STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
No. 19 CVS 012667

REBECCA HARPER, *et al.*,

Plaintiffs,

v.

REPRESENTATIVE DAVID R. LEWIS, IN HIS OFFICIAL CAPACITY AS SENIOR CHAIRMAN OF THE HOUSE SELECT COMMITTEE ON REDISTRICTING, *et al.*,

Defendants.

PLAINTIFFS' COMBINED REPLY IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT AND MOTION TO SET SCHEDULE FOR REVIEW OF REMEDIAL PLAN

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Plaintiff submit this combined reply brief in support of their motion for summary judgment and their motion to set a schedule for review of the General Assembly's new plan.

INTRODUCTION

Neither Legislative Defendants nor Intervenor Defendants mount any defense of North Carolina's 2016 congressional plan (the "2016 Plan"). For good reason: the 2016 Plan preordained election outcomes in all 13 congressional districts, in violation of North Carolina's Free Elections Clause, Equal Protection Clause, and Freedom of Speech and Assembly Clauses.

Rather than try to defend the 2016 Plan, Legislative Defendants seek to evade judicial review of both the 2016 Plan and the remedial plan enacted by the General Assembly this month in response to the Court's preliminary injunction (the "Remedial Plan"). Legislative Defendants argue that this case is moot simply because they enacted a new statute to replace the 2016 statute. According to Legislative Defendants, it does not matter whether the Remedial Plan cures the constitutional infirmities of the 2016 Plan. It does not matter whether the Remedial Plan substantially recreates many of the districts under the 2016 Plan. It does not matter whether Legislative Defendants openly flouted this Court's guidance urging a transparent and bipartisan process to adopt a new plan. And while Legislative Defendants insist that Plaintiffs must file a new lawsuit to challenge the Remedial Plan, they simultaneously contend that it is too late for the courts to adjudicate any such new case. Thus, in Legislative Defendants' view, the Remedial Plan is immune from *any* judicial review. Their position is that the 2020 elections must go forward under the Remedial Plan no matter what, even if the plan is another extreme partisan gerrymander that violates the constitutional rights of Plaintiffs and millions of North Carolinians.

That is not the law. Under controlling precedent, this Court retains jurisdiction to declare the 2016 Plan invalid under the North Carolina Constitution, to ensure that the Remedial Plan fully cures the constitutional violations, and if it does not, to adopt a new plan that does. The

Court should grant summary judgment in favor of Plaintiffs and set a schedule for review of the Remedial Plan, including for Plaintiffs to propose one or more alternative plans. North Carolina's voters should not be forced to vote, yet again, in unconstitutional election districts—not the unconstitutional 2016 districts, and not the unconstitutional 2019 districts.

ARGUMENT

I. No Defendant Disputes That the 2016 Plan Violates the North Carolina Constitution

Neither Legislative Defendants nor Intervenor Defendants dispute that the 2016 Plan gerrymandered the State's congressional districts for partisan gain in violation of the Free Elections Clause, the Equal Protection Clause, and the Freedom of Speech and Assembly Clauses. Defendants thus have waived any defense of the 2016 Plan on the merits. *See Don't Do it Empire, LLC v. Tenntex*, 246 N.C. App. 46, 51-53, 782 S.E.2d 903, 906-07 (2016). Legislative Defendants and Intervenor Defendants also do not dispute that Plaintiffs have standing to bring this action and that Plaintiffs' partisan gerrymandering claims are justiciable.

Accordingly, if the Court agrees that this case is not moot, it can immediately enter judgment declaring the 2016 Plan invalid under the North Carolina Constitution. Upon entering such a declaratory judgment, the Court can and should establish a process for reviewing the General Assembly's replacement plan, just as the Court did in *Common Cause v. Lewis* once the Court held that the challenged state legislative plans were unconstitutional.

II. This Case Is Not Moot

In lieu of any defense on the merits, Legislative Defendants oppose Plaintiffs' motion for summary judgment solely on mootness grounds. *See* Leg. Defs. Resp. to Pls. Mot. for Summ. J. ("LDs MSJ Opp.") at 1-7. Legislative Defendants and Intervenor Defendants also raise mootness in their responses to Plaintiffs' motion to set a schedule for review of the Remedial Plan. *See* Leg. Defs. Resp. to Pls. Mot. for Review ("LDs Review Opp.") at 5-6; Intervenor

Defs.' Resps. to Pls. Mot. for Summ. J. and Mot. for Review ("Int. Defs. Opp.") at 6. Plaintiffs have already addressed the issue of mootness in their November 22 opposition to Legislative Defendants' motion for summary judgment, which likewise relied exclusively on mootness. Plaintiffs incorporate that opposition brief by reference here.

In their latest briefs, Legislative Defendants and Intervenor Defendants fail to acknowledge that, as the parties seeking dismissal on mootness grounds, they bear the burden to establish that all of the criteria for finding a case moot are met. *See Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 170 (2000). In North Carolina, defendants seeking dismissal on mootness grounds must show that "(1) the alleged violation has ceased, and there is no reasonable expectation that it will recur, and (2) interim relief or events have completely and irrevocably eradicated the effects of the alleged violation." *Kinesis Adver., Inc. v. Hill*, 187 N.C. App. 1, 20, 652 S.E.2d 284, 298 (2007) (internal quotation marks omitted). Neither Legislative Defendants nor Intervenor Defendants attempts to show that either, let alone both, of these criteria are met. Under their theory, this case would be moot even if these criteria indisputably are not met. According to them, this case is moot solely because the 2016 Plan was repealed and replaced—even if the partisan gerrymandering of North Carolina's congressional districts has not "ceased," and even if the Remedial Plan carries forward the "effects" of the 2016 Plan's constitutional infirmities. That is not the law of mootness in North Carolina.

Indeed, Legislative Defendants acknowledge elsewhere in their brief that "a case is not moot where 'repeal of a challenged statute does not provide the injured party with adequate relief or the injured party's claim remains viable.'" LDs MSJ Opp. at 6 (quoting *Bailey & Assocs., Inc. v. Wilmington Bd. of Adjustment*, 202 N.C. App. 177, 182, 689 S.E.2d 576, 582 (2010)).[1] The

[1] Legislative Defendants attempt to distinguish the facts of *Bailey* and another mootness decision not involving redistricting. *See* LDs MSJ Opp. 5-6. But Legislative Defendants do not contest the key legal standards for

repeal of the 2016 Plan has not provided Plaintiffs with "adequate relief," and Defendants make little effort to show otherwise. They fail to dispute that Plaintiffs have not obtained all of "the relief sought in their complaint." *Hamilton v. Freeman*, 147 N.C. App. 195, 203, 554 S.E.2d 856, 861 (2001). In particular, Plaintiffs sought—and have not obtained—a judgment declaring the 2016 Plan invalid under the North Carolina Constitution. *See* Compl., Prayer for Relief ¶ b. And as further relief, Plaintiff asked the Court to "[e]stablish a new congressional districting plan that complies with the North Carolina Constitution, if the North Carolina General Assembly fails to enact new congressional districting plans comporting with the North Carolina Constitution." *Id.* ¶ c. As explained below and in Plaintiffs' opposition to Legislative Defendants' summary judgment motion, the General Assembly's Remedial Plan does not "comport[] with the North Carolina Constitution" because it is an extreme and intentional partisan gerrymander. *Id.* At the very least, Legislative Defendants' concession that this case would *not* be moot if the Remedial Plan fails to afford Plaintiffs "adequate relief," LDs MSJ Opp. at 6, warrants further briefing on the Remedial Plan to determine whether the relief it provides is, in fact, adequate.

Legislative Defendants' attempts to distinguish *Dickson* and *Covington* are unavailing. They admit that this Court in *Dickson* "enter[ed] a judgment in favor of the . . . plaintiffs" *after* federal courts struck down the 2011 state legislative plans and remedial plans were adopted. LDs MSJ Opp. at 3. The Court should do the same here and declare the 2016 Plan invalid under the North Carolina Constitution. Legislative Defendants point out that this Court refused to consider the *Dickson* plaintiffs' *new* argument that the remedial plans there violated the North

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mootness recognized by these decisions: "The repeal of a challenged statute does not have the effect of mooting a claim . . . if the repeal of the challenged statute does not provide the injured party with adequate relief." *Bailey*, 202 N.C. App. at 182, 689 S.E.2d at 582. In other words, a case is not moot if repeal of the challenged statute "does not provide plaintiffs the relief they sought." *Wilson v. N.C. Dep't of Commerce*, 239 N.C. App. 456, 460, 768 S.E.2d 360, 364 (2015).

Carolina Constitution's ban on mid-decade redistricting. *See id.* But the mid-decade redistricting issue raised in *Dickon* had nothing to do with the issues resolved by the Court's declaratory judgment, which concerned racial gerrymandering.[2] And, as the portion of the *Dickson* order quoted by Legislative Defendants made clear, the Court stressed that the remedial plans were "under consideration in" and subject to the "scrutiny of the federal courts" to determine whether those plans cured the racial gerrymandering violations. Order and Judgment on Remand from N.C. Supreme Court at 6-7, *Dickson v. Rucho*, No. 11 CV 16896 (N.C. Super. Feb. 11, 2018); *see* LDs MSJ Opp. at 3 (quoting same). By contrast, here, Plaintiffs' objections to the Remedial Plan relate to the very same constitutional violations underlying the declaratory judgment—unlawful partisan gerrymandering—and no other court will assess whether the Remedial Plan cures those constitutional violations. This Court alone can and should do so.

Legislative Defendants do not deny that they made the exact same mootness arguments in *North Carolina v. Covington*, and the U.S. Supreme Court decisively rejected them. 138 S. Ct. 2548, 2552-53 (2018). They attempt to distinguish *Covington* on the ground that the General Assembly there enacted new redistricting plans "*after* a finding of liability and judgment entered." LDs MSJ Opp. at 4 (emphasis in original). But Legislative Defendants never explain why this distinction makes any difference to the mootness inquiry. No North Carolina precedent supports such a distinction. To the contrary, North Carolina precedent makes clear that, regardless of when new legislation is passed, the case is not moot unless the plaintiffs have obtained all the relief sought and their injuries have been completely and irrevocably redressed.

In any event, Legislative Defendants gloss over the fact that they enacted the Remedial Plan *after* this Court preliminarily enjoined further use of the 2016 Plan. Just like in *Covington*,

[2] The *Dickson* plaintiffs raised their objections based on the mid-decade redistricting ban in an emergency brief filed February 7, 2018. *See* Joint Pls. Emergency Motion for Relief at 9-13, *available at* https://tinyurl.com/yx4ylny3.

Legislative Defendants passed the Remedial Plan solely because the prior plan was enjoined on constitutional grounds. Tellingly, Legislative Defendants' mootness arguments here are identical to those they made in *Covington*, notwithstanding the different procedural postures.

