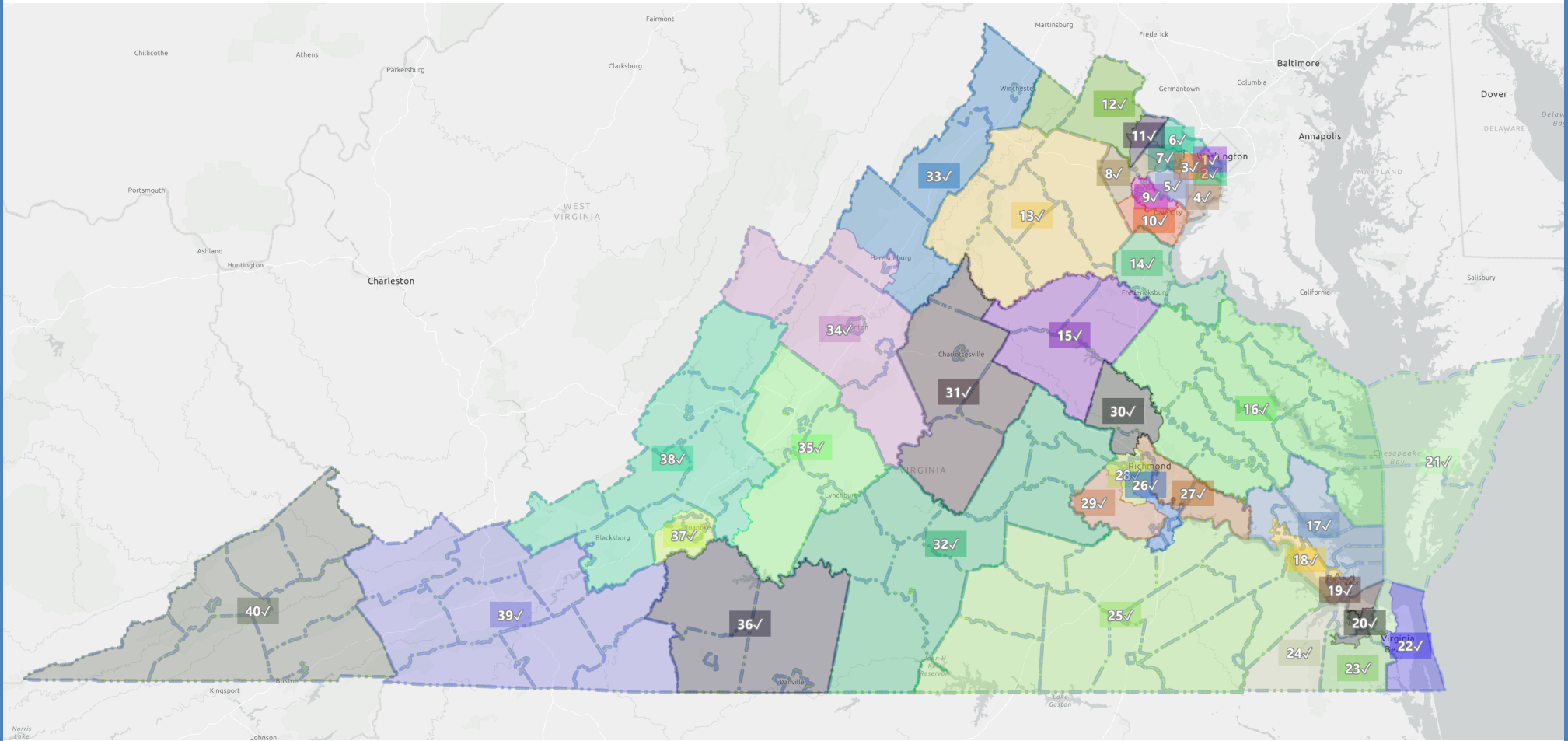


C2 Statewide SD

State Senate Plan C2 Statewide SD



AutoBound Edge MAP - Based on: 2020 Census Geography, 2010 PL94-171

Map Date: 9/25/2021 7:02:24 PM Last Edit:9/25/2021 6:45:09 PM



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District: 1 3

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District: 38 40

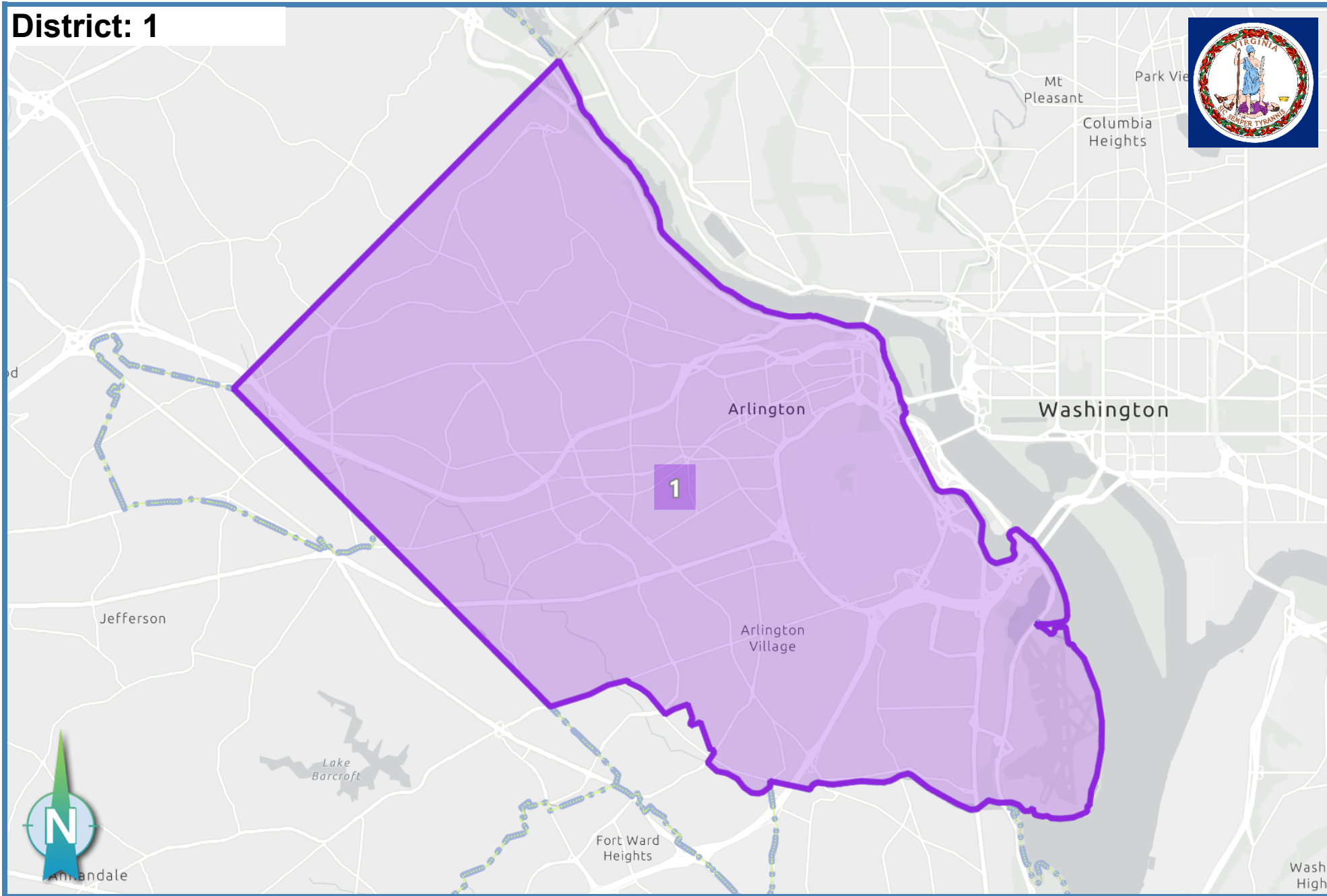
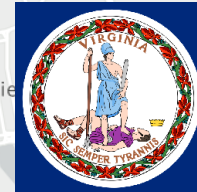
Based on: 2020 Census Geography, 2020 PL94-171



