SOUTHERN COALITION
for SOCIAL JUSTICE

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October 22, 2023

VIA ELECTRONIC MAIL

TO: Senator Phil Berger
                President Pro Tempore, North Carolina Senate
        Representative Timothy Moore
                Speaker, North Carolina House of Representatives
        Members, Senate Standing Committee on Redistricting and Elections
        Members, House Standing Committee on Redistricting

CC: Senator Dan Blue,
                Senate Democratic Leader
        Representative Robert T. Reives, II
                House Democratic Leader

Re: Racially Polarized Voting in North Carolina and its Effect on the 2023 Redistricting Plans

Dear Sirs:

We write in response to the invitation of Chairs Hise and Hall, in the Senate and House Redistricting Committee meetings on October 19, 2023, to bring forward information concerning racially polarized voting in North Carolina that would compel the drawing of districts under Section 2 of the Voting Rights Act ("VRA"). We took the invitation of both the Senate and House Redistricting Committees seriously and in good faith, and offer the enclosed analysis accordingly.

As an initial point, our preliminary analysis indicates that it is possible to draw reasonably configured *Gingles* demonstrative districts[1] in many areas throughout North Carolina with high concentrations of Black voters. Because it is possible to draw many such districts throughout the state, these areas of North Carolina must be studied as part of the redistricting process to determine if racially polarized voting is preventing minority voters from electing

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[1] A *Gingles* demonstrative district is a reasonably configured district that contains over 50% of minority voting age population. Such a district satisfies the first precondition laid out in *Thornburg v. Gingles*, 478 U.S. 30 (1986), which articulates the standard for evaluating vote dilution under Section 2 of the VRA.

candidates of their choice. We again urge, as a group of more than 20 civil society organizations did in our October 3 Letter,[2] that the General Assembly change course and conduct a fulsome, robust racially polarized voting analysis in these areas of North Carolina. This is the only way the General Assembly can be sure to fulfill its obligations to comply with the VRA and protect minority voters from unlawful vote dilution everywhere in the state— obligations the U.S. Supreme Court reaffirmed in its decision in *Allen v. Milligan*[3] from June of this year.

The *Gingles* framework lays out three preconditions to establishing VRA liability in a redistricting plan. *First*, "the minority group must be able to demonstrate that it is sufficiently large and compact to constitute a majority in a single-member district."[4] *Second*, "the minority group must be able to show that it is politically cohesive"[5] – that is to say, that the minority group typically votes for the same candidates. *Third*, "the minority must be able to demonstrate that the white majority votes sufficiently as a bloc to enable it … usually to defeat the minority's preferred candidate."[6] If these preconditions are established, the finder of fact must examine the totality of the circumstances to examine whether the vote dilution established by the preconditions is the result of discrimination. Importantly, the VRA requires an "'intensely local appraisal' of the electoral mechanism at issue[.]"[7] Thus, sweeping assertions that there exists no racially polarized voting in the state as whole, based upon erroneous and, at the very least, outdated data, falls short of what the VRA requires.

Our preliminary analysis of the maps released on October 18th indicates that the North Carolina legislature will fall short of the VRA's requirements without further analysis. For example, <u>***at a minimum***</u>***, it is readily apparent that the State Senate plan contained in Senate Bill 758 would unlawfully dilute the voting strength of Black voters in northeast North Carolina in Senate Districts 1 & 2, in violation of the VRA***.

The northeastern-most Senate districts proposed in Senate Bill 758, labeled as Senate Districts 1 & 2, both prevent Black voters from electing a candidate of their choice, despite both having sizable Black populations. Attached to this letter as **Appendix A** is a racially polarized voting study concerning electoral outcomes across a variety of election environments in Proposed Senate Districts 1 & 2 (the corresponding districts in the current State Senate plan). This racially polarized voting study demonstrates that Black voters in this area of North Carolina vote cohesively, that Black voters and white voters in this area of North Carolina consistently prefer different candidates, and that white voters typically defeat Black voters in electing candidates in the Proposed Senate Districts 1 & 2. In short, **Appendix A** confirms

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[2] Available at https://southerncoalition.org/wp-content/uploads/2023/10/Letter-2023-North-Carolina-Redraw.pdf.

[3] 143 S. Ct. 1487 (2023).

[4] *Gingles*, 478 U.S. at 50.

[5] *Id.* at 51.

[6] *Id.*

[7] *Milligan*, 143 S. Ct. at 1503 (citing *Gingles*, 478 U.S. at 79).

that the second and third *Gingles* preconditions are satisfied in Proposed Senate Districts 1 & 2.

As discussed above, it is possible to draw reasonably configured *Gingles* demonstrative districts in several areas of North Carolina, each of which would satisfy the first *Gingles* precondition. This includes the areas covered by Proposed Senate Districts 1 & 2. When combined with the analysis laid out in **Appendix A**, this shows that all three *Gingles* preconditions are established in the area covered by Proposed Senate Districts 1 & 2, and when combined with North Carolina's pervasive history of discrimination in voting, makes clear that **enacting Proposed Senate Districts 1 & 2 would violate the VRA**.

Because the *Gingles* preconditions are established, the General Assembly has a clear obligation to protect Black voters from vote dilution, by configuring VRA-compliant districts **before** the county clusters. As the North Carolina Supreme Court held two decades ago in *Stephenson v. Bartlett*[8]: "[T]o ensure full compliance with federal law, legislative districts required by the VRA shall be formed *prior to* creation of non-VRA districts"[9] and those districts must be drawn to give minority voters an opportunity to elect a representative of their choice.

Furthermore, the U.S. Supreme Court has made clear that the General Assembly can comply with the VRA by drawing Black opportunity districts that are either majority-minority districts or, where possible, functioning "crossover districts" that are below 50%+ Black Voting Age Population but still provide Black voters with an equal opportunity to elect a candidate of their choice. In other words, "Section 2 allows States to choose their own method of complying with the Voting Rights Act, which may include drawing crossover districts."[10] This has been confirmed as an appropriate remedy in recent VRA cases, particularly where a crossover district better adheres to traditional redistricting criteria. *See, e.g.*, Remedial Order, *Allen v. Milligan,* Case. No. 2:21-cv-01530 at Dkt. 311 at 6 (Oct. 5, 2023) (holding that a non-majority-minority district remedied a VRA violation).[11]

The General Assembly has just such a choice available to it in the alternative cluster configurations for this area that the General Assembly used in the current Senate Districts 1 & 3 when enacting the 2022 remedial plan.[12] Current Senate Districts 1 & 3 involve the exact same counties as Proposed Senate Districts 1 & 2, and thus choosing between them **affects no other districts proposed in Senate Bill 758**. And Current Senate Districts 1 & 3 would provide Black voters in this area with an opportunity to elect a candidate of their choice. Also contained in **Appendix A** is a racially polarized voting study examining elections in Current

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[8] 355 N.C. 354 (2002).

[9] *Id.* at 383.

[10] *Bartlett v. Strickland*, 556 U.S. 1, 23 (2009).

[11] Available at https://southerncoalition.org/wp-content/uploads/2023/10/10.5.23-Milligan-Remedial-Order-1.pdf.

[12] This can be seen in the cluster choices made available to the General Assembly, available at https://webservices.ncleg.gov/ViewDocSiteFile/38491.

Senate Districts 1 & 3. This study confirms again that Black voters and white voters in this area each vote cohesively and that they prefer different candidates. But contrary to Proposed Senate Districts 1 & 2, Black voters are not always defeated by white voters in Current Senate Districts 1 & 3. Instead, Current Senate District 3 gives Black voters a reasonable opportunity to elect a candidate of their choice.

As **Appendix A** demonstrates, Black voters would not have won in every single electoral environment in Current Senate District 3, but Black voters are provided a reasonable, equal opportunity to elect candidates of their choosing. Current Senate Districts 1 & 3 accomplished this outcome while respecting the *Stephenson* clusters ***just as well as the Proposed Districts***.

The choice between the Proposed Senate Districts 1 & 2 and the Current Senate Districts 1 & 3 in northeast North Carolina should be a familiar one to the General Assembly. The General Assembly was faced with ***precisely*** the same choice in the 2022 remedial redistricting process. The 2021 Enacted Senate plan used the configuration found in Proposed Senate Districts 1 & 2; after that plan was struck down by the North Carolina Supreme Court, the General Assembly considered how to modify the Senate map to bring it into compliance with the court's order. Initially, the General Assembly did not plan to change this county grouping; however, after SCSJ, on behalf of Common Cause, pointed out the obvious harm to Black voting power in the General Assembly's choice of grouping, the General Assembly switched course and enacted Current Senate Districts 1 & 3.[13] When presented with evidence of this threatened vote dilution in 2022, the General Assembly made the right decision: to fix the problem. We ask that the General Assembly make the same choice now, and protect Black voters as required by the VRA.

In closing, we note the extraordinary posture in which this limited analysis is offered. This is a remarkably compressed timeline for evaluating even a single statewide redistricting plan, let alone the four different plans that are currently under consideration in the General Assembly. The General Assembly released initial draft maps on October 18th, and per the Chairs' representations in committee the following day, intends to have passed State House, State Senate, and Congressional plans into law by October 25th.