In rejecting Legislative Defendants' mootness arguments, the U.S. Supreme Court did not rely on the entry of final judgment. The Supreme Court instead explained that the *Covington* plaintiffs' claims "arise from the plaintiffs' allegations that they have been separated into different districts on the basis of race," and those claims "remain[ed] the subject of a live dispute" because "the plaintiffs asserted that they remained segregated on the basis of race," and that "some of the new districts were mere continuations of the old, gerrymandered districts." 138 S. Ct. at 2552-53 (alterations omitted). Just substitute the word "partisanship" for "race," and all the same remains true here. Plaintiffs' claims "did not become moot simply because the General Assembly drew new district lines around them," particularly when "some of the new districts were mere continuations of the old, gerrymandered districts." *Id.*

Importantly, Legislative Defendants do not deny that, under their mootness theory, the General Assembly could always moot every congressional gerrymandering case simply by passing any new plan. While they deride this concern as "hypothetical," LDs MSJ Opp. at 6, this case confirms that it is very real. Legislative Defendants have already staked out the position that it is "too late" for *any* court to review the constitutionality of the Remedial Plan, including if Plaintiffs filed a new lawsuit challenging it. Given their scorched-earth tactics to maintain gerrymandered districts over the past decade, there is every reason to believe that Legislative Defendants would likewise seek to moot future redistricting challenges by passing new gerrymandered plans, creating a game of legal whack-a-mole. Legislative Defendants assert, without any substantiation whatsoever, that "it would not be possible for the General Assembly

to pass a new redistricting plan whenever a legal challenge to an existing plan is filed." *Id.* at 7. But in the past two months, the General Assembly has repeatedly demonstrated that new redistricting plans can be created and passed by both the House and Senate in a week or two. The Court should not adopt a mootness rule that could foreclose review of the gerrymandered Remedial Plan and that would undermine future redistricting litigation in North Carolina.

Lastly, Legislative Defendants' assertion that the state's three-judge panel statute "requires a new lawsuit" challenging the Remedial Plan simply recycles their same mootness arguments. LDs Review Opp. 7. Legislative Defendants again argue that the General Assembly "fully replaced the old map with the new map," and that the new map "render[s] this action moot." *Id.* at 7-8. Legislative Defendants' statutory version of these arguments fails for all the same reasons described above. And under the text of the statute, this case remains an action "challenging the validity of any act of the General Assembly that apportions or redistricts . . . congressional districts." N.C.G.S. § 1-267.1(a). This case has already been assigned to this three-judge panel pursuant § 1-267.1, and nothing in the statute requires a new lawsuit or a new three-judge panel in order to provide the relief sought here. Of course a three-judge panel retains jurisdiction to review a new plan that was enacted in response to the panel's injunction.

III. This Court's Review of the Remedial Plan Is Urgently Needed

Acknowledging that the mootness inquiry turns in part on whether the Remedial Plan cured the constitutional violations, Legislative Defendants argue that the redistricting process in the General Assembly this month was transparent and bipartisan, and that the Remedial Plan is not gerrymandered. Legislative Defendants are wrong on both counts.

A. The Remedial Process Was Neither Transparent Nor Bipartisan

Legislative Defendants repeatedly proclaim that they enacted the Remedial Plan through a "transparent and non-partisan process." LDs Review Opp. at 11. But repeating this phrase

over and over does not make it so. Senators Hise and Newton afforded Democratic legislators zero input on the map, and the only thing "transparent" about the process they employed is how secretive and partisan it was. This Court indicated that expedited further proceedings may not be necessary if Legislative Defendants "ensure[d] full transparency and allow[ed] for bipartisan participation and consensus to create new congressional districts," Order on Inj. Relief at 17-18, but Legislative Defendants did the opposite.

Plaintiffs detailed the extreme secrecy and lack of bipartisanship of the remedial process in their opposition to Legislative Defendants' summary judgment motion. *See* Pls. Opp. to Leg. Defs. Mot. for Summ. J. ("Pls. MSJ Opp.") at 3-8. To briefly recap, when Legislative Defendants arrived on the first day of hearings, they had already picked the specific base map they wanted to use—a map drawn at an exercise organized by Common Cause in 2016. Legislative Defendants had already extensively studied the partisan attributes of the map in *Rucho*. They forged ahead with this base map even after being informed that racial data were used in drawing it, in violation of Legislative Defendants' own adopted criteria for the Remedial Plan which barred any use of racial data. Legislative Defendants now assert that, during the 2016 exercise that produced the Common Cause Map, "[a] Voting Rights Act analysis was conducted after the districts were drawn but not in drawing the districts themselves." LDs Review Opp. at 8 n.3. That is untrue, and Legislative Defendants know it. During discovery in *Rucho*, Legislative Defendants received a document explaining how Bill Gilkeson used racial data to alter the boundaries of the northeastern district and the Mecklenburg-based district in the Common Cause Map, which required altering surrounding districts as well. Ex. C. Legislative Defendants' counsel introduced this document as an exhibit in deposing both Mr. Gilkeson and Common Cause's Bob Phillips in *Rucho*. Regardless of the proprietary of using racial data, the

fact that Legislative Defendants used a base map that they know violates their own adopted criteria speaks volumes to their ulterior motivations and the lack of transparency of the process.

And the remedial process only got worse. Legislative Defendants claim that "all mapdrawing was conducted on live-streamed computer terminals," and that the "video itself is proof." LDs Review Opp. at 9. But the video is proof that Legislative Defendants drew the map *outside* of public view. As Plaintiffs detailed in their summary judgment opposition, the video shows that Senators Hise and Newton consistently printed multiple copies of the latest version of the map, took the copies to a back room with unknown individuals, and then returned to direct specific changes to the districts that had been developed in the back room. *See* Pls. MSJ Opp. at 4-5.[3] If legislators decided on the text of any bill in secret and then merely typed up that text on a public computer, nobody would consider the process transparent. This is no different. Indeed, Legislative Defendants do not deny that Senators Hise and Newton developed the details of the Remedial Plan through secret deliberations in the back room. *See* LDs Review Opp. at 9.

As for bipartisanship, the most Legislative Defendants can say is that the Select Committee's vote on the adopted criteria was "unanimous." LDs Review Opp. at 2. True, the vote on the written criteria was unanimous, but application of those criteria was not. Not a single Democrat in either chamber of the General Assembly voted for the Remedial Plan. And

[3] *See, e.g.*, 11/6/19 Video at 51:00 (Senator Hise leaves the room); 1:04 (Senator Hise returns and directs specific changes); 1:22:30 (Senator Hise leaves the room); 2:06:00 (Senator Hise returns and directs specific changes); 2:19:20 (Senator Hise leaves the room); 2:26:30 (Senator Hise returns and directs specific changes); 3:09:15 (Senator Hise leaves room); 3:18:05 (Senator Hise returns and directs specific changes); 3:35:40 (Senator Hise leaves the room); 3:39:30 (Senator Hise returns); 3:58:30 (Senator Hise leaves the room); 4:02:15 (Senator Hise returns and directs specific changes); 4:51:34 (Senator Hise asks staff before leaving the room: "Print me 4 copies of that."); 4:55:00 (Senator Hise leaves the room); 5:30:50 (Senator Hise returns and directs specific changes); 5:45:00 (Senator Hise leaves the room): 7:28:50 (Senator Hise returns and directs specific changes); 7:45:20 (Senator Hise leaves the room); 8:02:20 (Senator Hise returns and directs specific changes); 11/7/19 Video at 1:08:20 Senator Newton says to Senator Hise: "Can you bring a couple of copies?"); 1:08:20-1:09:30 (Senator Hise asks career staff to print seven copies of the latest map and tells staff member that "[t]hey want to see what Common Cause looks like" with particular changes).

Legislative Defendants violated the unanimously adopted criteria. They violated the criterion barring use of racial data by using the Common Cause Map as the base map, and they violated the prohibition on partisan considerations in drawing a plan that seeks to predetermine an 8-5 Republican advantage. Legislative Defendants stress that, unlike in 2016, they did not adopt written criteria admitting to their use of partisanship, *see id.* at 12, but attempting to hide one's partisan intent is no better. As described in Plaintiffs' prior filings and further below, the districts and the data leave no doubt that the Remedial Plan is an extreme partisan gerrymander that violates the adopted criteria and, more importantly, the North Carolina Constitution.

B. The Remedial Plan Is an Extreme Partisan Gerrymander That Substantially Recreates Many of the 2016 Plan's Districts

1. Legislative Defendants assert that Plaintiffs have only "suspicions" that the Remedial Plan is another partisan gerrymander, not "hard proof." LDs Review Opp. at 5. Plaintiffs have hard proof—the maps themselves reveal clear partisan intent, and the analyses of Dr. Chen and now also Dr. Mattingly prove to a statistical certainty that partisan considerations drove the drawing of the Remedial Plan. In all manner of cases, including redistricting cases, courts routinely find that defendants acted with improper intent without an open confession. In *Covington*, for instance, the federal court found that the General Assembly's 2017 remedial state legislative districts failed to cure the racial gerrymandering of several districts, even though the General Assembly's adopted criteria for the remedial plans precluded the use of racial data or considerations. *Covington v. North Carolina*, 283 F. Supp. 3d 410, 434-42 (M.D.N.C. 2018). And in *League of Women Voters of Pennsylvania v. Commonwealth*, 178 A.3d 737 (2018), the Pennsylvania Supreme Court found that the state's congressional plan was an extreme partisan gerrymander without any admission of partisan intent by legislators. The state high court instead found partisan intent based on the maps themselves and Dr. Chen's analysis. *Id.* at 820-21.

2. Of particular relevance to the mootness issue here, the maps here reveal the remarkable extent to which certain districts under the Remedial Plan recreate the gerrymandered features of the 2016 Plan. Plaintiffs detailed in their summary judgment opposition how Districts 1, 3, 7, 8, 9, and 12 in the Remedial Plan replicate specific features of the gerrymandering of the 2016 districts alleged in Plaintiffs' Complaint. *See* Pls. MSJ Opp. at 20-29. Legislative Defendants assert that, "[v]isually, the 2019 Plan is clearly substantially different from the 2016 Plan," LDs Review Opp. at 8, but the substantial similarities between these new districts and the 2016 versions are "visually" unmistakable, *see* Pls. MSJ Opp. at 20-29.

Legislative Defendants' own expert, Dr. Brunell, confirms the significant overlap between districts in the Remedial Plan and their predecessors. According to Dr. Brunell, two districts—District 3 and District 12—have a greater than 90% overlap with their prior versions. Brunell Report ¶ 4. District 3 overlaps by 92% and District 12 overlaps by an astounding 94%. *Id.* Moreover, Districts 7, 8, and 9 overlap by 75%, 74%, and 80% respectively with their prior versions, *id.*; these overlaps are especially noteworthy given that each of these districts spans hundreds of miles. These statistics refute Intervenor Defendants' claim that "there have been significant changes to each and every Congressional District in North Carolina." Int. Defs. Opp. at 7. And it is not just the sheer magnitude of the overlap between the remedial and prior districts, but the fact that the overlap specifically replicates the gerrymandered features of these districts documented in the Complaint. *See* Pls. MSJ Opp. at 20-29.

What's more, Dr. Brunell seriously errs in calculating the districts' average overlap. He asserts that "[t]here are 6 districts with less than 50% core retention and the average core retention across all districts is only 55%." Brunell Report ¶ 5. But Dr. Brunell failed to account for the fact that some remedial districts have the greatest overlap with a district that had a

different number in the 2016 Plan. For instance, Dr. Brunell's own data show that District 2 in the Remedial Plan has a ***72%*** overlap with District 4 from the 2016 Plan. In calculating his average, however, Dr. Brunell used the ***28%*** overlap between the new District 2 and the old District 2, rather than the 72% overlap with the old District 4. Dr. Brunell repeated this error for remedial Districts 4, 5, 6, 10, and 13. Using the correct statistics, the average overlap of all thirteen districts is 65%, not 55%, and just four districts have an overlap of less than 50% (Districts 4, 5, 6, and 10). In other words, the average district in the new plan is a *two-thirds* match with its corresponding district in the prior plan, and many districts are well above that.

The bottom line is that Legislative Defendants cannot moot this case by tweaking the 2016 districts but leaving the core aspects of the constitutional violations in place.

