To: Chairman Mark Nordenberg, Pennsylvania Legislative Reapportionment Commission  
From: Dr. Matt A. Barreto, Faculty Director, UCLA Voting Rights Project  
Re: Voting Rights Act compliance in Pennsylvania  
January 7, 2022

1. My name is Matt A. Barreto, and I am currently Professor of Political Science and Chicana/o Studies at the University of California, Los Angeles. I was appointed Full Professor with tenure at UCLA in 2015. Prior to that I was a tenured professor of Political Science at the University of Washington from 2005 to 2014. At UCLA I am the faculty director of the Voting Rights Project in the Luskin School of Public Affairs and I teach a year-long course on the Voting Rights Act (VRA), focusing specifically on social science statistical analysis, demographics and voting patterns that are relevant in VRA expert reports. I have written expert reports and been qualified as an expert witness more than three dozen times in Federal and State voting rights and civil rights cases. I have been invited to give Congressional testimony about voting rights and co-authored a report on racially polarized voting that Congress relied on in their reauthorization of the VRA in 2006. I have published peer-reviewed, social science articles specifically about minority voting patterns, racially polarized voting, and have co-authored a software package specifically for use in understanding racial voting patterns in VRA cases. I have been retained as an expert consultant by counties and states across the country to advise them on racial voting patterns as they relate to VRA compliance during redistricting. I have worked extensively with both plaintiffs groups and on behalf of defendants in VRA lawsuits, always to provide independent analysis. As an expert witness in VRA lawsuits, my testimony has been relied on by courts to find in favor of both plaintiffs and defendants.

2. Every 10 years states and localities must redraw political district boundaries to balance out the population and take into account demographic and population changes over the previous decade. While drawing the new districts, the Legislative Reapportionment Commission must balance a number of important factors in the Pennsylvania Constitution, including compactness, contiguity and avoiding municipal splits and ensuring free and equal elections, and must also consider preserving communities of interest. Among the important considerations is also the Federal Voting Rights Act. All redistricting bodies must be aware of, and comply with the standards in the VRA which prohibits districting plans which dilute opportunities for representation for racial or ethnic minorities. Specifically, Section 2b of the 1965 VRA states that a plan is in violation if a minority group has “less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice.” It is this second clause of the VRA which directly relates to redistricting plans that either overly pack, or crack and diminish, the voting strength of racial or ethnic minorities – thereby diluting their vote and diminishing their ability to elect candidates of their choice. While race must not be the predominant factor in redistricting,
commissions need to be aware of racial and ethnic population characteristics and voting patterns in order to ensure compliance with the VRA.

3. In 2020 across the state of Pennsylvania the Black and Hispanic population have grown large enough to clearly create 50% voting age population districts consistent with the VRA and subsequent court decisions. Failure to consider and appropriately draw minority performing districts will put a districting plan at risk of a VRA challenge.

4. According to the 2020 Census, Pennsylvania’s population grew by 300,321 residents from 2010 to 2020, a growth rate of 2.4%. However, growth patterns were uneven across the state, by region, and by racial and ethnic groups. Population changes in Pennsylvania were driven by a fast-growing Latino population which added nearly 330,000 residents across the state. In particular, there were large increases in the Latino population in the eastern parts of the state. Likewise, the Asian American population grew rapidly over the decade adding over 160,000 more residents. The African American population also grew over the decade while the White, non-Hispanic population declined by over half a million people. Overall, there was a shift in Pennsylvania’s racial demographics of 1,382,791 or about 10% of the entire state. These shifts must be reflected in the new state legislative district boundaries that are being drawn, in particular examining issues related to the VRA and the ability of minority communities to elect candidates of choice.

5. With each State House district comprising about 64,000 residents, the White population decline of 541,235 represents a loss of about 8.4 districts. In contrast, the non-white population combined to increase by 841,556, or roughly the equivalent of 13.1 new districts. Thus statewide redistricting should consider these shifts in order to recognize the large population changes Pennsylvania experienced in the last decade, not just by region, but among minority voters who are considered a protected class under the VRA.

6. The population changes across Pennsylvania have been uneven with respect to geography and race. For instance, across the state, counties across Western Pennsylvania experienced far more population decline than other regions in the state. In fact only three counties in the west had population growth, Butler (5.4%), Allegheny (2.2%) and Washington (0.7%) while more than 20 counties lost population. What’s more, while Allegheny grew as a whole, the city of Pittsburgh lost population (-0.9%) with more population growth outside the city of Pittsburgh. Thus, in order to join communities of interest that now extend outside Pittsburgh, the city is appropriately split.

7. Further, the population growth within and outside Pittsburgh varied by race and ethnicity. For example, the Black population within the city of Pittsburgh declined by 13% from 2010 to 2020, however the Black population within Allegheny County outside the city grew by 15% during the same period. In contrast, the white population grew faster within the city of Pittsburgh. To avoid minority vote dilution and maintain minority performing districts, it is
appropriate to split districts across city boundaries to adjust to the larger emerging Black population outside the city of Pittsburgh.

