IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION

Latasha Holloway, et al., *Plaintiffs*, v. City of Virginia Beach, et al., *Defendants*.	Case No. 2:18-cv-0069

DEFENDANTS' RESPONSE TO
ORDER REGARDING SPECIAL MASTER'S REPORT

On October 26, 2021, this Court forwarded to the parties the report of the Special Master, Dr. Bernard Grofman, and ordered the parties to "provide any comments" within 21 days. ECF No. 281 at 2. The defendants—the City of Virginia Beach, the Virginia Beach City Council, the council members in their official capacities, the City Manager, and the City Registrar (collectively, "the City")—have reviewed the report and provide this response, which addresses three topics. First, because Plaintiffs contend that liability issues are properly before the Court for further review and adjudication at this stage, and because the Special Master's report touches on issues of liability, the City addresses the impact of the Special Master's findings on the Court's liability order. Second, the City addresses certain material legal errors undermining some of the Special Master's findings. Third, the City addresses the Special Master's proposed remedy.[1]

[1] The City does not accept the premises of the liability opinion that give rise to the need for a "remedy." The City intends to prosecute its challenge to the liability ruling on appeal, and nothing in this memorandum (or any other) waives any contention the City has raised or will raise against that order. For purposes of addressing some remedial issues, the City assumes the correctness of the liability ruling for the sake of argument only.

I. Impact of the Special Master's Report on the Liability Ruling

An argument central to Plaintiffs' "successful motion for an abeyance to the Fourth Circuit" was that "the appropriate appellate record in a Section 2 case is 'the entire record' from both the liability and remedy proceedings, because, as the Eleventh Circuit has explained, 'our inquiries into remedy and liability cannot be separated' due to the nature of the *Gingles* inquiry." ECF No. 273 at 1–2 (quoting *Wright v. Sumter Cty. Bd. of Elections & Registration*, 979 F.3d 1282, 1298–1300 (11th Cir. 2020)). The City assumes this Court has authority to address liability issues at this stage within the framework of the *Wright* decision.[2]

Plaintiffs, relying on *Wright*'s conclusion that a district court must reconsider liability issues from the vantage point of the record developed during the remedial phase, urge the Court to make "express factual findings . . . regarding how the evidence submitted as part of the remedial phase further supports" a finding of cohesion. ECF No. 273 at 2; *see also id.* at 24. But *Wright* is not limited to identifying "further support for the Court's factual finding[s]." *See id.* at 2. Rather, *Wright* held that the principle of record interrelatedness may either bolster *or undermine* the liability ruling, depending on how the remedial record develops. *See* 979 F.3d at 1303. The Eleventh Circuit endorsed its prior ruling, *Dillard v. Baldwin County Commissioners*, 376 F.3d 1260 (11th Cir. 2004), which held that remedial-phase developments undermined a liability ruling and "precluded" the district court from adhering to it. *Id.* at 1266; *Wright*, 979 F.3d at 1303. In *Wright* itself, the Eleventh Circuit explained that "[i]t was not inevitable that the district court,

[2] The City contested this principle in opposing a stay in the Fourth Circuit, but the Fourth Circuit did not adopt the City's arguments. *See, e.g.*, *Scott v. Land Span Motor, Inc.*, 781 F. Supp. 1115, 1120 (D.S.C. 1991) ("[T]he party against whom estoppel is being invoked . . . must have convinced the judicial or quasi-judicial body to adopt its position."). For purposes of this memorandum, the City assumes the Court's authority to address liability issues without waiving the right to contest this principle during the appellate-review process.

relying on [Special Master] Dr. Grofman's analysis, would find a workable remedy" in support of its prior liability ruling. 979 F.3d at 1303. "Had the court instead found that no viable remedy was available, *Dillard* would have instructed the trial court to dissolve its injunction." *Id.*

In this case, the Special Master's report undermines the liability ruling in at least three important respects set forth below. The Court should vacate the liability ruling and dissolve its injunction or else clarify the predicates of that ruling to provide reviewing courts a clear basis for the Court's decision.

A. Dr. Grofman's Report Rejects the Possibility of Inferring, From Aggregate Data, Cohesion Levels of Individual Groups of the Alleged Coalition

A central dispute in this Section 2 coalitional claim is whether Plaintiffs have proven coalitional cohesion within and among the three constituencies of the alleged coalition: the Black, Asian, and Hispanic communities. The City has urged the Court to adopt the cohesion standard established by the Fifth Circuit in *Brewer v. Ham*, 876 F.2d 448 (5th Cir. 1989), which requires proof of internal cohesion among each constituent group of the alleged coalition and cohesion between or among all groups together. *Id.* at 453. Plaintiffs contend that they *have* proven cohesion as to each group individually—even though their expert, Dr. Spencer, was unable to disaggregate estimates for each constituency individually—through "non-linear" inferences that can be drawn from Dr. Spencer's aggregated estimates. *See, e.g.*, ECF No. 273 at 5. The City criticized this approach as "speculative." ECF No. 237 at 12.

The Court's liability order found for Plaintiffs on this point. The Court's liability ruling did not invoke the standard of *Brewer*, but it did endorse Plaintiffs' view that inferences about Asian and Hispanic voting patterns can be drawn from statistical studies that do not disaggregate estimates of voting patterns of each group individually. The Court recognized that, "[s]ince the Asian and Hispanic communities are much smaller than the Black community, high Black support

for a given candidate *could* mask far lower support—or even opposition—from Asian and Hispanic voters." ECF No. 242 at 83. Nevertheless, the Court credited Dr. Spencer's efforts "to address his own limitations"—i.e., his inability "to obtain separate data for Asian and Hispanics." *Id.* at 86. The Court relied on "1) HP [or Homogenous Precinct] analyses confirming the ER [Ecological Regression] and EI [Ecological Inference] results; and 2) non-linear 'LOESS' curves showing that the most accurate line through the distributed precinct data for the 'All minority' community was nonlinear." *Id.* (internal citations omitted).

However, the remedial record undermines Plaintiffs' analysis through the analyses of Dr. Grofman and Dr. Lisa Handley, both internationally recognized experts in the Voting Rights Act,[3] in ways that render any further reliance on Plaintiffs' cohesion analysis untenable.

First, Dr. Grofman's report finds that "separating out the voting behavior of each individual group in the composite minority grouping is, for all practical purposes, impossible." ECF No. 281-1 at 62. Dr. Grofman concludes that, "in the absence of reliable survey data," he cannot "regard any inferences about how the three minority groups voted as individual groups, whether made by an expert for Plaintiffs or an expert for Defendants, to be sufficiently well supported for me to make any use of them in my own analyses." *Id.* (emphasis in original). Dr. Grofman "regard[s] it as essentially mathematically impossible, given the data limitations in this case, to reliably estimate voting behavior for each group separately." *Id.* at 62–63; *see also id.* at 13 n.15. Dr. Grofman also

[3] Drs. Grofman and Handley have co-authored dozens of publications about minority representation and the Voting Rights Act which have guided both courts and experts in the field of political science. *See, e.g.*, Bernard Grofman, Lisa Handley, and Richard G. Niemi, *Minority Representation and the Quest for Voting Equality* 83–84 (Cambridge 1992); Bernard Grofman & Lisa Handley, *1990s Issues in Voting Rights*, 65 Miss. L.J. 205, 268–69 (1995); Bernard Grofman, Lisa Handley, & David Lublin, *Drawing Effective Minority Districts: A Conceptual Framework and Some Empirical Evidence*, 79 N.C. L. Rev. 1383, 1420 (2001); David Lublin, Thomas L. Brunell, Bernard Grofman, and Lisa Handley, *Has the Voting Rights Act Outlived Its Usefulness? In a Word "No,"* 34 Legis. Stud. Q. 525 (2009).

rejects the reliance on HP (Homogeneous Precinct) analysis to predict minority voting cohesion, because "even the VTDs with the highest minority proportions do not have sufficiently large minority populations to allow us to use the results in those precincts as reliable indicators of how the minority community (and only the minority community) in those precincts voted." *Id.* at 15.[4]

Second, the City presented additional evidence at the remedial phase from Dr. Handley that an expert "cannot draw any conclusions about Asian or Hispanic voting preferences in Virginia Beach," ECF No. 260-2 at 7 n.4. Dr. Handley stands by that opinion. *See* Handley Declaration (attached as Exhibit A). As Dr. Handley notes, combining minority groups together to analyze minority voting patterns does not provide statistical evidence that majorities of the different groups tend to support the same candidates, especially if one group is larger than the other(s). Such an analysis identifies only the "voting behavior of the compositive minority group **as a whole**." Handley Decl. ¶ 3 (quoting ECF No. 281-1 ¶ 63 (emphasis in the original)). Dr. Handley warns that treating all minority voters statistically as if they constituted a unified whole in order to demonstrate statistically that they are cohesive effectively places the cart before the horse. *Id.* ¶ 4. This method risks assuming cohesion before it is proven, especially where divergent voting patterns of the smaller minority groups may be subsumed into the voting pattern of the larger minority group. *Id.*

Dr. Grofman's findings in his Special Master report on these topics are sound. His finding of mathematical impossibility accords with the basic premise, admitted on all sides, that the Asian

[4] It is also noteworthy that Dr. Grofman is under the incorrect but understandable impression that "first and foremost" a "community consisting essentially of African-Americans plus Hispanics plus Asian-Americans" "is the voting rights group which brought this lawsuit." ECF No. 281-1 at 13 n.15 (emphasis added). Anyone with Dr. Grofman's experience in voting rights litigation would assume a coalitional claim must be brought by a coalition. ECF No. 237 at 45. Here, there are no Asian or Hispanic plaintiffs.

and Hispanic communities are too small for purposes of estimating their voting preferences by means of statistical estimates.[5] ECF No. 236 at 125 (Tr. 337) (Dr. Spencer admitting this); ECF No. 281-1 at 62 (Dr. Grofman agreeing with Dr. Spencer and Mr. Brace on this). The Court's liability opinion recognized significant "limitations" on Dr. Spencer's conclusion that Asian and Hispanic voters are internally cohesive, and cohesive across the coalitional groups. ECF No. 242 at 86. Indeed, Dr. Spencer's presentation of his non-linear theory was itself dubious, as the concept was not disclosed in his expert report; consisted of live, *ad hoc* scribbling on an easel during trial; and provided no numerical estimates of Hispanic and Asian voter support for any candidate. *See, e.g.*, ECF No. 236 at 226 (Tr. 279); Trial Ex. P500 (photograph of easel). The City has outlined the problems with Dr. Spencer's approach. *See* ECF No. 237 at 11–14, 33–39.

The Court therefore should not adhere to Dr. Spencer's mathematically impossible inferences of individualized group voting preferences as to the Asian and Hispanic communities. *See Wright*, 979 F.3d at 1303. Because that finding was central to the Court's liability determination and injunction,[6] the proper course of action is vacatur of the liability ruling and dissolution of the injunction, as *Wright* directs. To be sure, Dr. Grofman appears to doubt whether the Court should adopt the standard set forth in *Brewer*. *See* ECF No. 181-1 at 19 ("[T]o further require that a finding of minority political cohesion must be supported by evidence of voting patterns for each minority group separately is simply, in my view, to ask the mathematically impossible." (bolding omitted; emphasis in original)). That would be legally incorrect for reasons

[5] Importantly, this is a feature of "the very specific case demographic and geographic facts" of this case. ECF No. 281-1 at 62. In other coalitional cases, plaintiffs may succeed where Plaintiffs here have failed, and plaintiffs in any case could address the flaws in statistical methods by devoting their resources to obtaining "reliable survey data." *Id.*

[6] *See* ECF No. 242 at 73 ("Based upon Dr. Spencer's credible analysis, the Court finds that Plaintiffs provided sufficient evidence showing consistent minority cohesive voting…").

the City has articulated, ECF No. 237 at 34, and it would also conflict with Dr. Grofman's prior political-science views.[7] But, in all events, that legal ruling would alter the basis of the Court's injunction and need to be clarified in the Court's forthcoming written opinion as the basis of liability to aid appellate review. *See* Fed. R. Civ. P. 52(a)(1) & (2).

B. The Special Master's Report Fails To Establish a Viable Remedy That This Court May Implement

The remedial phase also undermines the Court's liability-phase conclusion that "Plaintiffs have shown that the Minority Community is sufficiently geographically compact and numerous in Virginia Beach to constitute a majority in a single-member district" and satisfy the first *Gingles* precondition. ECF No. 242 at 51. The Special Master's report finds that prior illustrative remedies presented in this action no longer satisfy the one-person, one-vote principle, ECF No. 281-1 at 34, which the City warned would occur after the release of the 2020 census results, *see, e.g.*, ECF Nos. 237 at 29–30 & 150 at 3, 12–13. These plans therefore do not establish the first *Gingles* precondition.

Although the Special Master contends that his proposed remedy establishes that three majority-minority districts (of combined Black, Hispanic, and Asian voting-age persons) can be created as a viable remedy, his plan also does not satisfy the one-person, one-vote principle. The total-population deviation in the Special Master's plan is 9.4%. Brace Decl. ¶ 6 (attached as Exhibit C). Although that deviation would likely be sufficient for "legislatively enacted

[7] To the extent Dr. Grofman is urging against the standard in *Brewer*, that position conflicts with his prior writing advocating that, for a finding of coalitional cohesion, he "would require that (1) each group usually supports viable candidates of its own race or ethnicity, and (2) each group usually supports viable candidates of the other group in preference to non-minority candidates in situations where no candidate of the group's own race/ethnicity is in the contest." Bernard Grofman, *Voting Rights in a Multi-Ethnic World*, 13 Chicano-Latino L. Rev. 15, 23 (1993) (footnotes omitted) (attached as Exhibit B). In all events, Dr. Grofman was not hired to give legal opinions but to provide social-science and redistricting expertise.

apportionment plans," "[c]ourt ordered apportionment plans must meet more stringent standards of population equality." *Daly v. Hunt*, 93 F.3d 1212, 1218 n.7 (4th Cir. 1996). The 9.4% deviation exceeds the 5.97% deviation the Supreme Court has found too large for a court-ordered plan in *Chapman v. Meier*, 420 U.S. 1, 26 (1975). *See Connor v. Finch*, 431 U.S. 407 418 n.17 (1977); *see Clark v. Putnam Cty.*, 293 F.3d 1261, 1276–77 (11th Cir. 2002).

In addition, Dr. Grofman's proposed remedial districts do not all cross the majority-minority threshold under the governing legal standard, even measuring Black, Hispanic, and Asian communities combined, and the plan does not establish an adequate remedy. Dr. Grofman asserts that his proposal contains three majority-minority districts, but that is measured by voting-age population (VAP), not citizen voting-age population (CVAP). The law is clear "that citizen-voting age population is the basis for determining equality of voting power" under Section 2. *Barnett v. City of Chicago*, 141 F.3d 699, 704 (7th Cir. 1998); *see also League of United Latin American Citizens v. Perry*, 548 U.S. 399, 429 (2006) (plurality opinion); *Perez v. Pasadena Indep. Sch. Dist.*, 165 F.3d 368, 372 (5th Cir. 1999); *Thompson v. Glades Cnty. Bd. of Cnty. Comm'rs*, 493 F.3d 1253, 1263 n.19 (11th Cir. 2007). As Mr. Brace's affidavit shows, two districts fall below majority-minority status under the CVAP metric. Brace Decl. ¶ 8. A plan with only one additional majority-minority districts is not an effective remedy or an improvement over the current plan. *See Johnson v. De Grandy*, 512 U.S. 997, 1015 (1994) (finding it insufficient for plaintiff to show "that lines could have been drawn elsewhere, nothing more").

Thus, both the liability and remedial phases have failed to yield a remedial plan that consists of proposed majority-minority districts, that constitutes an effective remedy, and that also complies with the one-person, one-vote principle of the Equal Protection Clause. *See* ECF No. 237 at 30.

C. The Court Should Rescind Its Alternative Ruling That Black Voting Age Persons Can Constitute a Majority in Single-Member Districts

The Special Master's report also impacts the Court's alternative finding that "Plaintiffs established that the African American community in Virginia Beach is sufficiently large and geographically compact" to meet the first *Gingles* precondition. ECF No. 242 at 65. Notably, Plaintiffs did not allege and did not seek to prove a single-race claim, and the table the Court's liability ruling credited reported majority "HBA" districts, meaning Hispanic, Black and Asian combined. ECF No. 242 at 53 (Table 1); *see also id.* at 65 (relying on Table 1 in making alternative finding regarding Black community alone). The Special Master has found that a "community consisting essentially of African-Americans plus Hispanics plus Asian-Americans treated as a whole" is "the only voting rights community with a large enough and geographically concentrated enough minority population to meet the 50% CVAP test of *Bartlett v. Strickland*, 556 U.S. 1 (2009)." ECF No. 281-1 at 13 n.15. The Special Master's remedial proposal contains no district exceeding 35% Black Voting Age Population (BVAP). *See id.* at 36–38. Plaintiffs' remedial proposal contains no district exceeding 36% BVAP. *See* ECF No. 261-1 at 12. There is no evidence supporting a single-race claim, and the Court should clarify that its injunction is predicated solely on a coalitional claim.

II. Objections to the Special Master's Report

Although the Special Master's report in many respects, including those already discussed, reflects a sound and thorough attempt to address the issues presently before the Court, it is not free from error.

First, the Special Master's racially polarized voting analysis excludes candidates found by the Court (and Plaintiffs' expert) to be minority preferred, yet who are not "members of the minority community." ECF No. 281-1 at 11 & n.14. Circuit precedent rejects this approach. *See*

Lewis v. Alamance Cty., N.C., 99 F.3d 600, 607 (4th Cir. 1996). The Fourth Circuit has particularly rejected it as to the third *Gingles* precondition. *See id.* at 609–10 & n.8. Further, the Special Master appeared to exclude races in which minority candidates failed to garner minority support, but these should have been *considered* as evidence *against* cohesion. *See* ECF No. 281-1 at 19–20 & n.20 (noting exclusion of races involving Mr. Furman and Mr. Wray).

Second, in evaluating cohesion (erroneously defined, as discussed, by reference to the amalgamated group of Blacks, Hispanics, and Asians), the Special Master assessed the "average rank of the minority candidate among minority voters" across elections. ECF No. 281-1 at 17. But courts evaluating cohesion have taken the different approach of examining each election to assess whether cohesion exists in *that* election and then count the election either as evidence in support of or evidence against cohesion. *See, e.g.*, *Wright*, 979 F.3d at 1304 ("The district court found that black voters in Sumter County were 'highly cohesive' in ten of the twelve elections the expert studied, including in all of the at-large elections held under the challenged plan."). Under that approach, six elections in Table 2 cut in favor of cohesion, and six—where minority support for a given candidate does not exceed 50%—"demonstrate a lack of political cohesiveness." *Levy v. Lexington Cty., S.C.*, 589 F.3d 708, 720 n.18 (4th Cir. 2009).

III. Statement of Position on the Special Master's Remedial Proposal

As discussed, the City believes that the Special Master's report undermines the Court's liability finding, and the City intends to prosecute its appeal in the Fourth Circuit. Nothing in this brief presents a waiver of any argument that has been or will be made on appeal. Nevertheless, for purposes of the remedial phase, the City recommends that, if the Court chooses to stand by the liability ruling—and concludes that it is not bound by tighter one-person, one-vote standards than bind state legislative bodies—it should implement the Special Master's proposed remedy, with

limited qualifications discussed below. Taking as a given the many premises of liability, which the City disputes, and assuming the Court's disagreement with the City's above-stated arguments, the remedy does appear to effectively remedy the supposed violation better than other options before the Court.[8] Two important qualifications should be noted.

First, the Special Master asserts that his proposal "has unpaired . . . each of [the] pairings" in Plaintiffs' proposal. ECF No. 281-1 at 41. But, in fact, the plan pairs two incumbents Guy Tower and Linwood Branch in District 6. This appears to be due to the recent changes in personnel on the Council. *See* ECF No. 280 (motion to substitute).[9] It appears that the Special Master intended to avoid pairings to the extent consistent with the Court's remedial purpose, ECF No. 281-1 at 41, which would be consistent with governing law, *Larios v. Cox*, 314 F. Supp. 2d 1357, 1362 (N.D. Ga. 2004) (three-judge court) ("[T]he Supreme Court has plainly said that" "incumbency protection" "is a legitimate state interest that may be properly considered by a court as well as a legislative body"). The Special Master should be instructed to determine whether this pairing can be avoided consistent with other criteria and Section 2 considerations.

Second, the Special Master used "voter tabulation districts," or "VTDs," as the building blocks of the plan. VTDs are units of geography created by the U.S. Census Bureau, and it is

[8] The City hereby withdraws reliance on the remedial proposals it proffered in July. Although the City respectfully disagrees with many of the Special Master's specific criticisms of the City's proposals, it is verifiably true that the proposals no longer satisfy the one-person, one-vote principle, as the total deviation is 17.5%. ECF No. 281-1 at 34. For the record, it bears noting that the Special Master is wrong that the City's 7–3 plan "is no longer legal." ECF No. 281-1 at 25. The new state law the Special Master cites automatically transforms single-member districts in the City's residency plan into single-member voting districts, Va. Code § 24.2-222 (effective January 1, 2022); ECF No. 240-1, but the City's residency plan is a 7–3 plan. So not only is a 7–3 plan legal, it is *required* by state law. To the extent state-law is deemed controlling, it is the 10–1 plans that are "no longer legal," including the Special Master's.

[9] On October 8, 2021, Counsel for the City sent by e-mail to Dr. Grofman, copying counsel for Plaintiffs, Councilmember Branch's residential address.

common and unobjectionable for redistricting plans to be created at the VTD level. However, the City conducts its elections using "precincts," which are creatures of local law and differ from VTDs. The VTDs forming the basis of the Special Master's plan would not make for workable elections if they were deemed to replace the City's voting precincts. Counsel for the City do not understand precincts to be within the scope of the Section 2 challenge or to be subject to replacement by the Special Master's plan. However, out of an abundance of caution, the City requests that the Court clarify that implementation of the Special Master's plan would not require the City to redraw its precincts to match VTDs utilized in that plan but, rather, to administer the elections using the remedial districts comprised of whatever geographical building blocks the City uses for elections (here, precincts, not VTDs).

CONCLUSION

The Court should vacate its liability ruling and dissolve its injunction. Alternatively, the Court should clarify the basis of its liability findings in light of the Special Master's rejection of core elements of its liability opinion, adopt the Special Master's remedy, and return jurisdiction to the Court of Appeals.

DATE: November 16, 2021

Respectfully submitted,

/s/ Katherine L. McKnight

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CERTIFICATE OF SERVICE

I hereby certify that on November 16, 2021, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system, which will then send a notification of the filing to all parties of record.

/s/ Katherine L. McKnight
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Counsel for Defendants

Exhibit A

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION

Latasha Holloway, et al., *Plaintiffs*, v. City of Virginia Beach, et al., *Defendants*.	Case No. 2:18-cv-0069

DECLARATION OF LISA R. HANDLEY

1. I am Lisa R. Handley. I have been hired in the above-referenced matter to provide expert analyses during the remedial phase of this lawsuit. First, I assisted with evaluating remedial maps drawn for City Council seats in the City of Virginia Beach. For this declaration, I reviewed the report prepared by the Special Master Bernard Grofman.

2. I agree with Dr. Grofman that it is "mathematically impossible" to analyze statistically the "voting patterns for each minority group separately." Grofman p. 19. As Dr. Grofman notes, using statistics to "separate[e] out the voting behavior of each individual group in the composite minority grouping is, for all practical purposes, impossible," due to the small size and residential patterns of the Hispanic and Asian communities in Virginia Beach. Grofman p. 62.

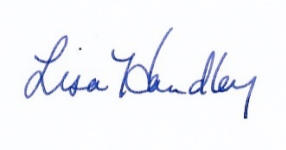
3. Combining minority groups together to conduct the analysis does not provide statistical evidence that the different groups are supporting the same candidates, especially if one group is larger than the other(s). It only allows us to identify the "**voting behavior of the compositive minority group as a whole**." Grofman, p. 63, emphasis in the original.

4. Treating all minority voters statistically as if they constituted a unified whole in order to demonstrate statistically that they are cohesive is essentially putting the cart before the horse. We risk assuming cohesion when it may be only that the divergent voting patterns of the smaller minority groups are simply subsumed into the voting pattern of the larger minority group.

5. Given the impossibility of using a statistical analysis of the voting patterns of each group separately to demonstrate political cohesion among Black, Hispanic, and Asian American voters, other forms of evidence should be reviewed. This evidence might include survey data, exit polling, interviews of local minority community leaders, and the testimony of political scientists or experts knowledgeable about **local** voting behavior.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully executed and submitted this 16th day of November 2021.