District: 39 41

District: 40 42

District: 1



Ideal Population: 215,785

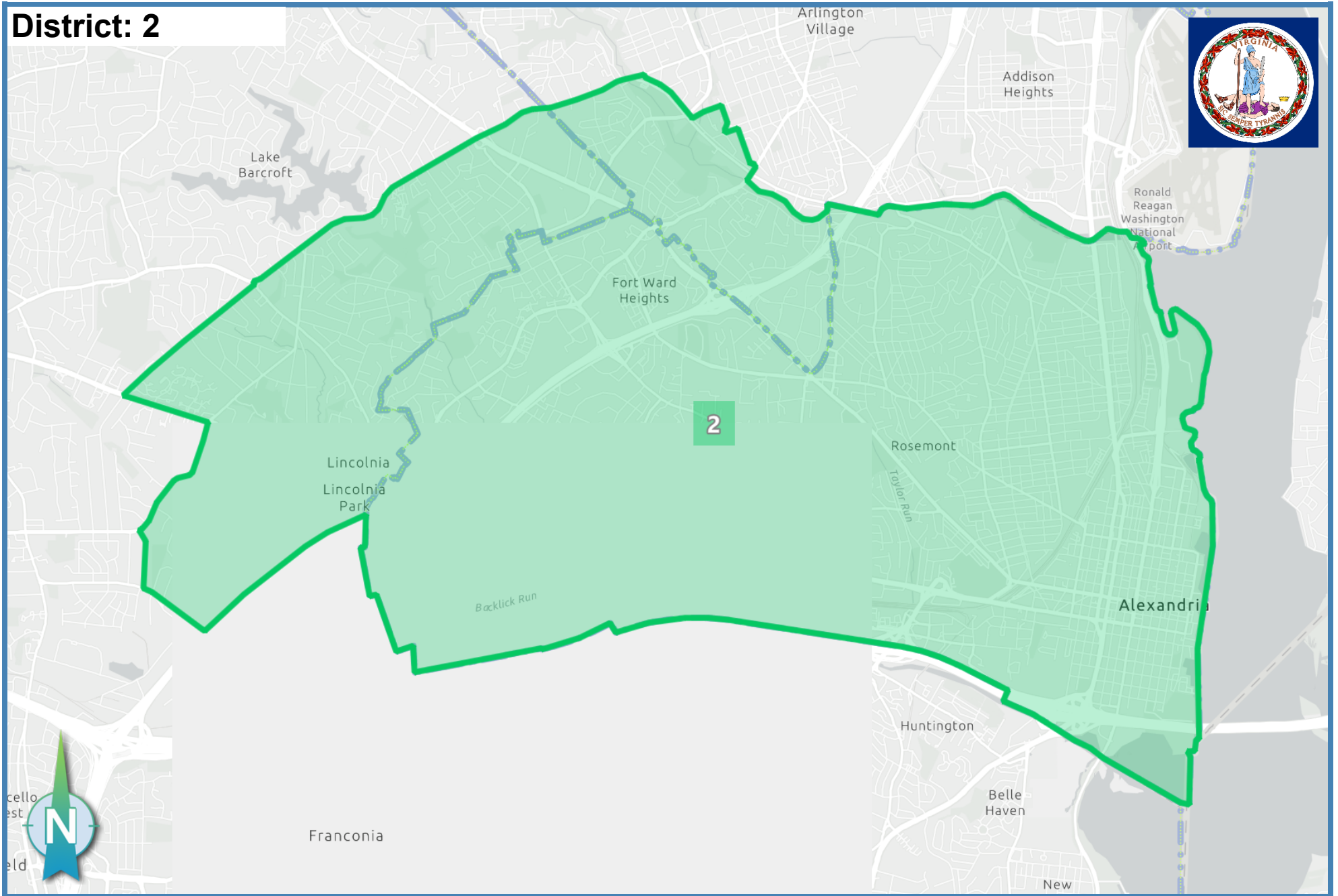
Deviation: 0.41 %

Total Population: **216,662**

Based on: 2020 Census Geography, 2020 PL94-171



District: 2



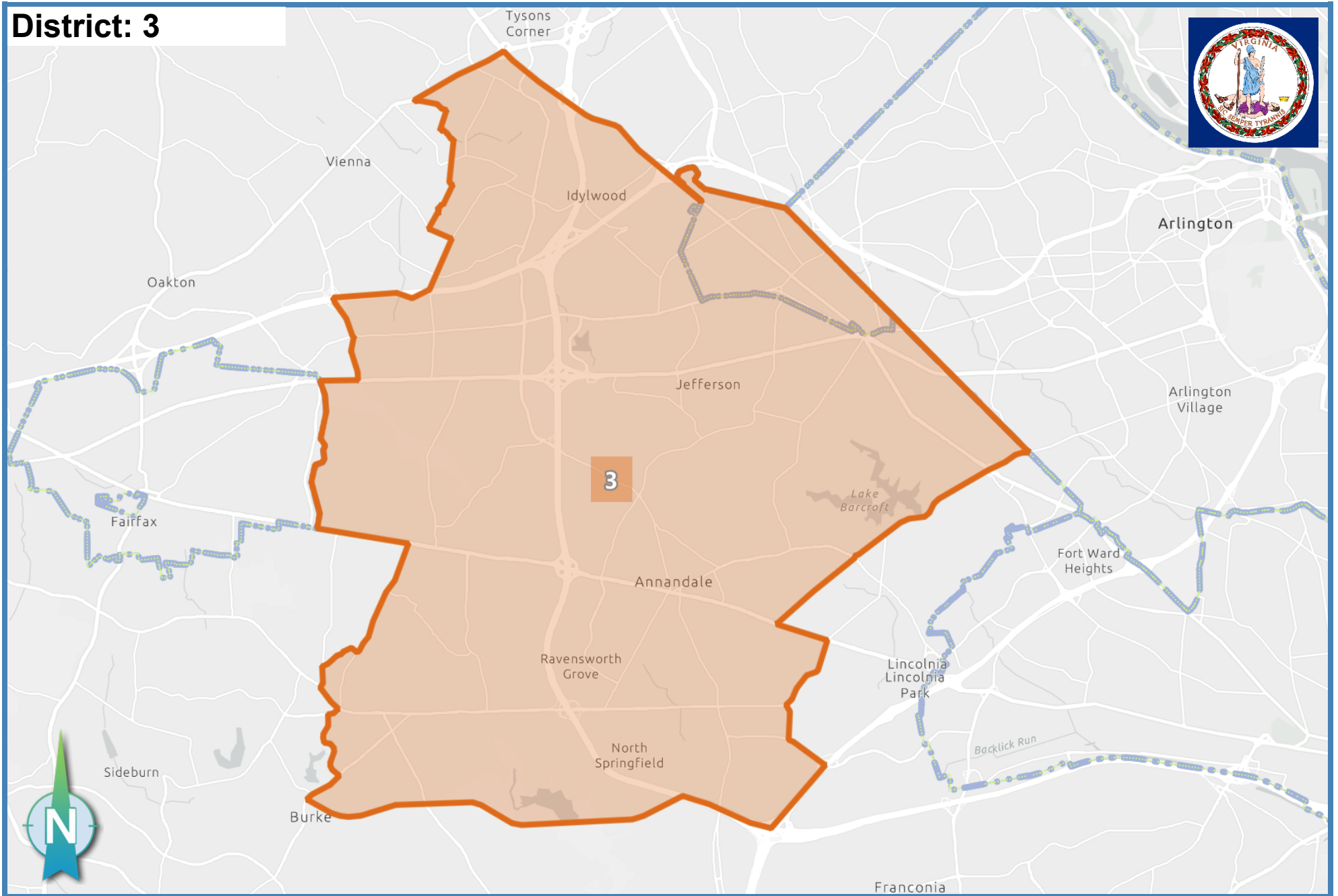
Ideal Population: 215,785

Deviation: -0.38 %

Total Population: **214,955**

Based on: 2020 Census Geography, 2020 PL94-171

District: 3



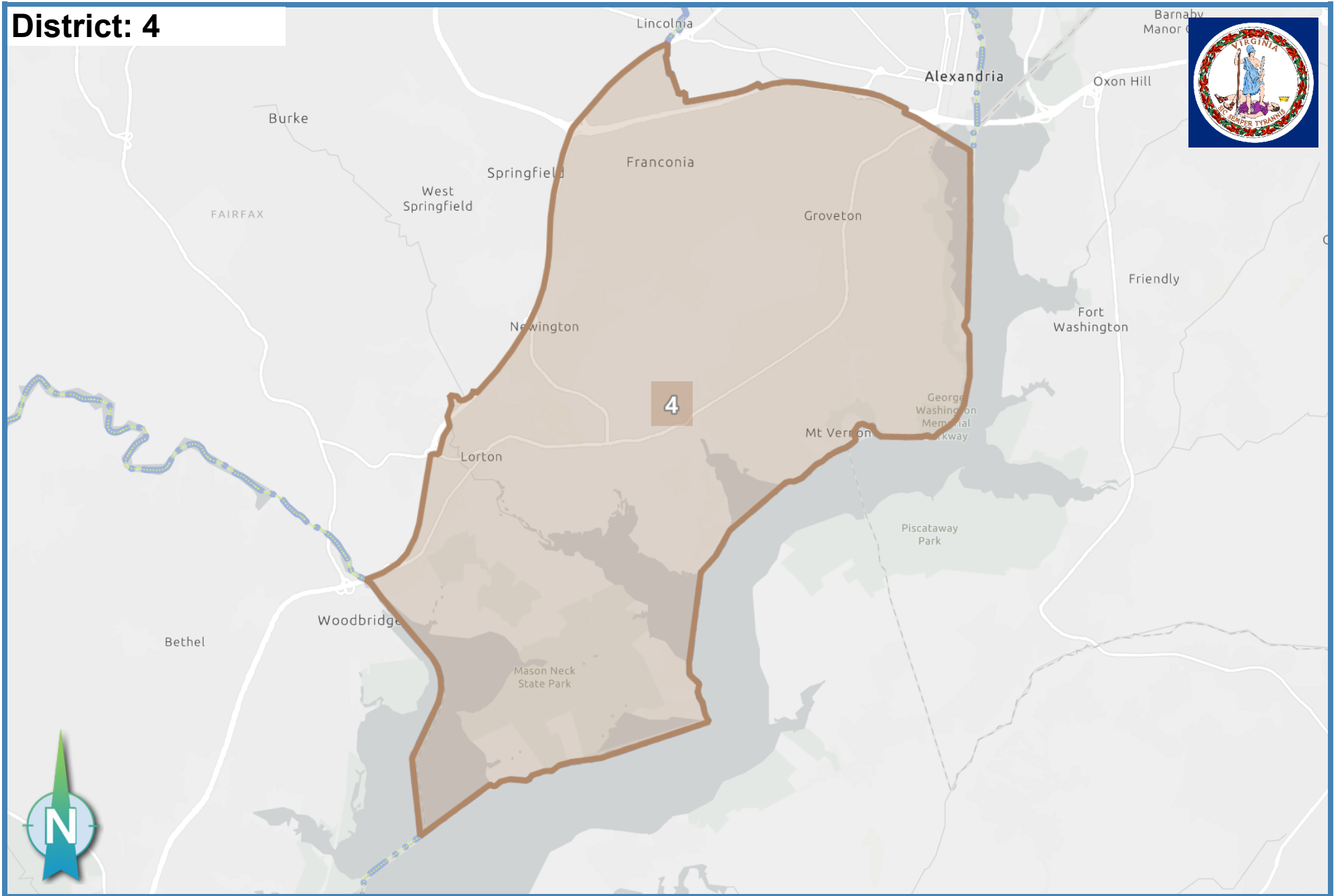
Ideal Population: 215,785

Deviation: 0.22 %