This week-long period is not nearly enough time for the public to digest and analyze the maps, let alone propose changes. The General Assembly has long been aware that they would likely re-draw redistricting maps,[14] and instead of conducting a full slate of public hearings and working to incorporate public input through a deliberate, careful process, you have instead chosen to go from an unveiling of the maps to their adoption in under a week. While the time to conduct an open process without delaying the primary has come and gone, we note

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[13] Available at https://southerncoalition.org/wp-content/uploads/2023/10/2022.02.11-VRA-Required-Remedial-Districts-in-State-Legislative-Maps-1.pdf, at page 9 ("any constitutional remedial map will have to utilize the alternative Senate cluster "Z1" for northeast North Carolina (one that protects the ability of Black voters to continue electing their candidate of choice)").

[14] http://speakermoore.com/nc-supreme-court-delivers-rulings-reinstate-voter-id-affirm-legislatures-redistricting-authority-end-unconstitutional-felon-voting/.

that any shortcomings in the 2023 redistricting process flow from this decision, and we urge you not to repeat it.

The fact that we write today concerning two specific Senate districts **cannot** and **should not** be read as an indication that there are no VRA concerns elsewhere in the maps under consideration; instead, the fact that a clear, impending violation could be identified even on this truncated timeline should be understood as a warning sign. Under the circumstances, these maps and the process by which they are being considered run an alarming, unjustifiable risk of violating the VRA.

We have also provided preliminary RPV analysis in **Appendix B** for counties with high Black Voting Age concentrations. Even this preliminary analysis, provided in the extremely limited time period which you have afforded for considering this information, still shows **extreme racially polarized voting in North Carolina's Black Belt.** The unlawful vote dilution in the geographic area discussed in this letter, as well as the potential for such dilution in areas across North Carolina, should be examined for all of the redistricting plans under current consideration by the General Assembly.

We hope the General Assembly will utilize this information and perform additional analysis so that it follows well-established law and ensures that minority voters in North Carolina have an equal opportunity to elect candidates of their choice. We are further hopeful that, in light of the recent guidance provided in *Milligan,* the General Assembly will not "misconstrue" what the law requires and take license to pack Black voters throughout the state, diminishing their voting influence overall, as has occurred in the past. *Covington v. North Carolina*, 316 F.R.D. 117, 168 (M.D.N.C.), *summary affirmed*, 137 S. Ct. 2211 (2017).

We would be happy to provide any additional information that may be helpful in this process.

Respectfully,

Hilary Harris Klein
Jeff Loperfido
Chris Shenton
Lily Talerman

Counsel, Southern Coalition for Social Justice

Expert Memo of Dr. Kassra A.R. Oskooii

Summary of Racially Polarized Voting and Electoral Performance Analyses

North Carolina Senate Legislative Districts

October 22, 2023

I. Background and Qualifications

1. I am a tenured, Associate Professor and Provost Teaching Fellow in the department of Political Science and International Relations at the University of Delaware ("UD"), having joined the faculty in 2016 as an Assistant Professor. I am also an affiliated faculty member at UD's Data Science Institute, Master of Science in Data Science, Center for Political Communication, and Center for the Study of Diversity.

2. My research and teaching focuses on American political behavior, political methodology, political psychology, political representation, voting rights, and redistricting. I received my Ph.D. in Political Science, specializing in American politics, minority and race politics, and political methodology, from the University of Washington in Seattle, Washington in 2016. Prior to that, I received my Master's Degree in Political Science at the University of Washington and received a political methodology field certificate from the Center for Statistics & the Social Sciences in 2013. I received my Bachelor of Arts in Political Science in 2008 from the University of Washington, with minors in Human Rights and Law, Societies, and Justice. My research has appeared in numerous leading peer-reviewed, social science journals, including *Sociological Methods and Research*, *Political Behavior*, *Public Opinion Quarterly*, *Political Psychology*, *British Journal of Political Science*, *Electoral Studies*, *Perspectives on Politics*, *Urban Affairs Review*, *State Politics and Policy Quarterly*, and *Journal of Public Policy*.

3. Of relevance to this report, in 2022 I co-authored a peer-reviewed article in the journal *Sociological Methods and Research* titled "Estimating Candidate Support in Voting Rights Act Cases: Comparing Iterative EI & EI-RxC Methods."[1] I also co-developed a software package called "eiCompare," which is a reproducible code that quantifies, compares, and represents racially polarized voting data. The publication describing this package was accepted in the peer-reviewed *The R Journal* in 2016, in a paper titled "eiCompare: Comparing Ecological Inference Estimates across EI and EI:RxC."[2] This package enables social scientists to use aggregate-level election data to predict voting behavior by racial or ethnic group

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[1] Available at https://journals.sagepub.com/doi/full/10.1177/0049124119852394.
[2] Available at https://journal.r-project.org/archive/2016/RJ-2016-035/RJ-2016-035.pdf.

affiliations, and to my knowledge it has been cited in academic papers and in court filings.[3]

4. As a voting rights and redistricting expert, I have over a decade of experience in examining elections and maps in jurisdictions in states such as California, Florida, Georgia, Maryland, New York, Texas, and Washington. I have also have been retained in redistricting and voting rights related cases such as *Dickinson Bay Area Branch NAACP v. Galveston County, Texas*, No. 3:22-cv-117-JVB (S.D. Tex.) (deposed and testified), *Baltimore County Branch of the NAACP v. Baltimore County, Maryland*, No. 1:21-cv-03232-LKG (D. Md.), *Common Cause Florida v. Lee*, No. 4:22-cv-00109-AW-MAF (N.D. Fla.), *Common Cause Florida v. Byrd*, No. 4:22-cv-00109-AW-MAF (N.D. Fla.) (deposed), *Reyes v. Chilton*, No. 4:21-cv-05075-MKD (E.D. Wash.) (deposed), *Caroline County Branch of the NAACP v. Town of Federalsburg*, Civ. Action No. 23-SAG-00484 (D. Md. 2023), and *Coca v. City of Dodge City, et al.*, Case No. 6:22-cv-01274 (D. Kan. 2022) (deposed).

5. As an expert consultant in the area of voting rights and redistricting, I have also advised various organizations such as the American Civil Liberties Union (ACLU), National Association for the Advancement of Colored People (NAACP), Southern Poverty Law Center (SPLC), Southern Coalition for Social Justice (SCSJ), and UCLA's Voting Rights Project. I have also advised the State of Maryland on its 2021 Congressional and Legislative redistricting plans. Finally, I have examined and redrawn the 2022 school board district boundaries of the Roswell Independent School District in the state of New Mexico. More information about my qualifications and expert witness and consulting background, including a full list of my peer-reviewed publications, is included on my Curriculum Vitae, included with this Memo.

6. References to documents and data I include in this Memo are meant to provide examples of supporting information, but are not intended to be comprehensive or exhaustive lists of all known support. The information in this Memo is based upon information that has been made available to me or

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[3] For example, the Southern District of New York accepted my colleague Dr. Matthew Barretto's use of the eiCompare software in the matter *NAACP v. E. Ramapo Cent. Sch. Dist.*, 462 F. Supp. 3d 369, 383 (S.D.N.Y. 2020) ("Through a statistical package and method called eiCompare, Dr. Barreto then used both King's EI and RxC to estimate voting preference by race and compared the results").

known to me to date. My work in this matter is ongoing, and I reserve the right to modify or supplement any conclusions as additional information is made available or as I perform further analysis.

II. Scope of Inquiry

7. I was asked by Southern Coalition for Social Justice to examine whether Racially Polarized Voting (RPV) patterns between Non-Hispanic White and Non-Hispanic Black voters exists in (a) Senate Legislative Districts (SLDs) 1 and 3 of the 2022 Enacted SLD map and (b) SLDs 1 and 2 of the 2023 Proposed SLD map. Additionally, I was asked to examine the extent to which Black voters in each SLD have the opportunity to elect their candidates of choice.

III.   Executive Summary

8. My findings regarding RPV patterns are based on a comprehensive list of contested general elections held in years 2020 and 2022. To examine the presence or absence of RPV, I relied on two well-established and rigorous statistical methods to estimate voting patterns by race: the Iterative Ecological Inference ("EI") method and the EI Rows by Columns ("RxC") method. The statistical methods I rely on to estimate vote choice by race are agnostic as to *why* voters support or oppose different candidates; the analysis simply shows *which* candidates different groups of voters prefer.

9. I also conducted electoral performance analyses across the different SLD boundaries to determine whether Non-Hispanic Whites vote as a bloc to usually defeat Non-Hispanic Black candidates of choice. A performance analysis reconstructs previous election results based on enacted and proposed SLD boundaries to determine whether the amalgamation of the voting precincts will elect or defeat Black-preferred candidates.

10. Overall, the accumulated evidence leads me to conclude the following:

   a. By using two ecological inference methods, RxC and iterative EI, which are the standard methods of measuring RPV, and applying these to past electoral results paired with voter demographic data, I have identified definitive evidence of RPV patterns in SLDs 1 and 3 of the enacted map and SLDs 1 and 2 of the proposed map.

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b. Specifically, Black voters in each SLD vote cohesively such that a large majority of them favor the same candidates across 27 general election contests.

c. White voters in each SLD engage in bloc voting such that a large majority of the White voters favor their own set of candidates. The candidates favored by a large majority of White voters in each SLD are different than, and ran against, those favored by the Black voters.

d. Electoral performance results show that White voters are able to vote in sufficient quantity to defeat any of the Black-preferred candidates in SLD 1 and 2 of the 2023 proposed map and SLD 1 of the 2022 enacted Map. However, the evidence suggests that White voters are not able to usually defeat Black-Preferred candidates in SLD 3 of the 2022 enacted map.