**Figure 1: Population Changes in Allegheny County 2010 to 2020**

8. This same pattern is clear in Southeastern Pennsylvania in Philadelphia and Delaware counties where the city of Philadelphia represents an area of white population growth relative to 2010 and Black population growth has been much stronger on the edges of the city and into Delaware county.
Figure 2: Population Changes in Philadelphia and Delaware Counties 2010 to 2020 (White & Black)

Figure 3: Population Changes in Philadelphia and Delaware Counties 2010 to 2020 (White, Latino, Black)
9. In addition, when we layer in Latino population change over the decade, there are even more clear patterns of difference by race and ethnicity, with large increases in the Latino population across the entire Philadelphia-Delaware county region. Therefore, maintaining current minority-performing districts for Black and Hispanic candidates of choice requires city and county splits.

10. Issues related to minority vote dilution are especially consequential in the face of racially polarized voting. In 1986 the Supreme Court of the United States issued a unanimous ruling (*Thornburg v. Gingles*) that redistricting plans can not dilute minority voting strength by cracking their population into multiple districts, nor can they pack the population into too few districts. From the perspective of political science, the Court established specific tests to determine if a redistricting plan violated the VRA, in particular calling on a statistical analysis of voting patterns. The *Gingles* prongs concern how minorities and whites vote, and whether they prefer the same, or different candidates. Specifically, the Court asks if a minority group is sufficiently large and geographically compact to constitute a majority in a single-member district? Are minority voters are cohesive? Do they generally tend to vote for a “candidate of choice”? And next, the Court examines who the larger majority (or White) voters prefer as their candidate. Evidence of voting patterns differing by the race of voters was called “racially polarized voting” by the courts, to simply describe a finding in which voters of one racial group were voting in one direction, but voters of the other racial group were voting in the opposite direction – their patterns were polarized.

11. In regions in Pennsylvania that have sizable populations of both White and minority voters, data across more than a dozen elections points to a clear pattern of racially polarized voting. Black, Latino and Asian American voters demonstrate unified and cohesive voting, siding for the same candidates with 75% to 90% support. In contrast, White voters tend to block vote against minority candidates of choice. This evidence should come as no surprise to any observers of state politics in Pennsylvania. Exit poll\(^1\) results from recent elections clearly support this conclusion reporting that Blacks and Latinos vote overwhelmingly Democratic, while White voters continue to vote majority-Republican. It is also true that White block voting varies by degree and by region. In some pockets of Pittsburgh and Philadelphia, Whites evidence cross-over voting with minority voters at 35% to 50%. However, in most instances outside of these two large cities, White voters demonstrate considerable block voting against minority candidates of choice, often voting in the exact opposite pattern of Blacks, Latinos, and Asian Americans. In these areas, creating minority performing districts avoid minority vote dilution.


Voting patterns in Southwestern Pennsylvania

12. Below are a series of ecological inference scatterplots with a regression fit line mapping vote choice by precinct in different regions of the state. Each chart plots how every voting precinct within a region voted in 2020 elections. Blue dots represent the percent of the vote a precinct gave to the Democratic candidate and red dots the percent going to Republican candidates. Thus each precinct is represented by two data points. The candidate vote choice is plotted along the vertical y-axis. In addition to vote choice, each precinct is charted for the percent of the voting population which is White or non-White. Precincts at the far left hand side are those which are heavily minority (Black, Latino or Asian) and precincts at the far right hand side are those which are heavily White. Precincts right in the middle at the 50% mark are those which are very diverse with about half the voters being White and half being minority.

13. We can start by reading the chart at the left hand side where precincts which are comprised of 75% to 100% non-white voters. In this first chart for Southwestern Pennsylvania, these minority precincts gave between 85% to 95% of their vote to Biden in the 2020 presidential election. This is very strong evidence of minority vote cohesion, the first Gingles component of a racially polarized voting inquiry. On the opposite side of the graph, the right hand side, we find precincts which are heavily White. There is a larger concentration of precincts here because White voters, and precincts which are over 80% White, make up the vast majority of precincts in this region. For those precincts which are most heavily White, the red dots for Republican voting rise to the top, suggesting that as the White population increases the vote for Trump increased considerably to over 75%. This provides evidence of the second component of racially polarized voting under the Gingles test of White block voting against minority candidates of choice.

14. In the 2020 election, Black voters in Southwestern Pennsylvania demonstrated very high rates of cohesive voting, with estimated Democratic vote share over 90% for State House elections, President, Congress and Attorney General. In contrast, White voters supported Republicans at rates between 70% to 90%. In the city of Pittsburgh, White voters still lean Republican but there is more evidence of cross-over voting in support of minority-preferred candidates, and thus the potential for minority coalition districts.