Total Population: **216,263**

Based on: 2020 Census Geography, 2020 PL94-171

District: 4



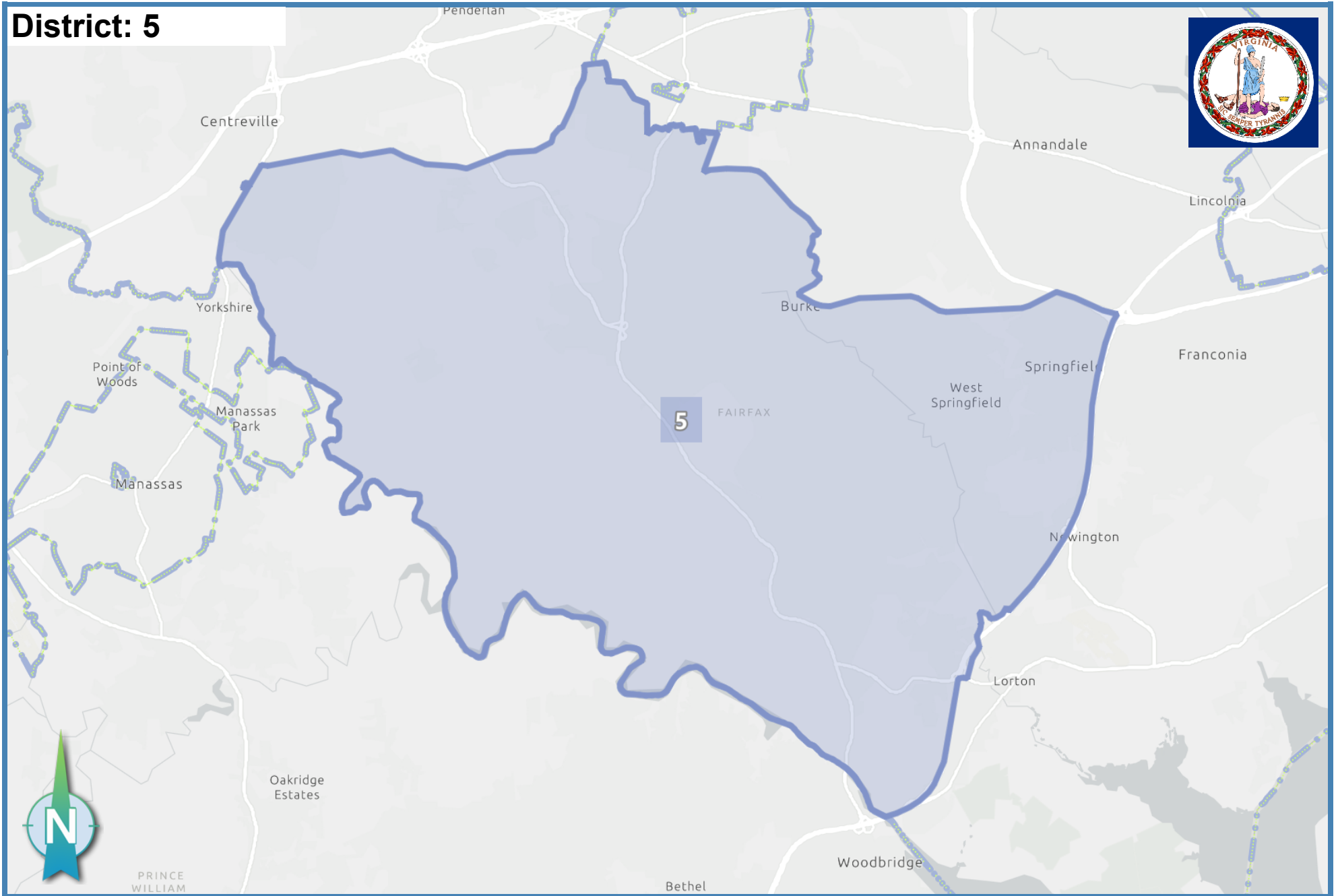
Ideal Population: 215,785

Deviation: -1.89 %

Total Population: **211,704**

Based on: 2020 Census Geography, 2020 PL94-171

District: 5



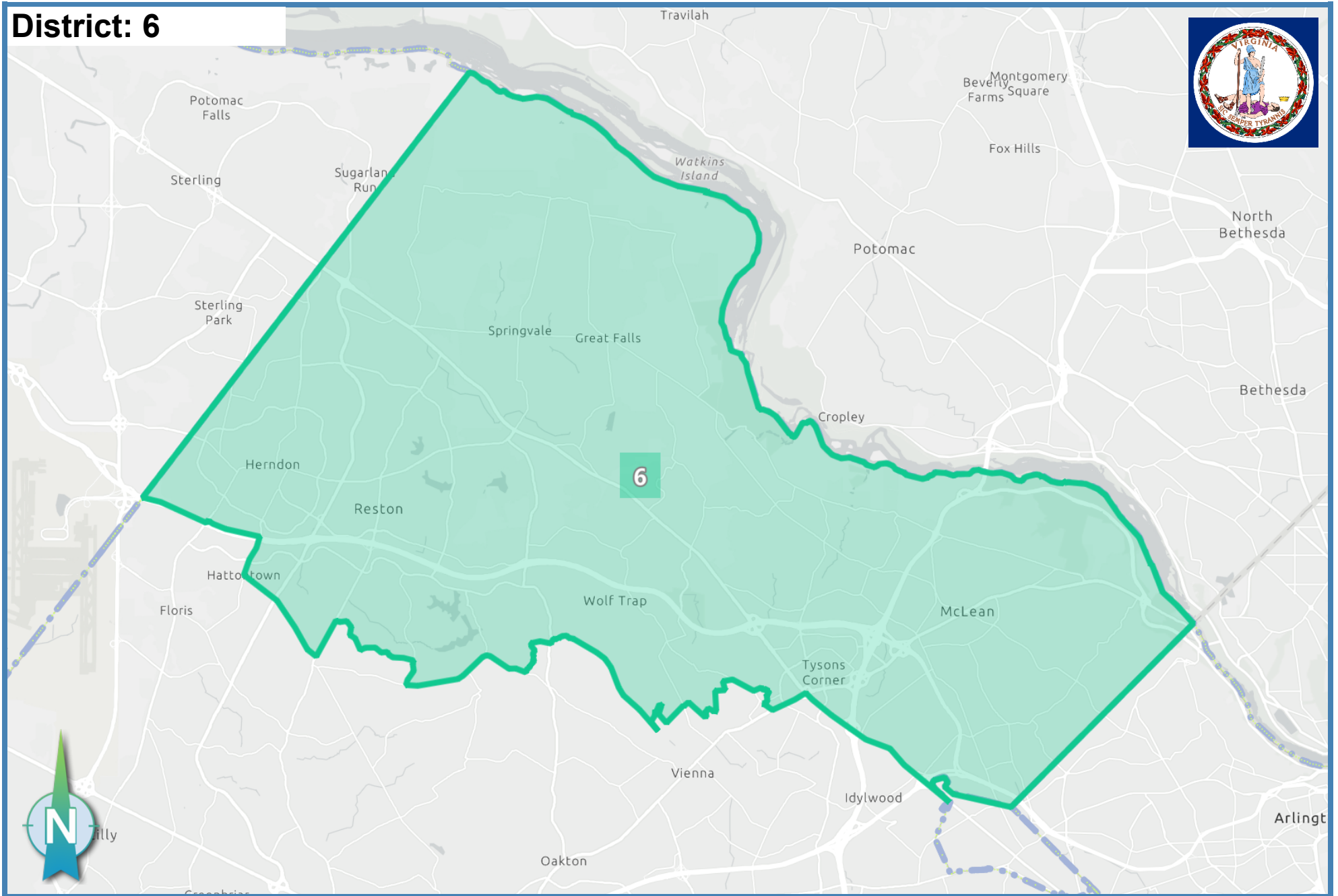
Ideal Population: 215,785

Deviation: -4.24 %

Total Population: **206,641**

Based on: 2020 Census Geography, 2020 PL94-171

District: 6



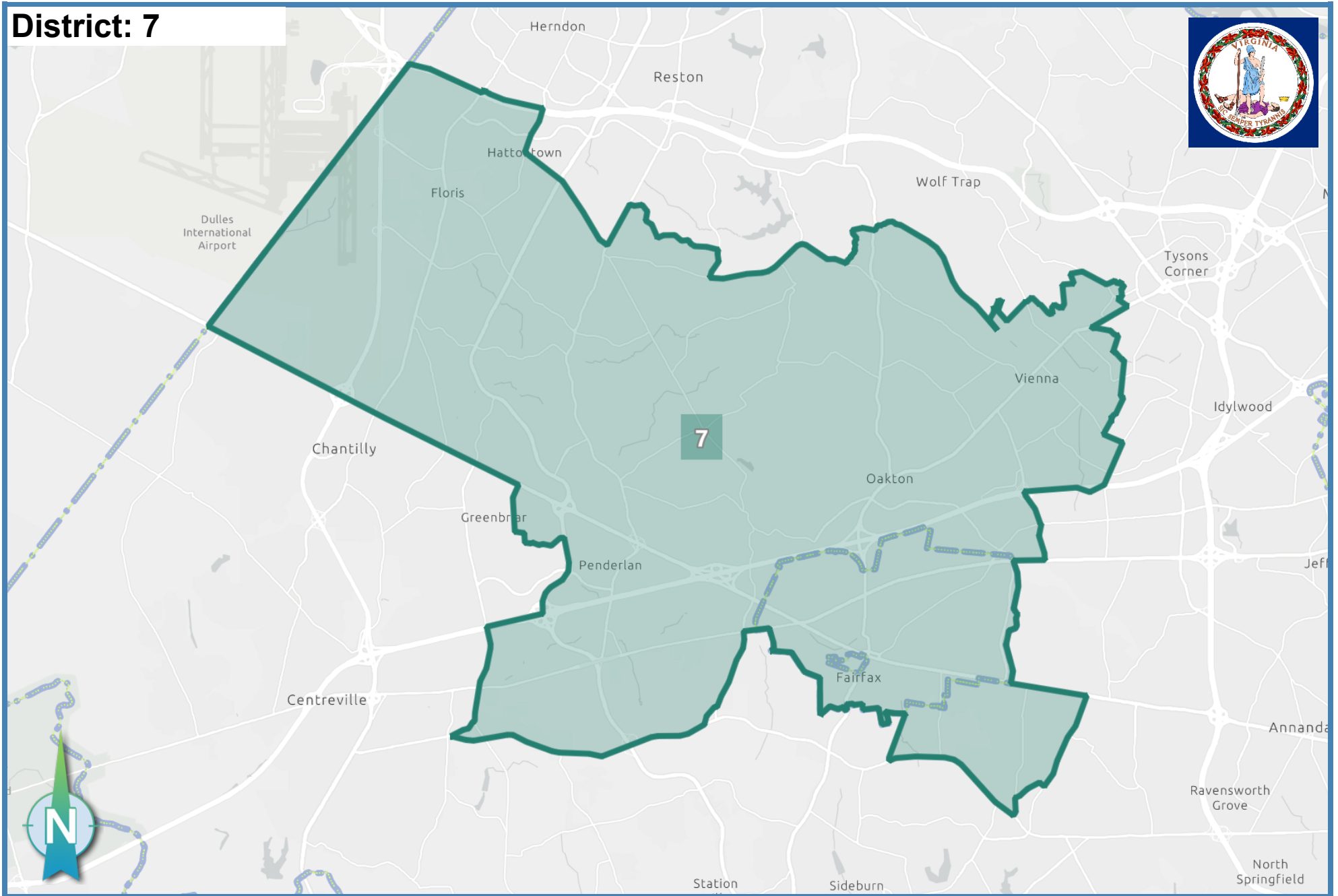