IV. Data and Analytical Approach

A. Election Data

11. For this inquiry, I examined every single contested[4] statewide general election help in years 2020 and 2022. In total, I examined 27 contested Federal, Council of State, and Judicial elections.

12. I downloaded precinct-level/sorted election results from the North Carolina State Board of Elections website.[5]

B. Voter Demographic Data

13. I downloaded precinct-level voter demographic data by race and ethnicity for the 2020 and 2022 general elections from the North Carolina State Board of Elections website.[6]

C. Precinct and SLD Map Boundaries

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[4] Contested elections in this context are defined as elections in which at least two candidates run against each other. An election must be contested to use it to examine RPV patterns.
[5] Election Data Source: https://dl.ncsbe.gov/?prefix=ENRS/2022_11_08/results_precinct_sort/ and https://dl.ncsbe.gov/?prefix=ENRS/2020_11_03/results_precinct_sort/
[6] Voter Demographic Data Source: https://dl.ncsbe.gov/?prefix=ENRS/2022_11_08/ and https://dl.ncsbe.gov/?prefix=ENRS/2020_11_03/

14. Precinct shapefiles for years 2020 and 2022 were obtained from North Carolina State Board of Elections website.[7] I also supplemented this data with Redistricting Hub's "North Carolina 2022 General Election Precinct-Level Results and Boundaries" shapefile.[8]

15. I downloaded the 2022 Enacted SLD boundaries and the 2023 Proposed SLD boundaries from the General Assembly's website.

D. RPV Methodology

16. I use two state of the art ecological inference methods[9] to estimate the vote choice of Non-Hispanic White and Non-Hispanic Black voters in each of the SLD boundaries identified above.

17. The first method is commonly referred to as King's Iterative EI,[10] often preferred when there are two racial groups and two candidates. The second—and more computationally intensive method—is called EI Rows by Columns (RxC),[11] which allows multiple rows (candidates) and multiple columns (racial groups) to be estimated simultaneously in one model (rather than iteratively). Both versions of EI operate similarly in that the following VTD/Precinct-level[12] data is required to estimate vote choice by racial or ethnic groups: (1) the percentage of each racial and ethnic group under consideration; (2) the percentage of votes received by each candidate; and (3) the total votes cast between the candidates. A comprehensive assessment of the two methods using VTD/Precinct-level data ranging from two

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[7] Precinct Shapefiles Source: https://dl.ncsbe.gov/?prefix=PrecinctMaps/

[8] Source: https://redistrictingdatahub.org/dataset/north-carolina-2022-general-election-precinct-level-results-and-boundaries/

[9] "Ecological inference is the process of using aggregate (*i.e.*, ecological) data to infer discrete individual-level relationships of interest when individual-level data are not available. Ecological inferences are required in political science research when individual-level surveys are unavailable (*e.g.*, local or comparative electoral politics), unreliable (racial politics), insufficient (political geography), or infeasible (political history). They are also required in public policy (*e.g.*, for applying the Voting Rights Act) and other academic disciplines ranging from epidemiology and marketing to sociology and quantitative history." King, G. and Roberts, M., 2012, *EI: a (n R) program for ecological inference*, Harvard University, at 2.

[10] King, G., 2013, *A Solution to the Ecological Inference Problem*, Princeton University Press.

[11] Rosen, O., Jiang, W., King, G. and Tanner, M.A., 2001, *Bayesian and frequentist inference for ecological inference: The R × C case*, Statistica Neerlandica, 55(2), at 134-156.

[12] VTDs are the U.S. Census geographic equivalent of county election precincts. They are created for the purposes of relating U.S. Census data to election precinct data.

candidates and two racial groups to multiple candidates and up to four racial groups suggests that they produce substantively similar findings.[13]

18. To estimate vote choice with each EI method, I relied on the "eiCompare" R software package,[14] which includes the necessary functions to estimate vote choice by race with both RxC and iterative EI.

19. In general, RPV occurs when a minority racial group or groups (*e.g.*, Black voters) favor candidates (termed "candidates of choice") that are disfavored by the majority racial group (*e.g.*, White voters). If a majority of voters from both the minority and majority demographic groups vote for the same candidate in a contest, RPV is usually not present in that contest.

20. In situations where RPV is present, majority voters, for example, White voters, may be able to prevent minority voters, for instance, Black voters, from electing their candidates of choice by voting as a bloc against minority voters' preferred candidates.

21. An electoral performance analysis[15] is conducted to determine if RPV in a jurisdiction usually results in blocking minority voters from electing their candidates of choice.

E. Electoral Performance Methodology

22. An electoral performance analysis is a simple, yet effective approach to examine the success (or failure) of different candidates under different map/district boundaries.

23. To conduct a performance analysis, one does not need to rely on any estimation methods. All that is required is to identify the VTDs/Precincts that fall inside the electoral jurisdiction of interest (*i.e.*, SLD 1 boundaries of the 2022 Enacted and 2023 Proposed maps) and then aggregate the candidate votes in the subject jurisdiction. The aggregated vote total for each

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[13] Barreto, M., Collingwood, L., Garcia-Rios, S. and Oskooii, K.A., 2022, *Estimating candidate support in Voting Rights Act Cases: Comparing iterative EI and EI-R×C Methods*, Sociological Methods & Research, 51(1), at 271-304.

[14] Collingwood, L., Oskooii, K., Garcia-Rios, S. and Barreto, M., 2016, *eiCompare: Comparing Ecological Inference Estimates across EI and EI: RxC*. R J., 8(2), at 92.

[15] Another term used by scholars and the courts is called a "functional" analysis. In this Memo, an electoral performance analysis is interchangeable with a functional analysis.

candidate is then divided by the total votes cast in that given election in the subject jurisdiction (*i.e.*, SLD 1) to produce vote percentages.

24. This analysis, which reconstructs previous election results based on enacted or newly proposed district boundaries, will demonstrate which contests the preferred candidates of minority voters (*e.g.*, Black voters) win or lose.

F. *RPV Analyses and Results*

25. In this section I present ecological inference results to determine whether RPV patterns exist in each of the aforementioned SLDs such that (*i*) Black voters are politically cohesive in that they tend to vote for the same candidates and (*ii*) White voters tend to vote as a bloc in favor of their own set of candidates that are different than, and ran against, those favored by the Black voters.[16]

26. I first present RPV findings across all the electoral precincts covered in SLDs 1 and 3 of the 2022 enacted map and SLDs 1 and 2 of the 2023 proposed map. I then present RPV results for each of the SLDs on their own.

27. Figure 1 reports combined 2022 Enacted Map SLDs 1 and 3 RxC vote estimates of White and Black voters for each candidate across all the 27 election contests analyzed. The left side of this figure lists the name of each contest, the year in which the elections were held, and the associated candidate names. The color-coded panels report vote estimates for White and Black voters. The bars in the plot represent estimated vote percentages and the lines/bands attached to each bar represent 95% confidence intervals (CIs) around the point estimates.[17] For readability, vote estimate percentages are also provided at the tail ends of the CI bands.

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[16] In all analyses I examine the vote choice of Non-Hispanic White and Non-Hispanic Black voters. I also control for all other racial/ethnic demographic groups in the models.

[17] Confidence Intervals ("CIs") are the range of values, bounded above and below the point estimate, that contain the unknown, true parameters with a certain degree of probability. Scientific studies often report 90% or 95% CIs, with some studies, depending on the context, reporting 67% CIs or lower. CIs are sensitive to the sample size and the standard deviation of the study groups. If the sample size is small and dispersion is high, CI bands become wider. Jurisdictions (*e.g.*, towns, cities, school districts, counties, regions) have different racial group concentrations and sizes across different voting precincts. Therefore, analysts should not apply overly strict or rigid guidelines. CIs are just one piece of information that may aid analysts in the overall assessment of RPV patterns.

