nicole Quick, hereby state that I am a Plaintiff in the above-titled action. I am a homemaker residing in Greensboro, North Carolina. My residence was located within Congressional District 6 under the 2016 Plan and is now located within District 7 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
Lily Nicole Quick

Sworn and subscribed before me this the 10th day of November, 2021.

LINDA MENSAH
NOTARY
My Comm. Exp.
12/13/2025
PUBLIC
GUILFORD COUNTY, NC
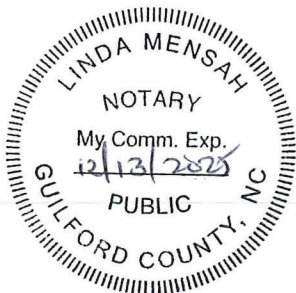
Notary Public: _____

Name: Linda Mensah

My commission expires: 12/13/2025

EXHIBIT T

AFFIDAVIT

I, Donald Rumph, hereby state that I am a Plaintiff in the above-titled action. I am an

Army and Air Force combat veteran and retired registered nurse residing in Greenville, North

Carolina. My residence was located within Congressional District 3 under the 2016 Plan and is

now located within District 1 under the 2021 Plan. I am a registered Democrat and have

consistently voted for Democratic candidates for the U.S. House of Representatives.

_____
Donald Rumph

Sworn and subscribed before me this the __9__ day of November, 2021.

Notary Public: _Diamonds A. Kornegay_

Name: _Diamonds A. Rumy_

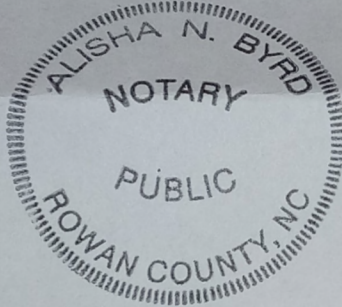My commission expires: _4/19/2026_
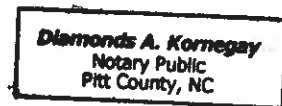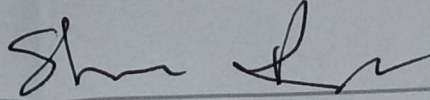
EXHIBIT U

AFFIDAVIT

I, Shawn Rush, hereby state that I am a Plaintiff in the above-titled action. I am a part owner of a marketing firm and a Meals on Wheels organizer residing in East Spencer, North Carolina. My residence was located within Congressional District 8 under the 2016 Plan and is now located within District 10 under the 2021 Plan. I am a registered Democrat and have consistently voted for Democratic candidates for the U.S. House of Representatives.
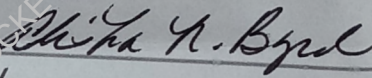
_____

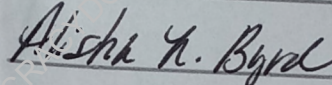Shawn Rush

Sworn and subscribed before me this the 17th day of November, 2021.

Notary Public: _____

Name: _Aisha N. Byrd_____

My commission expires: _04/25/2022_____