Ideal Population: 215,785

Deviation: -0.69 %

Total Population: **214,299**

Based on: 2020 Census Geography, 2020 PL94-171

District: 7



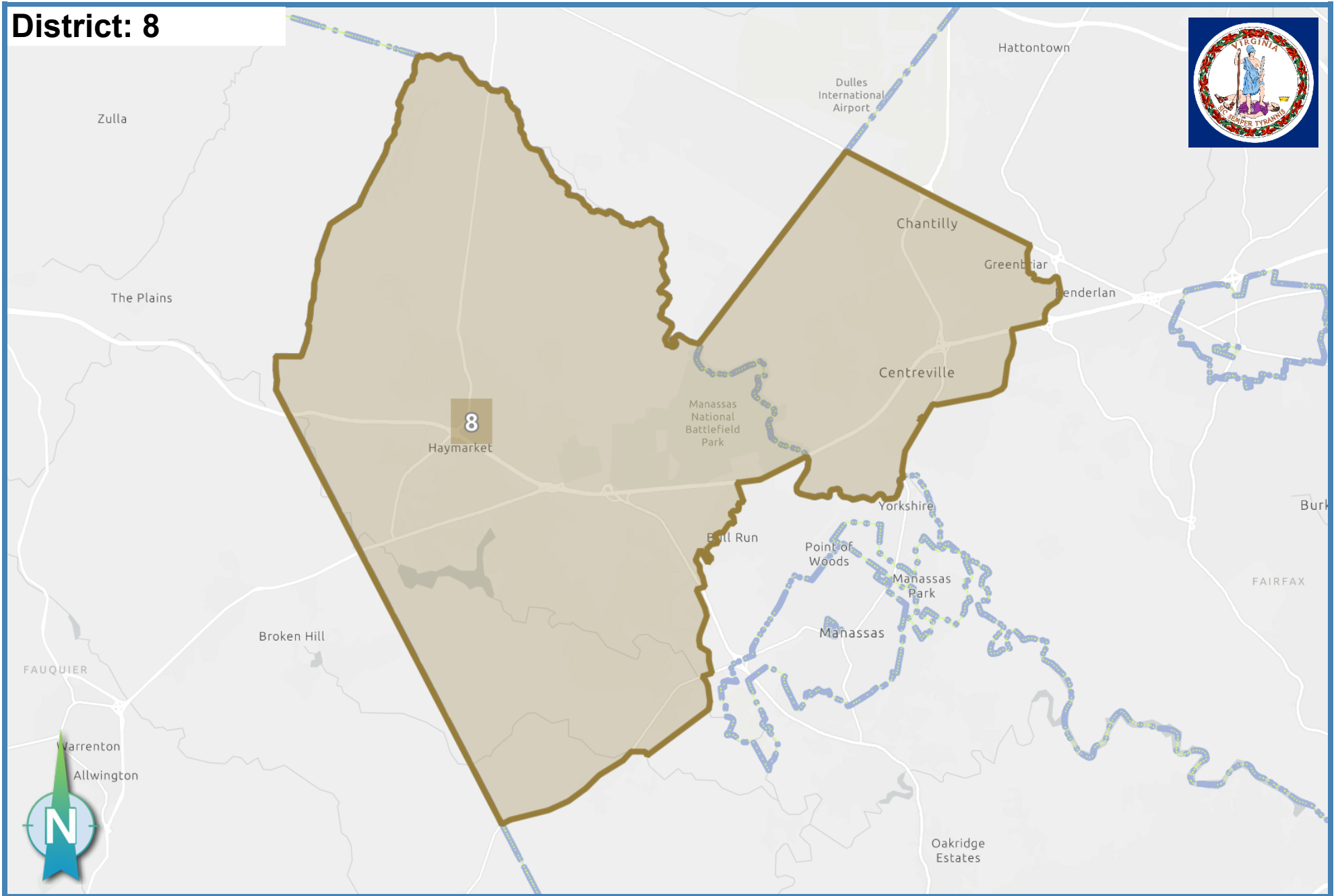
Ideal Population: 215,785

Deviation: -1.10 %

Total Population: **213,417**

Based on: 2020 Census Geography, 2020 PL94-171

District: 8



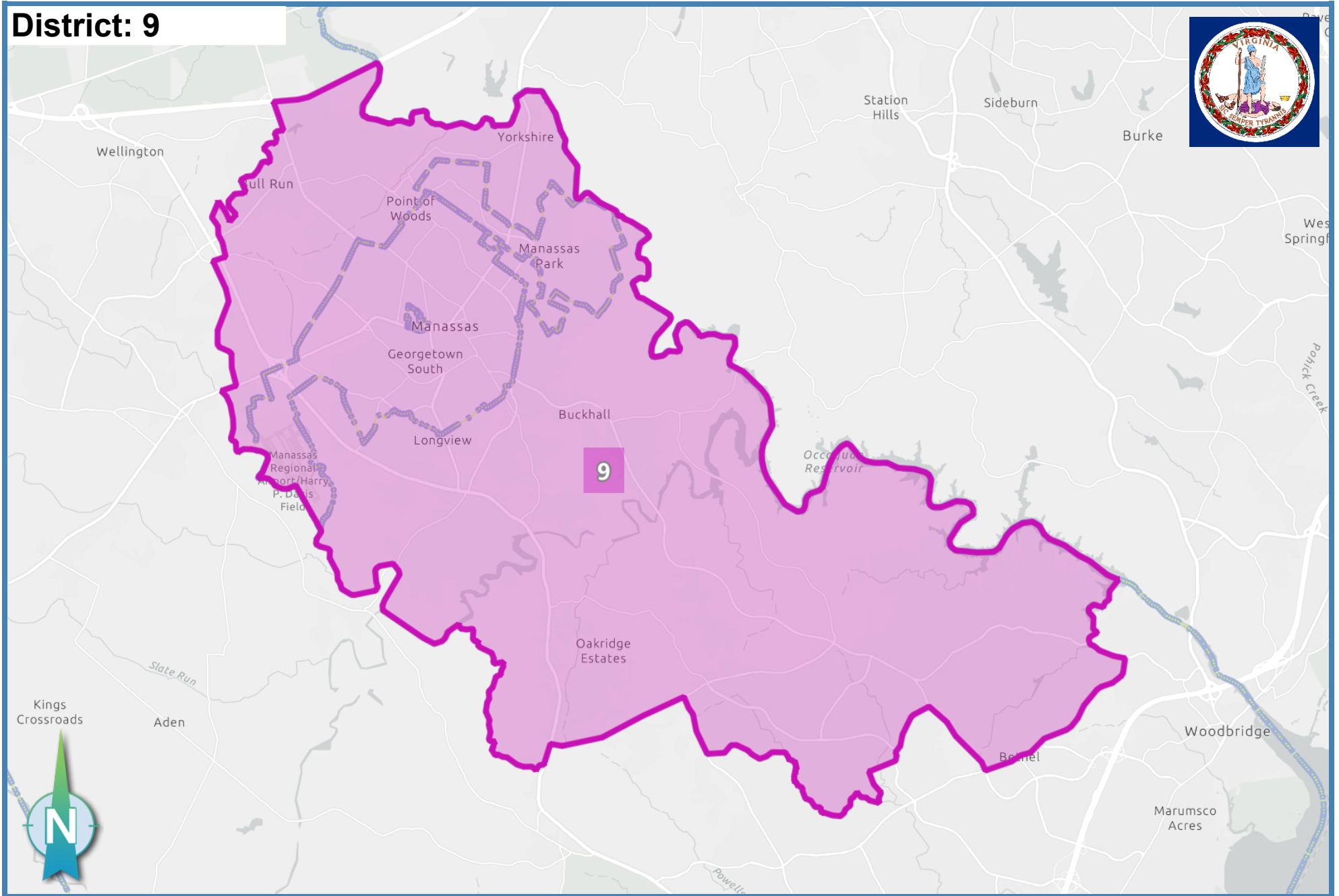
Ideal Population: 215,785

Deviation: -3.11 %

Total Population: **209,069**

Based on: 2020 Census Geography, 2020 PL94-171

District: 9