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Lisa R. Handley

Exhibit B

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Chicano-Latino Law Review
Summer 1993

Articles
Bernard Grofman [d]

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VOTING RIGHTS IN A MULTI-ETHNIC WORLD

Introduction

The Voting Rights Act of 1965 was extended in 1970 and again in 1975 and 1982. The 1970 extension added to the jurisdictions covered under Section 5 of the Act those jurisdictions which had used a literacy test in which either less than 50% of the voting-age residents had been registered in 1968 or in which less than 50% of the voting-age residents had voted in 1968. [1] The 1975 extension broadened coverage under the Act so as to include a number of groups in addition to blacks, namely, American Indians, Asian Americans, Alaskan natives and those of Spanish heritage. [2] The most important feature of the 1982 extension was the addition of new language to Section 2 which made explicit that the Act applied whenever there were discriminatory effects of electoral practices ***16** even in the absence of a discriminatory purpose. [3] Provisions relating to minority groups were extended in 1992 to apply through the year 2007. [4]

The Act has had a profound effect in fully restoring the franchise to southern blacks [5] and in fostering gains in black and Hispanic [6] representation through the elimination of at-large election systems and the drawing of single-member districts with substantial minority populations. [7] Its effects on descriptive representation have been dramatic for blacks in the South [8] and for Hispanics ***17** in Texas, [9] but the Act has also benefitted both groups (albeit to a lesser extent) in many other states including California, [10] Florida, [11] Illinois, [12] and New York. [13] Also, the Act has had some impact on the representation of Native Americans in the Southwest. [14]

In order for a group to prevail in a challenge to an election system brought under Section 2, absent a finding of discriminatory purpose, the minority plaintiffs must, as a matter of practical necessity, satisfy all three prongs of the Thornburg [15] test. Litigants must show that the group whose rights are allegedly being violated is large enough and geographically compact enough to constitute a majority in one or more districts, that it is politically cohesive, and that its candidates of choice regularly lose as a result of bloc voting by the majority group. [16] Several of these aspects of the Thornburg test are especially problematic where there are multiple minority groups within the jurisdiction [17] who are subject to the special protections ***18** of the Voting Rights Act. The focus of this article is on the issues that arise in voting rights cases (and more generally) when there are multiple minorities in a jurisdiction. Issues that will be discussed include determining the extent of common political cohesiveness across the various minority groups, resolving conflicts among competing voting rights claims if these occur, and evaluating alternative voting systems such as limited and cumulative voting.

When Is A Group Large Enough and Geographically Concentrated Enough To Have A Cognizable Voting Rights Claim Under Section 2 (or Section 5)?

When is a group large enough to have a claim under the Voting Rights Act? The Thornburg Court suggested that a sufficient condition was that the minority group constitute a majority in at least one district, [18] but this language is ambiguous without further specification. Of what is the minority group to constitute a majority--population, voting age population, voting-age citizen population, registrants, actual voters?

Justice Brennan's language in Thornburg was that: "Unless minority members possess the potential to elect representatives in the absence of the challenged structure or practice, they cannot claim to have been injured by that structure or practice." [19] One way to interpret this language is based on a test of potentially eligible voters, i.e., voting-age population or citizen voting-age population. In Romero v. City of Pomona, [20] the appellate court required that the minority be numerous enough to constitute a citizen voting-age majority in at least one district. A majority of voting-age ***19** population was the threshold used in an Illinois case. [21] However, in that case, the citizenship issue was not salient. [22]

In Garza v. Los Angeles County Board of Supervisors, [23] however, the trial court rejected a rigid application of a bright-line test, and harkened instead to another aspect of Justice Brennan's opinion in Thornburg--his emphasis on a functional approach [24] to vote dilution. [25] Justice David V. Kenyon, the trial judge in Garza, noted the fact that the Hispanic population in Los Angeles County was known to be steadily growing while the non-Hispanic white population in the county was on the decline. [26] In light of these and other considerations, a supervisorial district that almost met a 50% citizen voting-age population test, a roughly 65% minority population, and a Hispanic registration percentage comparable to that in other districts that had regularly elected Hispanic candidates, was held to be adequate to create a realistic opportunity for Hispanics to elect a candidate of choice over the course of the decade. [27]

***20** Absent intentional discrimination, how should we interpret the language about size (and geographic concentration) under Thornburg for those situations where there are multiple groups covered under the Act claiming that they ought to be treated as a single group for the purpose of satisfying this prong of Thornburg? [28] The obvious answer would be that if the groups are held to be politically cohesive, then we apply the same threshold test under the first prong of Thornburg to the combined group as we would have to a single racial or ethno-linguistic group covered under the Act. [29] If the groups are not cohesive, then we look at each group separately, against the set of voters not in the group. Thus, the existence of multiple groups might not seem to affect analysis of the first prong of Thornburg. [30]

***21** A federal district court considering Miami/Dade County redistricting [31] was confronted with an interesting pattern of evidence. That court accepted expert witness evidence that blacks, Hispanics and whites could be seen as political rivals, with blacks allying with whites in white versus Hispanic conflicts and Hispanics allying with whites in black versus white contests. It argued for the creation of districts in which each minority group was large enough to elect candidates of choice based on the assumption that each group was facing a unified opposition.

If we take a functional view of the political process, then it matters not only how large is a group and the degree of its own political cohesiveness, but also whether or not the group's candidates of choice can expect to face unified political opposition. Under plurality voting, a group's candidate of choice can win even if the group does not have a majority of the voters, and even if that candidate attracts only limited support from the voters of other groups, if other voting blocs nominate candidates who divide the vote. In such a multi-candidate situation it may be enough for the group to constitute the single largest voting bloc, even though short of a majority. [32] Judge Kenyon's views in Garza suggest that courts should be willing to go beyond raw numbers to look at subtler political realities that might affect a group's realistic opportunity to elect candidates of choice over the course of a decade in deciding when a group is large enough to satisfy the first prong of the Thornburg test. Certainly a group's coalitional prospects and the extent to which the group can expect to be faced with a divided opposition are among such realities. [33]

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***22** In co-authored work, I have considered the likelihood of electing a black candidate in a given district as a function not only of the black proportion in the district, but also of the Hispanic proportion, treating the two as having interdependent effects. Similarly, my co-authors and I have looked at the likelihood of electing a Hispanic candidate in a given district as a function not only of the Hispanic proportion in the district, but also of the black proportion. The results are quite interesting. With respect to congressional contests, we found that blacks who are elected from congressional districts that are not majority black are very likely to come from districts with a substantial (but not majority) black population where the combined black and Hispanic population was 60% or more. [34] With respect to black electoral success in Texas city councils, we found that Hispanic plurality districts with a clear combined black and Hispanic majority elect only black or Hispanic candidates; similarly, black districts with a clear combined Hispanic and black majority elect only black or Hispanic candidates. [35] Such results suggest that, even if blacks and Hispanics are not politically cohesive, per se, the presence of members of one group may aid the members of the other group to elect candidates of choice. [36]

How To Specify The Test For Political Cohesion In The Case Of Combined Groups?

In jurisdictions with more than one covered minority, the question has arisen whether distinct covered groups (e.g., blacks and Hispanics) could be combined for purposes of determining whether they pass Thornburg's threshold "size" test. [37] Most courts that have looked at this question have held that blacks and Hispanics could, in principle, be treated as a combined group, but to do so would require proof of electoral coalitions between the groupings. [38]

***23** In several California cities [39] and in Boston [40] where this issue has arisen, courts have rejected the evidence of such coalitions offered by plaintiffs' witnesses as inadequate; while in some (but not all) Texas jurisdictions the evidence presented has been held to be sufficient. [41]

In my view, for a combined group to be politically cohesive in satisfaction of Thornburg, we would require that (1) each group usually supports viable [42] candidates of its own race or ethnicity, and (2) each group usually supports viable candidates of the other group in preference to non-minority candidates in situations where no candidate of the group's own race/ethnicity is in the contest. [43]

***24** There are two types of errors possible. One error is to focus on each group's support for its own members rather than on whether or not each group prefers a member of its own or the other minority group to a white candidate. A second type of error is to fail to look separately at the voting behavior of each of the two (or more) groups who are supposed to be part of the combined minority.

On the one hand, if there are both black and Hispanic candidates in the contest, it would be wrong to claim that the fact that blacks may prefer black to Hispanic candidates and Hispanics may prefer Hispanics to black candidates negates a finding of political cohesion for the combined group, [44] any more than the failure of black voters to cast 100% of their vote for a given black candidate, when there is more than one black candidate in the race, shows that blacks are not racially cohesive.

On the other hand, by failing to disaggregate, we might wrongly infer that neither group is supporting the white candidate(s) when in fact one group may be giving most of its support to the white candidate(s). It is mathematically possible for a majority of a combined group to be supporting a minority candidate of a given race or ethnicity even though one of the two groups is giving a majority of its votes to a white candidate. For example, if blacks and Hispanics are present among the electorate in equal numbers, and if 90% of the blacks but only 30% of the Hispanics support a given black candidate in a contest against a white opponent, that candidate will still be receiving 60% support from the combined group, even though 70% of the Hispanic voters voted for the white candidate.

In situations where more than one covered minority group is present and the issue is whether or not the two (or more) groups are politically cohesive, absent homogeneous precincts for each group, it may not easily be possible to separately estimate the voting behavior of each group. However, even if there are no homogeneous precincts for the separate groups, if there are homogeneous precincts for the combined group and these precincts vote

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overwhelmingly for minority candidates, we may still be able to reliably establish that neither of the subgroups is casting a majority of its votes for white candidates.

Consider the following example: If the combined minority casts 100% of its votes for minority candidates, then each subgroup within that combined minority must also be casting 100% of its votes for minority candidates! A similar argument is applicable in ***25** cases far less extreme. Consider, for example, precincts whose electorate is 40% non-Hispanic black, 40% black and 20% non-black non-Hispanic, and in which the minority candidates receive 80% of the vote. Assume further that in overwhelmingly homogeneous non-black non-Hispanic precincts, the minority candidates receive only 5% of the vote. Even under the highly implausible assumption that all non-black non-Hispanic voters in the heavily minority precincts were voting for the minority candidates, at least 75% of the minority voters must have voted for minority candidates. Then, under the specified assumptions, both black and Hispanic voters must have given at least 50% of their votes to the minority candidates, since even if one of the two groups gave 100% support, for the combined support to average 75%, we would need the other group (assumed to be of equal size in this example) to have voted at the 50% level. [45]

More realistically, in the above example, if we assume that even in the heavily minority precincts, non-minority voters are not casting much more than 5% of their votes for the minority candidate, then minority voters in the 80% minority precincts are casting an average of almost 99% of their vote for the minority candidates, i.e., both blacks and Hispanics are voting for the minority candidate at nearly unanimous levels.

There may still be circumstances where the election data required to make a definitive judgment about the cohesiveness of a combined group is not available. In such circumstances, courts may choose to rely on other types of data, including lay witness testimony. For example, in LULAC v. Midland Independent School District, [46] the trial court found that blacks and Hispanics "share)d common experiences in past discriminatory practices" and that, ")t he two groups have political goals that are inseparable. As such, coalition formation will often prove to be mutually beneficial to the two groups. The evidence presented bears out this fact. Testimony presented showed that blacks and Hispanics worked together and formed coalitions when their goals were compatible." [47]

***26 How To Resolve Conflict Among the Voting Rights Claims of Different Minorities?**

The Voting Rights Act of 1965 was written to right the wrong of America's historic exclusion of blacks from the electoral process at a time when blacks were still being effectively denied the franchise in parts of the deep South. One line of analysis would say that it is hard to assign the same claims for remedial treatment to groups who lack the same overwhelming burden of historic exclusion as blacks, especially for groups most of whose members are very recent immigrants to the United States. Moreover, it might seem appropriate that groups whose members chose to come to the United States should fall into a different category than would blacks whose ancestors were brought as slaves. In this line of reasoning, claims of black plaintiffs under the Act should have priority over those of other minority groups. For Mexican-Americans, however, testimony at the 1975 Hearings on the Extension of the Voting Rights Act included arguments that Texas patterns of Mexican-American exclusion were, in MALDEF Director Vilma Martinez' words, "strikingly reminiscent of the deep South in the early 1960s." [48] Similarly, historical evidence for exclusion and discrimination against those of Asian descent can readily be compiled. Thus, I would be unwilling to grant any group covered under the Act a special status in situations where its claims may conflict with those of another group also covered under the Act. [49]

In the context of single-member district plans, I believe that we can usually minimize conflicts between different minority groups by drawing, wherever possible, districts in which one minority group is given a relatively clear (majority or clear plurality) preponderance within the likely electorate. [50] This informal rule helped guide the ***27** decision process of the 1991 redistricting plan drawn by the New York City Districting Commission to which I served as a consultant. [51] However, in looking at jurisdictions wherein reside more than one of the groups covered under the Act, I suggest the need to distinguish between voting patterns in non-partisan contests, party primaries, and general elections. For example, there may be jurisdictions in which we can expect that blacks will support Hispanics, or vice versa, in a general election where the candidate supported is the Democratic party nominee, even though black and Hispanic candidates will be rivals in the Democratic party primary. [52]

I believe that the extent to which the interests of blacks and Hispanics or of Hispanics and Asian-Americans come into conflict in the congressional, legislative and local boundary-drawing process has been much exaggerated.

Part of that exaggeration is due to the fact that, in a number of situations, white officeholders have tried to set these groups against one another by claiming that redistricting is a process in which one group can gain only at another group's expense. This occurred, for example, in the L.A. County supervisorial case when it was suggested that a new seat for Hispanics would require threatening the ability of African-Americans to elect a candidate of choice, especially if a supervisorial district where the African-American plurality was slim was redrawn so as to reduce its percentage of Hispanic (heavily non-voting) population. This claim was false. Also, sometimes minority groups have drawn plans exclusively with their own group interest in mind without paying attention to the consequences for other groups. For example, in the initial 1980s litigation involving Los Angeles City Council redistricting, MALDEF proposed a plan which inadvertently made relatively substantial changes in the configuration of some of the black majority seats, rather than simply preparing a plan that created a second Hispanic majority seat in an area of high Hispanic concentration. Because there was nothing about the 1980s geography or demography of Los Angeles that required the drawing of a new Hispanic seat which would significantly impact the existing black-majority seats, the MALDEF plan ***28** raised concern among black incumbents of those seats and within the black community more generally, thus potentially jeopardizing black support for a plan that would be fair to Hispanics.

Another part of the belief that some minority interests can only be satisfied at the expense of the interests of other minorities has come from a failure to appreciate geographic and demographic realities. For example, Hispanics and Asian-Americans have a high proportion of recent immigrants and a correspondingly lower proportion of citizens, as well as a high proportion of disqualified population because of age. [53] Moreover, Hispanic and Asian-American populations are rarely as highly concentrated as the African-American population. Thus, in general, it will be more difficult to draw districts in which these groups have a sufficient population to elect candidates of choice. In consequence, ceteris paribus, [54] relative to population share, we would anticipate greater electoral success for blacks than for Hispanics or Asian-Americans. [55]

Failure to be sensitive to the ways in which demographic and geographic realities impact the redistricting process has sometimes led minority groups-- Hispanics in particular--to complain that they have been discriminated against in the line-drawing process in comparison to blacks. [56] Not only do minority groups usually have a lower proportion of voting-age eligibles, and perhaps also a slightly lower turnout relative to registration, but also the nature of single-member districting schemes is such that they create, ceteris paribus, an advantage for the largest group. [57] The all-too-common insistence on judging outcomes of the redistricting process in terms ***29** of proportionality to population share fails to appreciate these demographic and geographic realities. The frequent disproportionality of seat share under districted systems and Hispanic share of population has led to the consideration of alternative voting methods, especially in situations where a group's voting strength is geographically dispersed. However, as discussed below, it is not always the case that these alternative remedies will improve the ability of minorities to elect candidates of choice.

When Should We Use Alternative Voting Systems Such as the Limited Vote and The Cumulative Vote?

Political scientists who specialize in the analysis of comparative election systems often align systems on a continuum--anchored at one end by majoritarian voting systems (such as those requiring majority runoffs) and at the other end by systems designed to yield representation proportional to vote share (such as list-based PR and the Hare System [58]). Plurality systems lie close to the majoritarian end of the continuum, while modified at-large systems, such as the limited and cumulative vote, are generally regarded as semi-proportional systems that fall relatively close to the proportionality end of the continuum. [59] However, the degree of anticipated proportionality of both these systems is contingent on the ability of groups to make effective use of their ballots. In each system, votes may be “wasted.” If minorities are few in number, they may spread their votes among too many candidates and thus elect none (or at least fewer candidates of choice than they might otherwise have elected had they been more strategic in their voting). If minorities are present in higher proportions, they may waste votes by giving too many of their votes to one candidate rather than distributing their votes in the optimal fashion among several

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candidates. Also, the expected degree of proportionality of the limited vote is a function of how many votes each voter is given; the higher the number of votes per voter (relative to the number of seats to be filled) the less proportional, in general, will be a limited voting system. Limited voting is as proportional as cumulative voting only in a "vote for one" situation. [60]

A number of civil rights attorneys and academics have recently ***30** argued for the use of modified at-large systems as potentially appropriate remedies to redress previous submergence of minority voting strength under at-large plurality (or majority runoff) systems. [61] The basic arguments have been that (1) these systems can provide equitable representation for all groups and can benefit groups whose voting strength is geographically dispersed in a way that a single-member district remedy cannot, and (2) such systems can be implemented in the at-large setting, thus avoiding the need to draw districts. In very small cities, where even a city-wide election involves only a small electorate, the drawing of districts to achieve accessible and accountable representation may seem unnecessary. [62] Also, districting may reduce the pool of available candidates because the potential candidates are not evenly distributed across districts.

One major impetus to the use of modified at-large remedies has come from the efforts of Alabama attorney Edward Still, [63] one of the principal litigators of Dillard v. Crenshaw, [64] an Alabama multi-jurisdictional challenge that resulted in the adoption of limited or cumulative voting in over a dozen different local governments as a result of consent settlements in the case. Limited or cumulative voting remedies have also subsequently been adopted by a few jurisdictions in other states including Georgia, [65] New Mexico, [66] and North Dakota, [67] again as a result of consent decrees. However, no court has ever required the use of such election systems as a remedy for a voting rights violation. In McGhee v. Granville County of North Carolina, [68] the Fourth Circuit court explicitly rejected any ***31** claim that a remedy other than a fairly drawn single-member district plan could be compelled.

I remember discussing modified at-large systems with voting rights attorneys in the early and mid 1980s, and being met with a considerable amount of doubt as to their desirability. There was not only concern that these methods were not in the standard repertoire of election systems used in the United States, [69] but also fear about how well they would work in practice. In particular, one concern was whether minority voters would be able to understand these systems and take advantage of their potential for more fair minority representation. Much of the evidence is now available on how these methods work, and the picture is very positive. Minority voters, generally, have been successful in translating their voting strength into electoral success in jurisdictions where these systems have been implemented, and they have taken advantage of the features of these systems designed to enhance the ability of minorities to elect candidates of choice, to plump for one or a few candidates. [70]

However, understanding the consequences of alternative election systems for fair and effective representation is a very important task on which work has only just begun. [71] The impact of electoral systems on descriptive representation has been the critical and probably overriding concern in most (if not all) voting rights litigation, [72] but as scholars have increasingly come to realize, it is not the only issue. [73] In particular, our understanding of the full implications of modified at-large systems on minority representation is limited in ***32** that we do not know the long-term consequences for minority participation rates, [74] nor do we know the extent to which such systems affect the responsiveness of representatives to specific constituency needs, nor about their impact on the possibility of multi-ethnic coalition politics. [75]

Even if we focus exclusively on descriptive representation, the conditions under which a modified at-large system is to be preferred to a single-member district plan are not ones that can be stated simply. Consider m single-member districts. In principle, if a group were perfectly geographically concentrated, it might be possible for it to elect a candidate of choice in one of these districts with a proportion only slightly larger than 1/2 m of the vote even against unified opposition. Now consider a limited voting system, with m seats to be filled and in which each voter has only one vote . It would take a share of slightly more than 1/(m + 1) of the votes to guarantee the election of a candidate of choice against united opposition. Since 1/2 m is less than 1/(m + 1), it might seem that minorities should always prefer single-member districts. However, the ability of minorities to elect candidates of choice with only a 1/2 m share of the vote in a single-member district plan depends upon the minority group being perfectly

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geographically concentrated, having levels of registration and turnout comparable to those of the non-minority, and being at least as politically cohesive as the non-minority. In general, we cannot expect all of these things to be true; thus, the effective threshold of representation for a minority group in an m-seat single-member district plan will be considerably higher than 1/2 m share of the total population.

Two critical factors in determining when alternative voting remedies might be preferred to a fairly drawn single-member district ***33** plan are: (1) the degree of geographic concentration of minority voting strength; and (2) the turnout levels of the minority population(s) relative to those of whites. If its voting strength is sufficiently dispersed, then it may be the case that modified at-large systems will provide a group with a higher probability of electing candidates of choice. However, if a group's share of total registration and/or total turnout is very low relative to its population share (because of low proportion of age-eligible voters, a high proportion of non-citizens, or because of socioeconomic factors that reduce turnout), then even a relatively dispersed group may find a single-member district plan preferable to a modified at-large plan.

Consider the situation of Hispanics in Los Angeles County. As of 1990, even though they made up over one-third of the population in the county, they were estimated to constitute only about 15% of the registered voters in 1988, and only about 13% of the voters participating in county supervisorial elections. [76] Looking at the population share, it would appear that limited or cumulative voting could give a unified Hispanic community the opportunity to elect candidates of choice to at least one, and quite possibly two, of the five supervisorial seats. However, once we took into account registration and turnout share, it was apparent that Hispanics were below the one-sixth threshold needed to guarantee even a single seat under cumulative or limited voting ("vote for one"). In contrast, despite low registration and turnout, by drawing a district sufficiently Hispanic in composition (roughly two-thirds Hispanic or more), we could create a district in which Hispanics constituted a bare majority of the registered voters. [77] This was possible because, by creating a district whose Hispanic population was close to 70%, the district contained too few non-Hispanics to constitute a registration majority despite the fact that non-Hispanics had considerably higher average rates of registration and turnout than did Hispanics. [78]

Another reason to be cautious about implementing an alternative vote remedy in all situations is the possibility that divisiveness within the minority community might prevent any minority candidate from being elected, especially in situations where minorities suffer from low rates of participation. Effective use of modified at- ***34** large systems may require a considerable degree of strategic calculation as to how many candidates to run and how to distribute support. In Los Angeles County, in an overwhelmingly Hispanic single-member district, it is likely that the only viable candidates will be Hispanic, and thus the election of a Hispanic candidate preferred by the Hispanic community is virtually certain. [79] In contrast, if a county-wide election were to be held under a modified at-large plan, and if well-known candidates, such as Richard Alatorre and Gloria Molina, were to run, it is quite possible that neither would be elected. [80]

As the Los Angeles County example shows, it is sometimes easier to provide a realistic prospect of minority representation under a single-member district plan than under limited or cumulative voting. For groups with a high proportion of non-citizens such as Hispanics or Asian-Americans, modified at-large systems may have considerable drawbacks, despite the fact that such groups tend to be more geographically dispersed than the African-American population and thus, might be expected to benefit from the adoption of a modified at-large system of voting. Nonetheless, even for a group with high non-citizen proportions, there will be circumstances where the realistic prospect of minority representation is higher under limited or cumulative voting than under a single-member district plan because of the group's high level of dispersion. For example, in New York City, if there were borough-wide use of modified at-large voting and if the Asian-American community in a borough was almost perfectly united, it is possible that an Asian-American candidate might be elected in at least one borough. [81] Under the present 51-seat single-member district plan, given Asian-American geographic dispersion, it was impossible in 1991 to create a seat with an Asian-American majority. [82] However, while a ***35** switch from districts to a modified at-large plan (at the borough level) might be favored by Asian-American groups, it is unlikely to be well received by Hispanics or blacks who already receive substantial representation under the 51-seat plan implemented in 1991.

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Discussion

To appreciate the law and politics of redistricting in situations involving more than one minority group covered under the Voting Rights Act, it is important to emphasize three simple facts: First, minorities cannot, in general, expect to achieve proportional representation relative to population regardless of which voting system is used; this is especially true for groups with a high proportion of non-eligible voters. [83] Second, the degree of conflict among different minority groups as to choice of redistricting plan, while sometimes quite real, has been exaggerated. In most redistrictings in the 1990s to date, even in jurisdictions with multiple minorities covered under the Voting Rights Act, minorities (in particular, blacks and Hispanics) have not been in substantial conflict. [84] Third, for single-member district plans, it is still preferable to try to draw districts where conflicts between different minority groups are minimized, i.e., when possible to draw districts in which one minority group is given a well-defined (majority or clear plurality) preponderance among the likely electorate, and thus is likely to be able to elect candidates of its choice.