Figure 1: RxC Estimates for Candidates by Race within the 2022 Enacted SLDs 1 & 3 Combined

Racially Polarized Voting Analysis Results (2022 Enacted Map)
RxC Estimates For SLD1 & SLD3 Combined
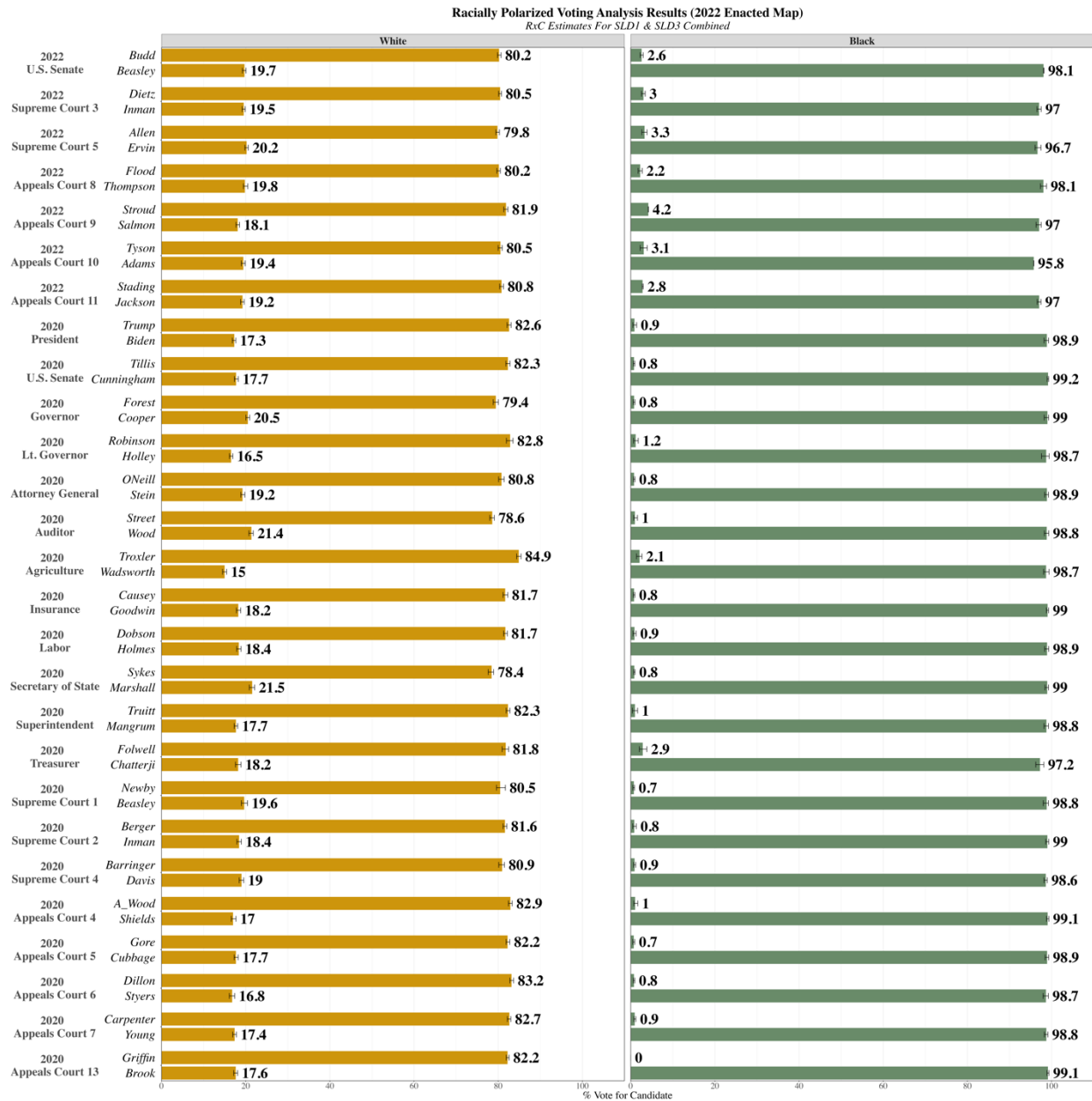
28. As is clearly apparent, across all 27 election contests a majority of Black voters (often over 95 percent) prefer candidates opposed by a majority of White voters (often over 80 percent of White voters).

29. For example, starting with the first election on the plot, an estimated 98.21 percent of Black voters voted for Cheri Beasley in the 2022 U.S. Senate contest, while only 2.6 percent of Black voters voted in favor of Ted Budd. In contrast, Cheri Beasley only received 19.7 percent of the White vote,

while her opponent, Ted Budd, received an estimated 80.2 percent of the White vote.

30. This pattern of Black and White voters favoring *opposing* candidates across every single election analyzed is evident in the iterative EI results reported in Figure 2 and within each of the SLDs (i.e., SLD 1 and SLD 2) examined separately as shown in Figures 3 and 4.

Figure 2: Iterative EI Estimates for Candidates by Race within the 2022 Enacted SLDs 1 & 3 Combined

Racially Polarized Voting Analysis Results (2022 Enacted Map)
EI Iterative Estimates For SLD1 & SLD3 Combined

Figure 3: RxC Estimates for Candidates by Race within the 2022 Enacted SLD 1 Only

Racially Polarized Voting Analysis Results (2022 Enacted Map)
RxC Estimates For SLD1 Only

Election	Candidate	White	Black
2022 U.S. Senate	Budd	77.6	0.2
	Beasley	22.3	98.8
2022 Supreme Court 3	Dietz	78.2	0.8
	Inman	21.9	98.8
2022 Supreme Court 5	Allen	77.8	1.4
	Ervin	22.2	98.4
2022 Appeals Court 8	Flood	77.7	0
	Thompson	22.4	98.8
2022 Appeals Court 9	Stroud	79.8	1.6
	Salmon	20.1	98.1
2022 Appeals Court 10	Tyson	78	0.4
	Adams	21.8	97
2022 Appeals Court 11	Stading	78.3	0.1
	Jackson	21.6	98
2020 President	Trump	79	0.3
	Biden	21	99.6
2020 U.S. Senate	Tillis	79.6	0.6
	Cunningham	20.4	99.3
2020 Governor	Forest	76.7	0.4
	Cooper	23.1	99
2020 Lt. Governor	Robinson	80.6	0
	Holley	19.3	98.3
2020 Attorney General	ONeill	79	0.8
	Stein	21	98.6
2020 Auditor	Street	76.5	1.1
	Wood	23.4	99.7
2020 Agriculture	Troxler	81.4	1
	Wadsworth	18.6	98.3
2020 Insurance	Causey	79.3	0.4
	Goodwin	20.7	99.4
2020 Labor	Dobson	78.1	0.5
	Holmes	21.9	99.5
2020 Secretary of State	Sykes	76.3	0.4
	Marshall	23.6	100
2020 Superintendent	Truitt	79.5	0.1
	Mangrum	20.4	98.3
2020 Treasurer	Folwell	80.7	2
	Chatterji	19.1	98.1
2020 Supreme Court 1	Newby	78.8	0.6
	Beasley	21.2	99.3
2020 Supreme Court 2	Berger	79	0.6
	Inman	20.9	99.3
2020 Supreme Court 4	Barringer	79.5	0
	Davis	20.4	99.2
2020 Appeals Court 4	A_Wood	80.6	0.8
	Shields	19.4	98.2
2020 Appeals Court 5	Gore	79.7	0.7
	Cubbage	20.2	98.5
2020 Appeals Court 6	Dillon	80.9	0.6
	Styers	19.1	99.4
2020 Appeals Court 7	Carpenter	80.3	0.3
	Young	19.8	98.9
2020 Appeals Court 13	Griffin	79.8	0.1
	Brook	20.3	99.1

% Vote for Candidate

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Figure 4: RxC Estimates for Candidates by Race within the 2022 Enacted SLD 3 Only

Racially Polarized Voting Analysis Results (2022 Enacted Map)
RxC Estimates For SLD3 Only
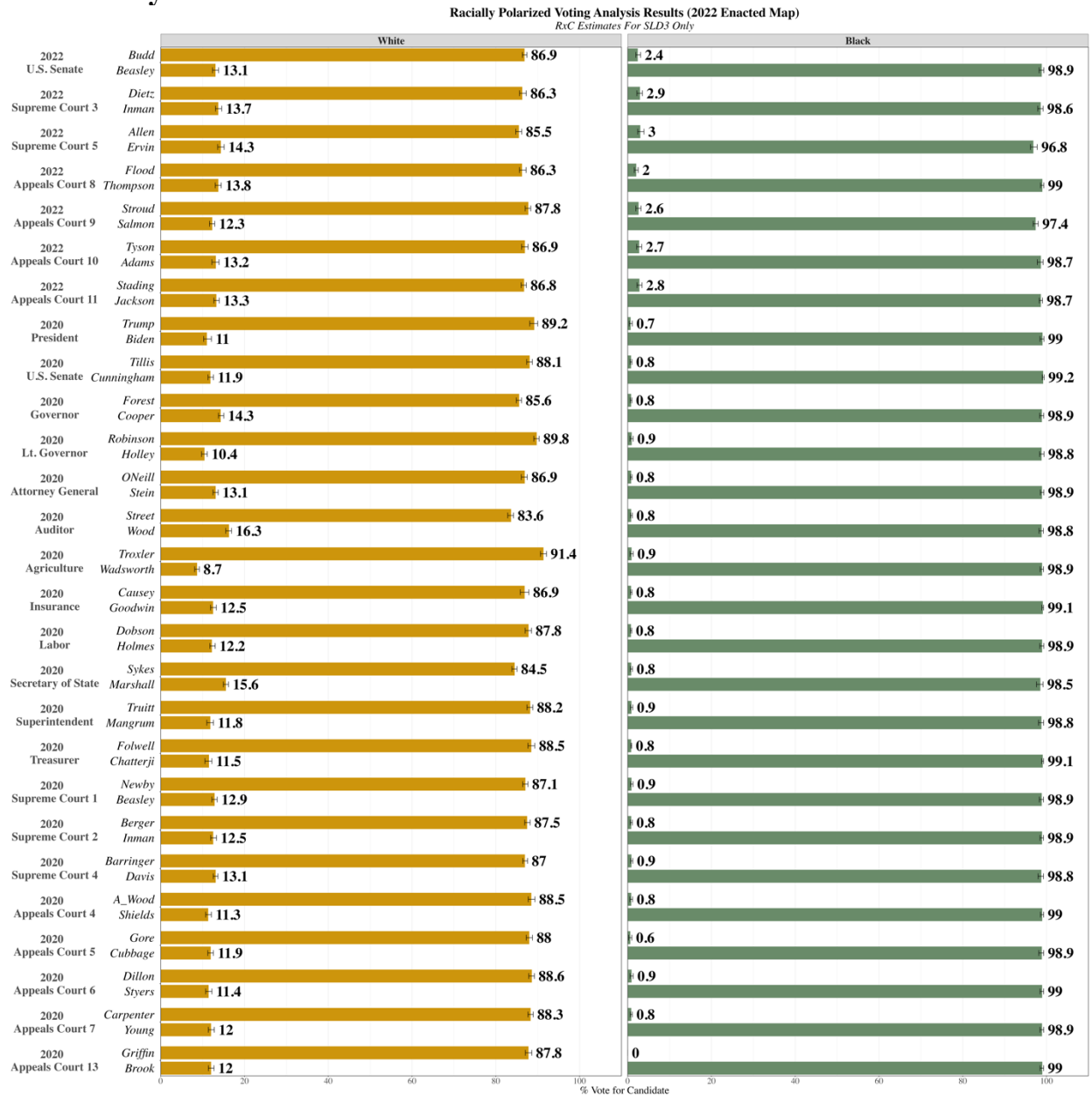
31. RPV patterns are also clearly present in the 2023 Proposed SLDs 1 and 2. Figure 5 reports RxC vote estimates by race for SLDs 1 and 2 combined. As illustrated, Black voters are highly politically cohesive in that they prefer their own sets of candidates that are opposed by the vast majority (often over 80%) of White voters.