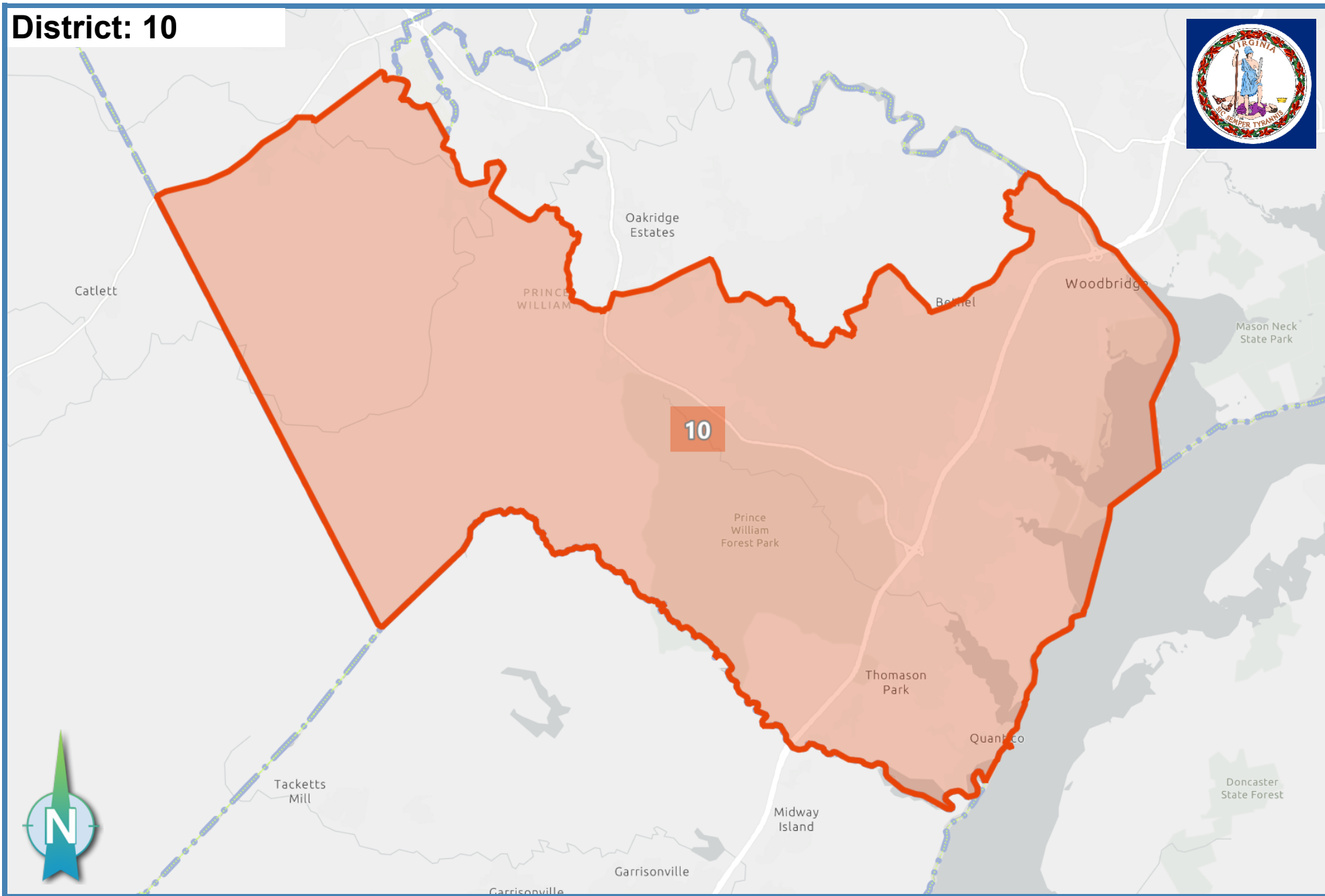
Ideal Population: 215,785

Deviation: -0.78 %

Total Population: **214,102**

Based on: 2020 Census Geography, 2020 PL94-171

District: 10



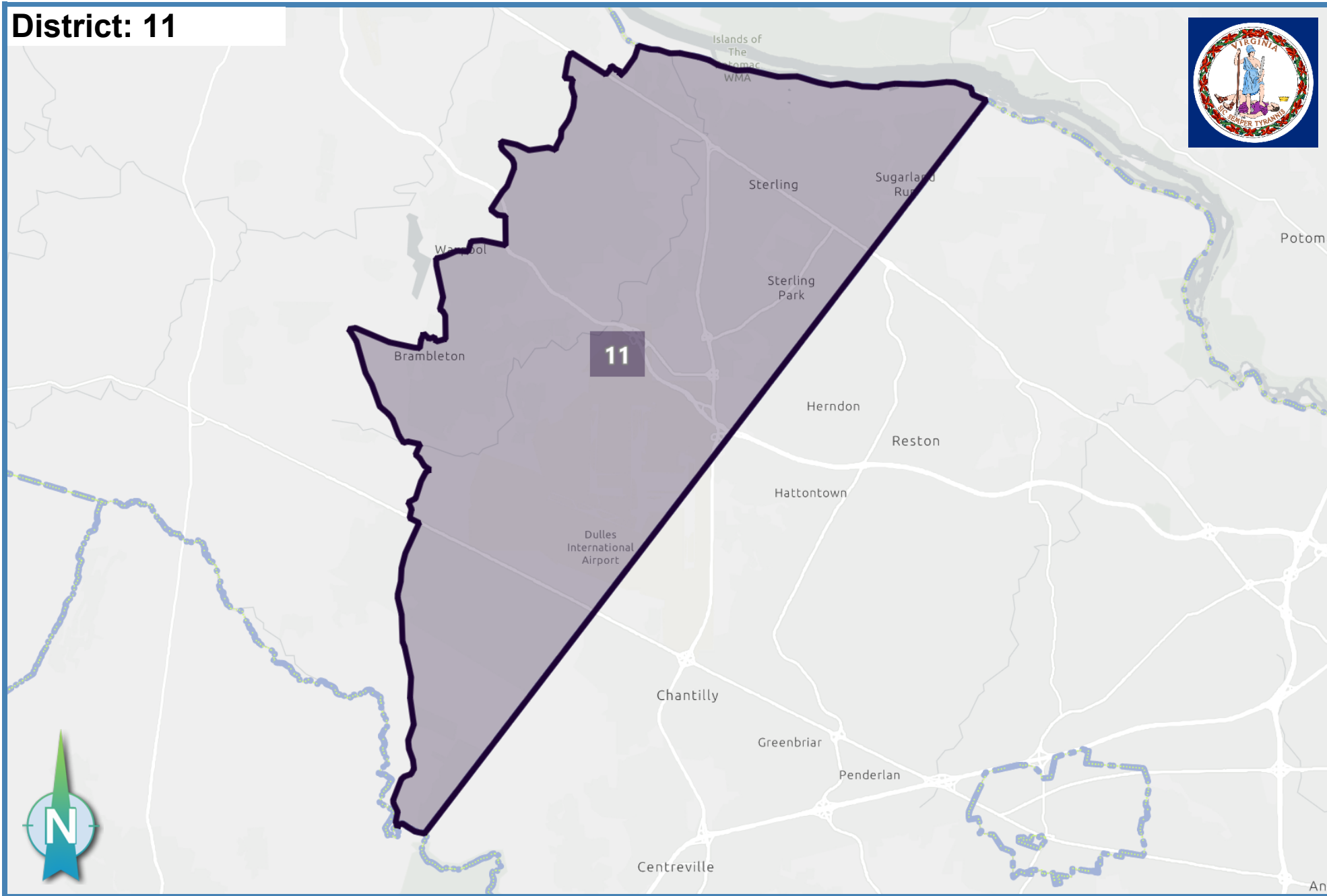
Ideal Population: 215,785

Deviation: -0.95 %

Total Population: **213,734**

Based on: 2020 Census Geography, 2020 PL94-171

District: 11



Ideal Population: 215,785

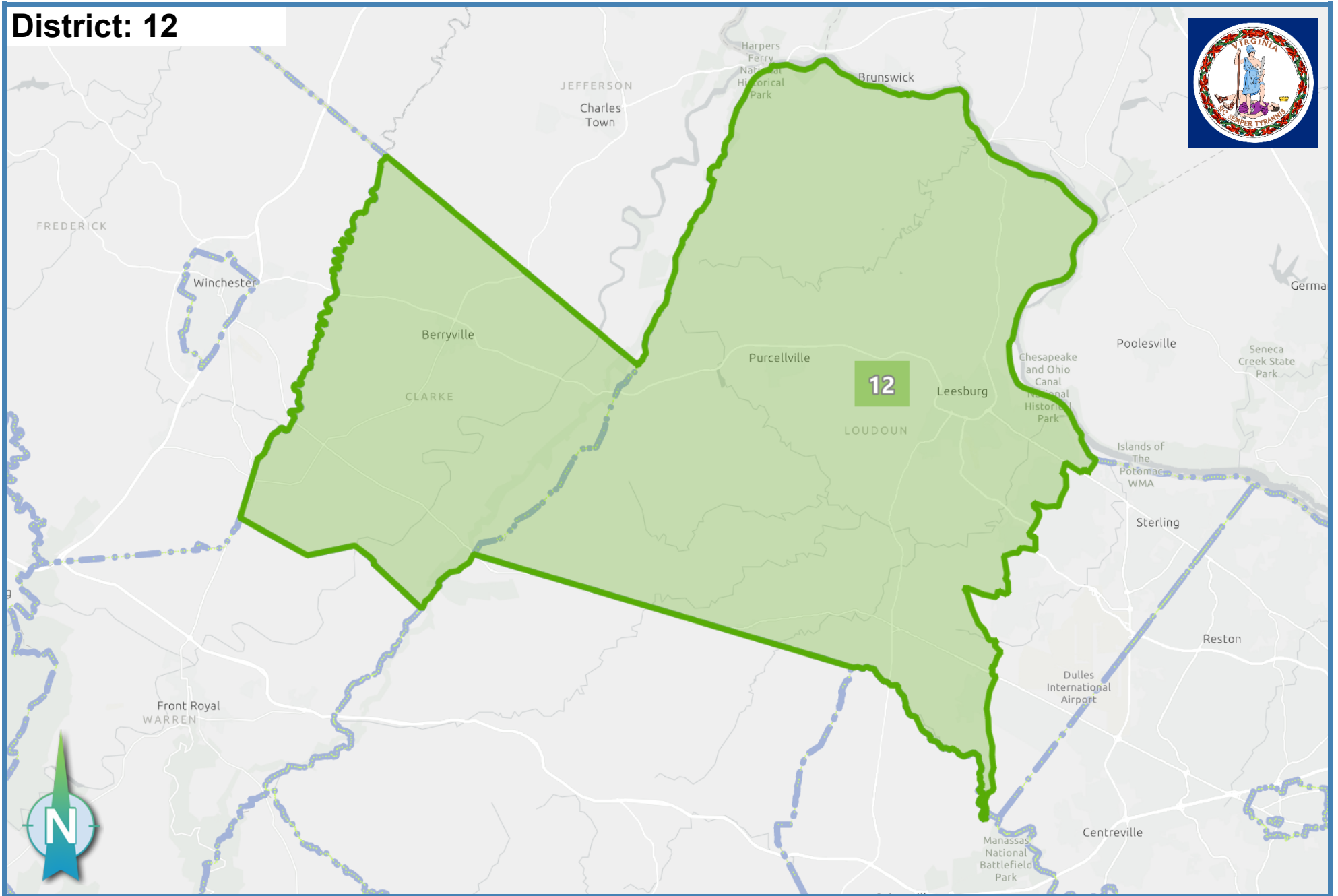
Deviation: 1.35 %

Total Population: **218,697**