As for the uses of alternative voting systems, such as the various forms of modified at-large systems, no court has held such schemes to be required remedies for voting rights violations; on the other hand, there are circumstances where, for groups with high proportions of ineligible voters, single-member district remedies may give rise to plans with higher levels of expected descriptive representation than for elections under modified at-large plans. Nonetheless, I believe that use of modified at-large plans in consent settlements to voting rights litigation, in jurisdictions where these election methods provide an appropriate remedy to the violation, is ***36** to be encouraged. [85] This is particularly true in very small jurisdictions, such as rural jurisdictions in the South, where drawing multiple districts may seem unreasonable. [86] However, if there is to be a substantial effort to persuade jurisdictions (or courts) to adopt these methods, compiling a track record from which their merits can be evaluated will be critical. [87]

Ethnic and racial categories used in censuses, e.g., Spanish origin, [88] Native American, [89] or Asian-American, [90] historically have ***37** often reflected a normatively laden set of prevailing norms of racial division and classification [91] as well as other factors. There is little that is natural or inevitable about how broadly or how narrowly census categories have been defined, as evidenced by the changes in the treatment of categories such as “Native American” and “Spanish origin” just over the past several decades. While racial and ethnic labels are presently matters for self-labeling on the U.S. Census, the categories for that self-labeling, unfortunately in my view, discourage multiple ethnic identification, although respondents can identify more than one country of ancestral origin. In this respect, the census categories do not reflect the changing shape of American society. While we still have a long way to go toward a polity where the most accurate ethnic (or racial) identification is “none” or “all of the above,” we are much closer to that than ever before. [92] For that progress I am glad. The Voting Rights Act is a response to a particular set of historical circumstances. The best news we could have is that it is no longer needed in a truly multicultural and multiracial society where, in Martin Luther King's words, people “will not be judged by the color of their skin but by the content of their character.” [93]

Footnotes

d Professor, School of Social Sciences, University of California, Irvine. I am indebted to the staff of the Word Processing Center, School of Social Sciences, University of California-Irvine, for manuscript typing, and to Dorothy Gormick for bibliographic assistance. This research was supported by Ford Foundation Grant n446740-47007 and also draws on previous research that was supported by National Science Foundation Grant SES n88-09392. Neither the Ford Foundation nor the National Science Foundation is in any way responsible for its contents. Portions of the discussion are adapted from language in Bernard Grofman et al., Minority Representation and the Quest for Voting Equality (1992).

1 With this expanded threshold, some areas with substantial Latino populations were covered for the first time including, Apache County, Arizona; Imperial County, California; and the New York City boroughs

of Manhattan and Brooklyn. For discussion of the 1970 extension of the Act, see Rudolfo de la Garza and Louis DeSipio, The Voting Rights Act and Latino Electorate Participation, Paper prepared for conference entitled, Key to Empowerment? The Voting Rights Act of 1965, American University, Washington, D.C. (April 6, 1990)(on file with author).

2 42 U.S.C. s 1973(b)(f)(3). Rudolfo de la Garza & Louis DeSipio, Between Voting Rights and Voter Empowerment: Lessons from the Extension of the Voting Rights Act to Latinos, 71 Tex. L. Rev. (forthcoming 1993)(commenting that "little debate went into the needs of Mexican Americans or Latinos when Congress extended the provisions of the Act to them").

3 See various essays in Controversies in Minority Voting (Bernard Grofman & Chandler Davidson eds., 1992), especially those by Chandler Davidson, Laughlin McDonald and Timothy G. O'Rourke.

4 Voting Rights Language Assistance Act of 1992, 42 U.S.C. s 1971 (1992). The 1992 changes also slightly expanded the circumstances under which bilingual ballots were required.

5 James Alt, The Impact of the Voting Rights Act on Black and White Registration in the South, in Quiet Revolution: The Impact of the Voting Rights Act in the South, 1965-1990 (Chandler Davidson & Bernard Grofman eds., forthcoming 1994))hereafter Quiet Revolution .

6 I will use the terms "Hispanics" and "Latinos" interchangeably to refer to the group that is covered under the Voting Rights Act under the rubric "persons of Spanish heritage." For alternative perspectives on the use of labels such as "Hispanic" or "Latino" see, e.g., Peter Skerry, E Pluribus Hispanic?, 16 Wilson Q. 62-73 (1992), and the introduction and various essays in The Politics of Ethnic Construction, Hispanic, Chicano, Latino? , 19 Latin Am. Persp. (Fall 1992).
— How to determine who counts as a person of Spanish heritage for purposes of the Voting Rights Act has been a matter of dispute. In Garza v. Los Angeles County Board of Supervisors, Nos. CV 88-5143 KN (Ex), CV 88-5435 KN (Ex), 756 F. Supp. 1298 (C.D. Cal. 1990), an expert witness testified that not all those who identified themselves as of Spanish origin on the census should be regarded as falling under the covered rubric of "persons of Spanish heritage." In particular it was argued that those born in Spain were not covered under the Voting Rights Act and that the portion of the Filipino population who identified themselves as of Spanish origin ought not to be counted as being of Spanish heritage. Garza, 756 F. Supp. at 1326. (The reason that this issue was important in the litigation is that removing these (and some other categories) from the protected class had the effect of reducing the Hispanic citizen voting-age population in the most heavily Hispanic district below 50%). The trial court in Garza followed the precedents of earlier decisions involving Hispanics by taking a Spanish origin response to the census questionnaire as the defining characteristic of the population covered under the Act. The Garza trial court also held that whether a group such as Hispanics, whose population might consist of a number of relatively distinct subgroups if classified by national origin, is in fact politically cohesive is a matter for empirical determination in a case-specific factual context.

7 Bilingual ballot provisions were mandated under the 1975 amendments to Titles 2 and 3 of the Act in jurisdictions that were covered by Section 5 and met certain other threshold conditions. One necessary condition was that the jurisdiction have more than 5% of a single language minority group. The language groups that fell under these provisions were the only groups other than blacks that were given special protection under Section 5, namely, American Indians, Asian Americans, Alaskan Natives, and those of Spanish heritage (Voting Rights Act, 42 U.S.C. s 1973(b)(f)(3)). At least for Spanish speakers, it appears that relatively few voters take advantage of non-English language ballots. de la Garza & DeSipio, supra note 2. These authors argue that, in addition to the help it actually provides to those with limited English competency, the bilingual ballot provisions also play an important symbolic role and should be kept, even if little used.

8 See, e.g., Peyton McCrary et al., Alabama; Laughlin McDonald et al., Georgia ; Richard L. Engstrom et al., Louisiana ; William R. Keech & Michael P. Sistrom; Orville Vernon Burton et al., South Carolina; Thomas R. Morris & Neil Bradley, Virginia; and Lisa Handley & Bernard Grofman, Black Officeholding in Southern State Legislatures and Congressional Delegations , chapters in Quiet Revolution , supra note 5.

9 See Robert Brischetto et al., Texas, in Quiet Revolution, supra note 5.

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10 For example, a suit brought under Section 2 of the Voting Rights Act by the Mexican American Legal Defense and Educational Fund (MALDEF) and the United States Department of Justice challenged the councilmanic lines used by the city of Los Angeles. United States v. City of Los Angeles, No. CV. 85-7739 (C.D. Cal. settled Oct. 10, 1986). The case was settled, a settlement that led to the creation of an additional Hispanic-majority council district that subsequently elected Gloria Molina.
— In Garza , MALDEF and the Department of Justice challenged the supervisorial lines under Section 2. After an extensive period of litigation and a long trial, the case was resolved by a ruling that led to the creation of an additional Hispanic-majority supervisorial district--a district that subsequently elected Gloria Molina as the first Hispanic member of the Los Angeles County Board of Supervisors in this century.

11 See Reapportionment and Representation in Florida (Susan McManus ed., 1991).

12 For example, Ketchum v. Byrne, 740 F.2d. 1398 (7th Cir. 1984), cert. denied, 471 U.S. 1135 (1985), involved the Chicago city council, where both Hispanic majority and black-majority districts were at issue. The result of the litigation was a gain of two additional black-majority seats and two additional Hispanic-majority seats. In the 1990s round of congressional redistricting, the threat of possible litigation under the Act was an important factor in leading to the creation of a Hispanic-majority congressional seat in the Chicago area.

13 Michael McDonald, The Effect of the Voting Rights Act in New York, Paper prepared for the Western Political Science Association Meeting, Seattle, WA (March 21-23, 1991)(on file with author).

14 See Gordon Henderson & Jeannette Wolfley, Native American Voting Rights, Presentation at the conference entitled, Impact of the Voting Rights Act, 1965-1990, Rice University (May 10-11, 1990).

15 Thornburg v. Gingles, 478 U.S. 30 (1986).

16 Whether the three prongs of Thornburg are either sufficient or necessary under all circumstances is a matter beyond the scope of this paper. For my views on that topic and a review of court cases through 1991, see Bernard Grofman et al., Minority Representation and the Quest for Voting Equality (1992); and Bernard Grofman & Lisa Handley, Identifying and Remedying Racial Gerrymandering, 8 J.L. & Pol. 345 (1992).

17 Increasingly, American cities, especially larger cities, are a multi-racial and multi-ethnic mosaic. See e.g., Angelo N. Ancheta & Kathryn K. Imahara, Multiethnic Voting Rights: Redefining Vote Dilution in Communities of Color, 27 U.S.F. L. Rev. (forthcoming 1993)(data on the 1990 population characteristics of ten of the largest cities in the United States)(manuscript on file with author); and the discussion of demographic trends in William P. O'Hare, America's Minorities: The Demographics of Diversity , 47 Population Bull. 1 (Dec. 1992).

18 The Brennan opinion is explicit on the point that Thornburg does not address "whether Section 2 permits, and if it does, what standards should pertain to, a claim brought by a minority group that is not sufficiently large and compact to constitute a majority in a single-member district,)and is alleging that the use of a multimember district impairs its ability to influence elections." 478 U.S. at 46 n.13. However, all appellate courts that have considered this question so far have regarded an "influence" claim as lacking judicially manageable standards. See discussion of this issue and case citations in Grofman & Handley, Identifying and Remedying Racial Gerrymandering, supra note 16; cf. J. Morgan Kousser, Beyond Gingles: Influence Districts and the Pragmatic Tradition in Voting Rights Case Law, Working Paper 831, California Institute of Technology, Pasadena, CA (Jan. 1993).

19 478 U.S. at 50-51 n.17.

20 883 F.2d. 1418 (9th Cir. 1989), overruled by Townsend v. Holman Consulting Corp., 914 F.2d 1136 (9th Cir. 1990).

21 McNeil v. City of Springfield, 658 F. Supp. 1015 (C.D. Ill. 1987), 851 F.2d 937 (7th Cir. 1988).

22 The citizenship question raises several pertinent issues. de la Garza & DeSipio have proposed that non-citizens be permitted to vote for the initial five-year period after their arrival in this country when they are not

yet eligible for naturalization, and that non-citizens who display their commitment to political participation by regular voting during this period have their naturalization exam waived. Supra note 2. It is useful to remember that non-citizens who expressed an intent to naturalize had been allowed to vote in local elections in many states during the early part of the 19th century. See Gerald M. Rosberg, Aliens and Equal Protection: Why Not the Right to Vote? 75 Mich. L. Rev. 1092 (1977). Indeed, non-citizen parents are presently allowed to vote in New York City School Board elections, and non-citizen residents have also recently been given the right to vote in Takoma Park, Maryland and five other Maryland towns. Wendy Aviva Shimmerman, Local Voting Rights for Non U.S. Citizen Immigrants in New York City (Center for Immigrants' Rights, New York, NY), July 1992, at 4. However, these are the only examples of contemporary non-citizen voting in the United States of which I am aware; Shimmerman alludes to a California city where this is also true but for which she does not provide details.

23 918 F.2d 763 (9th Cir. 1990), cert. denied, 498 U.S. 1028 (1991).

24 The Senate Report states: "The question whether the political processes are 'equally open' depends upon a searching practical evaluation of the 'past and present reality' ... and on a 'functional' view of the political process" (citations omitted). Thornburg, 478 U.S. at 45, citing S. Rep. No. 417, 97th Cong., 2d Sess. 28 (1992).

25 The appellate court decided the case on other grounds, holding that no strict size threshold applied when a group had been the victim of purposeful voting rights discrimination. Garza, 756 F. Supp. 1298 (1990). Judge Kenyon found purposeful discrimination against Hispanics that took the form of racial gerrymandering to fragment the Hispanic core population in the eastern and central part of the county; it was this aspect of his opinion that was seized on by the 9th Circuit as the grounds for their finding of a voting rights violation. Garza, 918 F.2d at 771. Thus, they did not reach the size threshold issue in the absence of purposeful dilution.

26 Garza , 756 F. Supp. at 1320.

27 My expert witness testimony in the L.A. County case pointed out a problem that apparently was not raised in earlier litigation, namely that citizen voting-age population by race and Spanish origin was not available at the time of the post-censal redistricting in 1981, and would not be available in time for post-censal redistricting in 1991 or even 1992. Thus, a threshold test that would require use of citizen voting-age population data would have made it effectively impossible for Hispanic plaintiffs to challenge 1990s redistricting plans until 1993 or so, and might have made it impossible for jurisdictions to know for sure whether the plans they had drawn would satisfy the Voting Rights Act. Also, because a large number of Hispanic non-citizens will be naturalized in the 1990s as a result of the special amnesty provisions passed by Congress several years ago, the Hispanic non-citizen proportion in 1990 may be a poor indicator of Hispanic potential to elect candidates of choice over the course of the decade. On the other hand, de la Garza & DeSipio note that little is done to encourage naturalization among new immigrants and have proposed a far more active federal role. Supra note 2. Other related issues in Garza had to do with the accuracy of census data used for apportionment and the problems of minority undercount versus minority overreporting of citizenship. Garza , 756 F. Supp. at 1324-25.

28 With respect to the obverse issue: Do groups that are component of a protected group (e.g., Hispanic-identifying Cuban-Americans or Central Americans in the case of Hispanics, or Japanese-Americans or Korean-Americans in the case of Asians), have a right to be treated separately from the remainder of their group if their interest and those of the wider group are not perfectly in agreement? My views are that (1) only Congress should determine when groups are entitled to special attention under the 14th Amendment, and that, at this point, with respect to election practices (except for bilingual ballots), the groups identified by Congress are blacks, Asian-Americans, American Indians, Alaskan Natives and those of Spanish heritage and subgroupings thereof; and (2) while one should not proliferate groups needlessly, this does mean that we cannot pay attention to the nonfragmentation of groups -- such as Salvadorans in New York City, for example--in terms of "community of interest" norms without treating such subgroups as having legal claims under the Voting Rights Act that are distinct from the broader group of which they are component. See Bernard Grofman, Would Vince Lombardi Have Been Right If He Had Said, "In Redistricting Race Is Not Everything, It's The Only Thing?", 14 Cardozo L. Rev. (forthcoming 1993).

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29 This is the approach taken by most courts confronting multi-ethnic claims of political cohesiveness. See, e.g., Campos v. City of Baytown, 840 F.2d 1240 (5th Cir. 1988), reh'g denied en banc, 849 F.2d 943 (5th Cir. 1988), cert. denied, 492 U.S. 905
—(1989). For an alternative point of view that is far more hostile to the voting rights claims of "combined" groups, see Katherine I. Butler & Richard Murray, Minority Vote Dilution Suits and the Problem of Two Minority Groups: Can a 'Rainbow Coalition' Claim the Protection of the Voting Rights Act?, 21 Pac. L. J. 619 (1990). It is important to note that most courts confronted with claims of cross-ethnic political cohesiveness have rejected such claims as inadequately substantiated and thus have not needed to determine precisely how to deal with a combined group claim with respect to the first prong of Thornburg. See Ancheta & Imahara, supra note 17.

30 Likewise, the existence of multiple groups might not seem to affect the remedy aspect of Thornburg. Presumably, we would still look at factors such as voting-age population, registration and turnout (either for the combined group or for the individual groups versus the remaining population) to determine the conditions under which a proposed remedy district provides a group with a realistic opportunity to elect candidates of choice. However, as noted below, attentiveness to coalitional possibilities, on the one hand, and to the likelihood of electoral success with only a plurality of the vote, on the other hand, complicates the picture.

31 Meek v. Metropolitan Dade County, No. 86-1820 CIV-Ryskamp (S.D. Fla. Oct. 5, 1988), 908 F.2d l540 (llth Cir. 1990), cert denied, 111 S. Ct. 1108 (1991).

32 Of course, a group with substantial, but not majority support can win with a sufficiently large cross-over support from members of other groups.

33 Alternatively, we might ask whether a single-member district remedy is the appropriate baseline against which to determine whether a group's voting rights have been violated--an issue raised in both its legal and policy aspects in a number of recent articles. See, e.g., Pamela S. Karlan, Maps and Misreadings: The Role of Geographic Compactness in Racial Vote Dilution Litigation, 24 Harv. C. R.-C.L. L. Rev. 173 (1989); Lani Guinier, No Two Seats: The Elusive Quest for Political Equality, 77 Virg. L. Rev. 1413 (1991); Edward Still, Alternatives to Single Member Districts, in Minority Vote Dilution 249 (Chandler Davidson ed., 1984); Edward Still, Cumulative Voting and Limited Voting in Alabama, in United States Electoral Systems: Their Impact on Women And Minorities 183 (Wilma Rule & Joseph F. Zimmerman eds., 1992). Later in this article I consider the issue of the desirability of alternative remedies such as limited and cumulative voting. Arguably, this issue is particularly pertinent in the case of cities with multiple protected groups of substantial size. See Judith Reed, Of Boroughs, Boundaries and Bullwinkles: The Limitations of Single-Member Districts in a Multiracial Context, 19 Fordham Urb. L.J. 759 (1992).

34 Bernard Grofman & Lisa Handley, Minority Population Proportion and Black and Hispanic Congressional Success in the 1970s and 1980s, 17 Am. Pol. Q. 436 (1989), reprinted as revised, Preconditions for Black and Hispanic Congressional Success, in United States Electoral Systems: Their Impact on Women and Minorities 31 (Wilma Rule & Joseph F. Zimmerman eds., 1992).

35 See supra note 9.

36 See also Judith Sanders-Castro et al., The Texas Experience with Combined Minority Districts as an Indication of the Level of Coalitional Politics, Memorandum prepared for MALDEF, San Antonio, TX (Oct. 1989) (on file with author).

37 For further discussion of that test, see Grofman et al., supra note 16.

38 The discussion below elaborates on how best to operationalize this approach. An alternative legal approach, resting more on the pre- Thornburg "totality of the circumstances" approach than on the three-pronged test laid down in Thornburg, is set out in Ancheta & Imahara, supra note 17. They reject adherence to formulaic principles and suggest a fact-intensive remedial theory based on complete relief and the maximization of minority voter opportunities. In contrast, I do not regard the Voting Rights Act as requiring maximizing minority influence, but only requiring equal treatment. For an elaboration of this point and discussion of

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the pre- Thornburg case law involving the "totality of the circumstances" approach, see Grofman et al., supra note 16, at 61-81, 129-137.
— It is beyond the scope of this paper to speculate on the conditions under which black and Hispanic or Hispanic and Asian-American coalitions are likely. My own general view is that this is best approached in a case-specific manner. But see , Bruce Cain et al., Blacks, Hispanics, Asians and Anglos: When Do They Coalesce?, Remarks prepared for the Public Choice Conference on Modeling Race and Electoral Politics, University of California, Irvine, CA (May 1991)(on file with author); Paula D. McClain, The Changing Dynamics of Urban Politics: Black and Hispanic Municipal Employment--Is There Competition? J. Pol. (forthcoming 1993)(on file with author); James Jennings, Blacks and Latinos in the American City in the 1990s: Toward Political Alliances or Social Conflict? 3 Ethnic Pol. & Civ. Liberties, Nat. Pol. Sci. Rev. 158 (Lucius J. Barker ed., 1992); Carole J. Uhlaner, Perceived Discrimination and Prejudice and the Coalition Prospects of Blacks, Latinos and Asian Americans, in Racial and Ethnic Politics in California 339 (Byron O. Jackson & Michael B. Preston eds., 1991); Rodney E. Hero, Multiracial Coalitions in City Elections Involving Minority Candidates: Some Evidence from Denver, 25 Urb. Aff. Q. 342 (1989); Charles S. Bullock III & Susan A. McManus, Voting Patterns in a Tri-Ethnic Community: Conflict or Cohesion? The Case of Austin, Texas, 1975-1985, 79 Nat. Civ. Rev. 5 (Jan./Feb. 1990); Rufus P. Browning et al., Protest is Not Enough: The Struggle of Blacks and Hispanics for Equality in Urban Politics, and various essays on racial politics in individual cities, in Racial Politics in American Cities (Rufus P. Browning et al. eds., 1990).

39 E.g., Romero v. City of Pomona, 883 F.2d 1418 (9th Cir. 1989), overruled by Townsend v. Holman Consulting Corp., 914 F.2d 1136 (9th Cir. 1990); Skorepa v. City of Chula Vista, 723 F. Supp 1384 (S.D. Cal 1989); Vallodolid v. City of National City, 976 F.2d 1293 (9th Cir. 1992); Badillo v. City of Stockton, 956 F. 2d 884 (9th Cir. 1992).

40 Latino Political Action Committee v. Boston, 784 F.2d 409 (1st Cir. 1986).

41 LULAC v. Midland Independent School Dist., 812 F.2d 1494 (5th Cir. 1987), vacated, 829 F.2d 546 (5th Cir. 1987)(en banc)(minority plaintiffs prevail); Campos v. City of Baytown, 840 F.2d 1240 (5th Cir. 1988), cert. denied, 492 U.S. 905 (1989)(minority plaintiffs prevail); cf. Overton v. City of Austin, 871 F.2d 632 (4th Cir. 1987)(minority plaintiffs lose).

42 If the minority candidates are not viable, then I would not be prepared to conclude that lack of support for them from the minority community demonstrated lack of minority political cohesiveness. See Garza, 756 F. Supp. at 1344-46.

43 I interpret the language of the 5th Circuit in Campos, 840 F.2d at 1245, as holding that the key is the minority group as a whole. Of course, if one part of the group cannot be expected to vote with the other part, the combination is not cohesive. If the evidence were to show that blacks voted against a Hispanic candidate, or vice versa, then the minority group could not be said to be cohesive. However, if the statistical evidence is that blacks and Hispanics vote together for the black or Hispanic candidate, then cohesion is shown. (It is also important to note that all combined group claims of which I am aware were made in the context of a situation where the component groups would singly have been unable to meet any form of 50% size threshold test).

44 This claim was made during deposition by expert witness, Stephen Klein, for the defendant in Badillo , 956 F.2d 884 (9th Cir. 1992).

45 This result is derived from a variant of the method of bounds approach in Otis D. Davis & Beverly Davis, An Alternative to Ecological Correlation , 18 Am. Soc. Rev. 665 (1953).

46 812 F.2d 1494 (5th Cir. 1984), vacated, 829 F.2d 546 (5th Cir. 1987)(en banc).

47 Id. at 1500-1501. For a different judicial response to anecdotal evidence of cohesion, see Brewer v. Hamm, 876 F. 2d 448 (5th Cir. 1989). I have suggested that attention to political realities such as multi-ethnic districts and the need to distinguish between voting patterns in primaries and in general elections made a bright-line test problematic for situations when a group was large enough to have a realistic opportunity to elect candidates. This same evidence might also be read to suggest that a test of political cohesion between

minority groups that requires such cohesion to be present under all circumstances may be undesirable from the standpoint of a functional approach to political cohesion. This would certainly be the view of Ancheta & Imahara, supra note 17.

48 de la Garza & DeSipio, supra note 2. They note that, at these hearings, similar claims were made about the status of the voting rights of rural Mexican-Americans in California.

49 I believe that adding groups to the list of those now given special protection by the Act is not something that should be undertaken lightly. The presumption, in my view, should be for standards of equal protection that apply equally to all individuals. However, when the nature of the discrimination is clearly directed against members of a given racial or ethnic group solely by virtue of their membership in that group it is often the case that remedies must be designed to be explicitly race-conscious.

50 It seems to me as impermissible to fragment a substantial compact and contiguous black or Asian-American population concentration so as to draw a Hispanic-majority seat as it is to fragment a substantial compact and contiguous Hispanic population concentration so as to protect a non-Hispanic white incumbent. Thus, in my view, if there was a city with a Hispanic majority electing at-large in which there was an Asian-American minority that could satisfy the three prongs of Thornburg, the fact that the voting rights claim would not be directed at whites/Anglos seems to me quite irrelevant. In the case where only one covered group has sufficient population concentration to have a district drawn in which its members will have a realistic opportunity to elect candidates of choice, then, ceteris paribus, I would prefer to see the plan drawn so as to permit that to occur even at the cost of some minor fragmentation of small population pockets of other covered groups. However, I would emphasize that this is a quite complex topic requiring case-specific analysis on which it is virtually impossible to state general rules. For different views on these questions, see Ancheta & Imahara, supra note 17.

51 See Alan Gartner, Drawing the Lines: Redistricting and the Politics of Racial Succession in New York (1994) (unpublished manuscript, on file with author). Ancheta and Imahara suggest that a similar rule was followed by the California Supreme Court in drawing legislative and congressional plans in 1992 when the state legislature and the governor failed to agree on plans. Supra note 17. See also Wilson v. Eu, 823 P.2d 545, 549-50, 566 (1992).

