

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT  
OF VIRGINIA  
Richmond Division

GOLDEN BETHUNE-HILL, *et al.*,

Plaintiffs,

v.

VIRGINIA STATE BOARD OF ELECTIONS, *et al.*,

Defendants.

Civil Action No. 3:14cv852

TRANSMITTAL OF THE FINAL REMEDIAL PLAN

January 29, 2019

Bernard Grofman\*  
Special Master

\*Bernard Grofman is Distinguished Professor of Political Science and Jack W. Peltason Endowed Chair of Democracy Studies at the University of California, Irvine, and former Director of the UCI Center for the Study of Democracy.

## TRANSMITTAL OF FINAL REMEDIAL MAP

1. By Order of the Court I have prepared a final map consisting of Richmond Module 1A, Petersburg Module 2, Peninsula Model 2, and Norfolk Module 1A. This plan changed the configuration of only 25 of the districts found in the 2011 Enacted Map. Under separate cover I will be providing the Court with maps of the full 100 district plan -- incorporating the changes in these 25 districts. In addition, I will be providing the Court with maps of each of the four geographically centered modules; and individual maps of the eleven remedial districts corresponding to the eleven districts found to be unconstitutional. The more detailed of these maps will show VTDs and also major geographic features such as highways.
2. The map that I am proposing to the Court as the final map is identical to what was presented in my Second Report of January 7, 2019 when one combines Richmond Illustrative Module 1A, Petersburg Illustrative Module 2, Peninsula Illustrative Model 2, and Norfolk Illustrative Module 1A. It is based on shape files posted on the DLS website on December 11, 2018.
3. In preparing a final map I was instructed by the Court to examine the illustrative modules that were used to create this 25 changed-district configuration to see if there were any needed technical corrections. My only concerns at this stage of the map drawing process were with identifying technical corrections such as might be made to reduce VTD splits. In this process, I had the assistance of staff of the DLS operating under my directions. In reviewing the map including the 25 changed districts, DLS staff identified 34 split VTDs located in whole or in part in one or more of the changed districts. This enumeration of VTD splits is based on the VTDs used to create the 2011 Enacted Map. This list of VTDs was chosen for use because it matches the data used in the Court's previous analyses and those of parties to this case.<sup>1</sup>
4. Reviewing these 34 VTD splits I concluded that the best map was one in which all of these VTD splits remained unchanged. Although I have successfully sought to minimize VTD splits in my map drawing, as I have stated in my Second Report, VTDs are simply units of administrative convenience and are changed by localities in response to new district configurations and/or substantial population shifts. Moreover, when seeking to balance population plus or minus one percentage point, given the population size and

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<sup>1</sup> Moreover, I was informed by DLS staff of technical reasons why using any later set of VTDs would cause problems for DLS in generating maps and reports of the kind previously relied upon by the Court and by the litigants.

sometimes irregular shape of Virginia VTDs, some VTD splits are inevitable. None of the remaining VTD splits are drawn with race as a preponderant motive.

5. In analyzing these 34 VTD splits I concluded that 29 of these VTD splits could not be corrected without violating other higher priorities. Of the four 4 remaining VTD splits, those that could in principle have been corrected, all four involved one set of census blocs with zero population in one district, and one set of populated census blocks in the other district. The zero population blocks were water area.
6. Of the 29 uncorrectable splits, 11 VTD splits were required to be kept in place because the VTD split involved census blocks located in both a district that was changed and in a district that was unchanged. The only way to remedy such a split would have been to change an additional district above and beyond the 25 that had been changed in my remedial map. For the reasons laid out in my First and Second Reports that was not something I was prepared to recommend to the Court. Moreover, in none of the other 18 VTD splits where there is population in both changed districts can the split be eliminated, because moving the census blocks in the VTD so that they were entirely in a single district would have made either the district from which they were moved or the district to which they were being moved (and sometimes both) violate the plus or minus one percentage point population equality instructions given me by the Court.
7. I concluded that there was no need to remedy the VTD splits in any of the 4 VTDs that include one set of census blocs with zero population in one district (water area) , and one set of census blocks that were populated in the other district. Water areas have zero population, and thus their inclusion does not directly affect election administration. Given the need to move forward with an adopted plan in a timely fashion so as to allow potential candidates adequate opportunity to assess the new district lines, and the desirability of not generating a further addendum with trivial technical corrections that would require new maps to be drawn, and new tables to be prepared, and possibly further responses by the parties, I have opted to leave unchanged the handful of zero population assignments in split VTDs.