Figure 5: RxC Estimates for Candidates by Race within the 2023 Proposed SLDs 1 & 2 Combined

Racially Polarized Voting Analysis Results (2023 Proposed Map)
RxC Estimates For SLD1 & SLD2 Combined

Race	Candidate	White	Black
2022 U.S. Senate	Budd / Beasley	80.2 / 19.7	2.5 / 97.4
2022 Supreme Court 3	Dietz / Inman	80.4 / 19.5	3 / 96.9
2022 Supreme Court 5	Allen / Ervin	79.8 / 20.2	3.3 / 96.7
2022 Appeals Court 8	Flood / Thompson	80.1 / 19.8	2.3 / 97.7
2022 Appeals Court 9	Stroud / Salmon	81.8 / 18.1	2.9 / 95.8
2022 Appeals Court 10	Tyson / Adams	80.6 / 19.4	3 / 95.8
2022 Appeals Court 11	Stading / Jackson	80.8 / 19.2	3.6 / 97.1
2020 President	Trump / Biden	82.6 / 17.2	0.9 / 98.9
2020 U.S. Senate	Tillis / Cunningham	82.3 / 17.7	0.8 / 99
2020 Governor	Forest / Cooper	79.5 / 20.5	0.7 / 98.8
2020 Lt. Governor	Robinson / Holley	83.2 / 16.5	1.2 / 98.7
2020 Attorney General	ONeill / Stein	80.7 / 19.2	0.8 / 99
2020 Auditor	Street / Wood	78.6 / 21.4	0.9 / 98.6
2020 Agriculture	Troxler / Wadsworth	84.9 / 15	2.1 / 98.9
2020 Insurance	Causey / Goodwin	81.7 / 18.1	0.8 / 99.1
2020 Labor	Dobson / Holmes	81.6 / 18.3	0.8 / 98.9
2020 Secretary of State	Sykes / Marshall	78.4 / 21.6	1 / 98.9
2020 Superintendent	Truitt / Mangrum	82.3 / 17.7	1 / 98.8
2020 Treasurer	Folwell / Chatterji	81.8 / 18.1	2.8 / 97.2
2020 Supreme Court 1	Newby / Beasley	80.3 / 19.6	0.8 / 98.9
2020 Supreme Court 2	Berger / Inman	81.6 / 18.4	0.9 / 99
2020 Supreme Court 4	Barringer / Davis	81 / 19	0.8 / 98.6
2020 Appeals Court 4	A_Wood / Shields	82.8 / 17.1	0.9 / 98.8
2020 Appeals Court 5	Gore / Cubbage	82.2 / 17.7	0.7 / 98.9
2020 Appeals Court 6	Dillon / Styers	83.1 / 16.9	0.8 / 98.8
2020 Appeals Court 7	Carpenter / Young	82.6 / 17.4	1 / 98.7
2020 Appeals Court 13	Griffin / Brook	82.2 / 17.6	1 / 98.8

% Vote for Candidate

32. Once again, the pattern of Black and White voters favoring *opposing* candidates is evident in the iterative EI results and within each of the SLDs examined separately as show in figures 6, 7, and 8.

Figure 6: Iterative EI Estimates for Candidates by Race within the 2023 Proposed SLDs 1 & 2 Combined
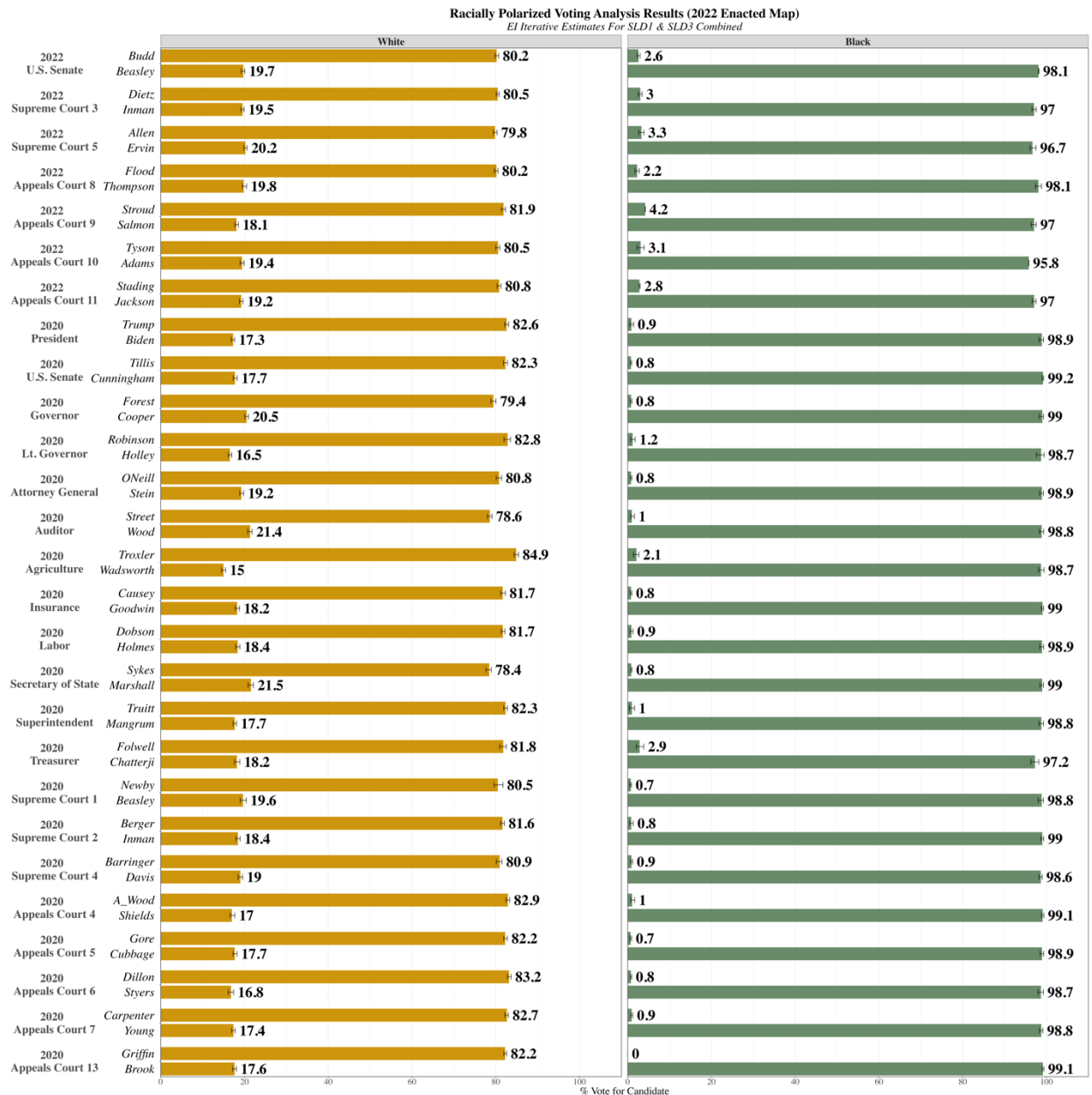
Racially Polarized Voting Analysis Results (2023 Proposed Map)
EI Iterative Estimates For SLD1 & SLD2 Combined