Based on: 2020 Census Geography, 2020 PL94-171



District: 12



Ideal Population: 215,785

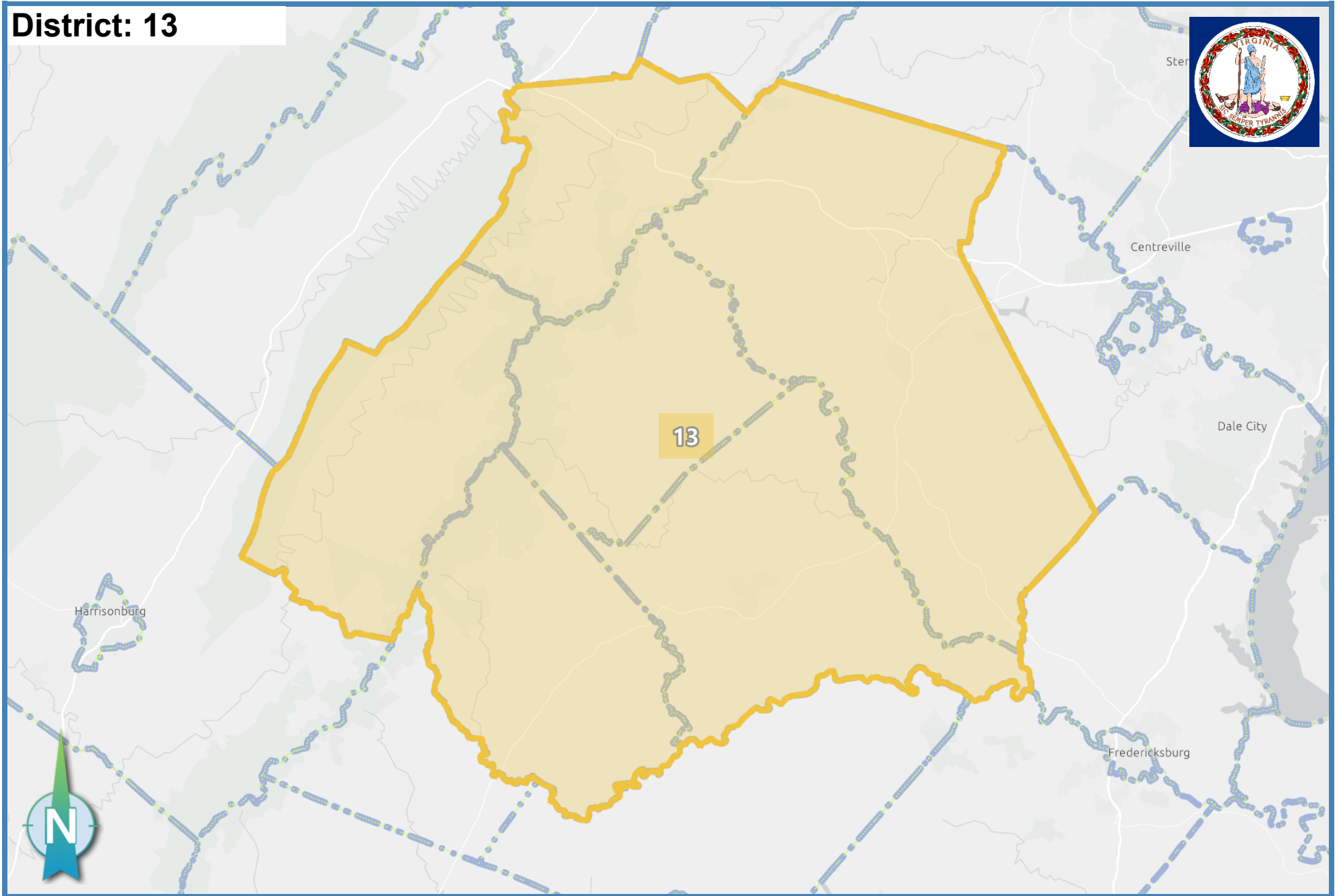
Deviation: 0.67 %

Total Population: 217,239

Based on: 2020 Census Geography, 2020 PL94-171



District: 13



13

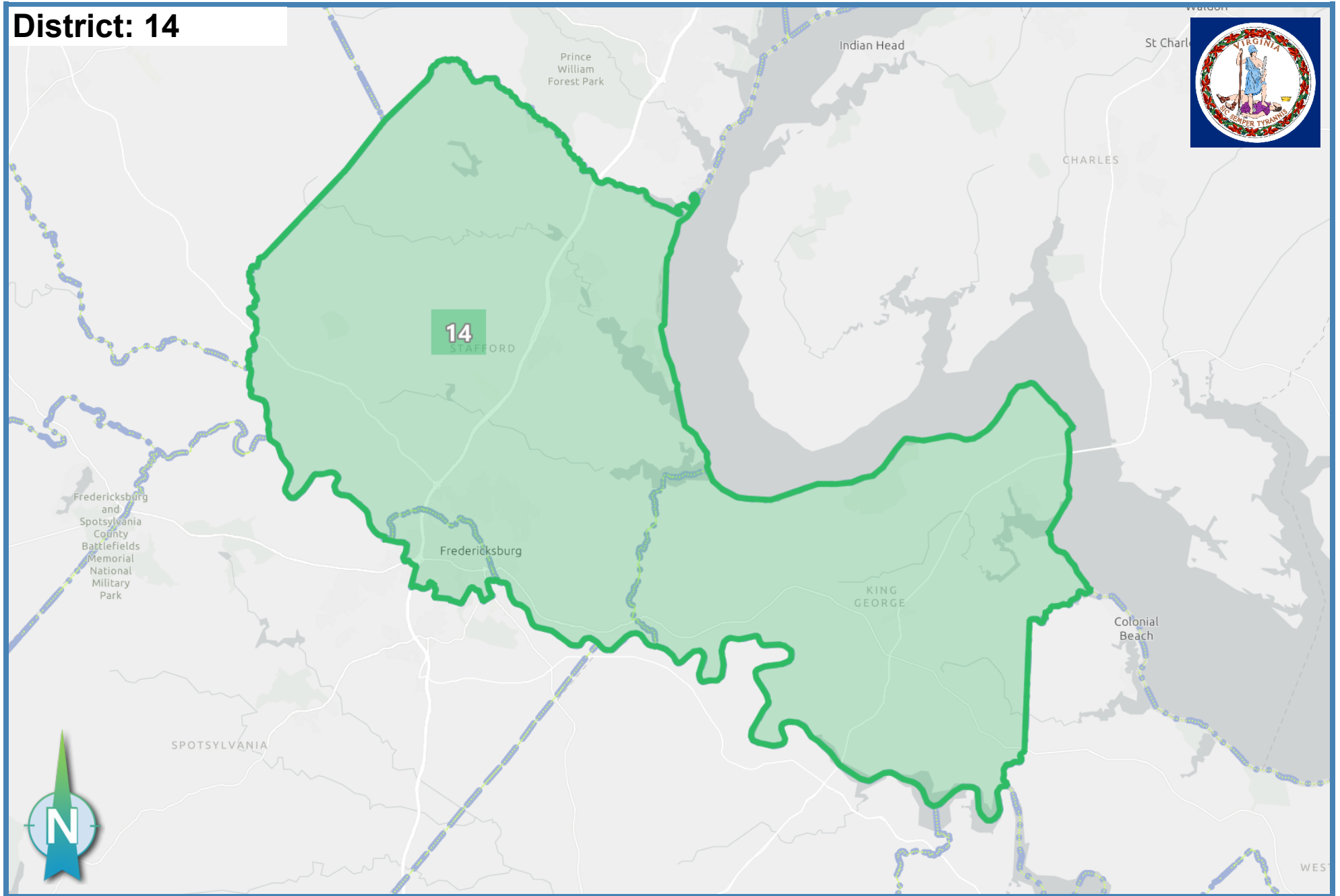
Ideal Population: 215,785

Deviation: -2.21 %

Total Population: **211,026**

Based on: 2020 Census Geography, 2020 PL94-171

District: 14



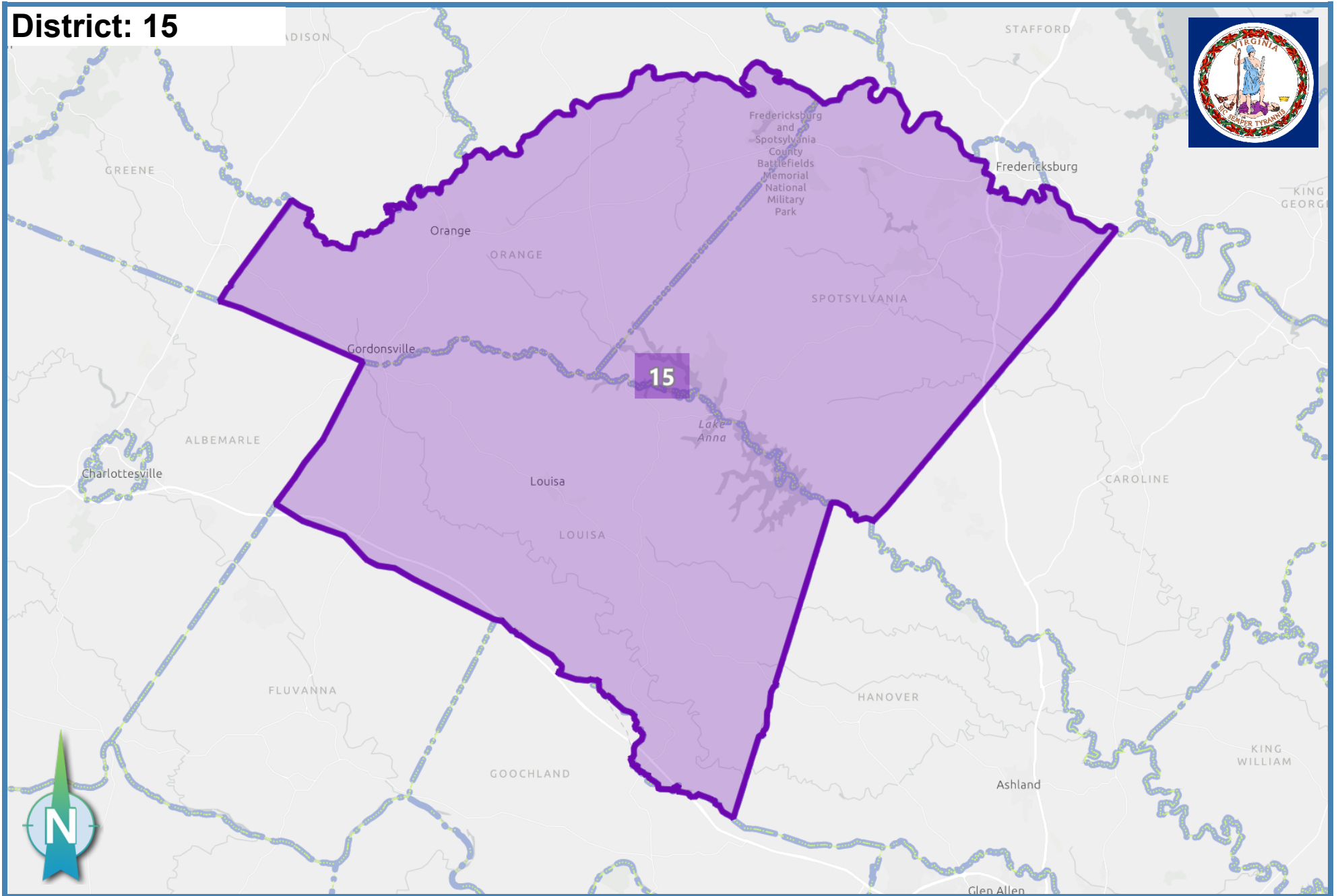
Ideal Population: 215,785

Deviation: -1.95 %