15. There is no magic threshold for minority performing districts, but generally where there are large Black populations courts have upheld districts which are at least 35% minority. It is often the case in areas with large minority populations that there is some white cross-over voting. When combined with very strong minority cohesion, this creates functional majority-minority districts. When considering minority performing districts, courts will often look to
performance analysis to assess if the district in question will “perform” consistent with minority voting preferences.
Voting patterns in Lehigh Valley

16. Voting patterns in the Lehigh Valley are also marked by minority vote cohesion and racially polarized voting under the *Gingles* test. In the 2020 election, Latino and Black voters in the Lehigh Valley demonstrated high rates of cohesive voting, with estimated Democratic vote share over 75% for State House elections, President, Congress and Attorney General. In contrast, White voters supported Republicans at rates between 60% to 80%. In the city of Allentown, White voters still lean Republican but there is more evidence of cross-over voting in support of minority candidates of interest, and thus the potential for minority coalition districts in and around Allentown.
Analysis by Dr. Matt Barreto

2020 State House Race, Democrat V Republican - PA Lehigh Region
Sorted by Percent White within each Precinct
(n = 472)

2020 Congress Race, Democrat V Republican - PA Lehigh Region
Sorted by Percent White within each Precinct
(n = 516)
Voting patterns in Philadelphia and Delaware Counties

17. In the 2020 election, Black, Latino and Asian voters in Philadelphia and Delaware counties demonstrated high rates of cohesive voting, with estimated Democratic vote share of 85% to 100% for State House elections, President, Congress and Attorney General. In contrast, White voters offered far less support to Democrats with an overall average support right around 50%. Even though this region is characterized by high Democratic voting rates, this is driven by very strong cohesiveness among Black, Latino and Asian voters which vote in coalition for Democratic candidates. In the city of Philadelphia, White voters demonstrate reasonable rates of cross-over voting to support minority candidates of choice, which suggests the strong potential for minority coalition districts in the region. In areas where the minority population is overweighted or packed, there can be consideration given to unpacking these districts, so that they still perform for minority candidates of choice, but also allow for minority voters to be influential and numerous in size in adjacent minority coalition districts.
Analysis by Dr. Matt Barreto

2020 President Race, Biden v Trump - PA Delaware & Philadelphia Counties
Sorted by Percent White within each Precinct
(n = 2120)

2020 State House Race, Democrat v Republican - PA Delaware & Philadelphia Counties
Sorted by Percent White within each Precinct
(n = 1473)
Voting patterns in Central Pennsylvania (Lancaster-Harrisburg)

18. Voting patterns in the Central Pennsylvania are also marked by minority vote cohesion and racially polarized voting under the *Gingles* test. In the 2020 election, Latino and Black voters in counties in Central Pennsylvania demonstrated high rates of cohesive voting, with estimated Democratic vote share of 75% to 90% for State House elections, President, Congress and Attorney General. In contrast, White voters supported Republican candidates at 70% to 85%. Central Pennsylvania areas that were diverse and had both minorities and whites still performed for minority candidates of choice around 60% to 65%, however in areas that were 80% white or higher, there was strong evidence of block voting against minority candidates of choice.
Analysis by Dr. Matt Barreto

2020 State House Race, Democrat V Republican - Central PA
Sorted by Percent White within each Precinct

2020 Congress Race, Democrat V Republican - Central PA
Sorted by Percent White within each Precinct
Voting patterns in Allegheny County

19. Allegheny County is the most populated county in Southwestern Pennsylvania and as noted above has experienced the most population shift over the past decade, including shifts by race and ethnicity. Minority voters in Allegheny – predominantly African American – are extremely cohesive voting for Democratic candidates at roughly 90%. Diverse precincts that are between 35% to 65% minority are also well-performing for Democratic candidates. However, precincts in Allegheny County which have the highest percent White voters vote majority Republican, against minority preferences. Thus, as districting decisions are being evaluated in Allegheny County, care must be given to not dilute and override minority voting preferences by combining them with majority-White precincts which vote Republican. In contrast, high density minority precincts could be combined with precincts in which White voters demonstrate cross-over voting and still create viable minority coalition districts.
Conclusion

20. There are many considerations which must be taken into account when adopting a redistricting plan. As I have outlined, among the factors to consider is the federal VRA. In my review, the preliminary plan comports with the VRA and does not dilute minority voting strength. The preliminary plan contains 23 majority-minority districts and 17 minority performing districts where minorities can “elect representatives of their choice” in accordance with Section 2 of the VRA. While the plan must balance many factors in drawing 203 House districts across a large and increasingly diverse Commonwealth, the preliminary plan comports with the VRA and assures its citizens access to free and equal elections and opportunities for fair representation. I look forward to speaking with the Commission on Friday, January 14, 2022 to expand or clarify as requested. If new issues arise, I reserve the right to supplement or amend this report to best inform the Commission of my opinions and conclusions.