		White	Black
2022 U.S. Senate	Budd	80.2	2.5
	Beasley	19.7	97.4
2022 Supreme Court 3	Dietz	80.4	3
	Inman	19.5	96.9
2022 Supreme Court 5	Allen	79.8	3.3
	Ervin	20.2	96.7
2022 Appeals Court 8	Flood	80.1	2.3
	Thompson	19.8	97.7
2022 Appeals Court 9	Stroud	81.8	2.9
	Salmon	18.1	95.8
2022 Appeals Court 10	Tyson	80.6	3
	Adams	19.4	95.8
2022 Appeals Court 11	Stading	80.8	3.6
	Jackson	19.2	97.1
2020 President	Trump	82.6	0.9
	Biden	17.2	98.9
2020 U.S. Senate	Tillis	82.3	0.8
	Cunningham	17.7	99
2020 Governor	Forest	79.5	0.7
	Cooper	20.5	98.8
2020 Lt. Governor	Robinson	83.2	1.2
	Holley	16.5	98.7
2020 Attorney General	ONeill	80.7	0.8
	Stein	19.2	99
2020 Auditor	Street	78.6	0.9
	Wood	21.4	98.6
2020 Agriculture	Troxler	84.9	2.1
	Wadsworth	15	98.9
2020 Insurance	Causey	81.7	0.8
	Goodwin	18.1	99.1
2020 Labor	Dobson	81.6	0.8
	Holmes	18.3	98.9
2020 Secretary of State	Sykes	78.4	1
	Marshall	21.6	98.9
2020 Superintendent	Truitt	82.3	1
	Mangrum	17.7	98.8
2020 Treasurer	Folwell	81.8	2.8
	Chatterji	18.1	97.2
2020 Supreme Court 1	Newby	80.3	0.8
	Beasley	19.6	98.9
2020 Supreme Court 2	Berger	81.6	0.9
	Inman	18.4	99
2020 Supreme Court 4	Barringer	81	0.8
	Davis	19	98.6
2020 Appeals Court 4	A_Wood	82.8	0.9
	Shields	17.1	98.8
2020 Appeals Court 5	Gore	82.2	0.7
	Cubbage	17.7	98.9
2020 Appeals Court 6	Dillon	83.1	0.8
	Styers	16.9	98.8
2020 Appeals Court 7	Carpenter	82.6	1
	Young	17.4	98.7
2020 Appeals Court 13	Griffin	82.2	1
	Brook	17.6	98.8

% Vote for Candidate

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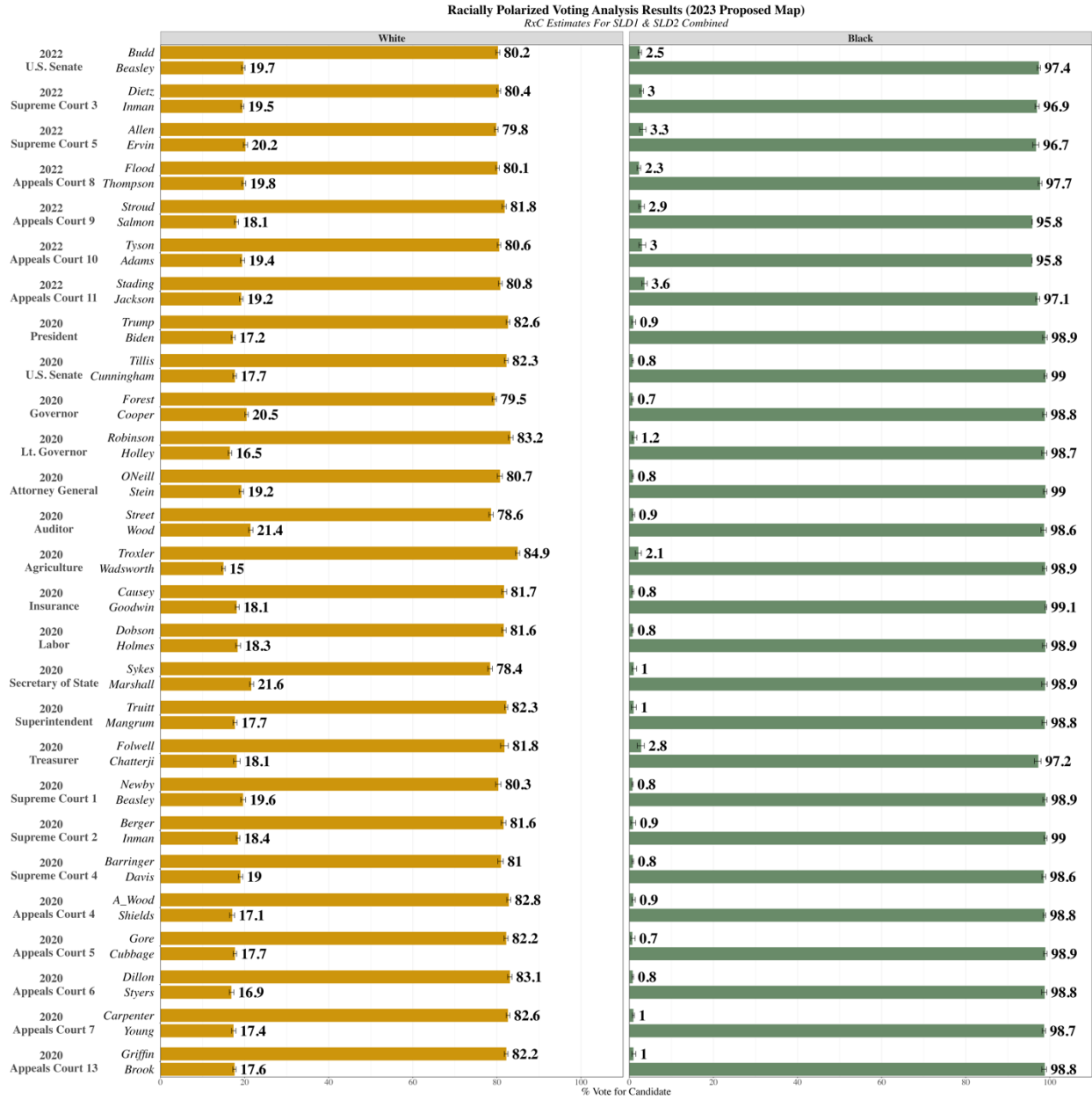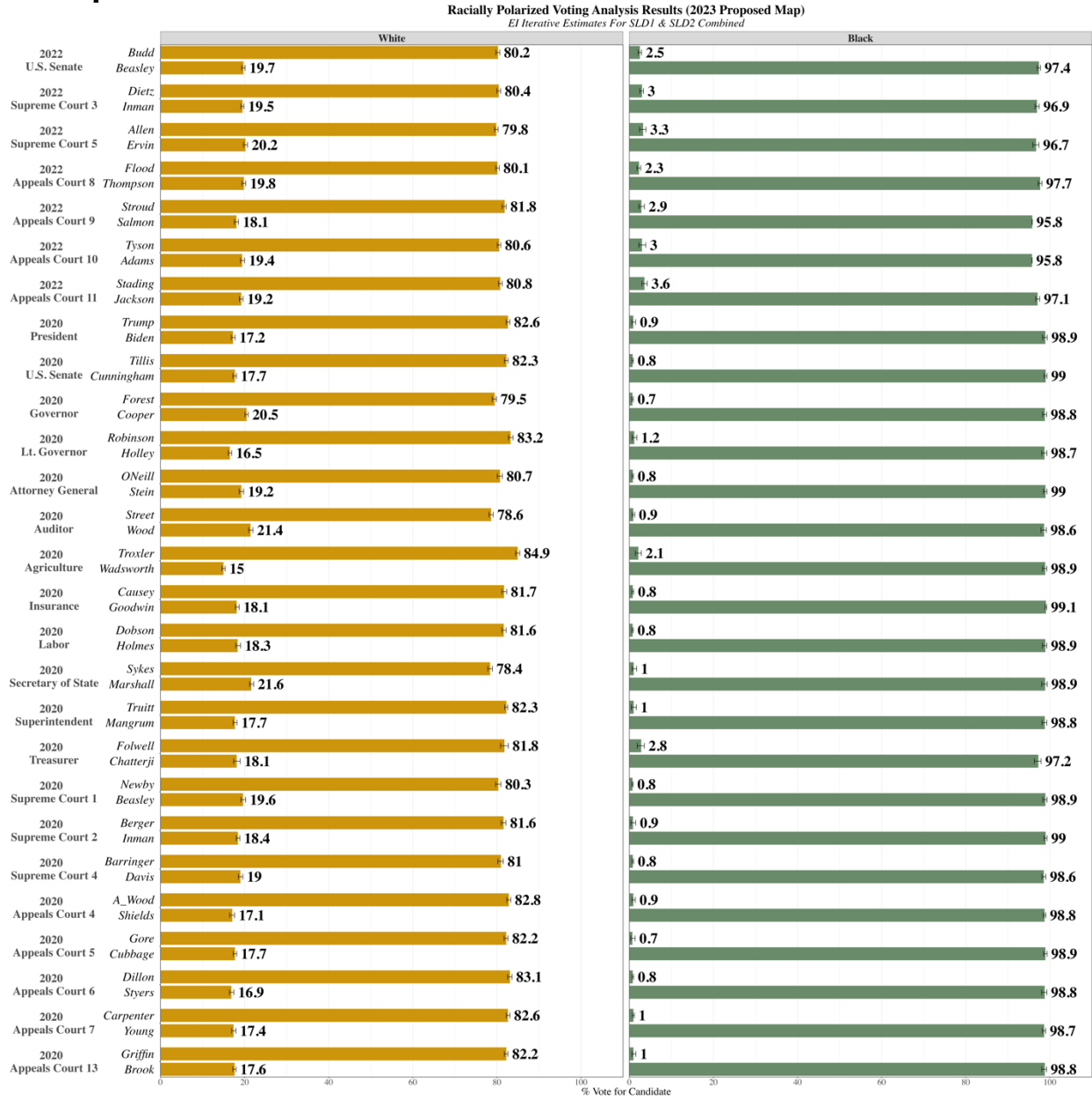**Figure 7: RxC Estimates for Candidates by Race within the 2023 Proposed SLD 1 Only**

