

## Expert Report of Dr. Loren Collingwood

Loren Collingwood

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### Executive Summary

I have been retained by plaintiffs as an expert, and have been asked to examine Dr. Sean Trende's expert report dated 2/23/2024. In particular, I was asked to compare demographic and political features of the plaintiffs' Map 3A against the intervenors' newly proposed map. Specifically, for both plaintiffs' Map 3A, as well as the intervenors' map, I examine 2022 CVAP demographic counts and electoral performance analysis.

Based on my analysis, I conclude the following:

- Map 3A has an estimated HCVAP of 51.04%, and a non-Hispanic white CVAP of 38.36%.
- Intervenors' map has an estimated HCVAP of 51.29%, and a non-Hispanic white CVAP of 42.95%.
- Based on contests between 2016-2020, the performance results for plaintiffs' map 3A are sufficient to provide Latino voters with an equal opportunity to elect candidates of their choice to the state legislature. The intervenors' proposed map shows that the Latino-preferred candidate does win in all the analyzed contests, but in several contests the Latino-preferred candidate nearly loses the election. Thus, there is a significantly greater risk that the Latino voters are unable to elect their preferred candidate in the intervenors' map relative to the plaintiffs' Map 3A.
- Further, voter turnout is often lower in legislative contests relative to top of the ticket (i.e., governor) contests. Given that turnout gaps tend to benefit whites over Latinos, this suggests that exogenous elections used for electoral performance likely slightly overstate Latino-preferred voters' ability to elect candidates of choice. Therefore, there is more doubt whether intervenors' map will perform for Latino-preferred legislative candidates in comparison to plaintiffs' Map 3A.

My opinions are based on the following data sources: 2020 US Census block data, 2022 American Community Survey (ACS) block group data, plaintiff 3A block assignment files, intervenor alternative map block assignment files, and precinct election results.

I am being compensated at a rate of \$400/hour. My compensation is not contingent on the opinions expressed in this report, on my testimony, or on the outcome of this case.

### Background and Qualifications

My qualifications were set forth in my last report dated 2/23/2024.

## CVAP Comparisons Across Maps

To estimate CVAP demographics for each map, I used the recently released 2022 CVAP block group data taken from the U.S. Census.<sup>1</sup> I filter the block groups to those appearing in each respective map (i.e., LD-15 in the intervenors' map, or LD-14 in plaintiffs' map 3A), then sum the total counts for total population, non-Hispanic white alone, Hispanic, and several other minority groups. For block groups that split legislative district boundaries, I weight them by Voting Age Population (VAP) to estimate the share of the block group that is in vs. out of the district for just that split block group.

**Table 1.** Demographics 2022 CVAP. Intervenor and Plaintiff 3A maps.

Map	HCVAP	WCVAP	BCVAP	NCVAP	ACVAP
Intervenor D15	51.29	42.95	1.24	0.96	1.33
Map 3A D14	51.04	38.36	1.01	5.25	1.6

## Electoral Performance

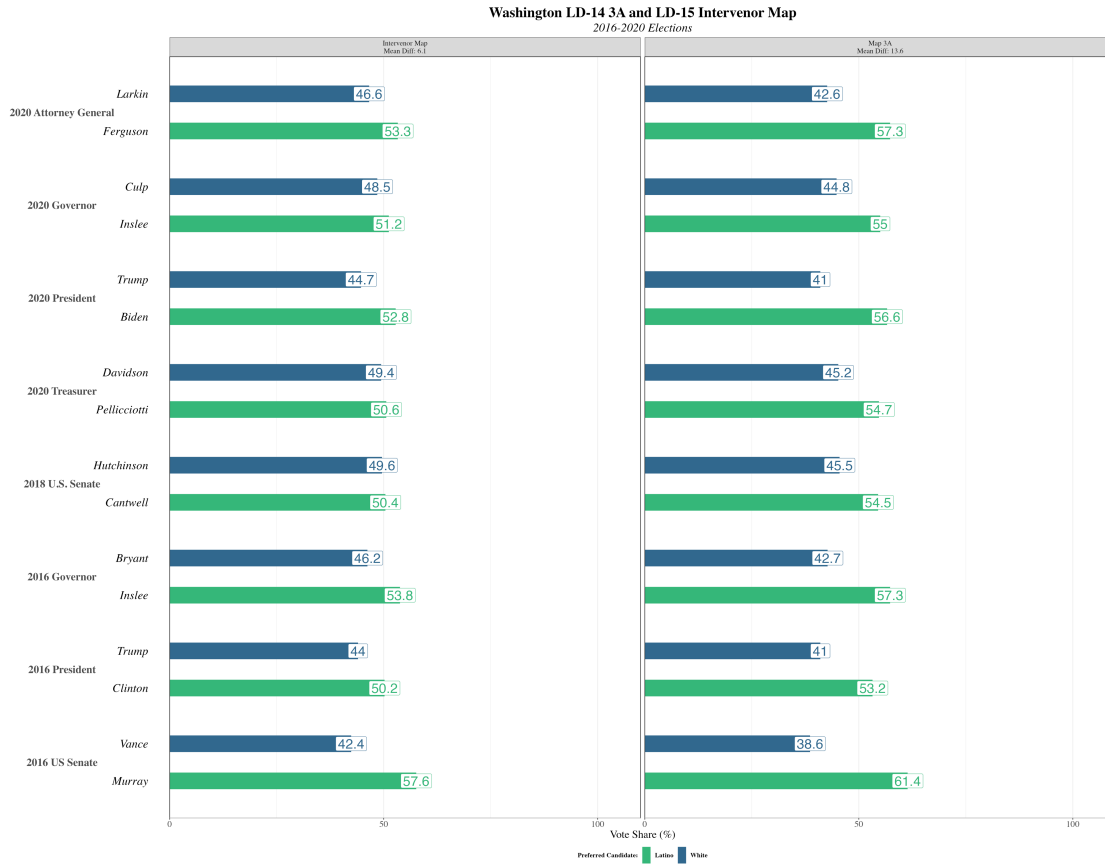
Figure 1 compares electoral performance across eight exogenous contests with precincts subset to the respective district maps. For precincts split across district lines, the vote is weighted by the proportion of the population of that precinct/VTD that is in vs. out of the district. Across every contest, the plaintiffs' map 3A outperforms the intervenors' map.

In all analyzed statewide elections, the Latino-preferred candidate wins by a sizeable margin in plaintiffs' Map 3A. In intervenors' late-proposed map, in many contests the Latino-preferred candidate nearly loses the election. As I noted in my initial remedial report, given that Latino-preferred state legislative candidates may receive a lower percentage than statewide candidates, there is some doubt whether intervenors' map would perform for legislative candidates. 12/1/23 Report, p. 3. On the other hand, the larger margin in plaintiffs' map 3A is sufficient to provide Latino voters with an equal opportunity to elect candidates to a state legislative district.

**Figure 1.** Electoral Performance analysis, Intervenors' Map District 15, Plaintiff Map 3A, 2016-2020 statewide general elections, paneled by map alternative.

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<sup>1</sup> <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>



Pursuant to 28 U.S.C. § 1746, I, Loren Collingwood, declare the foregoing is true and correct.

Dr. Loren Collingwood

Dated: March 1, 2024