Total Population: **211,567**

Based on: 2020 Census Geography, 2020 PL94-171

District: 15



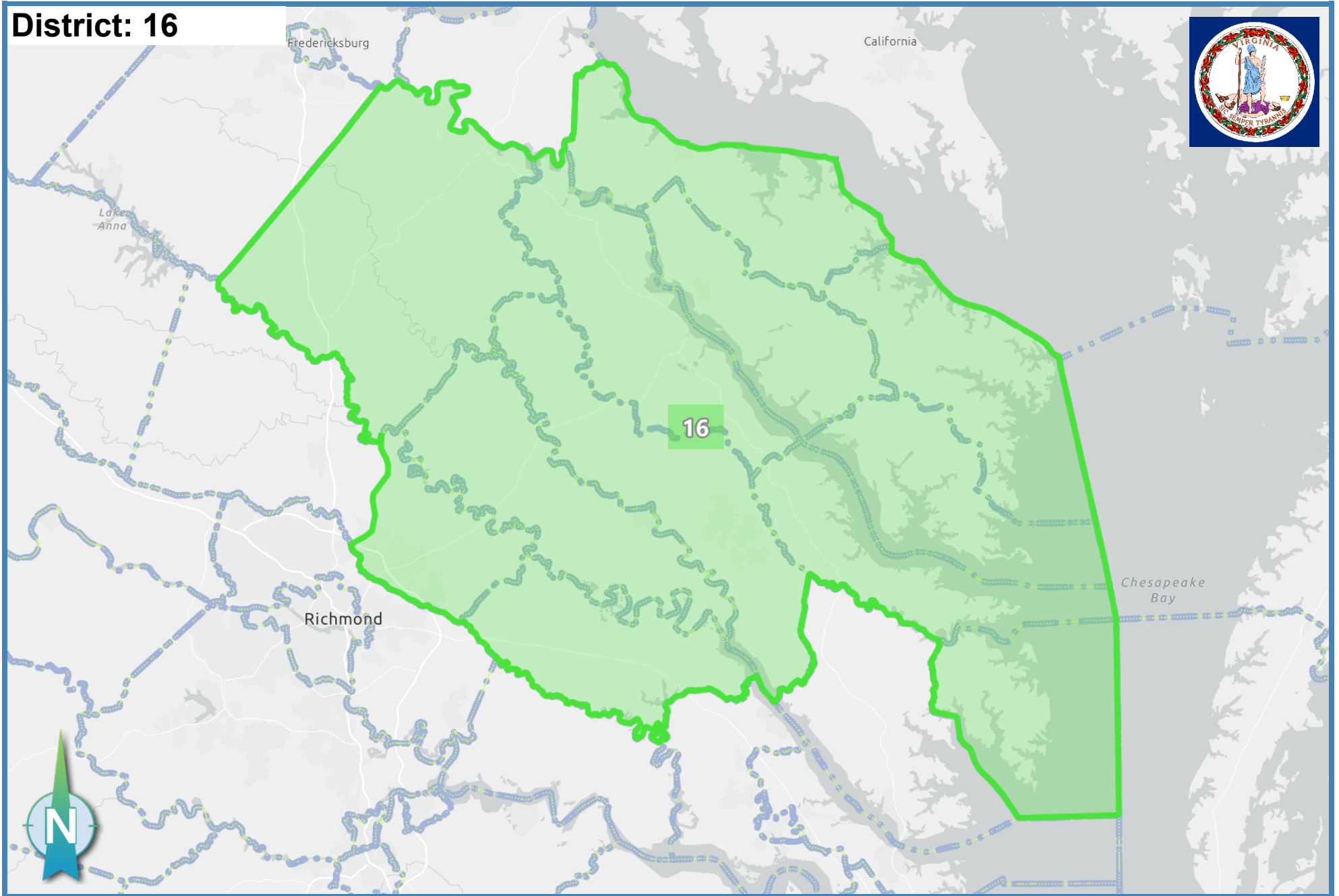
Ideal Population: 215,785

Deviation: -0.53 %

Total Population: **214,632**

Based on: 2020 Census Geography, 2020 PL94-171

District: 16



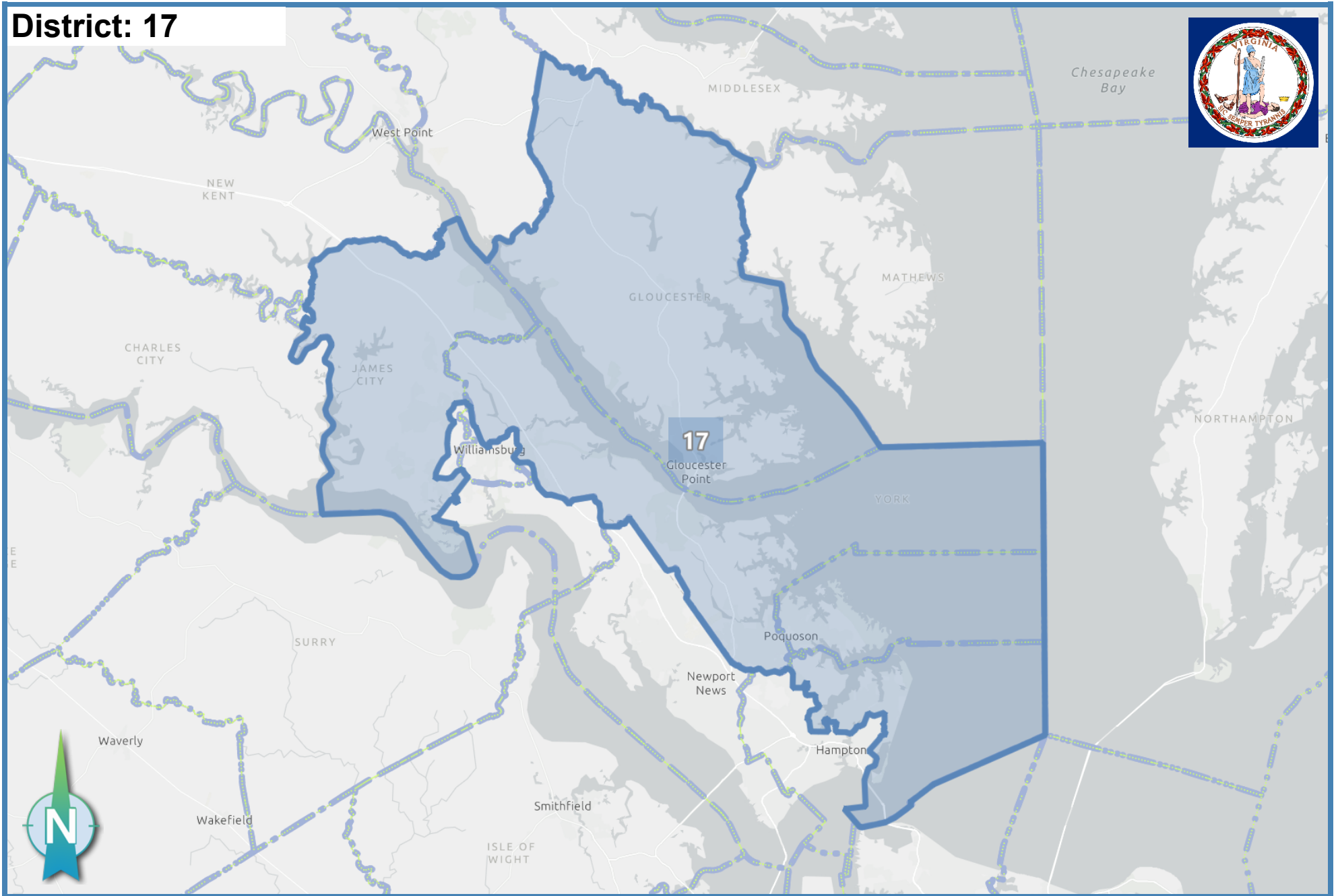
Ideal Population: 215,785

Deviation: -1.95 %

Total Population: **211,577**

Based on: 2020 Census Geography, 2020 PL94-171

District: 17



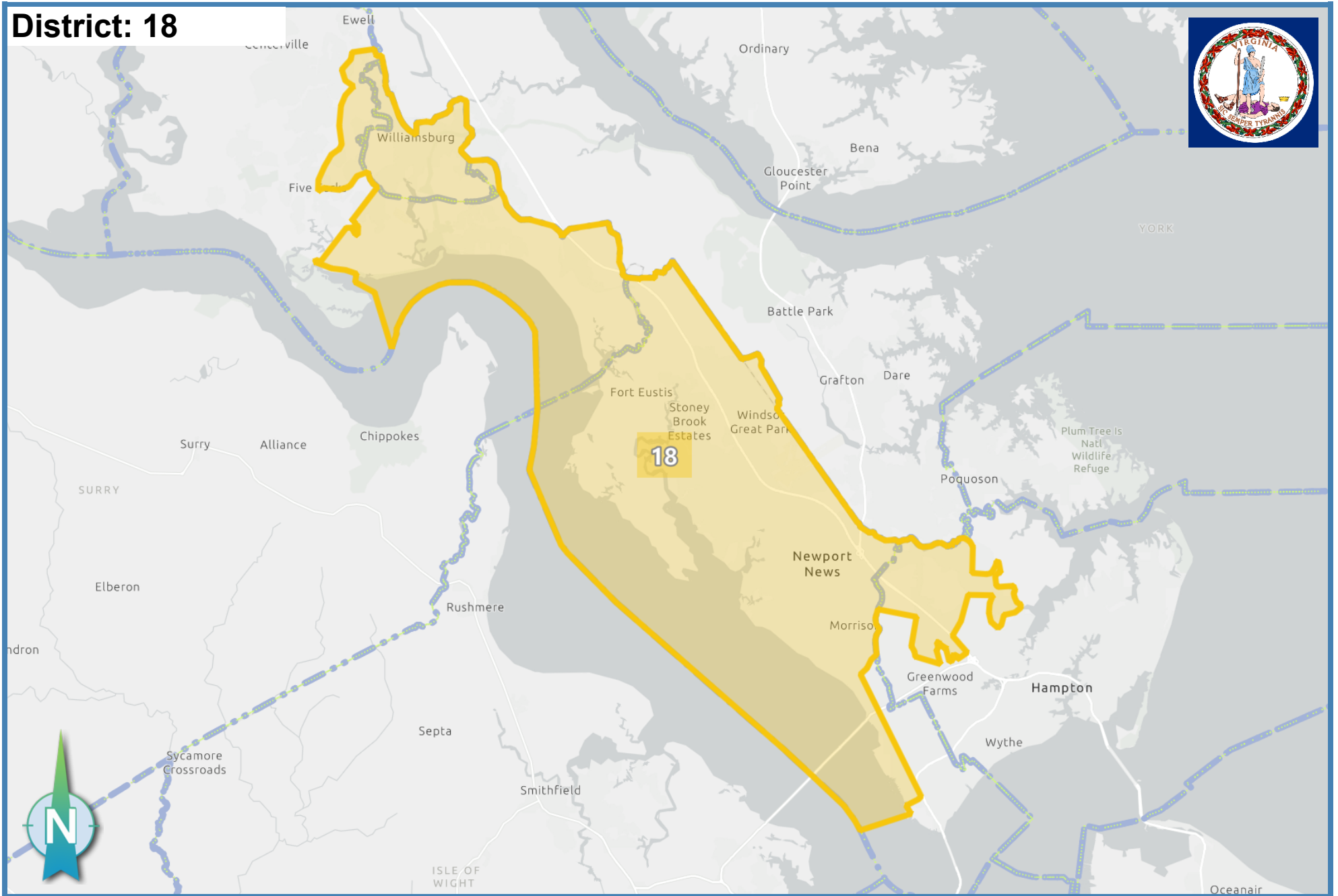