Racially Polarized Voting Analysis Results (2023 Proposed Map)
RxC Estimates For SLD1 Only

Figure 8: RxC Estimates for Candidates by Race within the 2023 Proposed SLD 2 Only

Racially Polarized Voting Analysis Results (2023 Proposed Map)
RxC Estimates For SLD2 Only
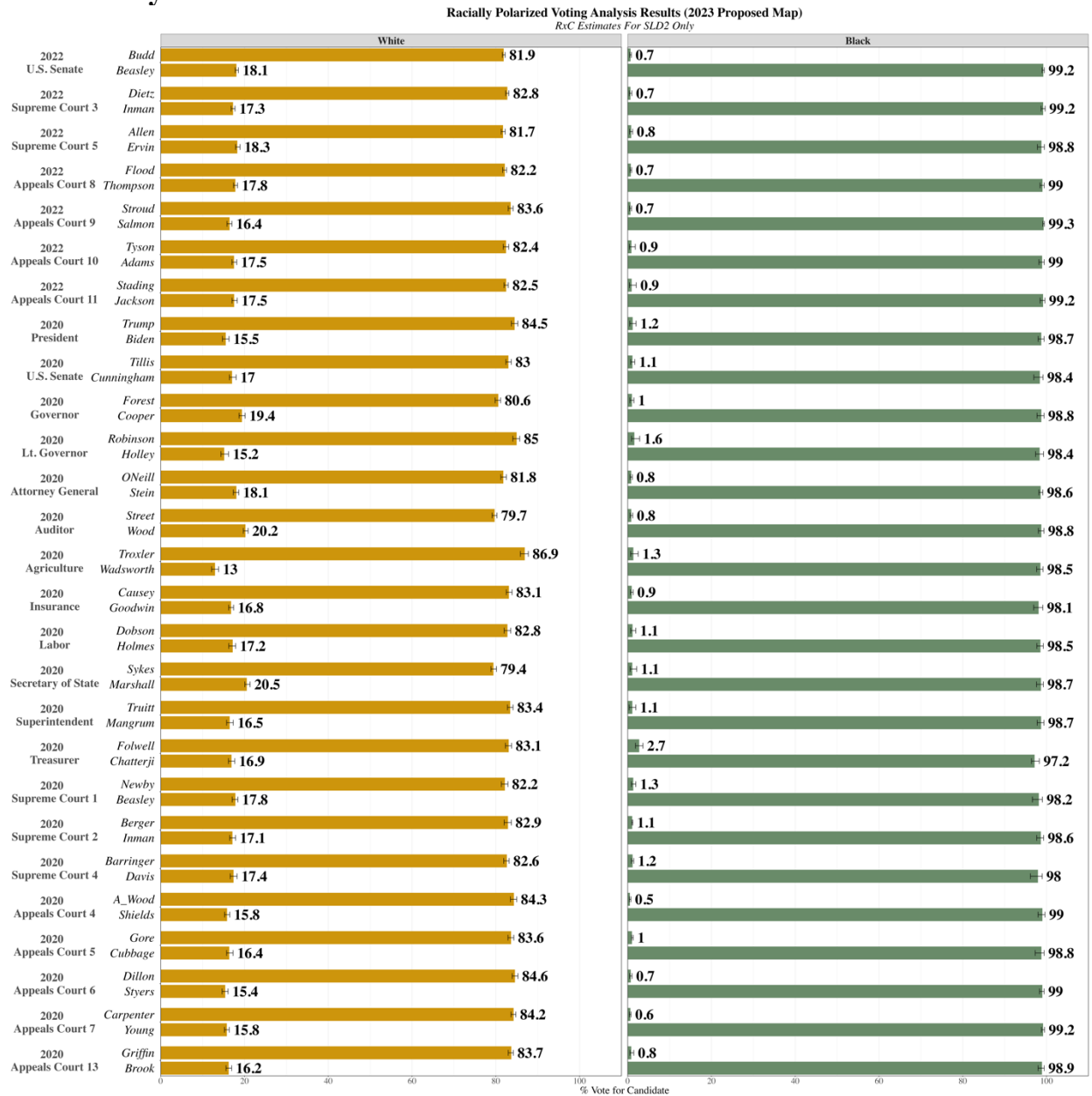
G. *Performance Results*

33. As previously mentioned, an electoral performance analysis reconstructs election results based on the 2022 Enacted and 2023 Proposed SLD boundaries to determine whether the amalgamation of the precincts under each SLD will elect or defeat Black-preferred candidates.

34. Figure 9 reports the percentage of the votes each candidate received in each contest within SLDs 1 and 3 of the 2022 Enacted Map. I also include the average margin of victory across all the elections for each SLD to aid in the overall assessment of the results.

**Figure 9: Electoral Performance Results of the 2022 Enacted SLDs 1 and 3**
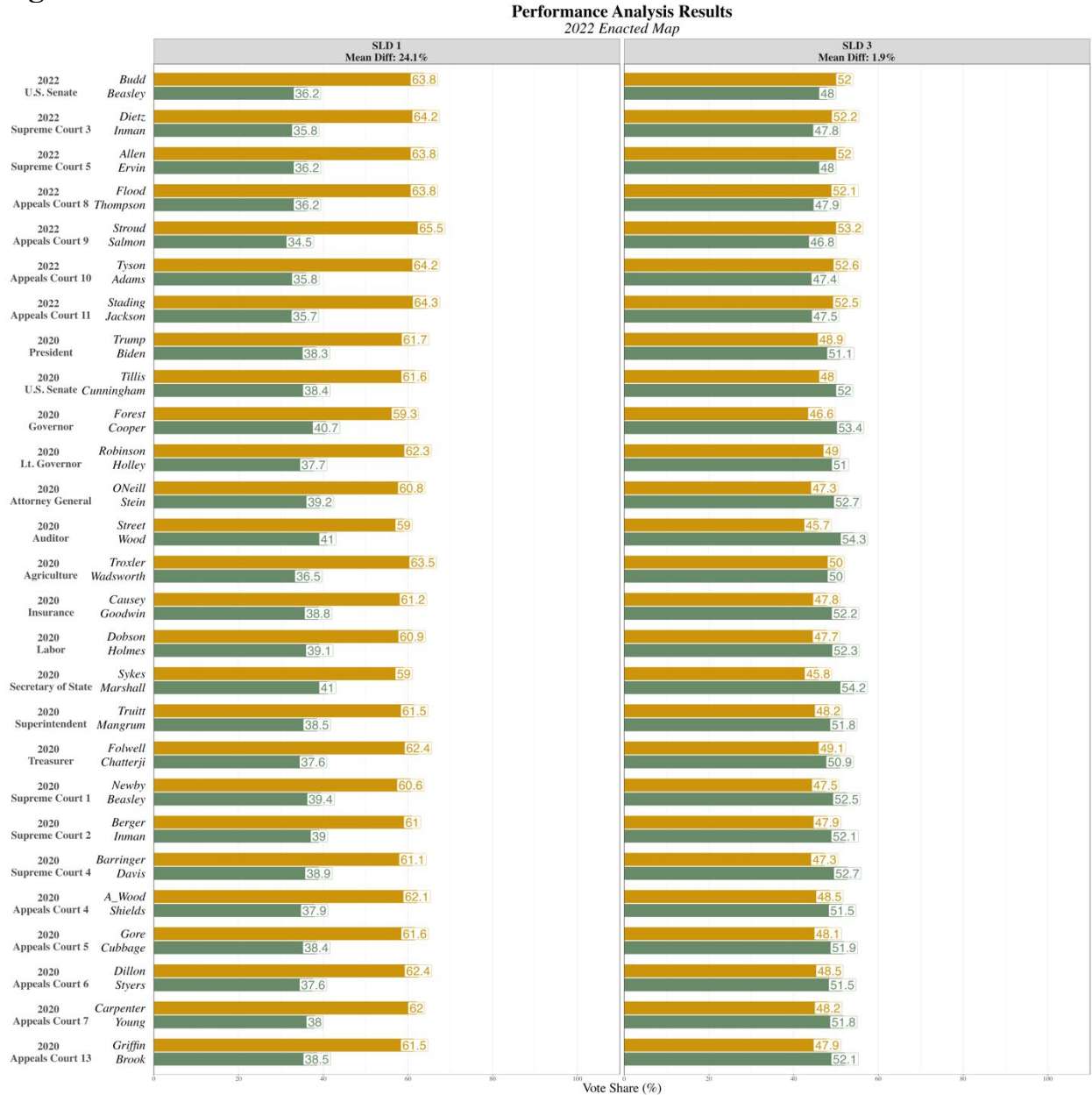
35. As the results help illustrate, Black-preferred candidates lost in every single election in the 2022 Enacted SLD 1 by an average margin of 24.1 percentage points. However, SLD 3 is a competitive district that elected Black-preferred candidates in 20 out of 27 elections examined.