52 This was arguably exactly the situation in Ohio. See Voinovich v. Quilter, 113 S. Ct. 1179 (1993).

53 For both groups there will be growth in the number eligible to vote, but continuing immigration will probably keep the non-citizen proportion high. Also, for Hispanics, except for Cubans and for the long-settled Hispanic community in New Mexico, there is relatively clear evidence of lower turnout rates among Hispanics than among non-Hispanics even among voters who are already registered. See discussion of changing Hispanic demography and participation patterns in de la Garza & DeSipio, supra note 2.

54 The ceteris paribus assumption fails if, in general, white/Anglo voters are more willing to support Asian-American candidates (or Hispanic candidates) than they are to support African-American candidates.

55 Cf. Bernard Grofman & Lisa Handley, Black Representation: Making Sense of Electoral Geography at Different Levels of Government, 14 Legis. Stud. Q. 265 (1989).

56 In my view, this occurred in New York City; however, there also were a handful of unnecessary last-minute changes in the New York City plan that gave the appearance of being unfair to Hispanics and that led the Department of Justice to insist on some minor revisions in the plan before preclearance would be granted. These last-minute changes were made largely to satisfy the preferences of minority incumbents. For a somewhat different perspective on New York City redistricting, see Gartner, Drawing the Lines, supra note 51.

57 Bernard Grofman, For Single Member Districts Random Is Not Equal, in Representation and Redistricting Issues 55 (Bernard Grofman et al. eds., 1982). However, the advantage of group size may be compensated for by a smaller group's greater geographic concentration. See Grofman & Handley, Black Representation, supra note 55.

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58 The Hare System is also known as the single transferable vote or STV.

59 Bernard Grofman, A Review of Macro-Election Systems, in 4 German Political Yearbook 303 (Rudolph Wildenmann ed., 1975).

60 This is the form of limited voting used in Japan where it is known as the single non-transferable vote. It is also the form of limited voting that has been used in the United States in virtually all jurisdictions that have (by consent decree) adopted limited voting as a way to resolve a voting rights challenge. Edward Still, Limited Voting and Cumulative Voting as Remedies for Minority Vote Dilution in Judicial Elections, Paper prepared for Annual Meeting of the American Political Science Association, Atlanta, GA (Aug. 30-Sept. 3, 1989) (on file with author).

61 See, e.g., Bernard Grofman, Alternatives to Single-Member Plurality Districts: Legal and Empirical Issues, 9 Pol'y Stud. J. 875 (1981); Still, Alternatives to Single Member Districts, supra note 33; Still, Limited Voting and Cumulative Voting, supra note 60; Still, Cumulative Voting and Limited Voting in Alabama, supra note 33; Karlan, Maps and Misreadings, supra note 33; Lani Guinier, The Triumph of Tokenism: The Voting Rights Act and the Theory of Black Electoral Success, 89 Mich. L. Rev. 1077 (1991); Guinier, No Two Seats, supra note 33; Guinier, Development of the Franchise: 1982 Voting Rights Amendments, in Voting in America 101 (Karen Arrington & William Taylor eds., 1992).

62 In multi-ethnic settings the process of creating districts can generate conflict between minorities. Thus a modified at-large system might seem especially attractive in jurisdictions with multi-ethnic populations. As yet, however, the settings where modified at-large systems have been implemented are ones where there has been only a single substantial minority population whose voting rights are at issue--blacks in Alabama and Georgia jurisdictions; Native Americans in Sisseton, North Dakota; and Hispanics in Alamagordo, New Mexico.

63 See Still, Alternatives to Single Member Districts, supra note 33; Still, Cumulative Voting and Limited Voting, supra note 60; Still, Cumulative Voting and Limited Voting in Alabama, supra note 33.

64 831 F. 2d 246 (11th Cir. 1987).

65 United States v. City of Augusta, No. CV. 187-004 (S.D. Ga. July 22, 1988).

66 Richard L. Engstrom & Charles J. Barrilleaux, Native Americans and Cumulative Voting: The Sisseton-Wahpeton Sioux, 72 Soc. Sci. Q. 386 (1991).

67 Id.

68 860 F.2d 110 (4th Cir. 1988).

69 The view that these systems are foreign to the American experience is wrong. See historical discussion of the use of limited voting, cumulative voting, and STV in Grofman, For Single Member Districts, supra note 57; Grofman, Criteria for Districting: A Social Science Perspective, 33 UCLA L. Rev. 77 (1985); and Leon Weaver, The Rise, Decline and Resurrection of Proportional Representation in Local Governments in the United States, in Electoral Laws and Their Political Consequences 139 (Bernard Grofman & Arend Lijphart eds., 1986).

70 See Engstrom & Barrilleaux, Native Americans and Cumulative Voting, supra note 66; Still, Alternatives to Single Member Districts, supra note 33; Still, Limited Voting and Cumulative Voting, supra note 60; Still, Cumulative Voting and Limited Voting in Alabama, supra note 33.

71 See Chandler Davidson & Bernard Grofman, Introduction to Quiet Revolution , supra note 5. We distinguish between four stages of research on minority voting rights; the first is concerned with minority enfranchisement, the second with descriptive representation, the third with minority political incorporation (including electoral participation), the fourth with the substantive policy implications of growth in minority participation and representation.

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72 See, e.g., Davidson & Grofman, id.; Grofman & Handley, Black Representation, supra note 55; Handley & Grofman, Black Officeholding in Southern State Legislatures , supra note 8.

73 See Guinier, The Triumph of Tokenism, supra note 61; Guinier, No Two Seats, supra note 33; Guinier, Development of the Franchise, supra note 61; Guinier, Groups, Representation and Race Conscious Districting: A Case of the Emperor's Clothes, 71 Tex. L. Rev. (forthcoming 1993)(on file with author).

74 See Guinier, Groups, Representation and Race Conscious Districting, id. Guinier has suggested that modified at-large systems may provide incentives for continued political participation to a greater extent than occurs in cities which have adopted districted plans with districts that are overwhelmingly of a given race or ethnicity. In the latter, after the first (minority and other) representatives are elected from the new districts, political competition may be minimal, and the absence of political competition can be expected to diminish turnout. de la Garza & DeSipio, supra note 2. In contrast, in limited and cumulative voting systems, the potential for a relatively small group to elect a candidate of choice, and the need to mobilize one's voters in order to assure reelection in a city-wide contest should operate to keep incentives to participate relatively high. Unfortunately this hypothesis, while plausible, is as yet without empirical verification.

75 In the worst-case scenario we might conjecture that modified at-large systems have polarizing effects and lead to the election of candidates who see themselves as representing only narrow interests. In such systems, there is no need to appeal to any constituency broader than the relatively small group needed to guarantee one's election, and the latter group can be expected to be even more homogeneous than any geographically defined electorate. Alternatively, the fact that representatives in modified at-large systems are elected at-large may lead them to identify with the interests of the jurisdiction as a whole, even though their voting support derives from only a portion of the electorate.

76 Garza, 756 F. Supp. at 1323.

77 See supra note 10.

78 It is also important to realize that the pool of non-Hispanic potential voters in this district was generally less wealthy and less well-educated than the average county non-Hispanic resident. In particular, registration and turnout rates among the non-Hispanics living in or near the Hispanic barrio area that formed the heart of the new Hispanic-majority supervisorial district were considerably lower than registration and turnout rates for non-Hispanics in the county as a whole. This made it easier to construct a district with a Hispanic registration majority than might first have appeared to be the case.

79 While we can construct scenarios in which this would not occur, such scenarios are unlikely.

80 I am assuming the extistence of only five seats, which is the present number. Proposals to expand the size of the Los Angeles County Board of Supervisors have been rejected. Louis Sahagun & Richard Simon, Controversial Plan To Expand Board of Supervisors Will Not Be Submitted To Voters , L.A. Times , Feb. 26, 1992, at B1.

81 I emphasize this only as a possibility. The prospect of Asian-American political success resting on a base of ethnic voters is hampered by both high non-citizen proportions and the fact that the Asian-American community in New York (and many other areas) is made up of a large number of different language groups, albeit with those of Chinese descent by far the largest grouping. In New York City, there are various organizations that are seeking to stimulate a pan-Asian political identity to strengthen the political clout of Asian-Americans. How successful their efforts will be remains an open question.

82 The Chinese-American community was divided in the debates over how to draw new city council lines in 1991. One well-known Chinese-American candidate and her supporters favored the placing of the Manhattan Chinatown area in a district that would combine it with a population of relatively affluent (and liberal) whites, in which she thought she would run well, while groups such as the Asian-American Legal Defense and Educational Fund wanted to combine Chinatown with a heavily Hispanic section of the lower east side (Losaido). The former proposal was adopted by the New York City Districting Commission, largely if not entirely, because it was the scheme favored by the one Asian-American member of the

Commission. The Asian-American candidate in the district including the Manhattan Chinatown area was defeated in the 1991 elections held under the new plan. See Gartner, Drawing the Lines, supra note 51.

83 The importance of the citizenship factor is stressed by de la Garza & DeSipio, who, as noted previously, argue for federal governmental involvement in encouraging naturalization, given the virtual absence of the traditional political machines which helped convert new immigrants into new voters in the decades before and after the turn of the century; they also argue for non-citizens' eligibility to vote. Supra note 2.

84 Of course, there are some highly publicized exceptions, such as the failure of Hispanic and black political leaders to reach an agreement about the drawing of new lines for the Los Angeles City Council in 1992. Richard Simon, Blacks, Latinos Clash Over Redistricting , L.A. Times , May 15, 1992, at B3.

85 Cf. Karlan, Maps and Misreadings, supra note 33; Guinier, No Two Seats, supra note 33; Guinier, The Triumph of Tokenism, supra note 61.

86 See Chandler Davidson & Bernard Grofman, The Voting Rights Act and the Second Reconstruction, in Quiet Revolution, supra note 5.

87 Moreover, I share the view of Rudolfo de la Garza that we need to be very cautious about blindly applying remedies designed primarily for one group to the other groups covered under the Act whose factual circumstances may be different. Oral Communication with Rudolfo de la Garza (Nov. 1992).

88 It seems to me to be increasingly common to see “Hispanic” treated as a racial category (as in the statement often found in newspapers that, with growing Hispanic and Asian-American populations, whites will no longer be in a majority of the United States population in the next century). I find this highly misleading. Spanish origin, for example, is a catch-all phrase, partly a category of administrative convenience and partly a categorization responsive to the desire of Mexican-American and other Hispanic politicians to define group membership broadly so as to increase their political clout. Perhaps even more importantly, we should be careful to remember that Spanish origin is used as an ethnic/cultural/linguistic category by the census, not a racial category.

— Hispanics are of various racial groups. While a very large proportion identify themselves as “other” or “none of the above” with respect to the census question that inquires as to racial self-identification, among the Hispanics who do not self-identify as “other,” more choose the descriptor “white” than any other racial category. (Racial self-identification of Hispanics does, however, vary with country of origin or ancestral national origin). Moreover, insofar as Hispanics are a linguistically and culturally defined group, Hispanic self-identification is not immutable. Would anyone wish to repeat with respect to Hispanics the pernicious racism of the “one drop of blood” rule that froze categories so that anyone who had any black ancestry was by definition “black”?

— In addition, not all children born to a Hispanic parent will subsequently self-identify as Hispanic. O'Hare reports that, “)i n 1991, there were an estimated ... 1.2 million Hispanics married to non-Hispanics.” Supra note 17, at 14. He also reports that, “)n early one-fourth of the babies born to Hispanic parents of any race ... had a non-Hispanic mother or father.” Id.

— Similarly, to talk of a Hispanic influx as reducing the size of the U.S. population that is of European-descent is a very problematic assertion, given that the labels “Hispanic” or “Latino” (and even more so the Voting Rights Act descriptor, “Spanish heritage”) correctly suggest that the cultural heritage of Hispanics includes a strong European influence. To point out the obvious, Spanish is a European language, a Romance language whose roots are Latin. Richard Alba emphasized the leveling of once-important national origin distinctions among Americans of European descent and the rise of intermarriage rates across national origin and religious lines. Richard D. Alba, Ethnic Identity: The Transformation of White America (1990). Such a process may eventually come to include Hispanics. Also, just as in religious practices there are similarities between Hispanics and Americans with, for example, Italian or Irish roots, similarities in political attitudes on a variety of issues among these three groups are also to be found.

89 Bernard Grofman & Michael Migalski, The Return of the Native: The Supply Elasticity of the American Indian Population, 1960-1980, 57 Pub. Choice 85 (1988) (discussing changes in the census definition of Native Americans over the past several decades).

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90 This category includes, for example, natives of both India and Japan.

91 For example, we do not now use a category such as "quadroon" or "octaroon" on the census, whereas both these words were once used.

92 O'Hare, supra note 17, at 14. He points out that there were an estimated "one million inter-racial couples in 1991," and that, "while mixed-race babies are less than 3 percent of all births nationally, they represented at least l3 percent of the children born to a non-white parent in 1989, and a much higher percentage among some groups." Id. In particular, while only "seven percent of marriages)in 1991 involving an African-American were interracial," the proportion of Asian Americans married to someone outside their own race was "about one quarter." Id. See also Elizabeth Campos Rajs, Pros, Cons of Ethnic Labels: Standard Categories Don't Fit Multiethnic Population, 5 U.C. Focus 1 (May/June 1991)(student groups at UC Berkeley and UC Santa Cruz are formed for "mixed-race" students); Paul R. Spickard, The Illogic of American Racial Categories, in Racially Mixed People in America 12 (Maria P. P. Root ed., 1992); Cynthia L. Nakashima, An Invisible Monster: The Creation and Denial of Mixed-Race People in America, in Racially Mixed People in America , id. at 162.

93 Martin Luther King, I Have A Dream, in The Testament of Hope: The Essential Writings Of Martin Luther King, Jr. 217 (James W. Washington ed., 1986).
— A world where fixed racially or ethnically defined groups are awarded a share of a governmentally allocated pie in strict proportion to their numbers, while certainly not as morally repugnant as a politics of racist dominance, is still an anathema to me. See Bernard Grofman & Chandler Davidson, Postscript: What is the Best Route to a Color-Blind Society, in Controversies in Minority Voting , supra note 3, at 300. However, unlike some other advocates of a color-blind society, I am also a realist, opting for what I have called, the "realistic politics of the second best," a politics in which it is recognized that race-conscious remedies are frequently necessary in a race-conscious world. Grofman, Expert Witness Testimony and the Evolution of Voting Rights Case Law, in Controversies in Minority Voting, supra note 3, at 197. A realistic politics of the second best does not mean, though, that we should reify racial or ethnic categories or that we should force people into inappropriate "either-or" identifications.

13 CHLLR 15

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Exhibit C

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION

Latasha Holloway, et al., *Plaintiffs*, v. City of Virginia Beach, et al., *Defendants*.	Case No. 2:18-cv-0069

DECLARATION OF KIMBALL W. BRACE

I, Kimball W. Brace, declare and state pursuant to 28 U.S.C. § 1746 as follows:

1. I have over 42 years of experience drawing electoral districts during redistricting cycles and in remedial phases for litigation. This experience includes drawing electoral districts in the City of Virginia Beach for the past three decades. I was a fact witness and testifying expert during the liability phase of this matter, and I have submitted an affidavit during the remedial phase of this matter. Dkt. 260-1. My curriculum vitae is familiar to this court and most recently submitted as Exhibit A to Dkt. 260-1.

2. This declaration is given in support of Defendants' November 16, 2021 Submission in Response to Court's October 26, 2021 Order (Dkt. 281).

3. I have reviewed Dr. Bernard Grofman's proposed remedial plan attached to the Court's October 26, 2021 Order at Dkt. 281-1 (the "Special Master's Plan").

4. Attached at Exhibit A are charts detailing the 2020 Census data in the Special Master's Plan; total population data has been adjusted to account for prisoner reallocation.[1]

[1] The Commonwealth of Virginia only reallocates prisoners to their last home address for total population figures and does not create this calculation for voting age population or by race.

5. Attached at Exhibit B are maps showing each district in the Special Master's Plan and the City as a whole. Stars indicate the residences of incumbent members of the City Council.

6. The following Table 1 shows the total population and deviation in the Special Master's Plan using 2020 Census data adjusted for prisoner reallocation (Exhibit A at 2):

TABLE 1

Special Master Plan District	Total Population	Target Population	Raw Deviation	Percent Deviation
1	47,744	46,028	1,716	3.7%
2	44,702	46,028	(1,326)	-2.9%
3	47,490	46,028	1,462	3.2%
4	44,122	46,028	(1,906)	-4.1%
5	45,181	46,028	(847)	-1.8%
6	43,917	46,028	(2,111)	-4.6%
7	45,954	46,028	(74)	-0.2%
8	46,878	46,028	850	1.8%
9	48,245	46,028	2,217	4.8%
10	46,045	46,028	17	0.0%
Total Deviation[2]				**9.4%**

7. The following Table 2 shows the demographic data in the Special Master's Plan using 2020 Census data (Exhibit A at 10):

TABLE 2

Special Master Plan District	VAP Total	Racial Demographics as Percent of Total Population (Census 2020)					
		White NH VAP	Black NH VAP	Asian NH VAP	Hispanic VAP	Black/Asian/ Hispanic VAP[3]	Total Minority VAP[4]
1	37,160	61.26%	17.85%	9.26%	5.94%	33.05%	38.74%
2	34,603	70.08%	11.40%	7.96%	5.71%	25.07%	29.92%
3	37,042	58.32%	19.86%	6.93%	8.69%	35.48%	41.68%
4	34,389	40.84%	34.97%	6.74%	11.00%	52.71%	59.16%
5	34,610	72.81%	9.13%	4.14%	7.95%	21.22%	27.19%
6	35,577	71.29%	12.93%	2.73%	7.79%	23.45%	28.71%
7	34,514	44.92%	26.49%	15.24%	7.57%	49.30%	55.08%
8	37,177	82.05%	5.59%	3.76%	4.49%	13.84%	17.95%
9	38,324	69.23%	11.85%	6.25%	7.39%	25.49%	30.77%
10	34,690	41.52%	28.09%	14.64%	9.50%	52.23%	58.48%

[2] Calculated by adding the largest positive deviation (4.8%) to the largest negative deviation (4.6%).
[3] Calculated by adding the percentages for Black NH VAP, Asian NH VAP, and Hispanic VAP.
[4] Calculated by subtracting the percentage for White NH VAP from a total of 100%.

8. The following Table 3 shows the demographic data in the Special Master's Plan using the 2019 ACS estimated percentage of CVAP for each district to estimate percentage CVAP for each demographic category using 2020 Census data (Exhibit A at 11).

TABLE 3

Special Master Plan District	VAP Total	Racial Demographics as Percent of Total Population (Census 2020)					
		White NH CVAP	Black NH CVAP	Asian NH CVAP	Hispanic CVAP	Black/Asian/ Hispanic CVAP[5]	Total Minority[6] CVAP
1	36,126	64.77%	20.25%	7.06%	4.58%	31.89%	35.23%
2	33,222	72.29%	13.73%	6.45%	4.67%	24.85%	27.71%
3	35,425	63.61%	20.35%	4.94%	7.86%	33.15%	36.39%
4	31,972	47.75%	34.16%	5.90%	8.81%	48.87%	52.25%
5	33,718	77.77%	8.97%	2.91%	7.02%	18.90%	22.23%
6	33,797	75.16%	15.30%	1.69%	4.58%	21.57%	24.84%
7	32,870	46.93%	29.39%	11.55%	8.58%	49.52%	53.07%
8	35,408	84.04%	6.26%	3.45%	3.37%	13.08%	15.96%
9	37,103	75.74%	11.38%	4.41%	5.83%	21.62%	24.26%
10	32,373	45.26%	30.92%	10.63%	9.02%	50.57%	54.74%

I declare under penalty of perjury that the foregoing is true and correct. Respectfully executed and submitted this 16th Day of November 2021.

Kimball W. Brace

[5] Calculated by adding the percentages for Black NH CVAP, Asian NH CVAP, and Hispanic CVAP.
[6] Calculated by subtracting the percentage for White NH CVAP from a total of 100%.

Exhibit A

Virginia Beach Plaintiff Districts Plan with 2020 Census Data

City Wards
2020

Number of Members	10
Ideal District Size (Target)	45,947
Acceptable Deviation	10.0%
Overall Deviation Window	4,595
One-sided Deviation Window	2,297
High Range (Raw Numbers)	48,244
High Range (Percentages)	5.0%
Low Range (Raw Numbers)	43,650
Low Range (Percentages)	-5.0%
Statewide Population	459,470

Analysis based on preliminary district definitions in Census Bureau files.
District boundaries have not been verified.

Tables	
Total Population	1, 2, & 3
Voting Age Population	4, 5 & 6
Race Alone	1 & 4
Combo	2 & 5
OMB Interpetation	3 & 6
No Hispanic category	Single digit tables
Hispanic category	"A" tables

Guide

Pop =	Total Population, also shown as PopTot or TAPersons in tables
VAP =	Voting Age Population, also VAPTot
WH =	White
BL=	Black, or African American
AS=	Asian
NA, or AI=	Native American or American Indian
PI=	Pacific Islander
OT=	Some Other Race
Hisp=	Hispanic
NH=	Non-Hispanic
XX=	More than one Race
P=	Percentage
_A=	Race Alone
_C=	Combo
_W=	OMB interpetation

Special Master Remedial Plan - Data.xlsx

Deviations

	A	B	C	D	E	F	G	H	I	J
1		Original PL Data					Post Prisoner Reallocation			
2	**Wards**	**POPTOT**	***Target***	***Raw Dev.***	***% Dev.***		**Adj POPTOT**	***Adj Target***	***Raw Dev.***	***% Dev.***
3	1	47,583	45,947	1,636	3.6%		47,744	46,028	1,716	3.7%
4	2	45,624	45,947	(323)	-0.7%		44,702	46,028	(1,326)	-2.9%
5	3	47,230	45,947	1,283	2.8%		47,490	46,028	1,462	3.2%
6	4	43,810	45,947	(2,137)	-4.7%		44,122	46,028	(1,906)	-4.1%
7	5	45,062	45,947	(885)	-1.9%		45,181	46,028	(847)	-1.8%
8	6	43,686	45,947	(2,261)	-4.9%		43,917	46,028	(2,111)	-4.6%
9	7	45,773	45,947	(174)	-0.4%		45,954	46,028	(74)	-0.2%
10	8	46,779	45,947	832	1.8%		46,878	46,028	850	1.8%
11	9	48,102	45,947	2,155	4.7%		48,245	46,028	2,217	4.8%
12	10	45,821	45,947	(126)	-0.3%		46,045	46,028	17	0.0%
13										
14	STATE TOT	459,470					460,278			
15										
16	Total Dev			4,416	9.6111%				4,328	9.4034%
17	Highest			2,155	4.6902%				2,217	4.8171%
18	Lowest			(2,261)	-4.9209%				(2,111)	-4.5863%
19										
20										

Special Master Remedial Plan - Data.xlsx

1-PopRaceAlone

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	**DISTRICT**		***POPTOT***	***PercentTot***	**POPWH_A**	**PPopWh_A**	**POPBL_A**	**PPopBL_A**	**POPNA_A**	**PPopNA_A**	**POPAS_A**	**PPopAS_A**	**POPPI_A**	**PPopPI_A**	**POPOT_A**	**PPopOT_A**	**POPXX**	***P2plusRace***	**PopNonW**	**PPopNonW**
2	1		47,583	100.00%	28,708	60.33%	8,767	18.42%	214	0.45%	4,113	8.64%	69	0.15%	1,072	2.25%	4,640	9.75%	18,875	39.67%
3	2		45,624	100.00%	31,976	70.09%	4,911	10.76%	105	0.23%	3,595	7.88%	64	0.14%	836	1.83%	4,137	9.07%	13,648	29.91%
4	3		47,230	100.00%	27,102	57.38%	9,853	20.86%	240	0.51%	3,138	6.64%	111	0.24%	1,708	3.62%	5,078	10.75%	20,128	42.62%
5	4		43,810	100.00%	17,373	39.66%	16,512	37.69%	232	0.53%	2,838	6.48%	62	0.14%	2,304	5.26%	4,489	10.25%	26,437	60.34%
6	5		45,062	100.00%	32,964	73.15%	4,284	9.51%	170	0.38%	1,820	4.04%	100	0.22%	1,136	2.52%	4,588	10.18%	12,098	26.85%
7	6		43,686	100.00%	30,677	70.22%	6,354	14.54%	230	0.53%	1,164	2.66%	83	0.19%	1,528	3.50%	3,650	8.36%	13,009	29.78%
8	7		45,773	100.00%	20,578	44.96%	12,391	27.07%	182	0.40%	6,570	14.35%	59	0.13%	1,295	2.83%	4,698	10.26%	25,195	55.04%
9	8		46,779	100.00%	37,842	80.90%	2,871	6.14%	113	0.24%	1,808	3.86%	38	0.08%	686	1.47%	3,421	7.31%	8,937	19.10%
10	9		48,102	100.00%	33,013	68.63%	5,967	12.40%	176	0.37%	2,919	6.07%	75	0.16%	1,619	3.37%	4,333	9.01%	15,089	31.37%
11	10		45,821	100.00%	18,723	40.86%	13,568	29.61%	232	0.51%	6,340	13.84%	95	0.21%	1,775	3.87%	5,088	11.10%	27,098	59.14%
12																				
13	STATE TOTAL		459,470	100.00%	278,956	60.71%	85,478	18.60%	1,894	0.41%	34,305	7.47%	756	0.16%	13,959	3.04%	44,122	9.60%	180,514	39.29%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0		0
19	65% - 69.9%					1		0		0		0		0		0		0		0
20	60% - 64.9%					1		0		0		0		0		0		0		1
21	55% - 59.9%					1		0		0		0		0		0		0		2
22	50% - 54.9%					0		0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0		0
24	40% - 45.9%					2		0		0		0		0		0		0		1
25	35% - 39.9%					1		1		0		0		0		0		0		1
26	30% - 34.9%					0		0		0		0		0		0		0		1
27	20% - 29.9%					0		3		0		0		0		0		0		3
28	10% - 19.9%					0		4		0		2		0		0		5		1
29	<10%					0		2		10		8		10		10		5		0
30																				