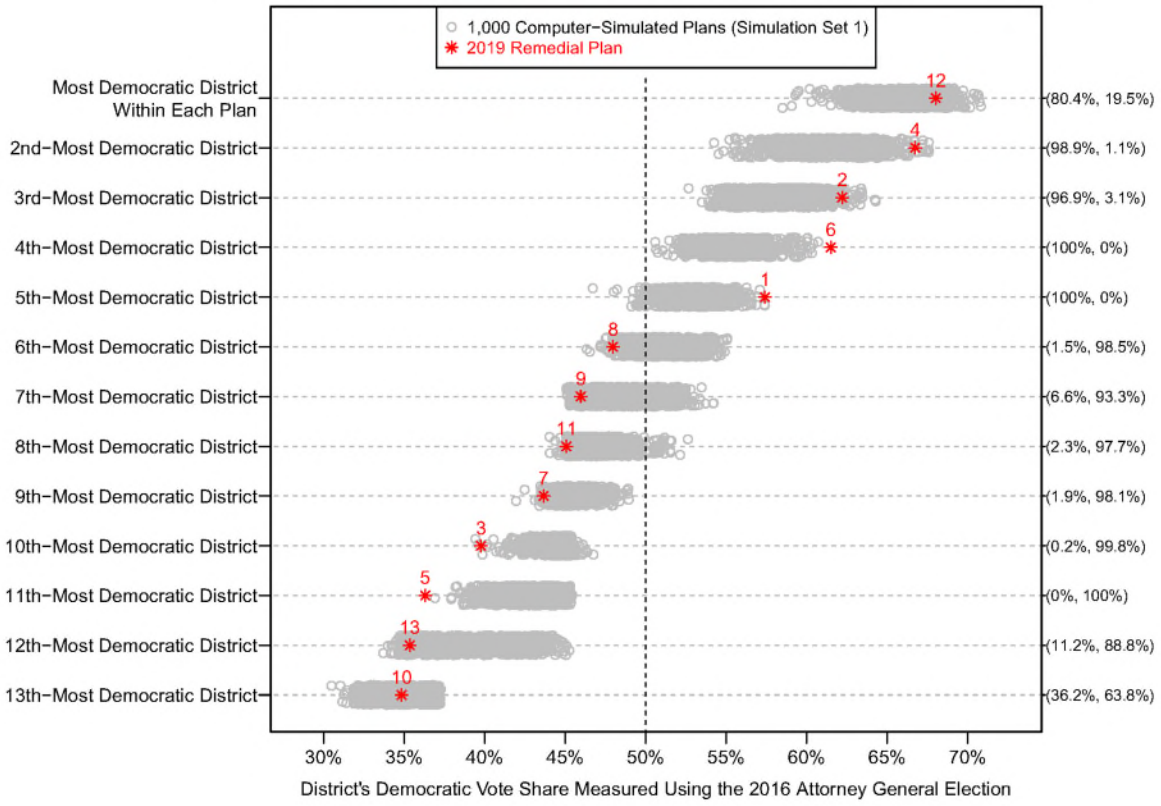
3. Dr. Chen's analysis confirms that the Remedial Plan is another extreme partisan gerrymander. Dr. Chen's November 22, 2019 declaration, as reported in Plaintiffs' summary judgment opposition, demonstrates that nearly every district in the Remedial Plan is an extreme outlier compared to his simulations. His analysis shows how the Remedial Plan packs Democrats into five overwhelmingly Democratic districts and cracks Democratic voters across the remaining eight districts in order to ensure a reliable Republican majority in each district.

Legislative Defendants contend that Dr. Chen's analysis does not show that the Remedial Plan is an extreme outlier because many of his simulations would also produce eight Republican-leaning seats and five Democratic-leaning seats using the 2010-2016 statewide elections results. LDs Review Opp. at 15. But as Dr. Chen, Dr. Mattingly, and Dr. Pegden all emphasized in their trial testimony in *Common Cause v. Lewis*, focusing exclusively on the number of seats won using particular historical elections can be highly misleading and fails to capture how the gerrymander operates. What matters is the vote margin in each district, since that reveals

whether the map has been engineered to produce specific electoral outcomes that are resilient to swings in the vote and different electoral environments. Dr. Chen's analysis demonstrates that the Remedial Plan has been engineered precisely in this manner: the Remedial Plan guarantees an 8-5 Republican advantage that is impervious to any realistic swings in the vote.

Indeed, Dr. Chen explained in *Common Cause* that looking at seat counts using the 2010-2016 statewide elections may be particularly misleading since that set of elections is overall very favorable for Republicans. In his attached declaration, like he did in *Common Cause*, Dr. Chen shows the results when using just the 2016 Attorney General election, which was almost an evenly split election. The results show that, under this type of electoral environment, the Remedial Plan costs Democrats 1-3 seats. The most common outcomes under Dr. Chen's simulations using the 2016 Attorney General race are 6 or 7 Democratic seats, but Democrats remain stuck at 5 seats under the Remedial Plan.

Figure 1: Simulation Set 1:
Districts' Democratic Vote Share Measured Using the 2016 Attorney General Election



Legislative Defendants' and their expert Dr. Brunell contend that Dr. Chen's analysis is "flawed" because the simulations purportedly do not "account for . . . different goals" that existed in drawing the Remedial Plan than in the 2016 Plan. LDs Review Opp. at 16. But the 2019 Adopted Criteria are materially identical to the 2016 Adopted Criteria, which Dr. Chen applied in his simulations. *Compare* Theodore 11/22/19 Decl., Ex. B (2019 Adopted Criteria) *with* Theodore 9/30/19 Decl., Ex. C (2016 Adopted Criteria). Legislative Defendants contend that, with the Remedial Plan, the General Assembly purportedly had the "goals" to "create a district wholly within Wake County" and "to keep Cumberland County whole." LDs Review Opp. at 16. Legislative Defendants provide no citations for these assertions, and they are simply

post-hoc rationalizations. These purported "goals" appear nowhere in the official 2019 Adopted Criteria that the Select Committee adopted. *See* Theodore 11/22/19 Decl., Ex. B.

4. Legislative Defendants claim that Dr. Mattingly's analysis in *Rucho* supposedly shows that the Remedial Plan is not a partisan gerrymander, LDs Review Opp. at 15, but Dr. Mattingly's simulations in fact prove that the Remedial Plan is extraordinarily gerrymandered. In the declaration attached as Exhibit A,[4] Dr. Mattingly "conclude[s] that the 2019 Remedial Plan is an extreme outlier." Mattingly Decl. ¶ 15. As shown below and in Dr. Mattingly's declaration, he establishes that, under a variety of different historical elections, the Remedial Plan produces five packed districts that are more heavily Democratic than the corresponding districts in almost all of his simulations, and that the remaining Republican-leaning districts are nearly all outliers in the other direction.

[4] Plaintiffs submit this declaration from Dr. Mattingly in response to Legislative Defendants' invocation of Dr. Mattingly in their opposition to Plaintiffs' motion for review, *see* LD Review Opp. at 3, 15-16, not in further support of Plaintiffs' summary judgment motion.

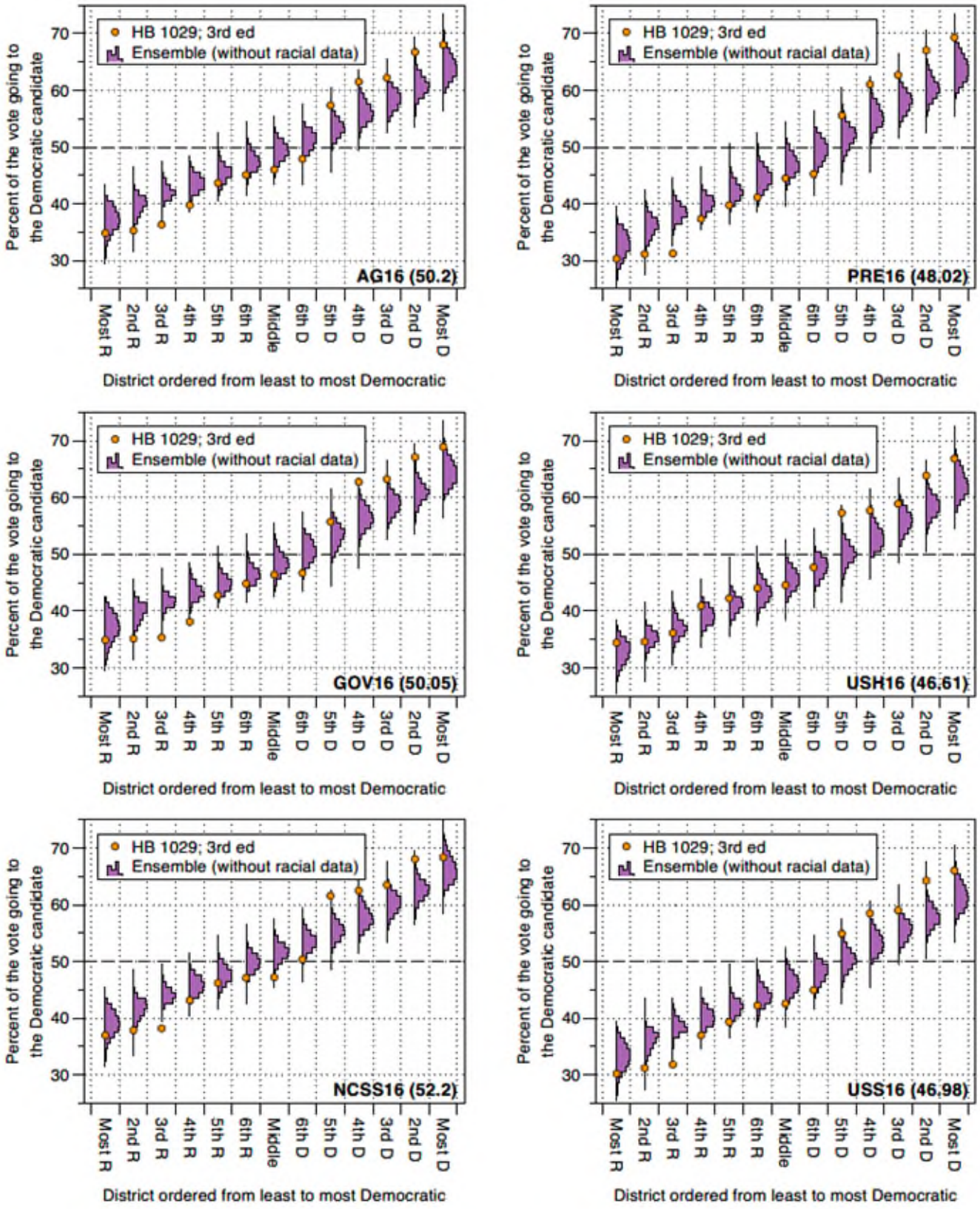


FIGURE 1. Ranked Marginals for 2016 elections for the ensemble which includes no racial data. The proposed 2019 remedial map is marked orange for comparison.

