W&M-1, State Senate, Governor's Commission Narrative

It is our belief that the map entitled "VA State Senate" from the College of William and Mary accomplishes the named competition criteria best for the 40 state senate districts in the Commonwealth. Given that this was a non-competitiveness-concerned map, the criteria considered are 1) Contiguity of districts, 2) Approximate Equipopulation of districts within judicial constraints, 3) Upholding the state precedents of majority-minority districts within the Voting Rights Act, 4) Maintaining "Communities of Interest," and 5) District compactness. Given Virginia's shape and population distribution, maximizing one of these standards often proved to be deleterious to another benchmark, so the concept of a healthy balance was needed throughout the creation of this map.

For ethical, Constitutional, and practical reasons, standardizing the state senate districts' populations was the first critical task. The one person-one vote standard for the House of Representatives as well as state legislatures has now been well established (*Baker v. Carr*) (*Westbury v. Sanders*) (*Karcher v. Daggett*), and each redistricting cycle represents a further attempt at meeting this goal. For state legislatures, a margin of +/- 5% of the Census-determined optimal district population was granted, which allowed for a total window of roughly 190,000-210,000 for state senate districts. This is because 200,026 was the equal division of eight million Virginia residents across 40 state senate districts. As judged by the redistricting software, all 40 of our districts meet the target population range.

Our actual range was smaller than the legally-granted margin, with District 31 at our height of 207,627 and District 24 representing the trough at 190,315. Interestingly,

and due to spatial constraints, the district centers of population migration over the last ten years, principally in Northern Virginia, tended to be at the high end of the "Equipopulation" distribution, while those districts in Southwest Virginia tended to spread their populations in the 190,000-200,000 range. Districts 24 (190,315) and 15 (190,453) had the most marginal populations but were still within the approved ranges, and these populations were lower than others principally to preserve the other criteria of compactness and communities of interest. We hope that the value of conforming to the modified one person-one vote standard needs no elaboration.

Our second central goal in this map's creation, as with all maps, was contiguity of districts. Simply said, contiguity means that you could conceivably travel from one point on a district to any other point on a district without crossing into another district. In the past, this standard has been diluted to the point of absurdity by using a single highway as the district's territory and claiming that, yes, one could travel along that highway from Charlotte, North Carolina, to Durham, North Carolina, without crossing into other districts (unless one needed a rest stop!). We aimed for a more rigorous satisfaction of this concept. All 40 state senate districts were indeed contiguous. During the creation process, several times contiguity alerts were dealt with as individual precincts or census blocks would be omitted from a transfer, as was the case in Albemarle County, Roanoke City, and Fairfax City. Contiguity of water was necessary in multiple instances in the Hampton Roads region, where Districts 2 and 13 both cross the James River to reach population centers on both sides of the river, but these were done primarily to conform to compactness (District 13) and minority voting rights (District 2). These were all rectified, though, and there were no contiguity crises in the map's final product.

If one were to divide the five redistricting quality criteria, one could say that the first two mentioned, Equipopulation and District Contiguity, have to be achieved in all maps, but are they achieved at the complete expense of Compactness, Communities of Interest, and Minority Voting Rights? Starting with the first of this second subset, compactness is often thought of as how circular or contained the district is. When made possible by Virginia's shape, our map promotes compactness. The redistricting software's "Compactness" scores show that only nine of our 40 districts fall below 50% in the compactness category, and only one (District 16) falls below 40%. Thirteen districts, meanwhile, reach numbers above 60% with four of these above 70%. Particularly impressive is our achievement of several highly compact districts in the Northern Virginia region, where high population density can lend itself to rather abstractly-shaped districts. Due to the horizontal nature of the southwestern corner of Virginia, Districts 38 and 40 scored lower in their compactness, but this was achieved by maintaining all major communities of interest in these districts. Similar geographic characteristics, such as peninsula shapes and county boundary shapes, also made compactness a difficult measure to achieve in Hampton Roads. In Central Virginia, though, by and large compactness was promoted, with Districts 17, 19, 23, 28, 21, 22, and 20 all receiving satisfactory marks. To put it another way, obvious opportunities for compact districts were not lost in this map.

Far and away the biggest foil to compactness, and indeed an important one, was maintaining Communities of Interest. Although we desired to break up no major communities of interest, our guiding philosophy was to divide counties (only if necessary) but not cities, if at all possible. Voters form civic bonds with their school

districts, co-workers, neighborhoods, and bowling leagues (or other Putnam-esque clubs), and these interactions tend to follow county and city delineations. Electorally dividing these interactions places a strain on the civic bond and was successfully avoided in most possible cases in this map. In fact, the only *officially-designated* cities to be split in this map are Richmond, Chesapeake, and Norfolk, though only the least populous precincts of the latter two were split. All designated cities west of Richmond and south of Northern Virginia were contained by single respective districts. Great progress was also made in county unification where possible. Grayson County, for instance, formerly was split between Districts 40 and 20 but is now contained within District 40 along with Galax City. Augusta County was adjusted so that all of it was contained by District 24, which also resulted in the unification of Staunton and Waynesboro Cities under the same district, a feat not accomplished in previous schemes. The division of Salem and Roanoke Cities has always been difficult in the state senate maps, but ours managed to more cleanly divide them, giving District 22 Salem City and as much of Roanoke County as possible while preserving the contiguity of District 21, which had Roanoke City. District 18 is an exception to our efforts at uniting counties, but the sacrifices here resulted in a majorityminority district. Regrettably, District 15 splits Albemarle County with District 24. Regarding this discrepancy, though, in order to preserve all of Charlottesville City in the 15th while maintaining equipopulation between the two districts, Albemarle County had to be split. Similar sacrifices will be noted in Northern Virginia, where Prince William, Farifax, and Loudon Counties all had to be split simply to conform to basic population demands. Overall, though, this map reduces the number of city and county breakups from the 2001-2010 map.

Related to Communities of Interest, the premise of majority-minority voting districts is that racial or ethnic minorities within reasonable proximity that could constitute a voting majority based on shared interests should be united under the same district (*Thornburg v. Gingles*). Though historically abused to promote racial gerrymandering, this process combats the opposite problem of having diluted minority representation in legislatures. Without much room for error, our map achieves the desired five districts wherein African American voters (Voting Age Population) constitute the majority of the population. District 18 in Southeast Virginia, Districts 2 and 5 in the Hampton Roads region, and Districts 9 and 16 in the Richmond area all are majorityminority districts in our map. Though the damage was limited in Districts 2 and 5, typically majority-minority districts were achieved at the expense of county and city communities of interest and compactness. Districts 13 and 36 are the next closest to increasing the number of majority-minority districts, but neither has even a 30% African American Voting Age Population proportion, so we would argue that we have maximized the opportunities in this criterion.

Though flaws undoubtedly exist in this map that would be exposed by population shifts in the next ten years, we would argue that our great achievements in contiguity, Communities of Interest, and Majority-Minority districts come at the least possible expense to Equipopulation (All districts conform to legal constraints) and Compactness. All of these criteria allow for a high quality of political representation, and the geographic, demographic, and legal constraints of the Commonwealth of Virginia demand extraordinary effort in achieving maximum harmony of the criteria.