Special Master Remedial Plan - Data.xlsx
1A-PopNHRaceAlone

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	DISTRICT		POPTOT	PercentTot	POPNHWH_A	PPopNHWh_A	POPNHBL_A	PPopNHBl_A	POPNHNA_A	PPopNHNA_A	POPNHAS_A	PPopNHAS_A	POPNHPI_A	PPopNHPI_A	POPNHOT_A	PPopNHOT_A	POPHISP	PPopHisp	POPNHXX	PPopNHXX	PopNonW	PPopNonW
2	1		47,583	100.00%	27,904	58.64%	8,488	17.84%	139	0.29%	4,072	8.56%	62	0.13%	290	0.61%	3,460	7.27%	3,168	6.66%	19,679	41.36%
3	2		45,624	100.00%	31,243	68.48%	4,789	10.50%	52	0.11%	3,527	7.73%	56	0.12%	235	0.52%	3,079	6.75%	2,643	5.79%	14,381	31.52%
4	3		47,230	100.00%	26,092	55.24%	9,496	20.11%	157	0.33%	3,078	6.52%	101	0.21%	256	0.54%	4,712	9.98%	3,338	7.07%	21,138	44.76%
5	4		43,810	100.00%	16,273	37.14%	16,003	36.53%	139	0.32%	2,804	6.40%	51	0.12%	274	0.63%	5,408	12.34%	2,858	6.52%	27,537	62.86%
6	5		45,062	100.00%	31,789	70.55%	4,099	9.10%	117	0.26%	1,782	3.95%	88	0.20%	251	0.56%	3,998	8.87%	2,938	6.52%	13,273	29.45%
7	6		43,686	100.00%	29,746	68.09%	6,081	13.92%	156	0.36%	1,136	2.60%	68	0.16%	206	0.47%	3,964	9.07%	2,329	5.33%	13,940	31.91%
8	7		45,773	100.00%	19,613	42.85%	11,983	26.18%	119	0.26%	6,493	14.19%	54	0.12%	303	0.66%	4,064	8.88%	3,144	6.87%	26,160	57.15%
9	8		46,779	100.00%	37,153	79.42%	2,761	5.90%	73	0.16%	1,777	3.80%	34	0.07%	222	0.47%	2,539	5.43%	2,220	4.75%	9,626	20.58%
10	9		48,102	100.00%	31,967	66.46%	5,754	11.96%	115	0.24%	2,869	5.96%	71	0.15%	305	0.63%	4,220	8.77%	2,801	5.82%	16,135	33.54%
11	10		45,821	100.00%	17,786	38.82%	13,129	28.65%	117	0.26%	6,218	13.57%	86	0.19%	257	0.56%	4,960	10.82%	3,268	7.13%	28,035	61.18%
12																						
13	STATE TOTAL		459,470	100.00%	269,566	58.67%	82,583	17.97%	1,184	0.26%	33,756	7.35%	671	0.15%	2,599	0.57%	40,404	8.79%	28,707	6.25%	189,904	41.33%
14																						
15																						
16	> 90%					0		0		0		0		0		0		0		0		0
17	80% - 89.9%					0		0		0		0		0		0		0		0		0
18	70% - 79.9%					2		0		0		0		0		0		0		0		0
19	65% - 69.9%					3		0		0		0		0		0		0		0		0
20	60% - 64.9%					0		0		0		0		0		0		0		0		2
21	55% - 59.9%					2		0		0		0		0		0		0		0		1
22	50% - 54.9%					0		0		0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0		0		0
24	40% - 45.9%					1		0		0		0		0		0		0		0		2
25	35% - 39.9%					2		1		0		0		0		0		0		0		0
26	30% - 34.9%					0		0		0		0		0		0		0		0		3
27	20% - 29.9%					0		3		0		0		0		0		0		0		2
28	10% - 19.9%					0		4		0		2		0		0		2		0		0
29	<10%					0		2		10		8		10		10		8		10		0
30																						

Special Master Remedial Plan - Data.xlsx

2-PopRace_Combo

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**DISTRICT**		**POPTOT**	***PercentTot***	**POPWH_C**	**PPopWH_C**	**POPBL_C**	**PPopBL_C**	**POPNA_C**	**PPopNA_C**	**POPAS_C**	**PPopAS_C**	**POPPI_C**	**PPopPI_C**	**POPOT_C**	**PPopOT_C**	**PopNonW**	**PPopNonW**
2	1		47,583	110.87%	32,822	68.98%	10,310	21.67%	1,163	2.44%	5,444	11.44%	273	0.57%	2,745	5.77%	14,761	31.02%
3	2		45,624	109.96%	35,807	78.48%	5,775	12.66%	905	1.98%	4,920	10.78%	190	0.42%	2,570	5.63%	9,817	21.52%
4	3		47,230	111.97%	31,507	66.71%	11,758	24.90%	1,399	2.96%	4,331	9.17%	324	0.69%	3,566	7.55%	15,723	33.29%
5	4		43,810	111.38%	21,085	48.13%	18,528	42.29%	1,184	2.70%	3,715	8.48%	213	0.49%	4,071	9.29%	22,725	51.87%
6	5		45,062	111.19%	37,197	82.55%	5,459	12.11%	1,140	2.53%	3,057	6.78%	301	0.67%	2,952	6.55%	7,865	17.45%
7	6		43,686	109.24%	33,938	77.69%	7,547	17.28%	1,052	2.41%	1,922	4.40%	240	0.55%	3,022	6.92%	9,748	22.31%
8	7		45,773	111.45%	24,576	53.69%	14,195	31.01%	1,015	2.22%	8,088	17.67%	256	0.56%	2,886	6.31%	21,197	46.31%
9	8		46,779	107.91%	41,067	87.79%	3,606	7.71%	876	1.87%	2,674	5.72%	140	0.30%	2,116	4.52%	5,712	12.21%
10	9		48,102	109.90%	36,888	76.69%	7,222	15.01%	1,036	2.15%	4,035	8.39%	236	0.49%	3,447	7.17%	11,214	23.31%
11	10		45,821	112.32%	23,083	50.38%	15,590	34.02%	1,163	2.54%	7,682	16.77%	298	0.65%	3,652	7.97%	22,738	49.62%
12																		
13	STATE TOTAL		459,470	110.62%	317,970	69.20%	99,990	21.76%	10,933	2.38%	45,868	9.98%	2,471	0.54%	31,027	6.75%	141,500	30.80%
14																		
15																		
16	> 90%					0		0		0		0		0		0		0
17	80% - 89.9%					2		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0
19	65% - 69.9%					2		0		0		0		0		0		0
20	60% - 64.9%					0		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		0
22	50% - 54.9%					2		0		0		0		0		0		1
23	45% - 49.9%					1		0		0		0		0		0		2
24	40% - 45.9%					0		1		0		0		0		0		0
25	35% - 39.9%					0		0		0		0		0		0		0
26	30% - 34.9%					0		2		0		0		0		0		2
27	20% - 29.9%					0		2		0		0		0		0		3
28	10% - 19.9%					0		4		0		4		0		0		2
29	<10%					0		1		10		6		10		10		0
30																		

Special Master Remedial Plan - Data.xlsx
2A-PopNHRace_Combo

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DISTRICT		POPTOT	*PercentTot*	POPNHWH_C	PPopNHWH_C	POPNHBL_C	PPopNHBL_C	POPNHNA_C	PPopNHNA_C	POPNHAS_C	PPopNHAS_C	POPNHPI_C	PPopNHPI_C	POPNHOT_C	PPopNHOT_C	POPHISP	PPopHisp	PopNonW	PPopNonW
2	1		47,583	107.31%	30,731	64.58%	9,724	20.44%	936	1.97%	5,266	11.07%	234	0.49%	711	1.49%	3,460	7.27%	16,852	35.42%
3	2		45,624	106.29%	33,690	73.84%	5,487	12.03%	708	1.55%	4,723	10.35%	162	0.36%	645	1.41%	3,079	6.75%	11,934	26.16%
4	3		47,230	107.90%	29,042	61.49%	11,002	23.29%	1,129	2.39%	4,133	8.75%	277	0.59%	667	1.41%	4,712	9.98%	18,188	38.51%
5	4		43,810	107.17%	18,600	42.46%	17,587	40.14%	934	2.13%	3,575	8.16%	178	0.41%	668	1.52%	5,408	12.34%	25,210	57.54%
6	5		45,062	107.02%	34,507	76.58%	4,996	11.09%	933	2.07%	2,844	6.31%	256	0.57%	691	1.53%	3,998	8.87%	10,555	23.42%
7	6		43,686	105.94%	31,833	72.87%	7,034	16.10%	849	1.94%	1,838	4.21%	196	0.45%	566	1.30%	3,964	9.07%	11,853	27.13%
8	7		45,773	107.61%	22,296	48.71%	13,455	29.40%	765	1.67%	7,824	17.09%	215	0.47%	639	1.40%	4,064	8.88%	23,477	51.29%
9	8		46,779	105.12%	39,240	83.88%	3,385	7.24%	736	1.57%	2,573	5.50%	122	0.26%	578	1.24%	2,539	5.43%	7,539	16.12%
10	9		48,102	106.29%	34,442	71.60%	6,758	14.05%	832	1.73%	3,869	8.04%	212	0.44%	795	1.65%	4,220	8.77%	13,660	28.40%
11	10		45,821	107.87%	20,604	44.97%	14,733	32.15%	852	1.86%	7,384	16.11%	257	0.56%	636	1.39%	4,960	10.82%	25,217	55.03%
12																				
13	STATE TOTAL		459,470	106.85%	294,985	64.20%	94,161	20.49%	8,674	1.89%	44,029	9.58%	2,109	0.46%	6,596	1.44%	40,404	8.79%	164,485	35.80%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0
18	70% - 79.9%					4		0		0		0		0		0		0		0
19	65% - 69.9%					0		0		0		0		0		0		0		0
20	60% - 64.9%					2		0		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		0		2
22	50% - 54.9%					0		0		0		0		0		0		0		1
23	45% - 49.9%					1		0		0		0		0		0		0		0
24	40% - 45.9%					2		1		0		0		0		0		0		0
25	35% - 39.9%					0		0		0		0		0		0		0		2
26	30% - 34.9%					0		1		0		0		0		0		0		0
27	20% - 29.9%					0		3		0		0		0		0		0		4
28	10% - 19.9%					0		4		0		4		0		0		2		1
29	<10%					0		1		10		6		10		10		8		0
30																				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**DISTRICT**		**POPTOT**	***PercentTot***	**POPWH_A**	**PPopWH_A**	**POPBL_W**	**PPopBL_W**	**POPNA_W**	**PPopNA_W**	**POPAS_W**	**PPopAS_W**	**POPPI_W**	**PPopPI_W**	**POPOT_W**	**PPopOT_W**	**PopNonW**	**PPopNonW**
2	1		47,583	92.51%	28,708	60.33%	9,164	19.26%	334	0.70%	4,337	9.11%	167	0.35%	1,308	2.75%	18,875	39.67%
3	2		45,624	92.33%	31,976	70.09%	5,134	11.25%	190	0.42%	3,732	8.18%	101	0.22%	991	2.17%	13,648	29.91%
4	3		47,230	92.14%	27,102	57.38%	10,412	22.05%	439	0.93%	3,342	7.08%	199	0.42%	2,023	4.28%	20,128	42.62%
5	4		43,810	93.37%	17,373	39.66%	17,186	39.23%	499	1.14%	3,071	7.01%	135	0.31%	2,642	6.03%	26,437	60.34%
6	5		45,062	91.43%	32,964	73.15%	4,560	10.12%	249	0.55%	1,977	4.39%	157	0.35%	1,294	2.87%	12,098	26.85%
7	6		43,686	93.47%	30,677	70.22%	6,667	15.26%	343	0.79%	1,281	2.93%	155	0.35%	1,711	3.92%	13,009	29.78%
8	7		45,773	92.86%	20,578	44.96%	12,958	28.31%	354	0.77%	6,888	15.05%	142	0.31%	1,585	3.46%	25,195	55.04%
9	8		46,779	93.56%	37,842	80.90%	3,020	6.46%	173	0.37%	1,900	4.06%	74	0.16%	756	1.62%	8,937	19.10%
10	9		48,102	92.95%	33,013	68.63%	6,322	13.14%	305	0.63%	3,116	6.48%	145	0.30%	1,810	3.76%	15,089	31.37%
11	10		45,821	92.11%	18,723	40.86%	14,145	30.87%	408	0.89%	6,614	14.43%	195	0.43%	2,122	4.63%	27,098	59.14%
12																		
13	STATE TOTAL		459,470	92.67%	278,956	60.71%	89,568	19.49%	3,294	0.72%	36,258	7.89%	1,470	0.32%	16,242	3.53%	180,514	39.29%
14																		
15																		
16	> 90%					0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0
19	65% - 69.9%					1		0		0		0		0		0		0
20	60% - 64.9%					1		0		0		0		0		0		1
21	55% - 59.9%					1		0		0		0		0		0		2
22	50% - 54.9%					0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0
24	40% - 45.9%					2		0		0		0		0		0		1
25	35% - 39.9%					1		1		0		0		0		0		1
26	30% - 34.9%					0		1		0		0		0		0		1
27	20% - 29.9%					0		2		0		0		0		0		3
28	10% - 19.9%					0		5		0		2		0		0		1
29	<10%					0		1		10		8		10		10		0
30																		

Special Master Remedial Plan - Data.xlsx
3A-PopNHRace_OMB

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DISTRICT		POPTOT	PercentTot	POPNHWH_A	PPopNHWh_A	POPNHBL_W	PPopNHBL_W	POPNHNA_W	PPopNHNA_W	POPNHAS_W	PPopNHAS_W	POPNHPI_W	PPopNHPI_W	POPNHOT_W	PPopNHOT_W	POPHISP	PPopHisp	PopNonW	PPopNonW
2	1		47,583	94.80%	27,904	58.64%	8,749	18.39%	226	0.47%	4,253	8.94%	146	0.31%	373	0.78%	3,460	7.27%	19,679	41.36%
3	2		45,624	95.10%	31,243	68.48%	4,941	10.83%	98	0.21%	3,644	7.99%	88	0.19%	294	0.64%	3,079	6.75%	14,381	31.52%
4	3		47,230	94.59%	26,092	55.24%	9,830	20.81%	316	0.67%	3,231	6.84%	164	0.35%	328	0.69%	4,712	9.98%	21,138	44.76%
5	4		43,810	95.94%	16,273	37.14%	16,470	37.59%	376	0.86%	2,998	6.84%	111	0.25%	396	0.90%	5,408	12.34%	27,537	62.86%
6	5		45,062	94.47%	31,789	70.55%	4,286	9.51%	176	0.39%	1,896	4.21%	121	0.27%	306	0.68%	3,998	8.87%	13,273	29.45%
7	6		43,686	95.80%	29,746	68.09%	6,284	14.38%	241	0.55%	1,232	2.82%	119	0.27%	266	0.61%	3,964	9.07%	13,940	31.91%
8	7		45,773	95.18%	19,613	42.85%	12,375	27.04%	248	0.54%	6,748	14.74%	112	0.24%	406	0.89%	4,064	8.88%	26,160	57.15%
9	8		46,779	95.84%	37,153	79.42%	2,863	6.12%	111	0.24%	1,853	3.96%	64	0.14%	252	0.54%	2,539	5.43%	9,626	20.58%
10	9		48,102	95.57%	31,967	66.46%	6,015	12.50%	220	0.46%	3,042	6.32%	128	0.27%	379	0.79%	4,220	8.77%	16,135	33.54%
11	10		45,821	94.85%	17,786	38.82%	13,518	29.50%	241	0.53%	6,436	14.05%	164	0.36%	358	0.78%	4,960	10.82%	28,035	61.18%
12																				
13	STATE TOTAL		459,470	95.21%	269,566	58.67%	85,331	18.57%	2,253	0.49%	35,333	7.69%	1,217	0.26%	3,358	0.73%	40,404	8.79%	189,904	41.33%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					0		0		0		0		0		0		0		0
18	70% - 79.9%					2		0		0		0		0		0		0		0
19	65% - 69.9%					3		0		0		0		0		0		0		0
20	60% - 64.9%					0		0		0		0		0		0		0		2
21	55% - 59.9%					2		0		0		0		0		0		0		1
22	50% - 54.9%					0		0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0		0
24	40% - 45.9%					1		0		0		0		0		0		0		2
25	35% - 39.9%					2		1		0		0		0		0		0		0
26	30% - 34.9%					0		0		0		0		0		0		0		3
27	20% - 29.9%					0		3		0		0		0		0		0		2
28	10% - 19.9%					0		4		0		2		0		0		2		0
29	<10%					0		2		10		8		10		10		8		0
30																				

Special Master Remedial Plan - Data.xlsx

4-VAPRaceAlone

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DISTRICT		VAPTOT	PercentTot	VAPWH_A	PVAPWH_A	VAPBL_A	PVAPBL_A	VAPNA_A	PVAPNA_A	VAPAS_A	PVAPAS_A	VAPPI_A	PVAPPI_A	VAPOT_A	PVAPOT_A	VAPXX	PVAPXX	PopNonW	PPopNonW
2	1		37,160	100.00%	23,255	62.58%	6,785	18.26%	147	0.40%	3,464	9.32%	59	0.16%	778	2.09%	2,672	7.19%	13,905	37.42%
3	2		34,603	100.00%	24,687	71.34%	4,020	11.62%	80	0.23%	2,797	8.08%	46	0.13%	619	1.79%	2,354	6.80%	9,916	28.66%
4	3		37,042	100.00%	22,288	60.17%	7,581	20.47%	199	0.54%	2,602	7.02%	83	0.22%	1,259	3.40%	3,030	8.18%	14,754	39.83%
5	4		34,389	100.00%	14,860	43.21%	12,316	35.81%	200	0.58%	2,343	6.81%	45	0.13%	1,674	4.87%	2,951	8.58%	19,529	56.79%
6	5		34,610	100.00%	26,059	75.29%	3,272	9.45%	115	0.33%	1,451	4.19%	70	0.20%	876	2.53%	2,767	7.99%	8,551	24.71%
7	6		35,577	100.00%	26,034	73.18%	4,759	13.38%	192	0.54%	990	2.78%	68	0.19%	1,161	3.26%	2,373	6.67%	9,543	26.82%
8	7		34,514	100.00%	16,134	46.75%	9,365	27.13%	147	0.43%	5,297	15.35%	47	0.14%	925	2.68%	2,599	7.53%	18,380	53.25%
9	8		37,177	100.00%	30,968	83.30%	2,142	5.76%	80	0.22%	1,417	3.81%	33	0.09%	481	1.29%	2,056	5.53%	6,209	16.70%
10	9		38,324	100.00%	27,258	71.13%	4,689	12.24%	149	0.39%	2,413	6.30%	50	0.13%	1,161	3.03%	2,604	6.79%	11,066	28.87%
11	10		34,690	100.00%	15,013	43.28%	9,978	28.76%	196	0.57%	5,153	14.85%	75	0.22%	1,305	3.76%	2,970	8.56%	19,677	56.72%
12																				
13	STATE TOTAL		358,086	100.00%	226,556	63.27%	64,907	18.13%	1,505	0.42%	27,928	7.80%	576	0.16%	10,239	2.86%	26,376	7.37%	131,530	36.73%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0
18	70% - 79.9%					4		0		0		0		0		0		0		0
19	65% - 69.9%					0		0		0		0		0		0		0		0
20	60% - 64.9%					2		0		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		0		2
22	50% - 54.9%					0		0		0		0		0		0		0		1
23	45% - 49.9%					1		0		0		0		0		0		0		0
24	40% - 45.9%					2		0		0		0		0		0		0		0
25	35% - 39.9%					0		1		0		0		0		0		0		2
26	30% - 34.9%					0		0		0		0		0		0		0		0
27	20% - 29.9%					0		3		0		0		0		0		0		4
28	10% - 19.9%					0		4		0		2		0		0		0		1
29	<10%					0		2		10		8		10		10		10		0
30																				

Special Master Remedial Plan - Data.xlsx
4A-VAPNHRaceAlone

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	DISTRICT		VAPTOT	PercentTot	VAPNHWH_A	PVAPNHWH_A	VAPNHBL_A	PVAPNHBL_A	VAPNHNA_A	PVAPNHNA_A	VAPNHAS_A	PVAPNHAS_A	VAPNHPI_A	PVAPNHPI_A	VAPNHOT_A	PVAPNHOT_A	VAPHISP	PVAPHisp	VAPNHXX	PVAPNHXX	PopNonW	PPopNonW
2	1		37,160	100.00%	22,763	61.26%	6,632	17.85%	100	0.27%	3,440	9.26%	55	0.15%	180	0.48%	2,209	5.94%	1,781	4.79%	14,397	38.74%
3	2		34,603	100.00%	24,251	70.08%	3,945	11.40%	40	0.12%	2,753	7.96%	40	0.12%	169	0.49%	1,976	5.71%	1,429	4.13%	10,352	29.92%
4	3		37,042	100.00%	21,603	58.32%	7,356	19.86%	136	0.37%	2,567	6.93%	81	0.22%	166	0.45%	3,219	8.69%	1,914	5.17%	15,439	41.68%
5	4		34,389	100.00%	14,044	40.84%	12,025	34.97%	129	0.38%	2,318	6.74%	37	0.11%	185	0.54%	3,782	11.00%	1,869	5.43%	20,345	59.16%
6	5		34,610	100.00%	25,201	72.81%	3,159	9.13%	88	0.25%	1,432	4.14%	64	0.18%	168	0.49%	2,753	7.95%	1,745	5.04%	9,409	27.19%
7	6		35,577	100.00%	25,364	71.29%	4,599	12.93%	133	0.37%	971	2.73%	60	0.17%	157	0.44%	2,773	7.79%	1,520	4.27%	10,213	28.71%
8	7		34,514	100.00%	15,502	44.92%	9,143	26.49%	95	0.28%	5,260	15.24%	46	0.13%	184	0.53%	2,613	7.57%	1,671	4.84%	19,012	55.08%
9	8		37,177	100.00%	30,502	82.05%	2,077	5.59%	51	0.14%	1,397	3.76%	30	0.08%	158	0.42%	1,671	4.49%	1,291	3.47%	6,675	17.95%
10	9		38,324	100.00%	26,533	69.23%	4,540	11.85%	101	0.26%	2,394	6.25%	49	0.13%	224	0.58%	2,833	7.39%	1,650	4.31%	11,791	30.77%
11	10		34,690	100.00%	14,405	41.52%	9,745	28.09%	101	0.29%	5,080	14.64%	66	0.19%	163	0.47%	3,294	9.50%	1,836	5.29%	20,285	58.48%
12																						
13	STATE TOTAL		358,086	100.00%	220,168	61.48%	63,221	17.66%	974	0.27%	27,612	7.71%	528	0.15%	1,754	0.49%	27,123	7.57%	16,706	4.67%	137,918	38.52%
14																						
15																						
16	> 90%					0		0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0		0		0
19	65% - 69.9%					1		0		0		0		0		0		0		0		0
20	60% - 64.9%					1		0		0		0		0		0		0		0		0
21	55% - 59.9%					1		0		0		0		0		0		0		0		3
22	50% - 54.9%					0		0		0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0		0		0
24	40% - 45.9%					3		0		0		0		0		0		0		0		1
25	35% - 39.9%					0		0		0		0		0		0		0		0		1
26	30% - 34.9%					0		1		0		0		0		0		0		0		1
27	20% - 29.9%					0		2		0		0		0		0		0		0		3
28	10% - 19.9%					0		5		0		2		0		0		1		0		1
29	<10%					0		2		10		8		10		10		9		10		0
30																						