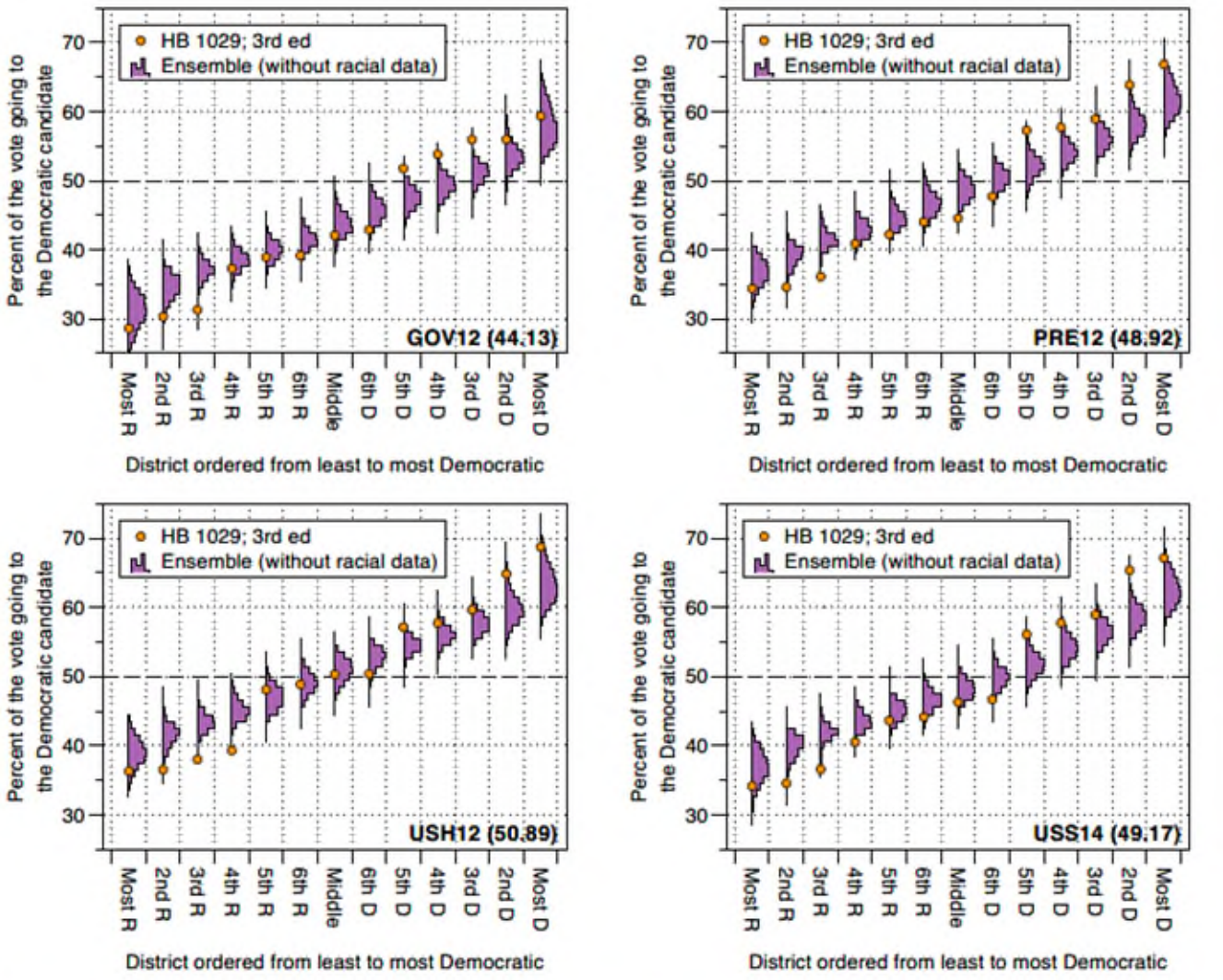


FIGURE 2. Ranked Marginals for 2012 and 2014 elections for the ensemble which includes no racial data. The proposed 2019 remedial map is marked orange for comparison.

Dr. Mattingly finds that, in eight of the 10 elections he considered, the Remedial Plan exhibits more packing of Democratic voters than ***100%*** of the 57,202 plans in his ensemble that does not consider racial data. Mattingly Decl. ¶¶ 13, 15; *see* Table 1 (below). In the remaining two elections, the Remedial Plan is a 99.996% and a 99.95% outlier. *Id.* In other words, the Remedial Plan shows more Republican advantage than between 99.95% and 100% of the 57,202 maps in his ensemble.

Race	Year	# maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan	% maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan
ATTORNEY GENERAL	2016	0	0%
GOVERNOR	2012	1	.004%
GOVERNOR	2016	0	0%
SECRETARY OF STATE	2016	0	0%
PRESIDENT	2012	0	0%
PRESIDENT	2016	0	0%
US HOUSE	2012	12	.05%
US HOUSE	2016	0	0%
US SENATE	2014	0	0%
US SENATE	2016	0	0%

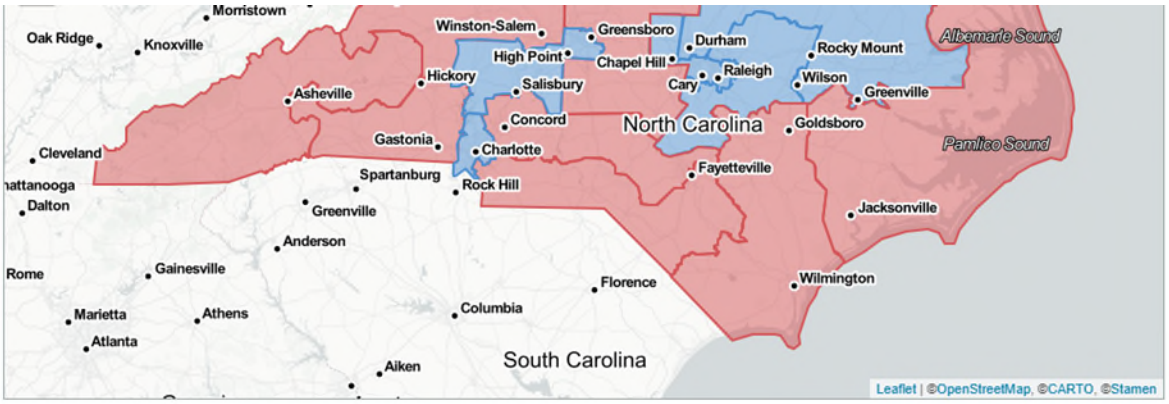
TABLE 1. Comparison with new ensemble which ignores race: For each election the number of maps with more Democrats on average in the five most democratic districts is calculated.

The charts above also show that, like Dr. Chen, Dr. Mattingly finds that in evenly split electoral environments like the 2016 Attorney General race and the 2016 Governor's race, the Remedial Plan costs Democrats 1-2 seats compared to his simulations. Legislative Defendants cherrypick from Dr. Mattingly's *Rucho* results, focusing narrowly on the fact that his simulations in *Rucho* most often produced five Democratic seats using the 2016 congressional elections to assess partisanship. But Dr. Mattingly's simulations produce 6 or 7 Democratic seats in electoral environments that are more favorable to the Democrats, while the Remedial Plan simply sticks at 5 Democratic seats regardless of how well the Democrats do.

5. Dr. Brunell points to a website called "PlanScore" to purportedly show that the Remedial Plan actually creates 7 Democratic-leaning districts and 6 Republican-leaning districts. Brunell Report ¶ 8. Dr. Brunell provides no details on the methodology that this website employs to make these estimates, including what election results and other factors it considers. Presumably Dr. Brunell does not know any of these details, as his report seems to indicate that he simply "submitted shape files" onto the website and clicked go. *Id.* Relying on a third-party website that employs some unknown methodology clearly does not meet the standards for expert analysis under North Carolina Rule of Evidence 702(a).

A closer review of the website reveals that it substantially overestimates the predicted Democratic performance in North Carolina congressional elections. For the 2016 Plan, the website predicts 5 Democratic seats. Of course, the 2016 Plan reliably produced just 3 Democratic seats in both elections held under the plan. As shown below, the website predicts that both Districts 2 and 13 were Democratic under the 2016 Plan; in reality the Republican candidate won District 13 by 12.2 points in 2016 and by 6 points in 2018, and the Republican candidate won District 2 by 13.4 points in 2016 and by 5.5 points in 2018.

PlanScore Predictions for 2016 Plan



District	Population 2010	Population 2016	Black Population 2016	Hispanic Population 2016	Predicted Democratic Vote Share	Predicted Republican Vote Share
1	733,499	743,634	46.3%	8.7%	72.2%	27.8%
2	733,499	821,642	21.2%	9.7%	50.7%	49.3%
3	733,498	757,353	22.5%	7.7%	43.6%	56.4%
4	733,499	813,927	23.6%	10.2%	73.9%	26.1%
5	733,499	749,617	15.5%	9.5%	45.6%	54.4%
6	733,498	756,766	21.6%	9.8%	48.4%	51.6%
7	733,499	778,997	20.7%	9.4%	46.5%	53.5%
8	733,499	777,928	25.1%	9.9%	47.9%	52.1%
9	733,498	774,408	20.4%	8.0%	49.6%	50.4%
10	733,499	747,450	13.2%	6.3%	44.2%	55.8%
11	733,499	747,645	4.0%	6.0%	40.5%	59.5%
12	733,498	824,830	39.0%	14.6%	73.7%	26.3%
13	733,499	758,365	23.0%	7.8%	51.1%	48.9%

Dr. Brunell also notes that the Remedial Plan would contain 6 Democratic-leaning seats under the results of the 2016 Secretary of State election. Brunell Report ¶ 6. There is a reason that Dr. Brunell reports results solely under this election. As Dr. Mattingly's analysis shows, the 2016 Secretary of State election a very pro-Democratic election and it is the *only* recent statewide election under which Democrats would (barely) win more than five seats under the Remedial Plan. Mattingly Decl. Figures 1 and 2. In every other recent statewide election, Democrats would win just five seats, even though they would often win more seats under nonpartisan plans. And we know that Legislative Defendants consider the 2016 Secretary of State election an anomalous election that is not predictive of future election results: Legislative Defendants did *not* include the 2016 Secretary of State election as one of the ten statewide elections that they announced they were using to gerrymander the 2017 state legislative maps. In any event, using the 2016 Secretary of State results, the Democrats would win either 7 or 8 seats under a nonpartisan map. Mattingly Decl. Figure 1 (NCSS16). In other words, the Secretary of State results confirm the gerrymander.

5. Legislative Defendants devote substantial space to critiquing the alternative maps drawn by Democratic legislators. *See* LDs Review Opp. at 13-14. Legislative Defendants also assert that "no alternative map that better achieved [the legislature's] objectives was offered by Plaintiffs." *Id.* at 16. The latter critique is bizarre since this Court has not yet afforded Plaintiffs an opportunity to submit an alternative map, but more broadly all of Legislative Defendants' arguments regarding alternative maps are premature. The only question at this stage is whether the Remedial Plan enacted by Legislative Defendants moots this case or whether the case instead remains live, including because the Remedial Plan fails to cure the constitutional infirmities of the 2016 Plan. If this Court holds that the case is not moot and sets a schedule for the

submission of alternative plans, Plaintiffs will submit one or more alternative plans at that time. Legislative Defendants will then be free to critique those alternatives plans all they want. But at this stage, the nature and characteristics of the Remedial Plan are all that matters.

C. The Federal Elections Clause Does Not Bar This Court From Entering Summary Judgment, Reviewing the Remedial Plan, and If Necessary Moving the Congressional Primary Date

In its decision preliminarily enjoining use of the 2016 Plan, this Court rejected as "unavailing" Legislative Defendants' and Intervenor Defendants' argument that the federal Elections Clause barred state courts from assessing the constitutionality of a state congressional plan. Order on Inj. Relief at 4 n.1. The Court correctly concluded that North Carolina's "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." *Id.* Legislative Defendants appropriately no longer press an Elections Clause argument—they do not mention it in their summary judgment motion, in their opposition to Plaintiffs' motion for summary judgment, or in their opposition to Plaintiffs' motion for review. Legislative Defendants thus have waived any Elections Clause argument.