17

36. Across both districts the margin of victory between presidential and midterm election cycles is notable in that Black-preferred candidates performed worse in the lower turnout (midterm) elections.

37. Figure 10 reports the electoral performance results of SLDs 1 and 2 of the 2023 Proposed Map.

38. Unlike the previous results in which Black voters had the opportunity to elect their candidates of choice in SLD 3 of the Enacted Map, Black-preferred candidates lost in every single election under the Proposed SLD 1 and 2 boundaries.

39. More specifically, Black-preferred candidates lost by an average margin of 10.1 percentage points in SLD 1 and by an average margin of 13.6 percentage point in SLD 2.

40. Given the strong patterns of RPV in this area of the state, a reduction of Black voters within a district corresponds to a lower probability of success for Black-preferred candidates. In year 2020, only about 26 percent of all voters within the Proposed boundaries of SLD 1 and 2 were Non-Hispanic Black voters. In contrast, about 40 percent of all voters within the 2022 Enacted boundaries of SLD 3 were Non-Hispanic Black voters.[18] Given these facts, it is not surprising that SLDs 1 and 2 of the Proposed Map does not perform for Black-preferred candidates.

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[18] Non-Hispanic Black voters consisted of about 14 percent of SLD1 voters based on precinct-level 2020 Voter Demographic data.

Figure 10: Electoral Performance Results of the 2023 Proposed SLDs 1 and 2

Performance Analysis Results
2023 Proposed Map
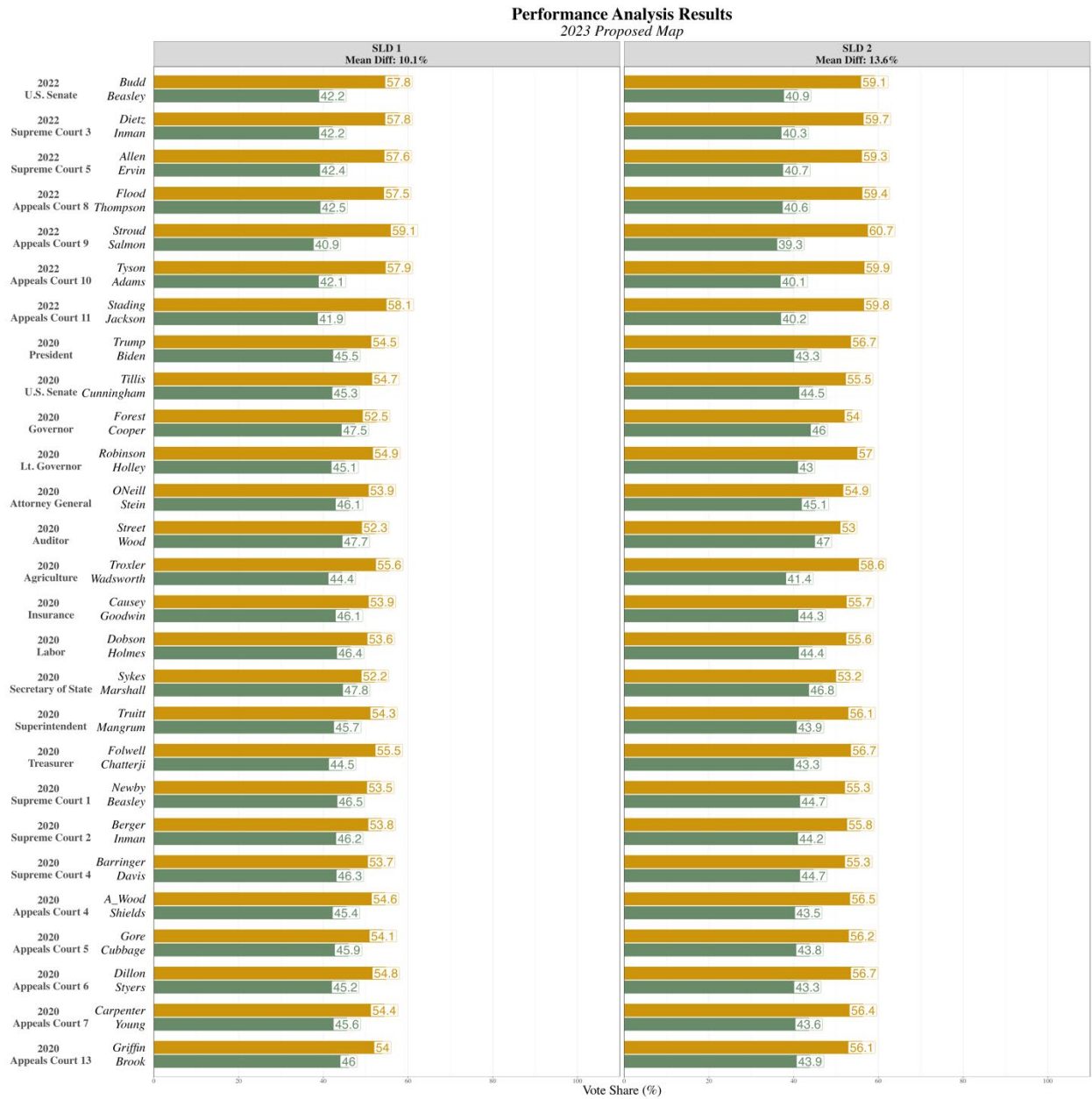
H.   Conclusion

41.   Based on the accumulated evidence, I find strong and consistent RPV patterns across all the SLDs that I examined.

42. In this part of the state, Black and White voters clearly prefer opposing candidates. The candidates preferred by Black voters consistently lose in all of the SLDs except for SLD 3 under the 2022 Enacted Map.

43. The findings and conclusions in this Memo are based upon information that has been made available to me or known by me to date. My work in this matter is ongoing and I reserve the right to modify, update, or supplement my analyses, findings, and any conclusions as additional information is made available to me or as I perform further analysis.

_____
Kassra A.R. Oskooii
October 22, 2023

APPENDIX B

The following is a preliminary analysis of voting patterns by race in select counties in North Carolina with high concentrations of Black Voting Age Population (BVAP), as indicated by the U.S. Census and available at https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html.

This analysis was performed using the RxC ecological inference method using publicly-available code available at: https://cran.rstudio.com/web/packages/eiCompare/index.html.

Election results and demographic voting data were sourced from: https://dl.ncsbe.gov/?prefix=ENRS/2008_11_04/ and https://dl.ncsbe.gov/?prefix=ENRS/2022_11_08/.

RxC ECOLOGICAL INFERENCE ESTIMATES BY COUNTY					
County	*BVAP*	*Race*	*Beasley/Budd*	*Adams/Tyson*	*Thompson/Flood*
Bertie	60.4%	White	11.3 / 88.7	9.1 / 90.9	9.1 / 90.9
		Black	94.3 / 5.7	96 / 4	95.9 / 4.1
Cumberland	40.5%	White	12 / 88	11.1 / 88.9	12.7 / 87.3
		Black	97.2 / 2.8	97.6 / 2.4	97.5 / 2.5
Edgecombe	56.4%	White	14.7 / 85.3	13.2 / 86.8	13.1 / 86.9
		Black	96.8 / 3.2	97.5 / 2.5	97.7 / 2.3
Gates	31.4%	White	26 / 74	28.6 / 71.4	30.4 / 69.6
		Black	69.1 / 30.9	66.9 / 33.1	66.3 / 33.7

Greene	37.3%	White	24.5 / 75.5	23.4 / 76.6	26.1 / 73.9
		Black	69.2 / 30.8	71.6 / 28.4	68.8 / 31.2
Halifax	51.7%	White	16.6 / 83.4	16.5 / 83.5	17.7 / 82.3
		Black	94.1 / 5.9	93 / 7	93.1 / 6.9
Hertford	57.3%	White	18.2 / 81.8	19.6 / 80.4	19.7 / 80.3
		Black	93.3 / 6.7	93.1 / 6.9	93.8 / 6.2
Lenoir	40.5%	White	11.6 / 88.4	10.7 / 89.3	11.6 / 88.4
		Black	95.8 / 4.2	96.4 / 3.6	95.9 / 4.1
Martin	41.0%	White	22.9 / 77.1	23.3 / 76.7	25.4 / 74.6
		Black	80 / 20	79.4 / 20.6	79.1 / 20.9
Northampton	55.2%	White	15.6 / 84.4	16.6 / 83.4	19.2 / 80.8
		Black	93.6 / 6.4	92.6 / 7.4	92.2 / 7.8
Pitt	35.7%	White	30.1 / 69.9	30.1 / 69.9	29.9 / 70.1
		Black	91.2 / 8.8	91.1 / 8.9	92.3 / 7.7
Vance	50.0%	White	23.3 / 76.7	21.5 / 78.5	23.6 / 76.4
		Black	90.2 / 9.8	91 / 9	91.9 / 8.1
Warren	49.3%	White	26.9 / 73.1	27.6 / 72.4	26.7 / 73.3
		Black	91.7 / 8.3	90.8 / 9.2	92.2 / 7.8
Wayne	31.8%	White	11.9 / 88.1	11.2 / 88.8	11.9 / 88.1
		Black	95.3 / 4.7	95.4 / 4.6	95.3 / 4.7
Wilson	39.1%	White	18.2 / 81.8	18.1 / 81.9	18.6 / 81.4
		Black	96 / 4	95.2 / 4.8	95.3 / 4.7