Special Master Remedial Plan - Data.xlsx
4A-VAPNHRaceAlone_Citzens

DISTRICT	CVAPTOT	PercentTot	CVAPNHWH_A	PCVAPNHWH_A	CVAPNHBL_A	PCVAPNHBL_A	CVAPNHNA_A	PCVAPNHNA_A	CVAPNHAS_A	PCVAPNHAS_A	CVAPNHPI_A	PCVAPNHPI_A	CVAPHISP	PCVAPHisp	CVAPNHXX	PCVAPNHXX	PopNonW	PPopNonW	TotalPop (2019 ACS)	CVAP (2019 ACS)	% CVAP	CVAP (2020 PL)	Non-Citzens
1	36,126	100.00%	23,399	64.77%	7,315	20.25%	88	0.24%	2,550	7.06%	7	0.02%	1,654	4.58%	1,113	3.08%	14,397	38.74%	48,867	37,101	76%	36,126	1,034
2	33,222	100.03%	24,016	72.29%	4,561	13.73%	116	0.35%	2,144	6.45%	21	0.06%	1,552	4.67%	822	2.47%	10,352	29.92%	42,516	30,959	73%	33,222	1,381
3	35,425	100.04%	22,534	63.61%	7,208	20.35%	29	0.08%	1,751	4.94%	32	0.09%	2,785	7.86%	1,101	3.11%	15,439	41.68%	46,537	34,905	75%	35,425	1,617
4	31,972	99.83%	15,266	47.75%	10,922	34.16%	46	0.14%	1,887	5.90%	21	0.07%	2,817	8.81%	958	3.00%	20,345	59.16%	41,798	30,504	73%	31,972	2,417
5	33,718	100.07%	26,224	77.77%	3,025	8.97%	69	0.21%	983	2.91%	86	0.25%	2,369	7.02%	988	2.93%	9,409	27.19%	44,748	33,483	75%	33,718	892
6	33,797	99.98%	25,401	75.16%	5,172	15.30%	89	0.26%	570	1.69%	54	0.16%	1,546	4.58%	957	2.83%	10,213	28.71%	44,243	34,228	77%	33,797	1,780
7	32,870	99.87%	15,426	46.93%	9,661	29.39%	54	0.16%	3,797	11.55%	4	0.01%	2,821	8.58%	1,064	3.24%	19,012	55.08%	46,570	33,442	72%	32,870	1,644
8	35,408	100.02%	29,756	84.04%	2,218	6.26%	49	0.14%	1,221	3.45%	51	0.14%	1,192	3.37%	929	2.62%	6,675	17.95%	45,900	34,743	76%	35,408	1,769
9	37,103	99.98%	28,101	75.74%	4,222	11.38%	51	0.14%	1,636	4.41%	26	0.07%	2,164	5.83%	896	2.41%	11,791	30.77%	46,341	35,745	77%	37,103	1,221
10	32,373	100.00%	14,651	45.26%	10,009	30.92%	120	0.37%	3,440	10.63%	43	0.13%	2,919	9.02%	1,191	3.68%	20,285	58.48%	42,681	30,155	71%	32,373	2,317
STATE TOTAL	342,015	99.98%	224,774	65.72%	64,311	18.80%	712	0.21%	19,978	5.84%	345	0.10%	21,820	6.38%	10,019	2.93%	137,918	40.33%					
> 90%				0		0		0		0		0		0		0		0					
80% - 89.9%				1		0		0		0		0		0		0		0					
70% - 79.9%				4		0		0		0		0		0		0		0					
65% - 69.9%				0		0		0		0		0		0		0		0					
60% - 64.9%				2		0		0		0		0		0		0		0					
55% - 59.9%				0		0		0		0		0		0		0		3					
50% - 54.9%				0		0		0		0		0		0		0		0					
45% - 49.9%				3		0		0		0		0		0		0		0					
40% - 45.9%				0		0		0		0		0		0		0		1					
35% - 39.9%				0		0		0		0		0		0		0		1					
30% - 34.9%				0		2		0		0		0		0		0		1					
20% - 29.9%				0		3		0		0		0		0		0		3					
10% - 19.9%				0		3		0		2		0		0		0		1					
<10%				0		2		10		8		10		10		10		0					

Special Master Remedial Plan - Data.xlsx
5-VAPRace_Combo

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**DISTRICT**		**VAPTOT**	***PercentTot***	**VAPWH_C**	**PVAPWH_C**	**VAPBL_C**	**PVAPBL_C**	**VAPNA_C**	**PVAPNA_C**	**VAPAS_C**	**PVAPAS_C**	**VAPPI_C**	**PVAPPI_C**	**VAPOT_C**	**PVAPOT_C**	**PopNonW**	**PPopNonW**
2	1		37,160	107.79%	25,603	68.90%	7,482	20.13%	766	2.06%	4,134	11.12%	182	0.49%	1,889	5.08%	11,557	31.10%
3	2		34,603	107.34%	26,848	77.59%	4,423	12.78%	619	1.79%	3,379	9.77%	130	0.38%	1,745	5.04%	7,755	22.41%
4	3		37,042	108.91%	24,875	67.15%	8,507	22.97%	993	2.68%	3,236	8.74%	213	0.58%	2,520	6.80%	12,167	32.85%
5	4		34,389	109.42%	17,223	50.08%	13,485	39.21%	931	2.71%	2,913	8.47%	145	0.42%	2,931	8.52%	17,166	49.92%
6	5		34,610	108.75%	28,600	82.64%	3,879	11.21%	816	2.36%	2,070	5.98%	181	0.52%	2,091	6.04%	6,010	17.36%
7	6		35,577	107.32%	28,151	79.13%	5,395	15.16%	796	2.24%	1,445	4.06%	183	0.51%	2,213	6.22%	7,426	20.87%
8	7		34,514	108.24%	18,300	53.02%	10,242	29.67%	703	2.04%	5,994	17.37%	160	0.46%	1,960	5.68%	16,214	46.98%
9	8		37,177	105.89%	32,909	88.52%	2,493	6.71%	589	1.58%	1,825	4.91%	103	0.28%	1,448	3.89%	4,268	11.48%
10	9		38,324	107.40%	29,589	77.21%	5,288	13.80%	749	1.95%	2,974	7.76%	158	0.41%	2,402	6.27%	8,735	22.79%
11	10		34,690	109.31%	17,526	50.52%	10,944	31.55%	857	2.47%	5,808	16.74%	199	0.57%	2,587	7.46%	17,164	49.48%
12																		
13	STATE TOTAL		358,086	108.02%	249,624	69.71%	72,138	20.15%	7,819	2.18%	33,778	9.43%	1,654	0.46%	21,786	6.08%	108,462	30.29%
14																		
15																		
16	> 90%					0		0		0		0		0		0		0
17	80% - 89.9%					2		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0
19	65% - 69.9%					2		0		0		0		0		0		0
20	60% - 64.9%					0		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		0
22	50% - 54.9%					3		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		3
24	40% - 45.9%					0		0		0		0		0		0		0
25	35% - 39.9%					0		1		0		0		0		0		0
26	30% - 34.9%					0		1		0		0		0		0		2
27	20% - 29.9%					0		3		0		0		0		0		3
28	10% - 19.9%					0		4		0		3		0		0		2
29	<10%					0		1		10		7		10		10		0
30																		

Special Master Remedial Plan - Data.xlsx
5A-VAPNHRace_Combo

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DISTRICT		VAPTOT	PercentTot	VAPNHWH_C	PVAPNHWH_C	VAPNHBL_C	PVAPNHBL_C	VAPNHNA_C	PVAPNHNA_C	VAPNHAS_C	PVAPNHAS_C	VAPNHPI_C	PVAPNHPI_C	VAPNHOT_C	PVAPNHOT_C	VAPHISP	PVAPHisp	PopNonW	PPopNonW
2	1		37,160	105.15%	24,321	65.45%	7,191	19.35%	644	1.73%	4,055	10.91%	158	0.43%	496	1.33%	2,209	5.94%	12,839	34.55%
3	2		34,603	104.40%	25,558	73.86%	4,256	12.30%	485	1.40%	3,289	9.50%	112	0.32%	451	1.30%	1,976	5.71%	9,045	26.14%
4	3		37,042	105.61%	23,243	62.75%	8,088	21.83%	813	2.19%	3,126	8.44%	183	0.49%	448	1.21%	3,219	8.69%	13,799	37.25%
5	4		34,389	105.93%	15,489	45.04%	12,962	37.69%	764	2.22%	2,835	8.24%	122	0.35%	475	1.38%	3,782	11.00%	18,900	54.96%
6	5		34,610	105.43%	26,794	77.42%	3,629	10.49%	704	2.03%	1,995	5.76%	155	0.45%	460	1.33%	2,753	7.95%	7,816	22.58%
7	6		35,577	104.72%	26,710	75.08%	5,129	14.42%	666	1.87%	1,396	3.92%	152	0.43%	429	1.21%	2,773	7.79%	8,867	24.92%
8	7		34,514	105.27%	16,876	48.90%	9,838	28.50%	545	1.58%	5,883	17.05%	145	0.42%	433	1.25%	2,613	7.57%	17,638	51.10%
9	8		37,177	103.72%	31,716	85.31%	2,379	6.40%	517	1.39%	1,776	4.78%	93	0.25%	408	1.10%	1,671	4.49%	5,461	14.69%
10	9		38,324	104.62%	27,989	73.03%	5,013	13.08%	613	1.60%	2,909	7.59%	140	0.37%	596	1.56%	2,833	7.39%	10,335	26.97%
11	10		34,690	105.74%	15,958	46.00%	10,516	30.31%	642	1.85%	5,676	16.36%	177	0.51%	418	1.20%	3,294	9.50%	18,732	54.00%
12																				
13	STATE TOTAL		358,086	105.05%	234,654	65.53%	69,001	19.27%	6,393	1.79%	32,940	9.20%	1,437	0.40%	4,614	1.29%	27,123	7.57%	123,432	34.47%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0
18	70% - 79.9%					4		0		0		0		0		0		0		0
19	65% - 69.9%					1		0		0		0		0		0		0		0
20	60% - 64.9%					1		0		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		0		0
22	50% - 54.9%					0		0		0		0		0		0		0		3
23	45% - 49.9%					3		0		0		0		0		0		0		0
24	40% - 45.9%					0		0		0		0		0		0		0		0
25	35% - 39.9%					0		1		0		0		0		0		0		1
26	30% - 34.9%					0		1		0		0		0		0		0		1
27	20% - 29.9%					0		2		0		0		0		0		0		4
28	10% - 19.9%					0		5		0		3		0		0		1		1
29	<10%					0		1		10		7		10		10		9		0
30																				

Special Master Remedial Plan - Data.xlsx

6-VAPRace_OMB

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	DISTRICT		VAPTOT	PercentTot	VAPWH_A	PVAPWH_A	VAPBL_W	PVAPBL_W	VAPNA_W	PVAPNA_W	VAPAS_W	PVAPAS_W	VAPPI_W	PVAPPI_W	VAPOT_W	PVAPOT_W	PopNonW	PPopNonW
2	1		37,160	94.59%	23,255	62.58%	7,030	18.92%	226	0.61%	3,594	9.67%	128	0.34%	918	2.47%	13,905	37.42%
3	2		34,603	94.35%	24,687	71.34%	4,159	12.02%	139	0.40%	2,868	8.29%	72	0.21%	724	2.09%	9,916	28.66%
4	3		37,042	94.24%	22,288	60.17%	7,931	21.41%	341	0.92%	2,739	7.39%	151	0.41%	1,460	3.94%	14,754	39.83%
5	4		34,389	94.92%	14,860	43.21%	12,831	37.31%	421	1.22%	2,515	7.31%	100	0.29%	1,915	5.57%	19,529	56.79%
6	5		34,610	93.34%	26,059	75.29%	3,453	9.98%	177	0.51%	1,547	4.47%	109	0.31%	960	2.77%	8,551	24.71%
7	6		35,577	94.81%	26,034	73.18%	4,955	13.93%	266	0.75%	1,067	3.00%	126	0.35%	1,284	3.61%	9,543	26.82%
8	7		34,514	95.03%	16,134	46.75%	9,719	28.16%	264	0.76%	5,476	15.87%	106	0.31%	1,098	3.18%	18,380	53.25%
9	8		37,177	95.11%	30,968	83.30%	2,231	6.00%	122	0.33%	1,463	3.94%	56	0.15%	520	1.40%	6,209	16.70%
10	9		38,324	94.69%	27,258	71.13%	4,900	12.79%	234	0.61%	2,513	6.56%	98	0.26%	1,287	3.36%	11,066	28.87%
11	10		34,690	94.11%	15,013	43.28%	10,324	29.76%	337	0.97%	5,293	15.26%	138	0.40%	1,542	4.45%	19,677	56.72%
12																		
13	STATE TOTAL		358,086	94.53%	226,556	63.27%	67,533	18.86%	2,527	0.71%	29,075	8.12%	1,084	0.30%	11,708	3.27%	131,530	36.73%
14																		
15																		
16	> 90%					0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0
18	70% - 79.9%					4		0		0		0		0		0		0
19	65% - 69.9%					0		0		0		0		0		0		0
20	60% - 64.9%					2		0		0		0		0		0		0
21	55% - 59.9%					0		0		0		0		0		0		2
22	50% - 54.9%					0		0		0		0		0		0		1
23	45% - 49.9%					1		0		0		0		0		0		0
24	40% - 45.9%					2		0		0		0		0		0		0
25	35% - 39.9%					0		1		0		0		0		0		2
26	30% - 34.9%					0		0		0		0		0		0		0
27	20% - 29.9%					0		3		0		0		0		0		4
28	10% - 19.9%					0		4		0		2		0		0		1
29	<10%					0		2		10		8		10		10		0
30																		

Special Master Remedial Plan - Data.xlsx
6A-VAPNHRace_OMB

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	DISTRICT		VAPTOT	PercentTot	VAPNHWH_A	PVAPNHWH_A	VAPNHBL_W	PVAPNHBL_W	VAPNHNA_W	PVAPNHNA_W	VAPNHAS_W	PVAPNHAS_W	VAPNHPI_W	PVAPNHPI_W	VAPNHOT_W	PVAPNHOT_W	VAPHISP	PVAPHisp	PopNonW	PPopNonW
2	1		37,160	96.43%	22,763	61.26%	6,799	18.30%	161	0.43%	3,552	9.56%	112	0.30%	238	0.64%	2,209	5.94%	14,397	38.74%
3	2		34,603	96.60%	24,251	70.08%	4,041	11.68%	71	0.21%	2,813	8.13%	64	0.18%	209	0.60%	1,976	5.71%	10,352	29.92%
4	3		37,042	96.32%	21,603	58.32%	7,585	20.48%	251	0.68%	2,667	7.20%	130	0.35%	224	0.60%	3,219	8.69%	15,439	41.68%
5	4		34,389	97.08%	14,044	40.84%	12,399	36.06%	330	0.96%	2,469	7.18%	82	0.24%	278	0.81%	3,782	11.00%	20,345	59.16%
6	5		34,610	95.85%	25,201	72.81%	3,288	9.50%	137	0.40%	1,505	4.35%	85	0.25%	203	0.59%	2,753	7.95%	9,409	27.19%
7	6		35,577	96.73%	25,364	71.29%	4,739	13.32%	191	0.54%	1,036	2.91%	102	0.29%	209	0.59%	2,773	7.79%	10,213	28.71%
8	7		34,514	96.91%	15,502	44.92%	9,389	27.20%	188	0.54%	5,410	15.67%	94	0.27%	250	0.72%	2,613	7.57%	19,012	55.08%
9	8		37,177	96.96%	30,502	82.05%	2,137	5.75%	81	0.22%	1,436	3.86%	50	0.13%	170	0.46%	1,671	4.49%	6,675	17.95%
10	9		38,324	96.75%	26,533	69.23%	4,692	12.24%	171	0.45%	2,482	6.48%	86	0.22%	282	0.74%	2,833	7.39%	11,791	30.77%
11	10		34,690	96.37%	14,405	41.52%	9,973	28.75%	203	0.59%	5,198	14.98%	121	0.35%	238	0.69%	3,294	9.50%	20,285	58.48%
12																				
13	STATE TOTAL		358,086	96.60%	220,168	61.48%	65,042	18.16%	1,784	0.50%	28,568	7.98%	926	0.26%	2,301	0.64%	27,123	7.57%	137,918	38.52%
14																				
15																				
16	> 90%					0		0		0		0		0		0		0		0
17	80% - 89.9%					1		0		0		0		0		0		0		0
18	70% - 79.9%					3		0		0		0		0		0		0		0
19	65% - 69.9%					1		0		0		0		0		0		0		0
20	60% - 64.9%					1		0		0		0		0		0		0		0
21	55% - 59.9%					1		0		0		0		0		0		0		3
22	50% - 54.9%					0		0		0		0		0		0		0		0
23	45% - 49.9%					0		0		0		0		0		0		0		0
24	40% - 45.9%					3		0		0		0		0		0		0		1
25	35% - 39.9%					0		1		0		0		0		0		0		1
26	30% - 34.9%					0		0		0		0		0		0		0		1
27	20% - 29.9%					0		3		0		0		0		0		0		3
28	10% - 19.9%					0		4		0		2		0		0		1		1
29	<10%					0		2		10		8		10		10		9		0
30																				

Special Master Remedial Plan - Data.xlsx

Population (ACS)

	ACS 2019	Racial Demographics as a Percent of Total Population 2019					Citizen Voting Age Population 2019					Hispanic by Race				
DISTRICT	Population	White NH	Black NH	Asian NH	Hispanic	Minority	White NH	Black NH	Asian NH	Hispanic	Minority	White (hisp)	Black (hisp)	Native (hisp)	Other (hisp)	Multi (hisp)
1	48,867	61.75%	19.74%	8.53%	5.09%	38.25%	64.77%	20.25%	7.06%	4.58%	35.23%	3.38%	0.20%	0.09%	0.70%	0.68%
2	42,516	72.06%	12.27%	6.13%	5.25%	27.94%	72.29%	13.73%	6.45%	4.67%	27.71%	3.74%	0.27%	0.03%	0.61%	0.46%
3	46,537	58.36%	21.26%	5.63%	9.90%	41.64%	63.61%	20.35%	4.94%	7.86%	36.39%	4.92%	0.77%	0.00%	2.99%	1.18%
4	41,798	41.74%	33.67%	6.14%	13.79%	58.26%	47.75%	34.16%	5.90%	8.81%	52.25%	5.31%	1.32%	0.15%	5.41%	1.59%
5	44,748	75.04%	8.72%	3.58%	7.76%	24.96%	77.77%	8.97%	2.91%	7.02%	22.23%	5.27%	0.15%	0.15%	1.05%	0.98%
6	44,243	70.81%	15.76%	2.01%	6.15%	29.19%	75.16%	15.30%	1.69%	4.58%	24.84%	4.15%	0.44%	0.13%	1.30%	0.12%
7	46,570	43.50%	27.17%	12.97%	10.20%	56.50%	46.93%	29.39%	11.55%	8.58%	53.07%	5.63%	1.08%	0.11%	1.64%	1.37%
8	45,900	80.49%	6.53%	3.96%	4.64%	19.51%	84.04%	6.26%	3.45%	3.37%	15.96%	2.46%	0.39%	0.02%	0.92%	0.62%
9	46,341	71.49%	10.98%	4.84%	8.42%	28.51%	75.74%	11.38%	4.41%	5.83%	24.26%	4.93%	0.45%	0.07%	2.05%	0.87%
10	42,681	40.23%	29.27%	11.86%	11.06%	59.77%	45.26%	30.92%	10.63%	9.02%	54.74%	5.95%	0.95%	0.11%	2.35%	1.58%
STATE TOTAL	450,201															
> 90%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80% - 89.9%		1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
70% - 79.9%		4	0	0	0	0	4	0	0	0	0	0	0	0	0	0
65% - 69.9%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60% - 64.9%		1	0	0	0	0	2	0	0	0	0	0	0	0	0	0
55% - 59.9%		1	0	0	0	3	0	0	0	0	0	0	0	0	0	0
50% - 54.9%		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
45% - 49.9%		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
40% - 45.9%		3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
35% - 39.9%		0	0	0	0	1	0	0	0	0	2	0	0	0	0	0
30% - 34.9%		0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
20% - 29.9%		0	3	0	0	4	0	3	0	0	4	0	0	0	0	0
10% - 19.9%		0	4	2	3	1	0	3	2	0	1	0	0	0	0	0
<10%		0	2	8	7	0	0	2	8	10	0	10	10	10	10	10

Special Master Remedial Plan - Data.xlsx

Population (ESRI)

	ACS 2019	Racial Demographics as a Percent of Total Population 2019					Hispanic by Race				
DISTRICT	Population	White NH	Black NH	Asian NH	Hispanic	Minority	White (hisp)	Black (hisp)	Native (hisp)	Other (hisp)	Multi (hisp)
1	47,867	61.45%	17.53%	9.78%	7.04%	38.55%	3.93%	0.51%	0.08%	1.60%	0.74%
2	43,990	67.57%	13.50%	8.35%	6.54%	32.43%	3.90%	0.40%	0.10%	1.13%	0.81%
3	46,687	57.47%	20.71%	6.25%	10.15%	42.53%	4.86%	0.97%	0.14%	2.88%	1.21%
4	42,137	40.84%	37.42%	5.72%	10.95%	59.16%	4.41%	1.31%	0.14%	3.54%	1.35%
5	44,773	71.36%	10.75%	4.28%	8.93%	28.64%	5.34%	0.48%	0.06%	1.93%	1.00%
6	44,149	68.29%	15.16%	2.49%	9.90%	31.71%	4.46%	0.63%	0.12%	3.39%	1.10%
7	46,243	43.57%	26.74%	15.02%	9.12%	56.43%	4.21%	0.92%	0.08%	2.40%	1.24%
8	44,750	82.42%	5.45%	3.73%	5.53%	17.58%	3.39%	0.27%	0.10%	1.26%	0.48%
9	47,100	69.00%	12.42%	6.13%	8.21%	31.00%	4.49%	0.49%	0.13%	2.12%	0.89%
10	45,585	38.49%	30.17%	12.92%	12.61%	61.51%	5.64%	1.26%	0.13%	3.62%	1.72%
STATE TOTAL	453,281										
> 90%		0	0	0	0	0	0	0	0	0	0
80% - 89.9%		1	0	0	0	0	0	0	0	0	0
70% - 79.9%		1	0	0	0	0	0	0	0	0	0
65% - 69.9%		3	0	0	0	0	0	0	0	0	0
60% - 64.9%		1	0	0	0	1	0	0	0	0	0
55% - 59.9%		1	0	0	0	2	0	0	0	0	0
50% - 54.9%		0	0	0	0	0	0	0	0	0	0
45% - 49.9%		0	0	0	0	0	0	0	0	0	0
40% - 45.9%		2	0	0	0	1	0	0	0	0	0
35% - 39.9%		1	1	0	0	1	0	0	0	0	0
30% - 34.9%		0	1	0	0	3	0	0	0	0	0
20% - 29.9%		0	2	0	0	1	0	0	0	0	0
10% - 19.9%		0	5	2	3	1	0	0	0	0	0
<10%		0	1	8	7	0	10	10	10	10	10

Special Master Remedial Plan - Data.xlsx
Racial Demographics (ACS)

DISTRICT	Total	Non-Hispanic Total						Hispanic Total (by Race)												Non-Hispanic Other Races				Total Minority	
	All Persons	NH White Alone	% White	NH Black Alone	% Black	NH Asian Alone	% Asian	Hispanic	% Hispanic	White (hisp)	% White	Black (hisp)	% Black	Native (hisp)	Native %	Other (hisp)	Other %	Multi (hisp)	Multi %	NH Amer Indian	NH Pacific Islander	NH Other	Multi Race	Minority	% Minority
1	48,867	30,176	61.8%	9,647	19.7%	4,168	8.5%	2,487	5.1%	1,654	3.4%	96	0.2%	42	0.1%	342	0.7%	332	0.7%	152	14	95	2,135	18,691	38.25%
2	42,516	30,636	72.1%	5,218	12.3%	2,605	6.1%	2,232	5.2%	1,588	3.7%	113	0.3%	11	0.0%	258	0.6%	195	0.5%	110	27	64	1,623	11,880	27.94%
3	46,537	27,160	58.4%	9,892	21.3%	2,618	5.6%	4,606	9.9%	2,289	4.9%	359	0.8%	0	0.0%	1,393	3.0%	549	1.2%	46	32	46	2,135	19,377	41.64%
4	41,798	17,445	41.7%	14,072	33.7%	2,567	6.1%	5,764	13.8%	2,220	5.3%	550	1.3%	64	0.2%	2,260	5.4%	665	1.6%	67	22	128	1,727	24,353	58.26%
5	44,748	33,578	75.0%	3,901	8.7%	1,602	3.6%	3,471	7.8%	2,358	5.3%	67	0.1%	65	0.1%	468	1.0%	437	1.0%	68	86	68	1,978	11,170	24.96%
6	44,243	31,330	70.8%	6,973	15.8%	888	2.0%	2,722	6.2%	1,834	4.1%	194	0.4%	57	0.1%	576	1.3%	53	0.1%	216	55	95	1,966	12,913	29.19%
7	46,570	20,256	43.5%	12,652	27.2%	6,038	13.0%	4,749	10.2%	2,624	5.6%	501	1.1%	49	0.1%	763	1.6%	640	1.4%	63	10	94	2,703	26,314	56.50%
8	45,900	36,945	80.5%	2,999	6.5%	1,816	4.0%	2,128	4.6%	1,130	2.5%	179	0.4%	10	0.0%	421	0.9%	285	0.6%	60	50	59	1,842	8,955	19.51%
9	46,341	33,127	71.5%	5,087	11.0%	2,244	4.8%	3,904	8.4%	2,286	4.9%	209	0.5%	34	0.1%	949	2.0%	404	0.9%	64	25	4	1,890	13,214	28.51%
10	42,681	17,170	40.2%	12,493	29.3%	5,064	11.9%	4,722	11.1%	2,541	6.0%	407	1.0%	45	0.1%	1,004	2.4%	673	1.6%	111	40	198	2,881	25,511	59.77%
STATE TOTAL	450,201																								
> 90%			0		0		0		0		0		0		0		0		0						0
80% - 89.9%			1		0		0		0		0		0		0		0		0						0
70% - 79.9%			4		0		0		0		0		0		0		0		0						0
65% - 69.9%			0		0		0		0		0		0		0		0		0						0
60% - 64.9%			1		0		0		0		0		0		0		0		0						0
55% - 59.9%			1		0		0		0		0		0		0		0		0						3
50% - 54.9%			0		0		0		0		0		0		0		0		0						0
45% - 49.9%			0		0		0		0		0		0		0		0		0						0
40% - 45.9%			3		0		0		0		0		0		0		0		0						1
35% - 39.9%			0		0		0		0		0		0		0		0		0						1
30% - 34.9%			0		1		0		0		0		0		0		0		0						0
20% - 29.9%			0		3		0		0		0		0		0		0		0						4
10% - 19.9%			0		4		2		3		0		0		0		0		0						1
<10%			0		2		8		7		10		10		10		10		10						0