Although Intervenor Defendants attempt to renew the Elections Clause objection, *see* Int. Defs. Opp. at 14-18, they are not proper parties to do so. Under federal law, an alleged violation of the Elections Clause is an "institutional injury" to the North Carolina General Assembly. *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 135 S. Ct. 2652, 2664 (2015). Intervenor Defendants "are neither the [North Carolina] General Assembly nor a group to which [North Carolina] has delegated the [State's] lawmaking power." *Corman v. Torres*, 287 F. Supp. 3d 558, 573 (M.D. Pa. 2018). The Elections Clause arguments "belong, if they belong to anyone, only to the [North Carolina] General Assembly." *Id.* Because Intervenor Defendants

are not members of the General Assembly, much less the institution itself, they are not proper parties to assert that the rights of the state legislature have been unlawfully invaded.

In any event, the Elections Clause argument fails on the merits. As Plaintiffs explained in detail in their reply brief in support of the preliminary injunction motion, which they incorporate here by reference, the U.S. Supreme Court has definitively held in a series of cases dating back a century that nothing in the Elections Clause alters a state court's unreviewable authority to invalidate a congressional map for violating the state constitution. Pls. PI Reply at 14-22; *see Smiley v. Holm*, 285 U.S. 355 (1932); *Koenig v. Flynn*, 285 U.S. 375, 379 (1932); *Carroll v. Becker*, 285 U.S. 380, 381-82 (1932); *Growe v. Emison*, 507 U.S. 25 (1993); *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 135 S. Ct. 2652, 2673 (2015); *Ohio ex rel. Davis v. Hildebrant*, 241 U.S. 565, 568 (1916). And just last June, the Supreme Court specifically affirmed that "state courts" can address whether congressional plans violate "state constitution[al]" prohibitions on partisan gerrymandering. *Rucho v. Common Cause*, 139 S. Ct. 2484, 2507 (2019).

Intervenor Defendants incorrectly contend (at 17) that the Elections Clause prohibits this Court from altering the date of the primary if necessary to allow for the replacement of the unconstitutional 2016 Plan with a constitutional plan.[5] The authority to review a congressional map for compliance with the constitution includes the inherent authority to remedy the violation and to delay a primary if necessary. In each of the last two redistricting cycles, North Carolina's congressional primaries have been delayed because a court enjoined the prior congressional plan. *See Cromartie v. Hunt*, 133 F. Supp. 2d 407, 410 (E.D.N.C. 2000) (describing case history which included delay of congressional primaries); *Harris v. McCrory*, 159 F. Supp. 3d 600 (M.D.N.C.

[5] Intervenor Defendants do not dispute that this Court had the power to delay the start of the candidate qualifying period. *See* Int. Defs. Opp. 17.

2016) (enjoining congressional plan shortly before primary, resulting in delay of primaries). In both instances, the U.S. Supreme Court denied applications to stay the lower court orders that caused the primaries to be delayed.

Neither of the state-court cases that Intervenor Defendants cite (at 17) holds or even suggests that state courts lack authority to delay a primary if necessary to cure a constitutional violation. To the contrary, Congress has made clear that congressional elections may *not* proceed pursuant to a legislatively-enacted plan if that legislature has not "redistricted in the manner provided by state law." *Ariz. State Legislature*, 135 S. Ct. at 2668-71 (discussing 2 U.S.C. § 2a(c)). And the Supreme Court reaffirmed in *Growe* and *Branch v. Smith*, 538 U.S. 254 (2003), that state courts have full authority to develop and oversee a remedial process when the legislature "fail[s] to redistrict constitutionally." *Branch*, 538 U.S. at 270; *see also Growe*, 507 U.S. at 33, 42. The General Assembly does not have the "exclusive power to set the time of the 2020" primary. Int. Defs. Opp. 17. Rather, under the Elections Clause, the legislature may not set the "*time*, place, and manner of holding federal elections in defiance of provisions of the State's constitution." *Ariz. State Legislature*, 135 S. Ct. at 2673 (emphasis added).[6]

IV. The Equities Overwhelmingly Support Further Proceedings to Ensure that North Carolina Voters Are Not Forced Yet Again to Vote in Unconstitutional Elections

Legislative Defendants argue that there will be "confusion and uncertainty" if this Court reviews the Remedial Plan, causing harm to "voters" and "election participants," especially if the Court's review results in "delaying primaries." LDs Review Opp. at 18-20. Just as they did in opposing Plaintiffs' motion for a preliminary injunction, Legislative Defendants argue that, under *Pender County*, *Dickson*, and *Purcell*, this Court must allow the 2020 elections to go

[6] In any event, the General Assembly by statute has authorized the Court and the State Board of Elections to enter into agreements delaying the primary when the legislature is out of session, as it currently is. N.C.G.S. § 163-22.2.

forward under an unconstitutional plan because it is too "late" to fix the gerrymander. *Compare id. with* LDs Opp. to Pls. Mot. for Prelim. Inj. at 15-23.

This Court has already rejected those arguments, holding that any harms from "a delay in the congressional primary . . . pale in comparison to the 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." Order on Inj. Relief at 17. As the Court explained, if the 2020 elections proceed under gerrymandered districts, "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." *Id.* at 15. To avoid this result, the Court "retain[ed] jurisdiction to move the primary date . . . should doing so become necessary to provide effective relief in this case." *Id.*

Legislative Defendants' arguments have not improved with age. Congressional candidates still do not suffer from any cognizable harm if they are forced to begin "an entire new fundraising and strategic strategy from scratch." LDs Review Opp. at 20. Nor do the concerns of "political parties," *id.*, trump the fundamental right of voters to cast their ballots in free and fair elections, untainted by partisan manipulation. Consistent with the Court's direction in its preliminary injunction order and summary judgment schedule, there is time to establish a new, lawful plan, with or without moving the primaries. If the General Assembly had enacted a plan this month that cured the constitutional violations and comported with the North Carolina Constitution, further proceedings here might be unnecessary. But it did not.

CONCLUSION

For the foregoing reasons, the Court should grant Plaintiffs' motion for summary judgment and set a schedule for objections to the Remedial Plan.

Respectfully submitted this the 26th day of November, 2019.

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing *by email*, addressed to the following persons at the following addresses which are the last addresses known to me:

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This the 26th day of November, 2019.

/s/ Burton Craige
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EXHIBIT A

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
No. 19-cv-012667

REBECCA HARPER, *et al.*,

Plaintiffs,

v.

DAVID LEWIS, IN HIS OFFICIAL CAPACITY AS SENIOR CHAIRMAN OF THE HOUSE SELECT COMMITTEE ON REDISTRICTING, *et al.*,

Defendants.

DECLARATION OF DR. JONATHAN C. MATTINGLY

I, Dr. Jonathan C. Mattingly, 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 the James B. Duke Professor of Mathematics at Duke University and the Chair of the Department of Mathematics. I am also Professor of Statistical Science at Duke. I received a B.S. in Applied Mathematics with a concentration in physics from Yale University in 1992, and a Ph.D. in Applied and Computational Mathematics from Princeton University in 1998.

3. I lead a group at Duke University which conducts non-partisan research to understand and quantify gerrymandering. I have testified either at deposition or at trial in the following cases: *Common Cause et al. v. Robert A. Rucho et al.* (M.D.N.C. 2016); *Common Cause et al. v. David Lewis et al.* (N.C. Super. 2019).

4. Plaintiffs' counsel asked me to analyze the HB 1029 remedial plan for North Carolina's congressional districts (the "Remedial Plan"), as passed on November 15, 2019. Specifically, plaintiffs' counsel asked me to compare the partisan attributes of the Remedial Plan

to those of the ensemble of congressional plans I created in the federal lawsuit *Common Cause v. Rucho*. Because the ensemble of congressional plans I created in *Common Cause v. Rucho* used racial data and the adopted criteria for the Remedial Plan stated that "[d]ata identifying the race of individuals or voters shall not be used in construction or consideration of districts in the 2019 Congressional Plan," Plaintiffs' counsel also asked me to compare the partisan attributes of the Remedial Plan to a new nonpartisan ensemble that did not consider race. Parts of this analysis were already in progress for our academic work.

5. The first ensemble that I use for my analysis in this Declaration contains 57,202 congressional plans and does not consider race. The second ensemble that I use for my analysis contains 24,518 congressional plans; it is the same ensemble described in my March 6, 2017 expert report in the federal lawsuit *Common Cause v. Rucho*.

6. To create both congressional ensembles, I employed the same general methodology that I used in creating the ensemble of simulated state House and state Senate plans in *Common Cause v. Lewis*. Specifically, I generated a random, representative collection of alternative redistricting maps using a Markov Chain Monte Carlo algorithm combined with simulated annealing. No partisan data were used to construct either ensemble of maps. In constructing the ensemble that did not consider race, I used only the generally accepted redistricting criteria of population equality, contiguity, compactness, and keeping counties and VTDs whole. In constructing the ensemble that I used in *Rucho* that did consider race, I used the above criteria and in addition tuned the ensemble to prioritize maps that contained one district with at least 44.48% African American voting age population and one district with at least 36.20% African American voting age population, based on percentages of the 2016 Plan. The *Rucho* ensemble also required that at least one district contain a BVAP above 40% and a second

district have a BVAP above 33.5%. Both ensembles are tuned to have similar compactness scores,[1] similar population deviations,[2] and number of split counties.

7. To assess the partisanship of the ensembles and the 2019 Remedial Plan, I have investigated the ranked-ordered marginal distributions using 10 elections in North Carolina from 2012, 2014, and 2016. While I have come to prefer statewide elections as the effects of incumbency, funding, and other such factors are uniform across the state, I have also included two sets of votes from North Carolina congressional elections (from 2012 and 2016) because I used these results to assess partisanship in my report in *Rucho*.

8. I used the phrase "signature of gerrymandering" in *Rucho* and *Lewis* to describe the significant jump in the Democratic vote-share in the rank-ordered box plots (Figure 4 in my report from *Rucho*) between a group of districts with abnormally few Democratic voters and a group of districts with atypically many Democratic voters. This packing effect translates into locking in the election results; thereby, making the outcome essentially predetermined. My analysis in *Common Cause v. Lewis* made the same point in a number of county clusters. There, the same analysis provided compelling evidence that particular county groupings had "baked in" the election results. In all of these cases, the exceptionally large jump is the signature of gerrymandering. Such gerrymandered maps are structured to be exceptionally non-responsive to shifting public opinion and shifting election results.

9. My results are described in the Figures and Tables appended to this declaration. Using 10 different elections, Figures 1 and 2 compare the partisanship of each district in the 2019 Remedial Plan to the partisanship of the corresponding districts in each of the 57,202 plans in my nonpartisan, no-racial-data ensemble. Figure 1 gives ranked-marginal distributions of the

[1] As measured by the Polsby-Popper index.
[2] The analysis in the *Rucho* report showed that the population deviation is small enough to reliably be zeroed out without qualitatively changing any results.