Special Master Remedial Plan - Data.xlsx
Racial Demographics (ESRI)

DISTRICT	Total	Non-Hispanic Total						Hispanic Total (by Race)												Non-Hispanic Other Races				Total Minority	
	All Persons	NH White Alone	% White	NH Black Alone	% Black	NH Asian Alone	% Asian	Hispanic	% Hispanic	White (hisp)	% White	Black (hisp)	% Black	Native (hisp)	Native %	Other (hisp)	Other %	Multi (hisp)	Multi %	NH Amer Indian	NH Pacific Islander	NH Other	Multi Race	Minority	% Minority
1	47,867	29,416	61.5%	8,389	17.5%	4,680	9.8%	3,371	7.0%	1,879	3.9%	245	0.5%	38	0.1%	768	1.6%	354	0.7%	163	52	82	1,720	18,451	38.55%
2	43,990	29,722	67.6%	5,939	13.5%	3,671	8.3%	2,876	6.5%	1,715	3.9%	177	0.4%	46	0.1%	499	1.1%	357	0.8%	85	45	59	1,591	14,268	32.43%
3	46,687	26,831	57.5%	9,671	20.7%	2,916	6.2%	4,738	10.1%	2,268	4.9%	453	1.0%	64	0.1%	1,346	2.9%	566	1.2%	122	95	114	2,194	19,856	42.53%
4	42,137	17,209	40.8%	15,768	37.4%	2,411	5.7%	4,616	11.0%	1,860	4.4%	553	1.3%	57	0.1%	1,490	3.5%	570	1.4%	149	97	72	1,807	24,928	59.16%
5	44,773	31,951	71.4%	4,813	10.7%	1,918	4.3%	3,997	8.9%	2,391	5.3%	216	0.5%	27	0.1%	862	1.9%	447	1.0%	117	85	83	1,806	12,822	28.64%
6	44,149	30,151	68.3%	6,691	15.2%	1,101	2.5%	4,372	9.9%	1,971	4.5%	278	0.6%	52	0.1%	1,495	3.4%	487	1.1%	127	50	73	1,584	13,998	31.71%
7	46,243	20,146	43.6%	12,366	26.7%	6,944	15.0%	4,217	9.1%	1,948	4.2%	425	0.9%	37	0.1%	1,112	2.4%	572	1.2%	98	65	134	2,273	26,097	56.43%
8	44,750	36,883	82.4%	2,438	5.4%	1,669	3.7%	2,476	5.5%	1,519	3.4%	120	0.3%	43	0.1%	565	1.3%	213	0.5%	129	39	73	1,047	7,867	17.58%
9	47,100	32,501	69.0%	5,850	12.4%	2,889	6.1%	3,866	8.2%	2,115	4.5%	231	0.5%	59	0.1%	999	2.1%	419	0.9%	147	79	78	1,700	14,599	31.00%
10	45,585	17,546	38.5%	13,752	30.2%	5,889	12.9%	5,750	12.6%	2,569	5.6%	573	1.3%	57	0.1%	1,651	3.6%	786	1.7%	126	73	91	2,355	28,039	61.51%
STATE TOTAL	453,281																								
> 90%			0		0		0		0		0		0		0		0		0						0
80% - 89.9%			1		0		0		0		0		0		0		0		0						0
70% - 79.9%			1		0		0		0		0		0		0		0		0						0
65% - 69.9%			3		0		0		0		0		0		0		0		0						0
60% - 64.9%			1		0		0		0		0		0		0		0		0						1
55% - 59.9%			1		0		0		0		0		0		0		0		0						2
50% - 54.9%			0		0		0		0		0		0		0		0		0						0
45% - 49.9%			0		0		0		0		0		0		0		0		0						0
40% - 45.9%			2		0		0		0		0		0		0		0		0						1
35% - 39.9%			1		1		0		0		0		0		0		0		0						1
30% - 34.9%			0		1		0		0		0		0		0		0		0						3
20% - 29.9%			0		2		0		0		0		0		0		0		0						1
10% - 19.9%			0		5		2		3		0		0		0		0		0						1
<10%			0		1		8		7		10		10		10		10		10						0

Special Master Remedial Plan - Data.xlsx

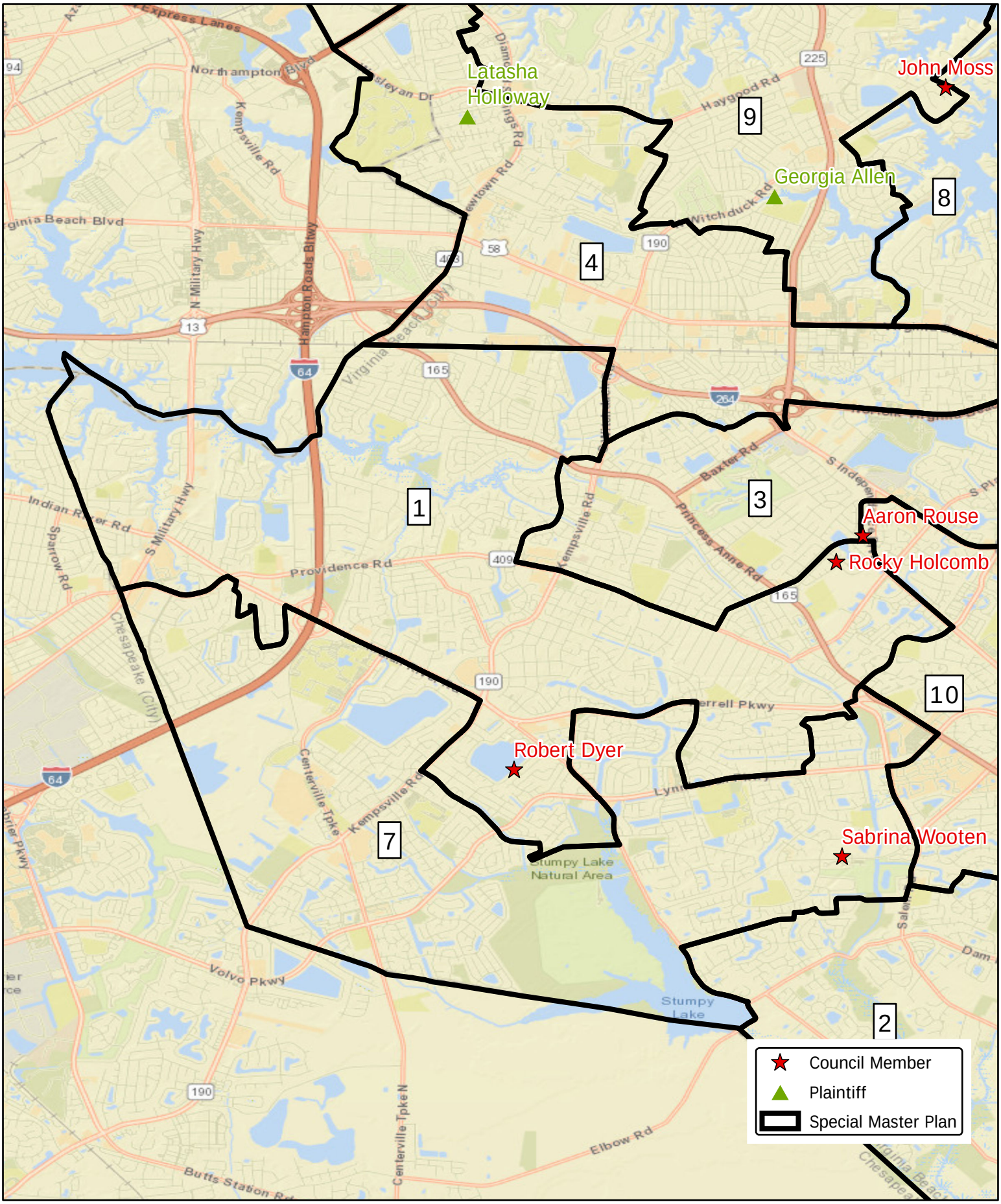
CVAP

DISTRICT	Total	Non-Hispanic Voting Age Citizens						Hispanic Voting-Age Citizens		Non-Hispanic Other Voting Age Citizens			Minority Voting Age Citizens	
	Voting-Age Citizens	NH White Alone	% White	NH Black Alone	% Black	NH Asian Alone	% Asian	Hispanic	% Hispanic	NH Amer Indian	NH Pacific Islander	Multi Race	Minority	% Minority
1	37,101	24,030	64.8%	7,512	20.2%	2,619	7.1%	1,699	4.6%	90	7	1143	13,071	35.23%
2	30,959	22,380	72.3%	4,250	13.7%	1,998	6.5%	1,446	4.7%	108	20	766	8,579	27.71%
3	34,905	22,203	63.6%	7,102	20.3%	1,725	4.9%	2,744	7.9%	29	32	1085	12,702	36.39%
4	30,504	14,565	47.7%	10,420	34.2%	1,800	5.9%	2,688	8.8%	44	20	914	15,939	52.25%
5	33,483	26,041	77.8%	3,004	9.0%	976	2.9%	2,352	7.0%	69	85	981	7,442	22.23%
6	34,228	25,725	75.2%	5,238	15.3%	577	1.7%	1,566	4.6%	90	55	969	8,503	24.84%
7	33,442	15,695	46.9%	9,829	29.4%	3,863	11.6%	2,870	8.6%	55	4	1083	17,747	53.07%
8	34,743	29,197	84.0%	2,176	6.3%	1,198	3.4%	1,170	3.4%	48	50	912	5,546	15.96%
9	35,745	27,072	75.7%	4,067	11.4%	1,576	4.4%	2,085	5.8%	49	25	863	8,673	24.26%
10	30,155	13,647	45.3%	9,323	30.9%	3,204	10.6%	2,719	9.0%	112	40	1109	16,508	54.74%
STATE TOTAL	335,265													
> 90%			0		0		0		0					0
80% - 89.9%			1		0		0		0					0
70% - 79.9%			4		0		0		0					0
65% - 69.9%			0		0		0		0					0
60% - 64.9%			2		0		0		0					0
55% - 59.9%			0		0		0		0					0
50% - 54.9%			0		0		0		0					3
45% - 49.9%			3		0		0		0					0
40% - 45.9%			0		0		0		0					0
35% - 39.9%			0		0		0		0					2
30% - 34.9%			0		2		0		0					0
20% - 29.9%			0		3		0		0					4
10% - 19.9%			0		3		2		0					1
<10%			0		2		8		10					0

Exhibit B

Virginia Beach Special Master Plan

District 1

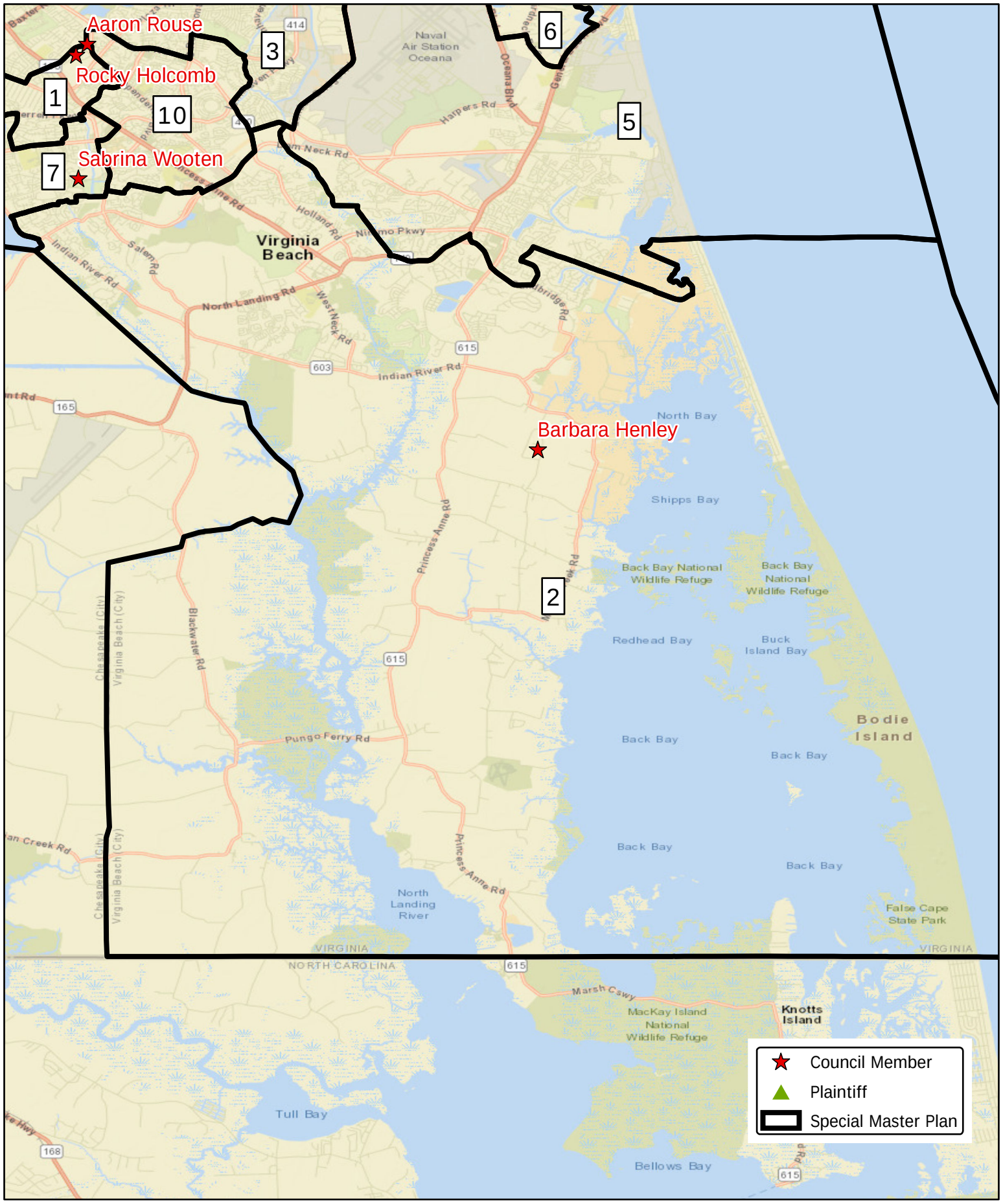


0 0.63 1.25 2.5 Miles

Election Data Services

Virginia Beach Special Master Plan

District 2



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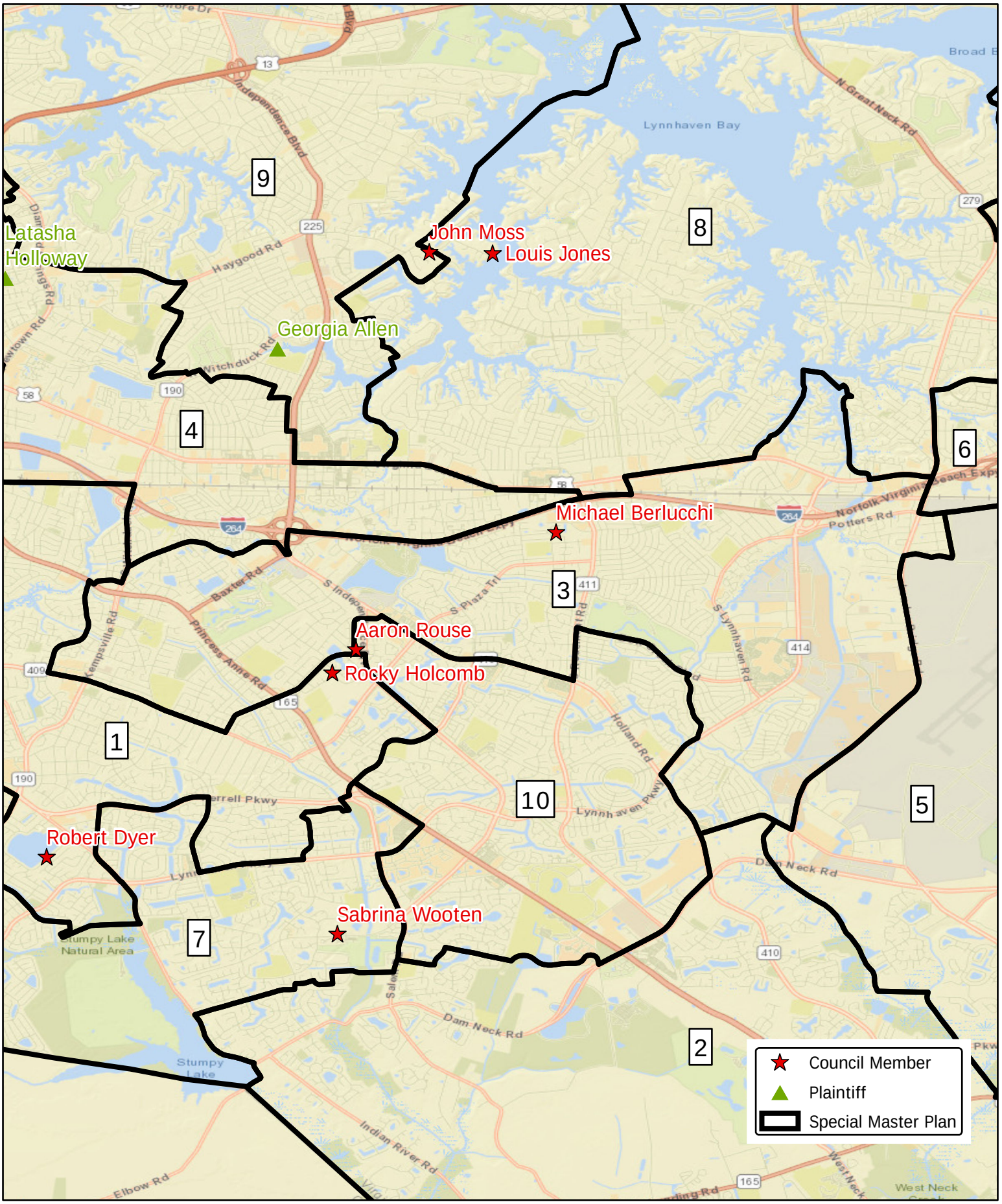
Virginia Beach Special Master Plan

District 3



0 0.7 1.4 2.8 Miles

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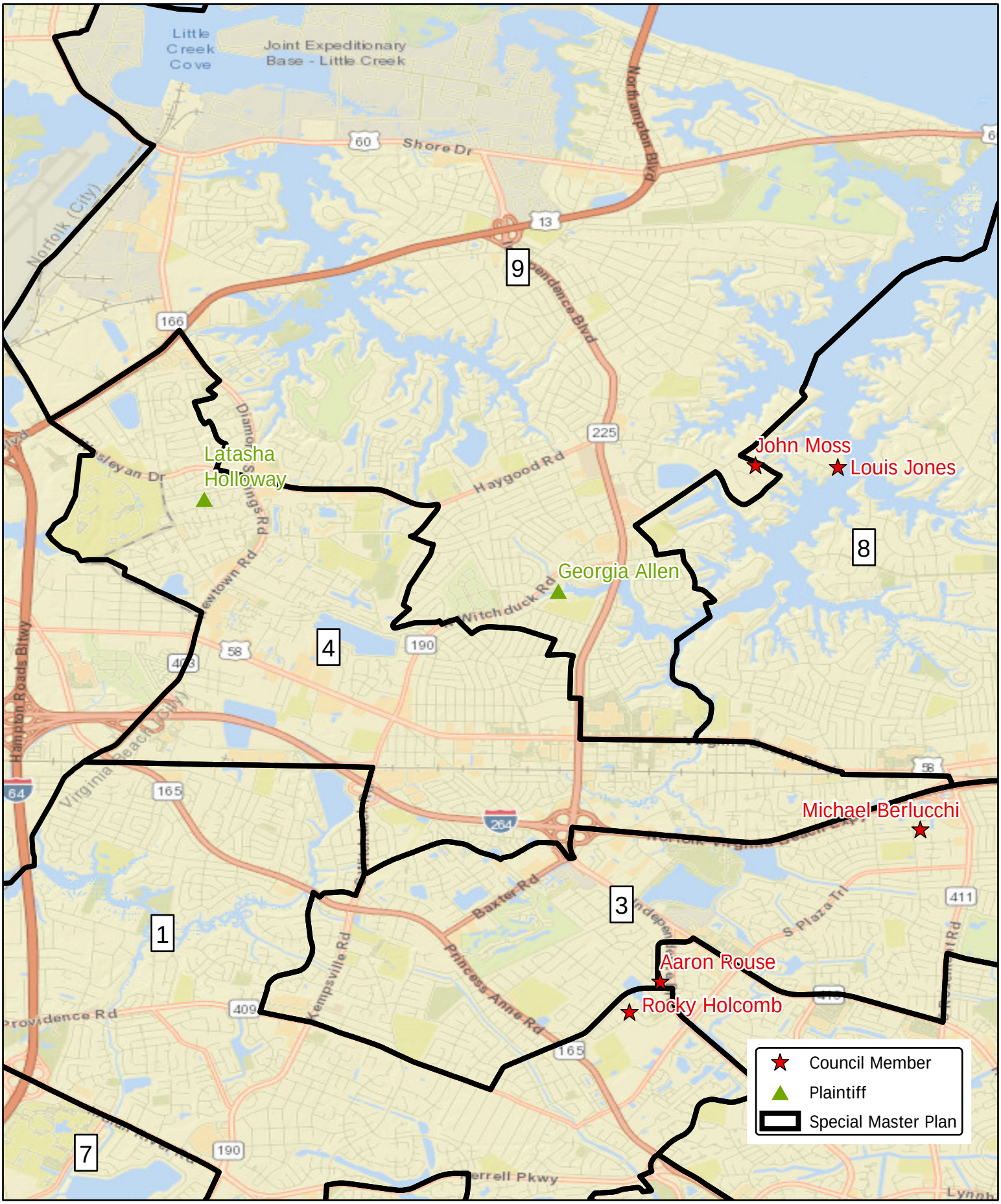
Virginia Beach Special Master Plan