Democratic vote percentage over six historic elections from 2016, using the ensemble of 57,202 maps that does not consider race. The districts are ordered from least to most Democratic. The Remedial Plan is depicted with an orange circle, and the plans in the nonpartisan ensemble are represented by the purple histograms. The right-most histogram in each of the six figures gives the distribution of the Democratic percentage in the most Democratic district. The left-most histogram in each plot gives the marginal distribution of the partisan outcome in the most Republican-leaning district in each map in the ensemble. Figure 2 gives the ranked-marginal distributions of the Democratic vote share in four historic elections from 2012 and 2014, again using the ensemble of 57,202 maps that does not consider race. These plots are explained in more detail in *Common Cause v. Lewis*; they are slightly different from the box-plots used in *Common Cause v. Rucho* as they demonstrate more detail.[3]

10. There are two striking features of these plots. The first striking feature is the sizable jump in the orange dots between the 5th and 6th most Democratic districts. This implies a large range of election outcomes which produce the exact same partisan seat count under the 2019 remedial plan, while the typical map in the ensemble would have multiple seats change hands over this range of outcomes. This observation is based on uniform swing analysis and the relation to this jump in the rank ordered marginal plots and is described in my reports and testimony in *Common Cause v. Rucho* and *Common Cause v. Lewis*.

11. The second (related) feature is the extent to which Democrats have been packed in the 5 most Democratic districts of the Remedial Plan when compared to the ensemble. Similarly the next seven districts typically have significantly fewer Democrats than is typical in

[3] For example, see Figure 4 and 5 in *Rucho* and Figure 4, 7, 10, 12 and 40 in *Lewis*.

the ensemble. This is reflected in the fact that the orange dots corresponding to these districts are in the extremes of the marginal distributions.

12. My analysis shows that the Remedial Plan was much less sensitive to swings in the partisan vote fractions than the vast majority of the maps in the ensemble. The plots in Figure 1 and 2 show that under a uniform swing analysis the nonpartisan maps in the ensemble often produce 6 and sometimes 7 Democratic seats in election environments when the Democrats perform well (a statewide vote fraction in the low 50%) for many sets of votes, while the 2019 Remedial Plan reliably produces 5 Democratic seats in most instances.

13. As in *Lewis* and *Rucho*, we have further illustrated this point by quantifying the packing of Democrats in the 2019 Remedial Plan. We count the maps within the ensemble which have higher average Democratic vote fractions than the Remedial Plan in the five most Democratic districts. These results are summarized in Table 1. We find that the Remedial Plan packs Democrats into these five districts in an extreme way. In eight of the 10 historic elections, there is not a single plan from the ensemble that contains a higher fraction of Democrats in the five most Democratic districts than the Remedial Plan; in one of the two remaining elections, only a single plan out of the 57,202 plans in the ensemble has as many Democrats as the remedial plan in those five districts. In the other remaining election, only 12 plans of the 57,202 plans in the ensemble have as many Democrats as the remedial plan in the five most Democratic districts.

14. Figures 3 and 4 and Table 2 repeat the previous analysis for the 24,518 maps presented in our expert report in *Common Cause v. Rucho*. As described earlier, these maps differ from the primary ensemble in that they considered racial data. The results are qualitatively

the same as the results in our first ensemble, with the exception of the results from the U.S. House 2012 election, and possibly the 2012 Governor election (see Figures 3 and 4).

15. I conclude that the 2019 Remedial Plan is an extreme outlier. In eight of the 10 elections that I considered, the 2019 Remedial Plan showed more packing of Democrats than 100% of the 57,202 plans in my nonpartisan, no-racial-data ensemble: not a single plan in my ensemble had as many Democrats as the Remedial Plan did in the five Democratic districts. In the remaining two elections, the Remedial Plan was a 99.996% and a 99.95% outlier, making it an extreme case of packing.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

This 26th day of November, 2019.

Dr. Jonathan C. Mattingly

EVALUATING 2019 REMEDIAL MAP FOR NC CONGRESSIONAL DISTRICTS

JONATHAN C. MATTINGLY

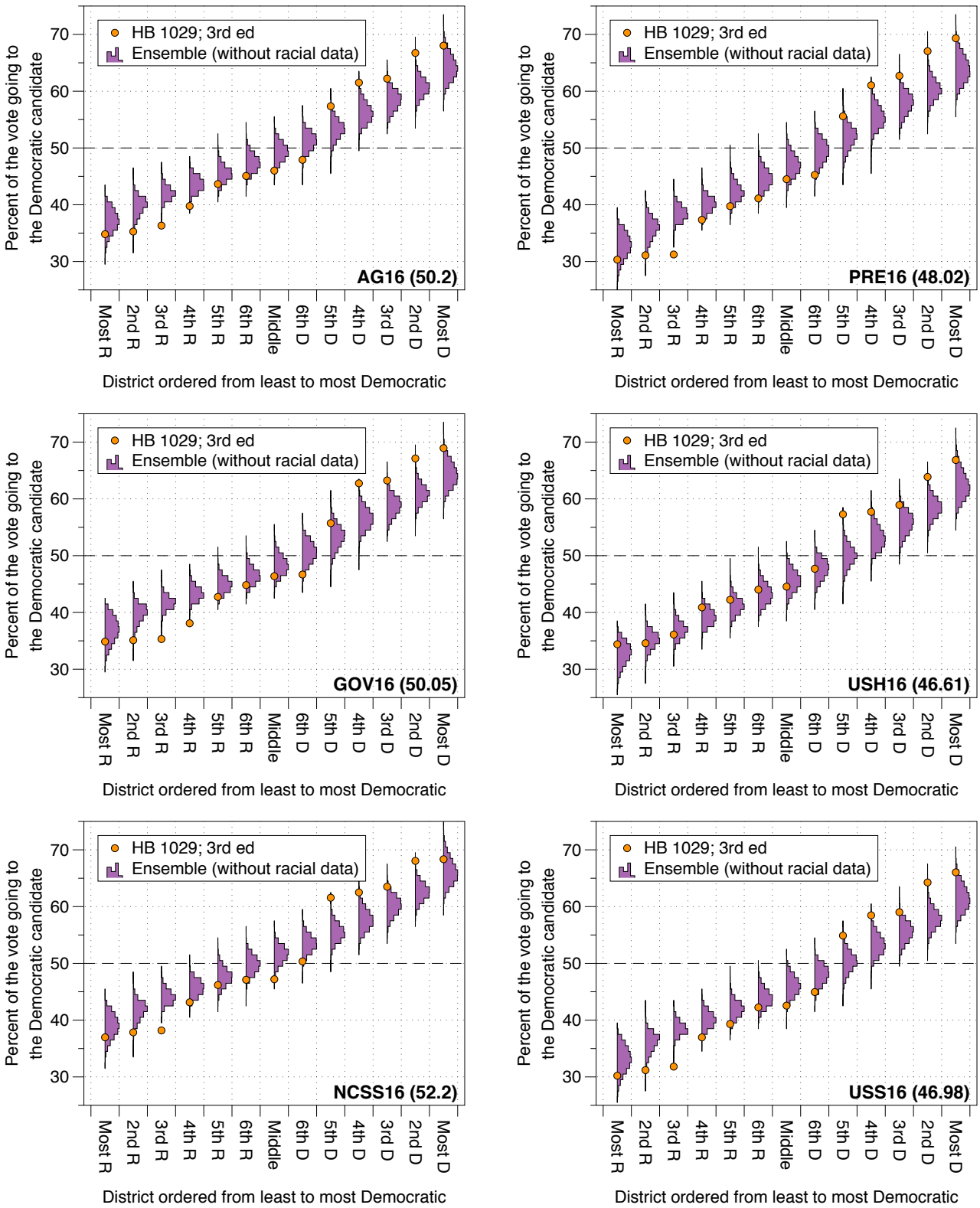


FIGURE 1. Ranked Marginals for 2016 elections for the ensemble which includes no racial data. The proposed 2019 remedial map is marked orange for comparison.

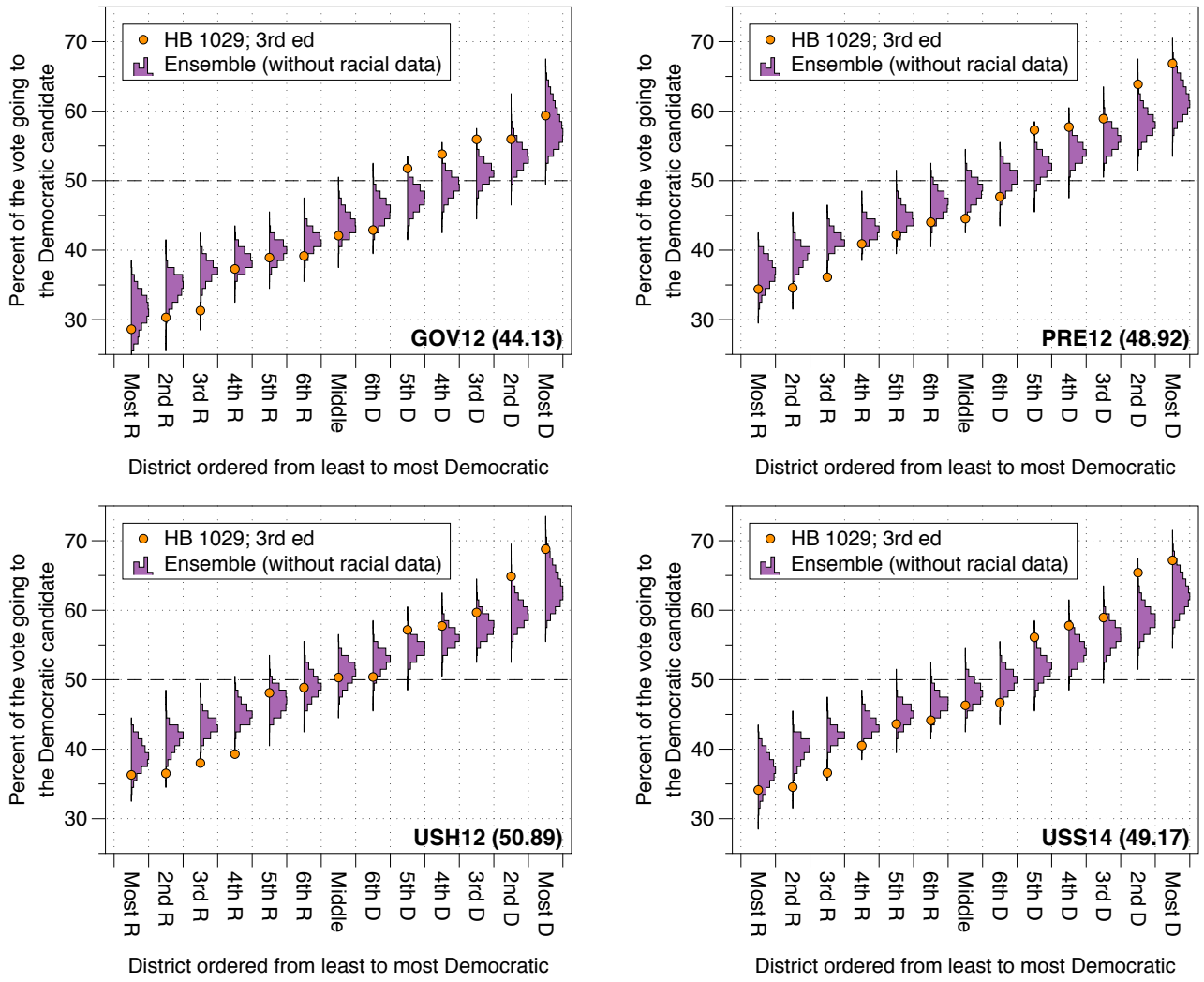


FIGURE 2. Ranked Marginals for 2012 and 2014 elections for the ensemble which includes no racial data. The proposed 2019 remedial map is marked orange for comparison.