District 4



0 0.55 1.1 2.2 Miles

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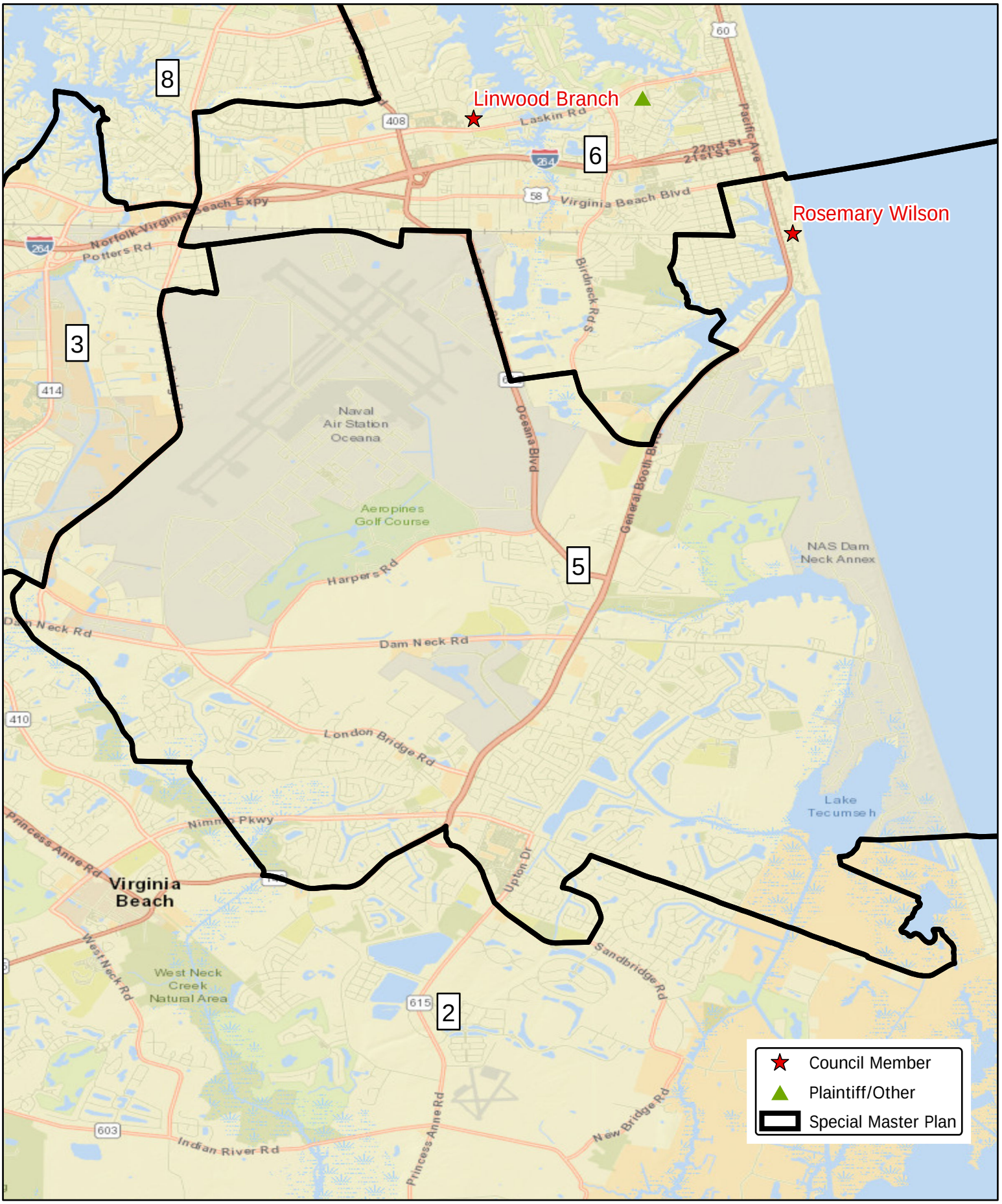
District 5



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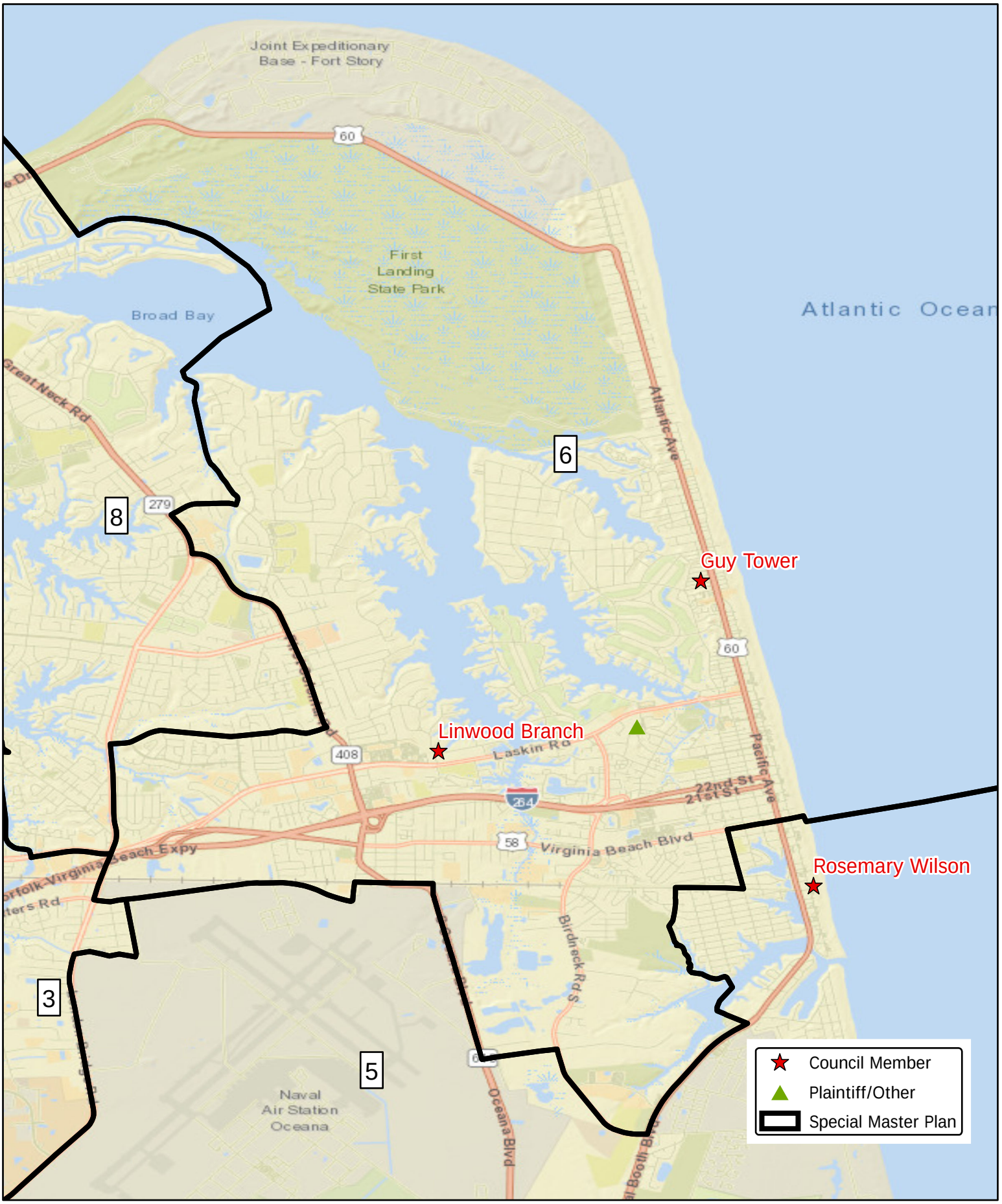
Virginia Beach Special Master Plan

District 6



0 0.55 1.1 2.2 Miles

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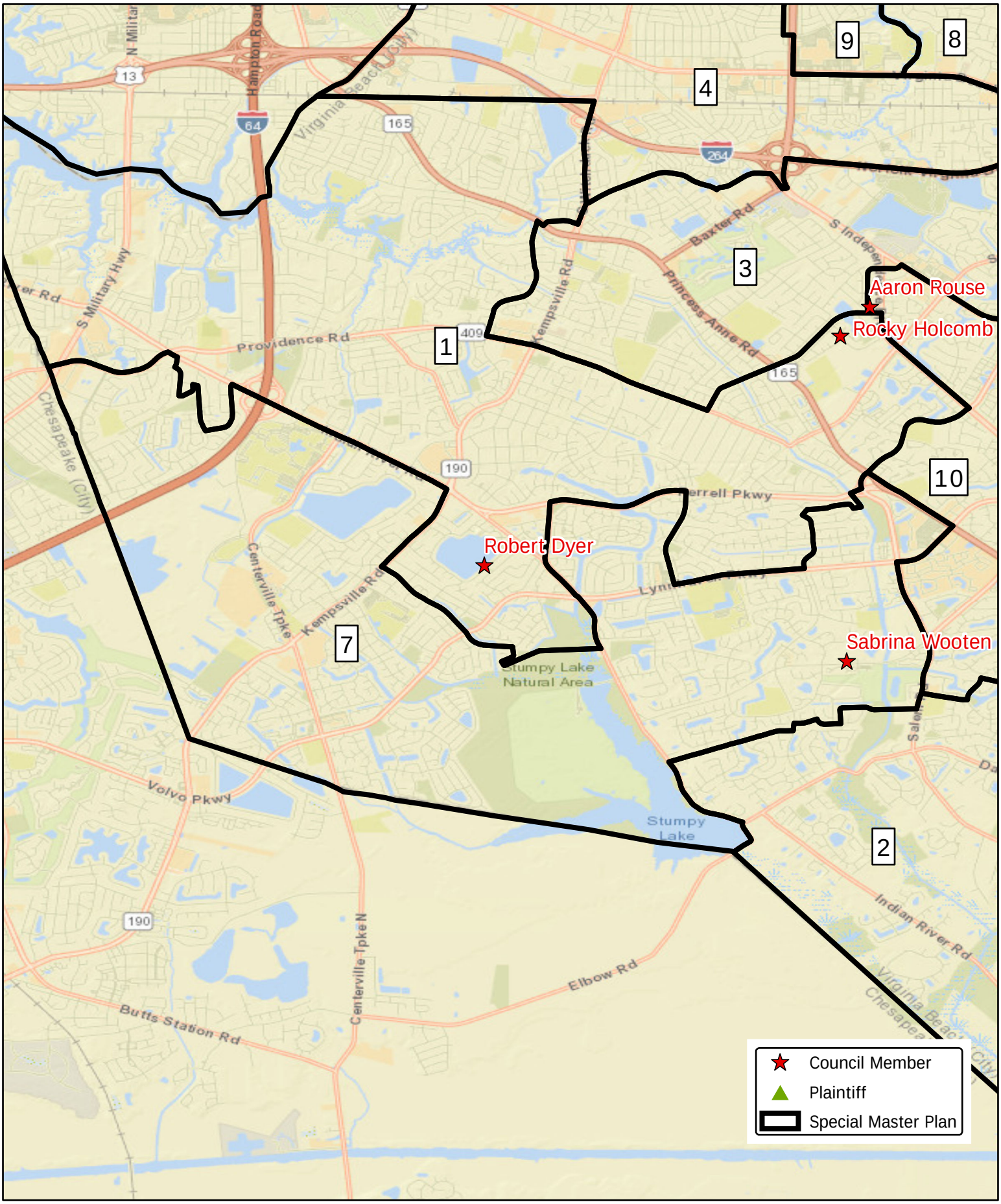
District 7



0 0.57 1.15 2.3 Miles

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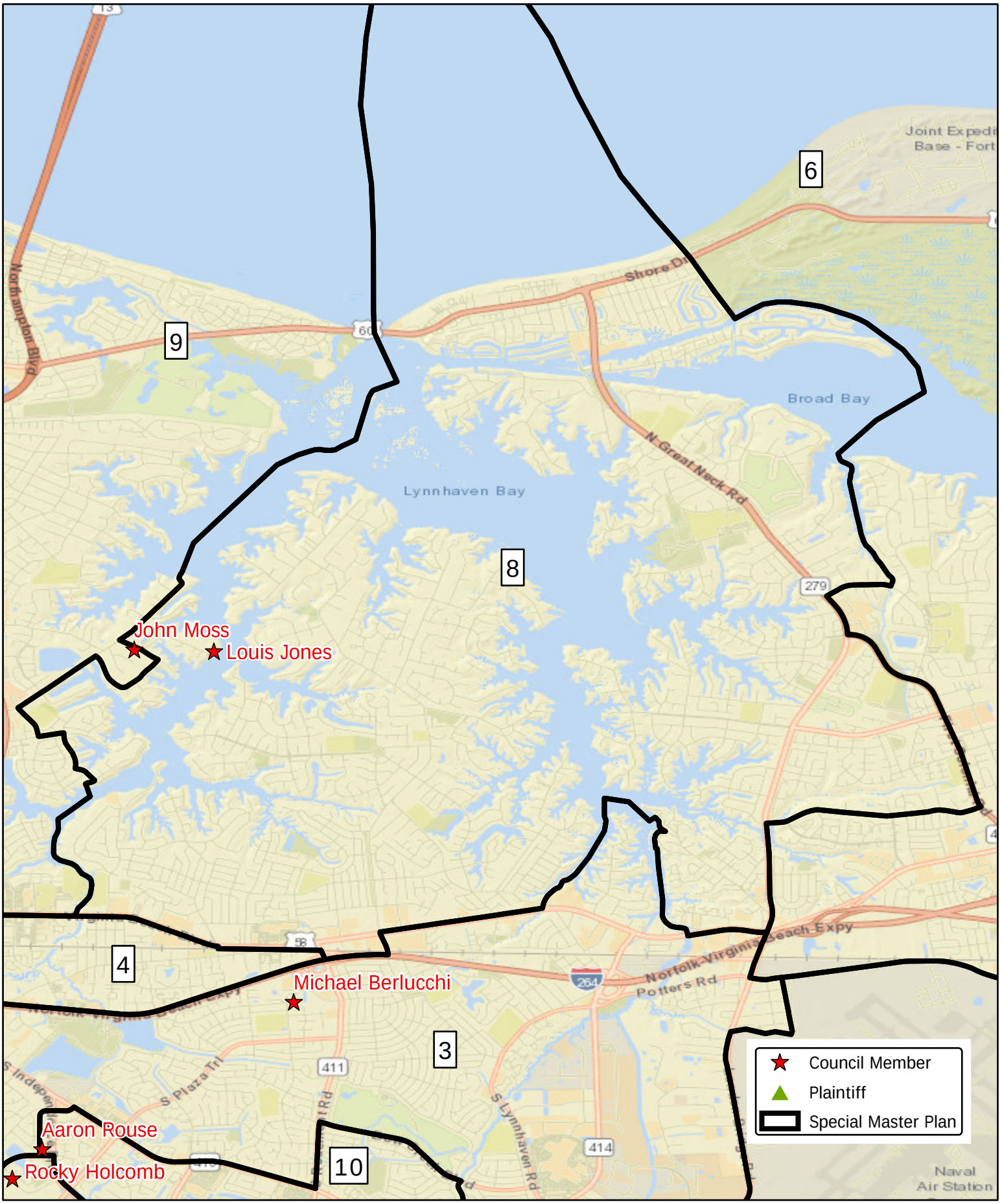
District 8



0 0.55 1.1 2.2 Miles

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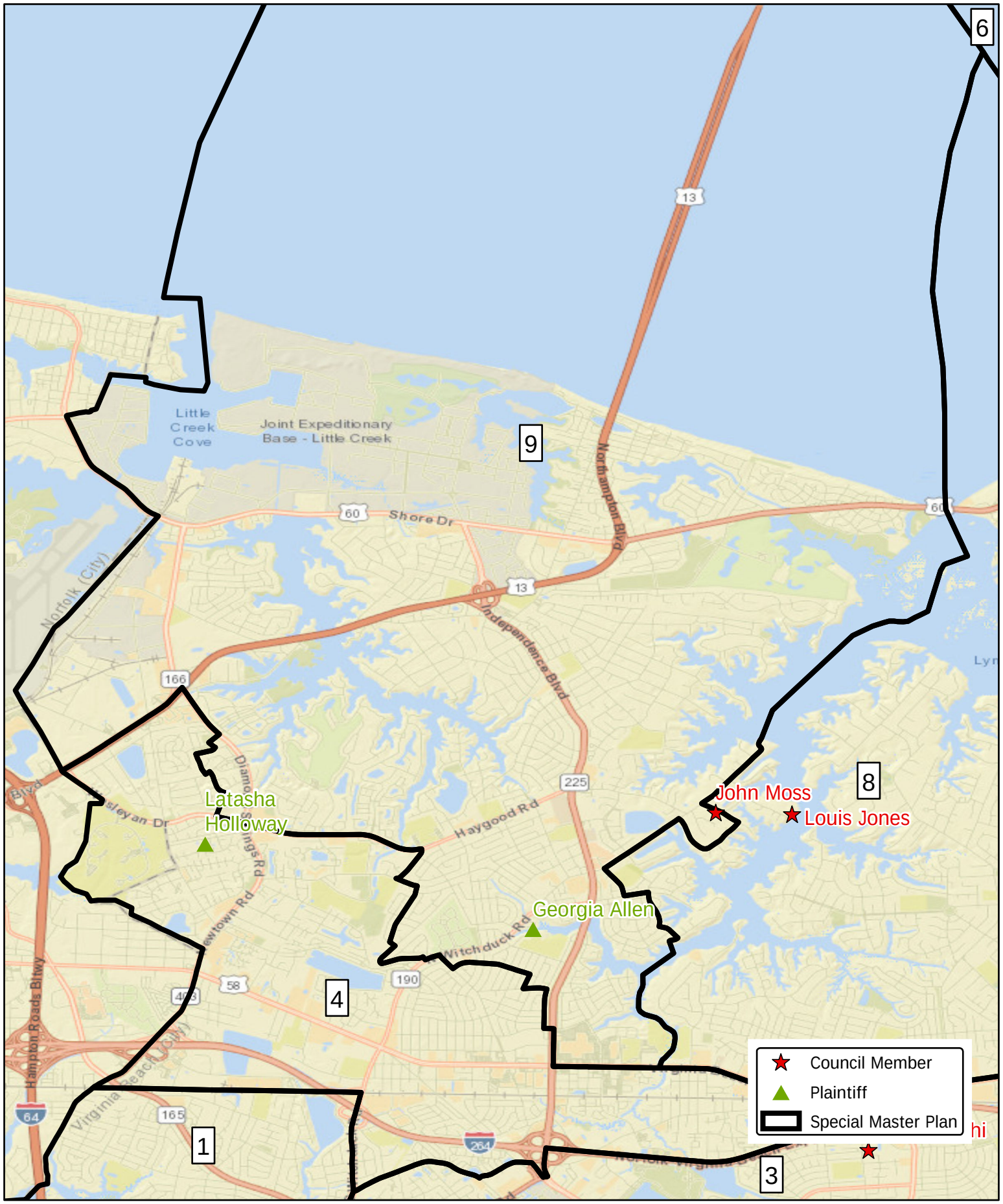
District 9



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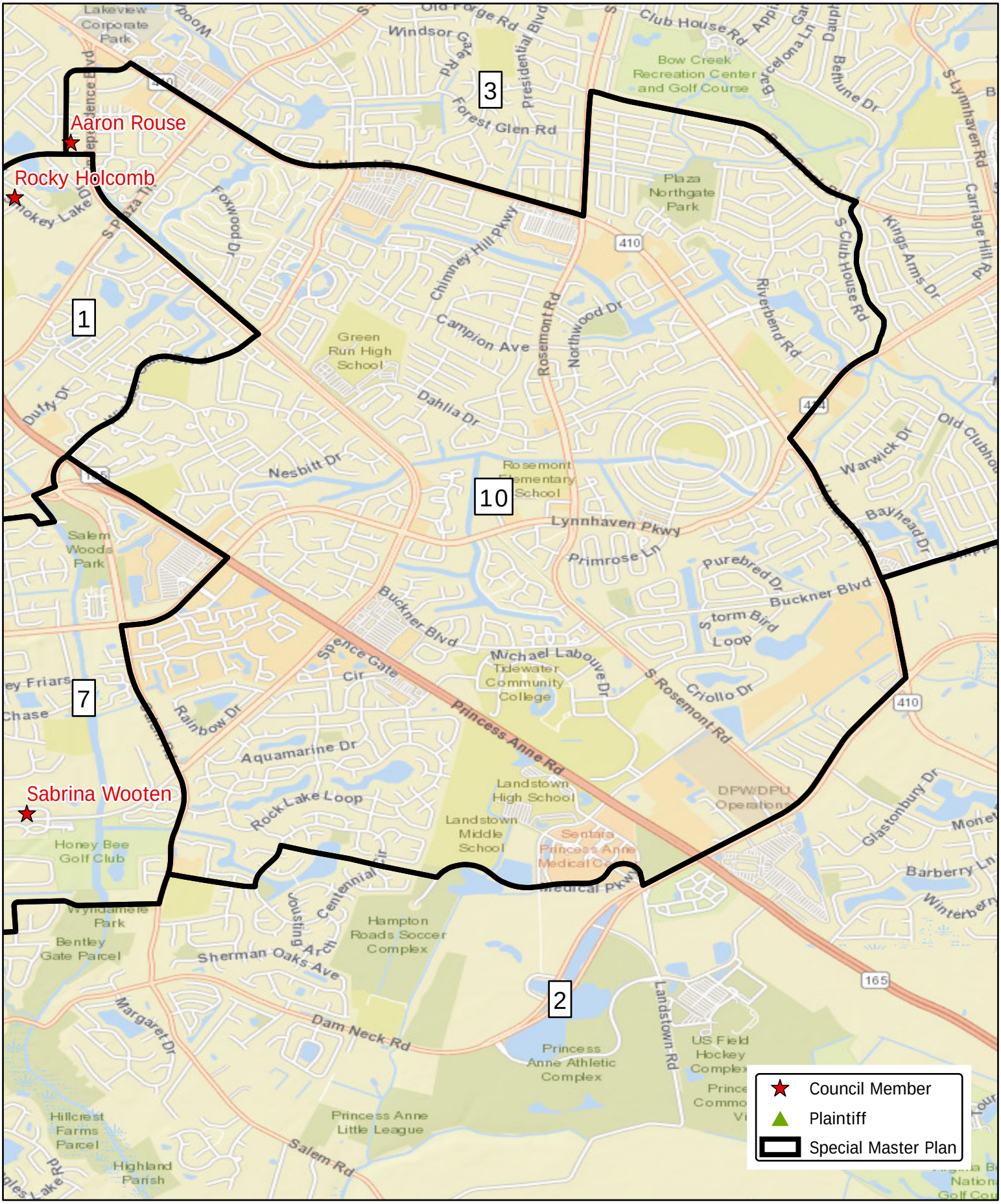
District 10



0 0.3 0.6 1.21 Miles

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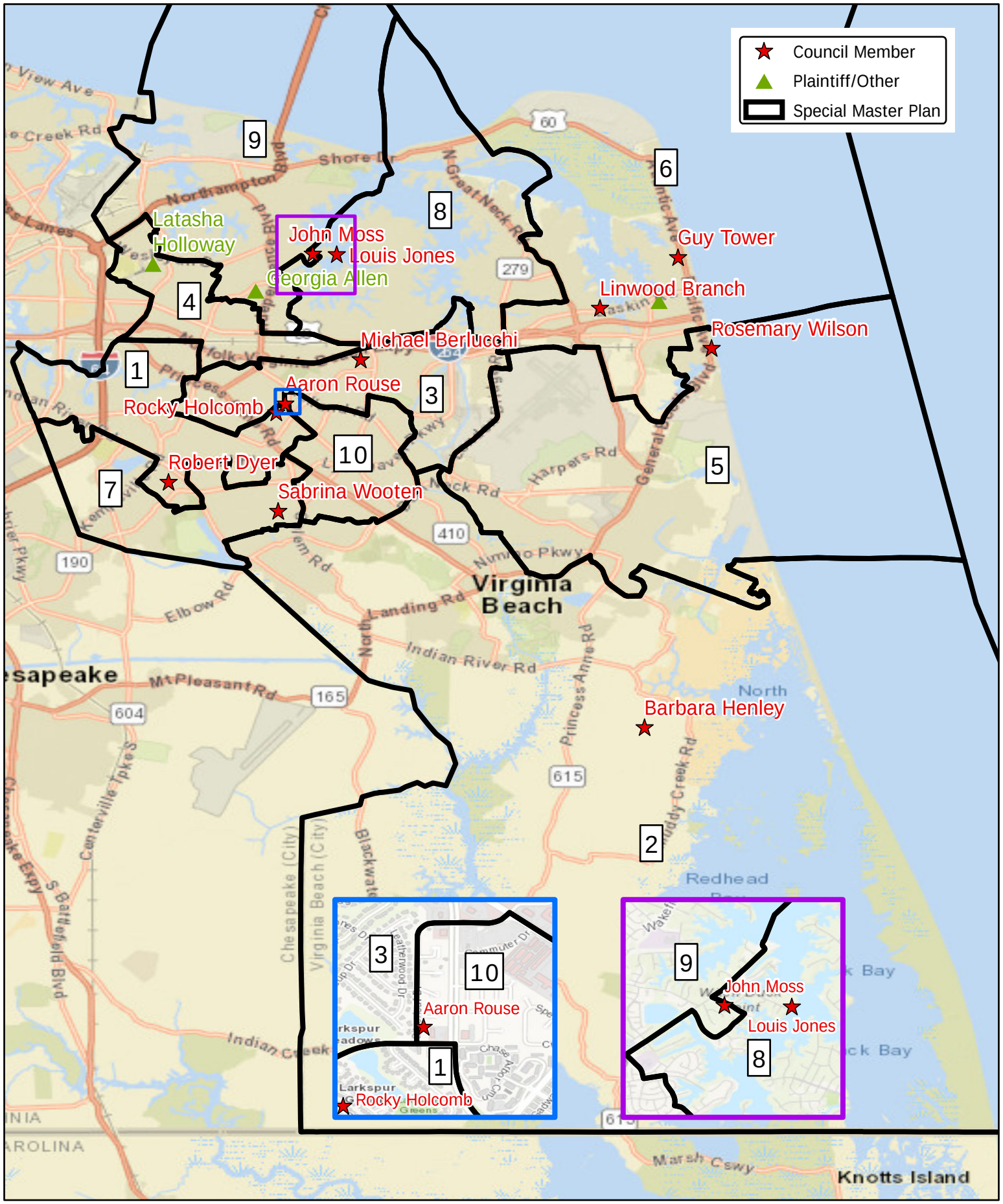

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