Race	Year	# maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan	% maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan
ATTORNEY GENERAL	2016	0	0%
GOVERNOR	2012	1	.004%
GOVERNOR	2016	0	0%
SECRETARY OF STATE	2016	0	0%
PRESIDENT	2012	0	0%
PRESIDENT	2016	0	0%
US HOUSE	2012	12	.05%
US HOUSE	2016	0	0%
US SENATE	2014	0	0%
US SENATE	2016	0	0%

TABLE 1. Comparison with new ensemble which ignores race: For each election the number of maps with more Democrats on average in the five most democratic districts is calculated.

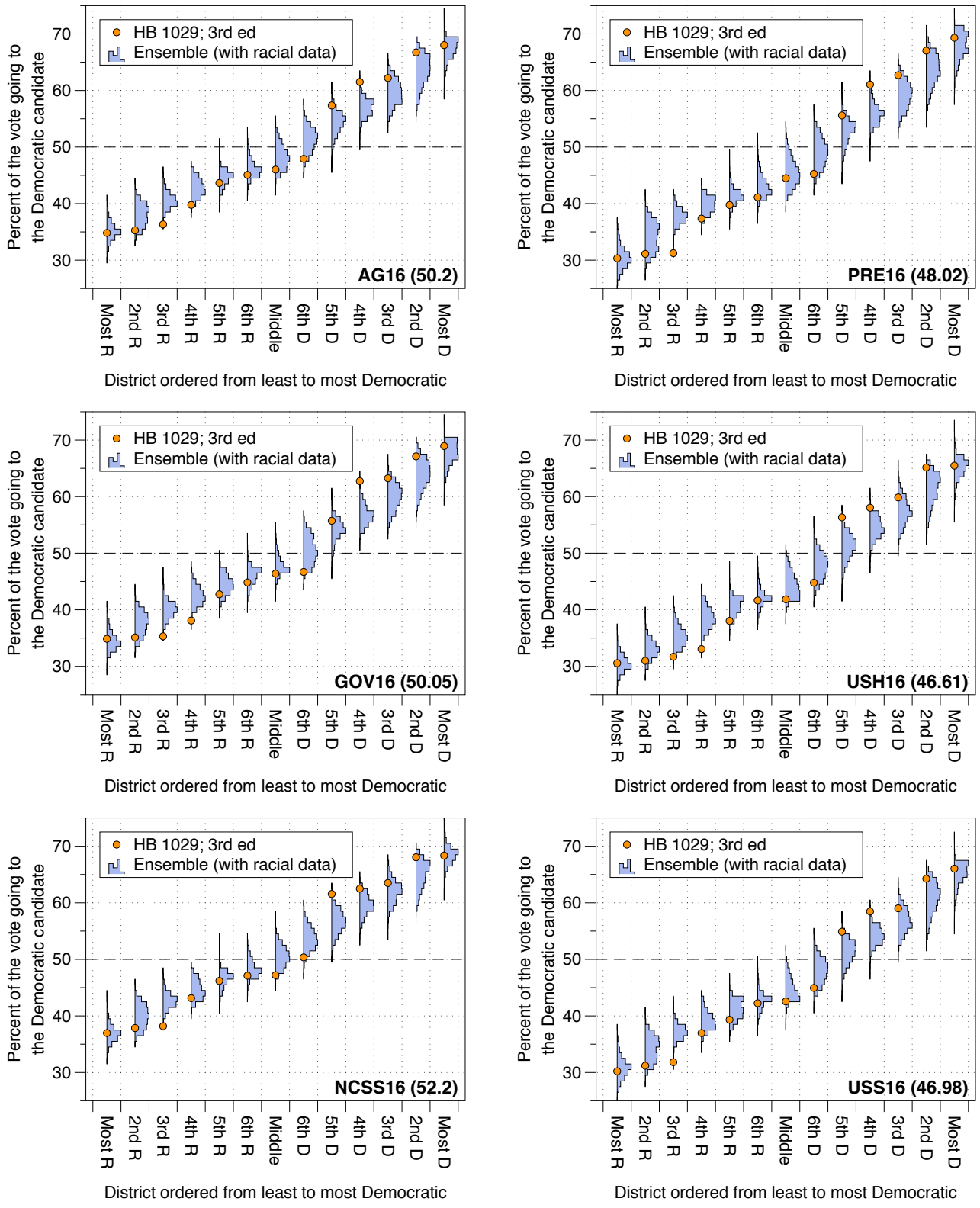


FIGURE 3. Ranked Marginals for 2016 elections for the ensemble which includes racial data. The proposed 2019 remedial map is marked orange for comparison.

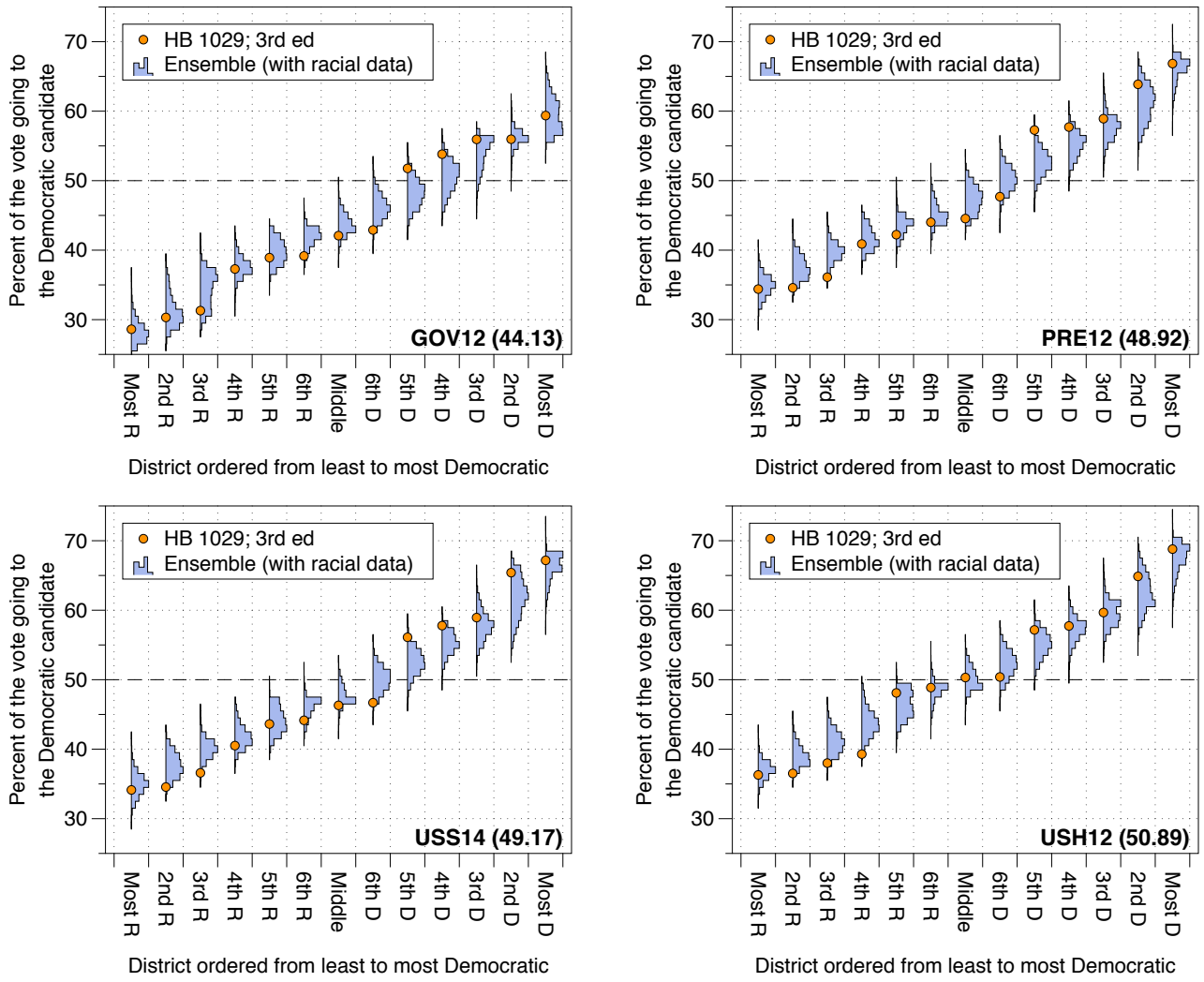


FIGURE 4. Ranked Marginals for 2012 and 2014 elections for the ensemble which includes racial data. The proposed 2019 remedial map is marked orange for comparison.

Race	Year	# maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan	% maps in ensemble w/ more Dems in top 5 Dem. Dist. than Remedial Plan
ATTORNEY GENERAL	2016	6	.024%
GOVERNOR	2012	528	2.2%
GOVERNOR	2016	5	.02%
NC SECRETARY OF STATE	2016	6	.024%
PRESIDENT	2012	22	.09%
PRESIDENT	2016	4	.016%
US HOUSE	2012	2976	12.1%
US HOUSE	2016	7	.028%
US SENATE	2014	20	.082%
US SENATE	2016	6	.024%

TABLE 2. Comparison with ensemble from Rucho which considers race: For each election, we calculate the number of maps with more Democrats on average in the five most democratic district.

EXHIBIT B

STATE OF NORTH CAROLINA

COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
No. 19-cv-012667

REBECCA HARPER, *et al.*,

Plaintiffs,

v.

DAVID LEWIS, IN HIS OFFICIAL CAPACITY AS SENIOR CHAIRMAN OF THE HOUSE SELECT COMMITTEE ON REDISTRICTING, *et al.*,

Defendants.

DECLARATION OF DR. JOWEI CHEN

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. For this declaration, Plaintiffs' counsel asked me to analyze the HB 1029 remedial plan for North Carolina's congressional districts (the "Remedial Plan"), as passed on November 15, 2019. Specifically, plaintiffs' counsel asked me to compare the partisan attributes of the Remedial Plan to my computer-simulated plans in Simulation Set 1 and Set 2, using only the results of the 2016 Attorney General election to measure the partisanship of districts.

3. In Figure 1, I directly compare the partisan distribution of districts in the Remedial Plan to the partisan distribution of districts in the computer-simulated plans in Simulation Set 1 when using the 2016 Attorney General results. In Figure 2, I perform the same analysis using Simulation Set 2 rather than Simulation Set 1.

4. These figures show that, when using the 2016 Attorney General election results, the following districts under the Remedial Plan are partisan outliers when compared to their 1,000 computer-simulated counterparts in both Simulation Sets 1 and 2, using a standard

threshold test of 95% for statistical significance: CD-1, CD-2, CD-3, CD-4, CD-5, CD-6, CD-7, CD-8, CD-11. In addition, CD-9 is a statistical outlier at the 95% level when compared to Simulation Set 2 and is very nearly a statistical outlier at the 95% level when compared to Simulation Set 1.

5. Figure 1 also shows that the most common outcomes across Simulation Set 1 under the 2016 Attorney General election results are six or seven Democratic-leaning districts. In contrast, the Remedial Plan produces just five Democratic-leaning districts under the 2016 Attorney General results. The Remedial Plan therefore produces 1-2 fewer Democratic-leaning districts under the electoral environment of the 2016 Attorney General race than most of the computer-simulated plans that adhere to the non-partisan criteria within the 2019 Adopted Criteria.

Figure 1: Simulation Set 1:
Districts' Democratic Vote Share Measured Using the 2016 Attorney General Election

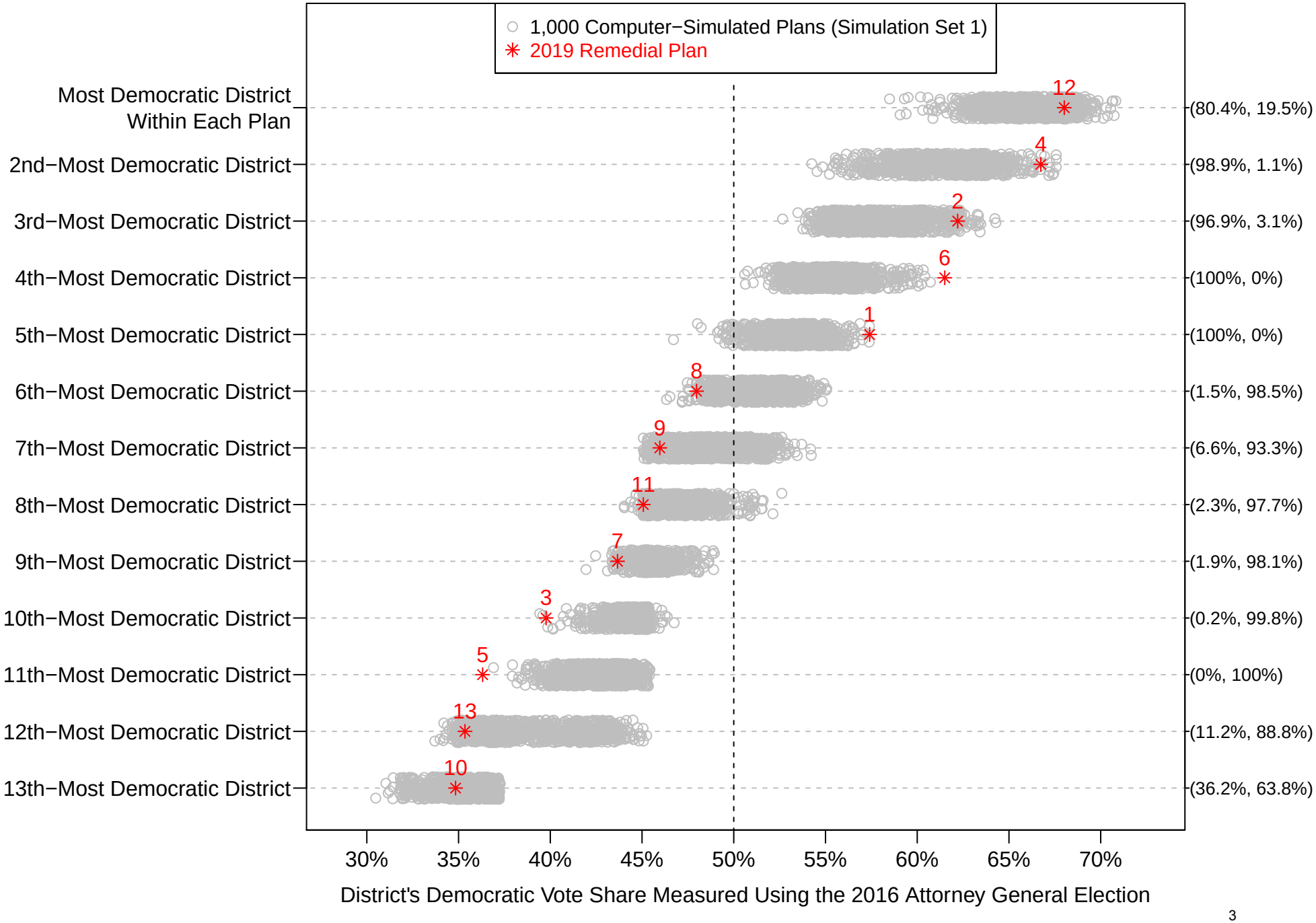
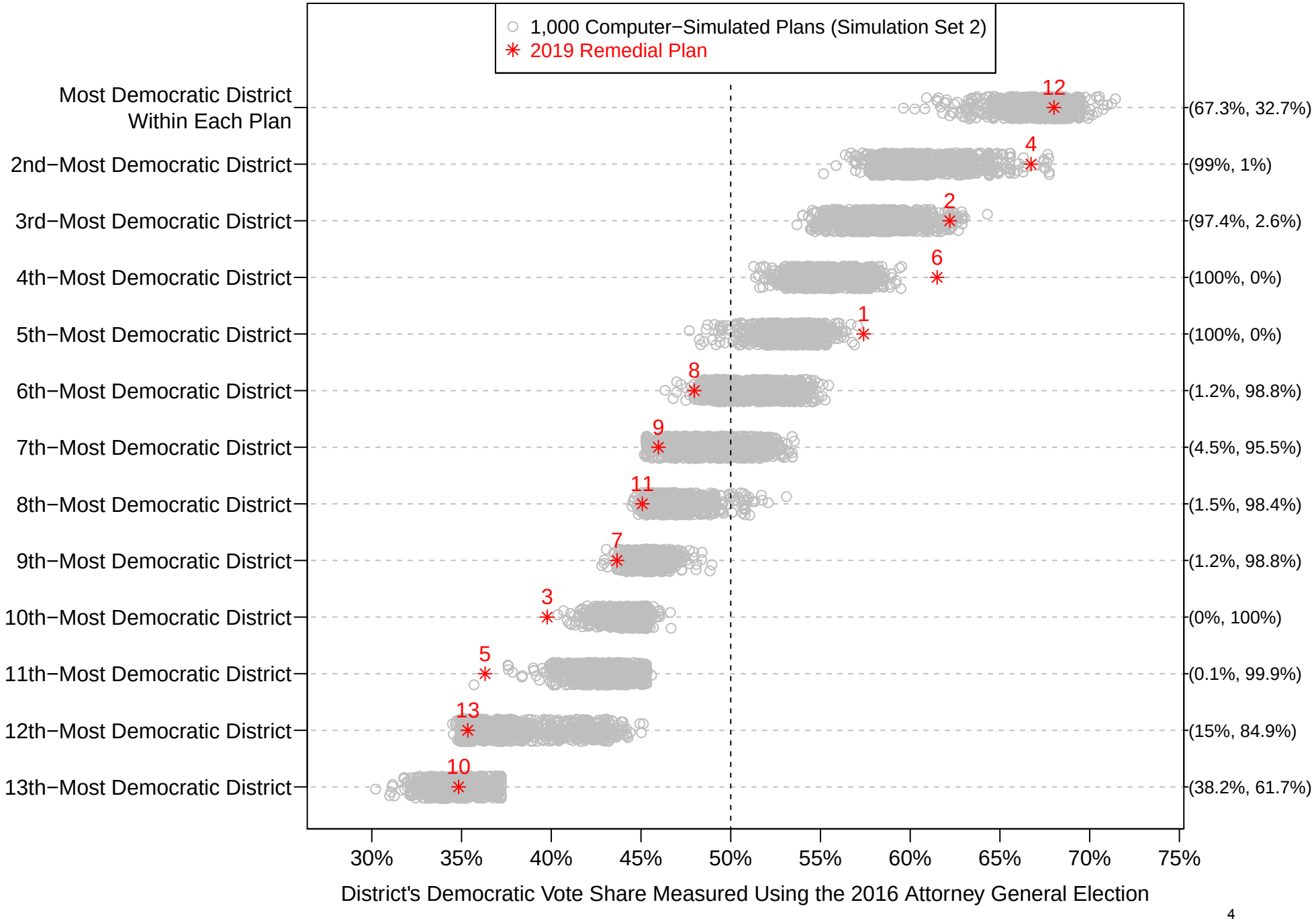
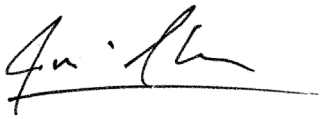


Figure 2: Simulation Set 2:
Districts' Democratic Vote Share Measured Using the 2016 Attorney General Election



I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

This 26th day of November, 2019.



Dr. Jowei Chen

EXHIBIT C

Preliminary Summary of Analysis and Modification of Plans A and B

Since each panel of judges produced a congressional plan on June 10, I have done the following:

1. I have analyzed the plans to determine whether they comply with the Voting Rights Act of 1965.
2. I have made adjustments to each plan designed to reduce doubt of their VRA compliance.
3. I have altered each original plan to achieve the minimum possible deviation between the districts – zeroed them out.

VRA Analysis. The VRA analysis was designed to determine whether the plan provided minority voters an equal opportunity with other voters to elect candidates of their choice. That is the goal of the Voting Rights Act. To that end, I looked at the following:

- The black percentage of the voting age population in each district.
- The black percentage of total voter registration in each district.
- The black percentage of Democratic registered voters in each district.
- The success of the Democratic nominee in six recent elections. In two of those elections the Democratic nominee was black him- or herself.

The purpose the final two items on the list was to see whether black voters could control the Democratic primary and, if so, whether the Democratic nominee can be expected to win, even if that nominee is black.

Each plan has at least two districts that arguably would give black voters the opportunity to elect candidates of their choice. Not surprisingly, in each plan a district in northeastern NC and a district in Mecklenburg County fit that description. In addition, both plans have other districts where black voters appear to have opportunities to at least influence the outcome.

The Mecklenburg districts in the two plans are very similar in their ability to elect candidates of black voters' choice.

	Black % of VAP	Black % of VR	Black % of Dem VR
Plan A Meck district	32.54%	33.07%	58.15%
Plan B Meck district	32.33%	32.79%	57.71%

Both plans' Mecklenburg districts show strong support for Democratic nominees regardless of race.

The northeastern districts in the two plans, however, are less similar. The Group B plan has a northeastern district that appears significantly more likely to elect candidates of black voters' choice.

	Black % of VAP	Black % of VR	Black % of Dem VR
Plan A NE district	34.20%	34.19%	52.57%

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Plan B NE district	39.60%	40.67%	57.71%

The northeastern district in Plan B gives more reliable support to Democratic nominees than does the northeastern district of Plan A.

VRA Modifications. The modifications I made to the two plans were focused on enhancing black voting strength in their northeastern and Mecklenburg districts. The most noticeable difference the modifications made were in the northeastern district of Plan A, increasing the black percentages by about 4 points. The difference was less with Plan B or with the Mecklenburg district of either plan.

	Black % of VAP	Black % of VR	Black % of Dem VR
Plan A Mod 1 NE dist	37.29%	37.60%	56.09%
Plan A Mod 2 NE dist	38.18%	38.69%	57.20%
Plan B Mod 1 NE dist	40.19%	41.17%	59.92%
Plan B Mod 2 NE dist	40.96%	41.95%	60.32%

The Balancing of One Person One Vote and County Splitting. Group A and Group B took a different approach to balancing population equality of districts with the splitting of counties.

Group A made the deliberate decision to split only Mecklenburg and Wake counties, the only 2 that have more people than the ideal congressional district. They kept the districts within 2% deviation.

Group B did not insist on keeping all but two counties whole. They strove instead to keep the deviation within 1%. They split nine counties.

In my VRA modifications, I did not split additional counties in either of the Plan A changes. I did not split additional counties in Modification 1 of Plan B. I split one additional county in Modification 2 of Plan B, so that Modification 2 split 10 counties instead of 9.

I did not split any VTDs (precincts) in any of the modifications.

Zeroing Out the Plans. I went through the exercise of reducing the plans' population deviations to zero. That required splitting 12 counties and 12 VTDs. That is the same number of precincts and counties split in the Congressional Plan enacted by the General Assembly in 2016 after the *Harris v McCrory* decision. The zeroed-out Plan B map looks little different from the original. Zeroing out had more of an effect on Plan A – shifting two small counties – though to me it does not appear less compact. The effect of zeroing out both plans on the racial and election percentages was, in my judgment, negligible.

I have not zeroed out the modifications.