Ideal Population: 215,785

Deviation: -1.59 %

Total Population: **212,351**

Based on: 2020 Census Geography, 2020 PL94-171

District: 18



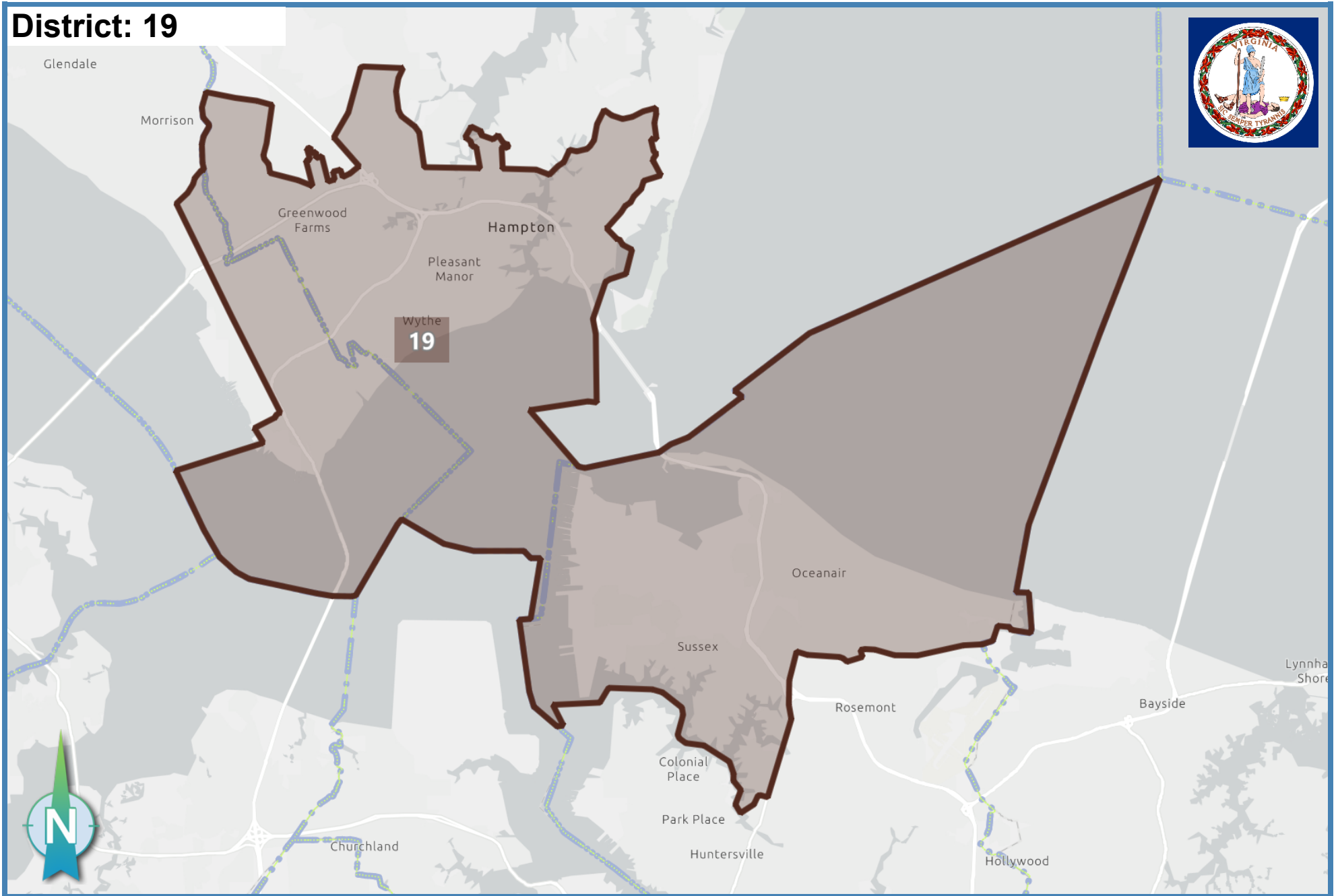
Ideal Population: 215,785

Deviation: -1.63 %

Total Population: **212,270**

Based on: 2020 Census Geography, 2020 PL94-171

District: 19



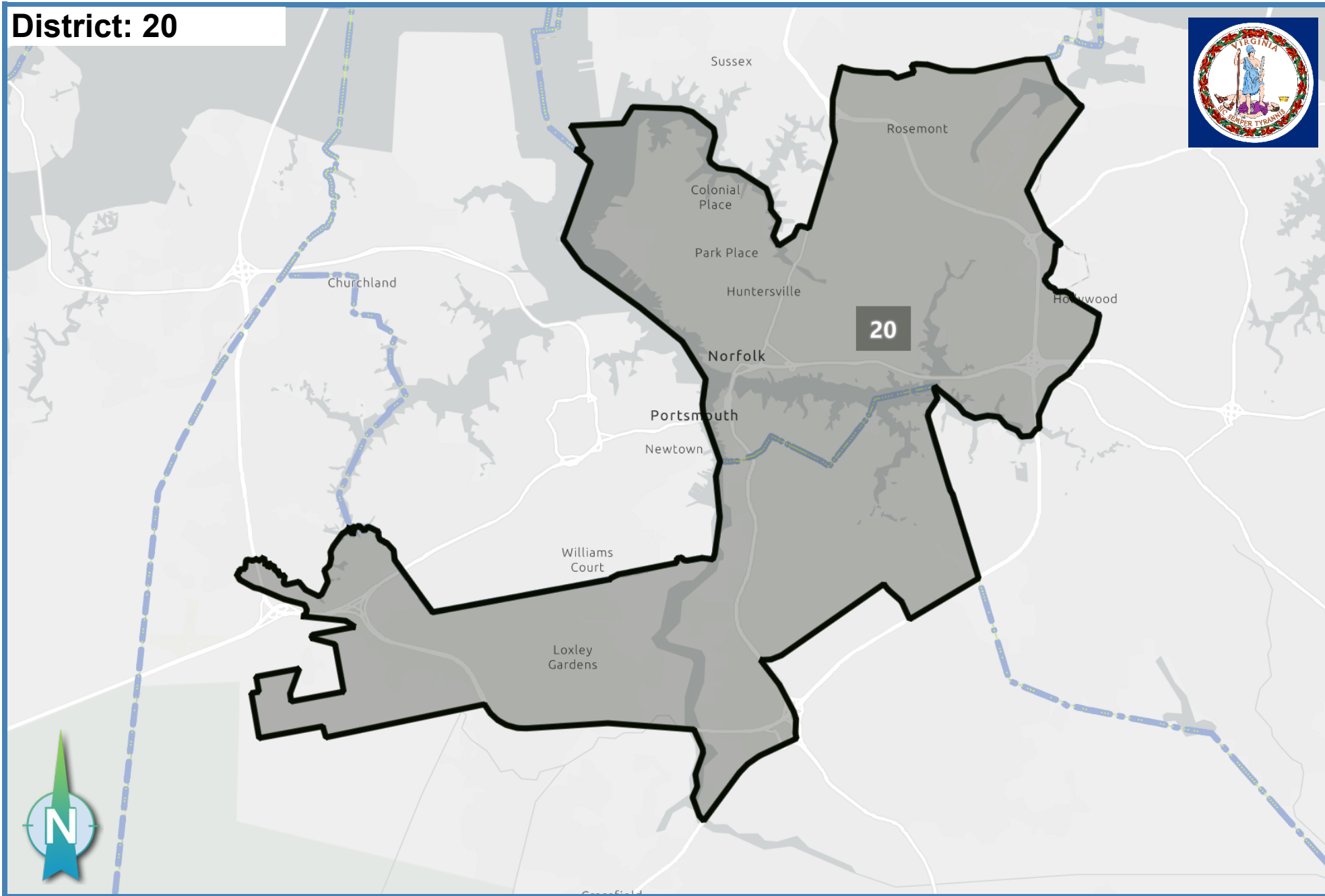
Ideal Population: 215,785

Deviation: -0.28 %

Total Population: 215,185

Based on: 2020 Census Geography, 2020 PL94-171

District: 20



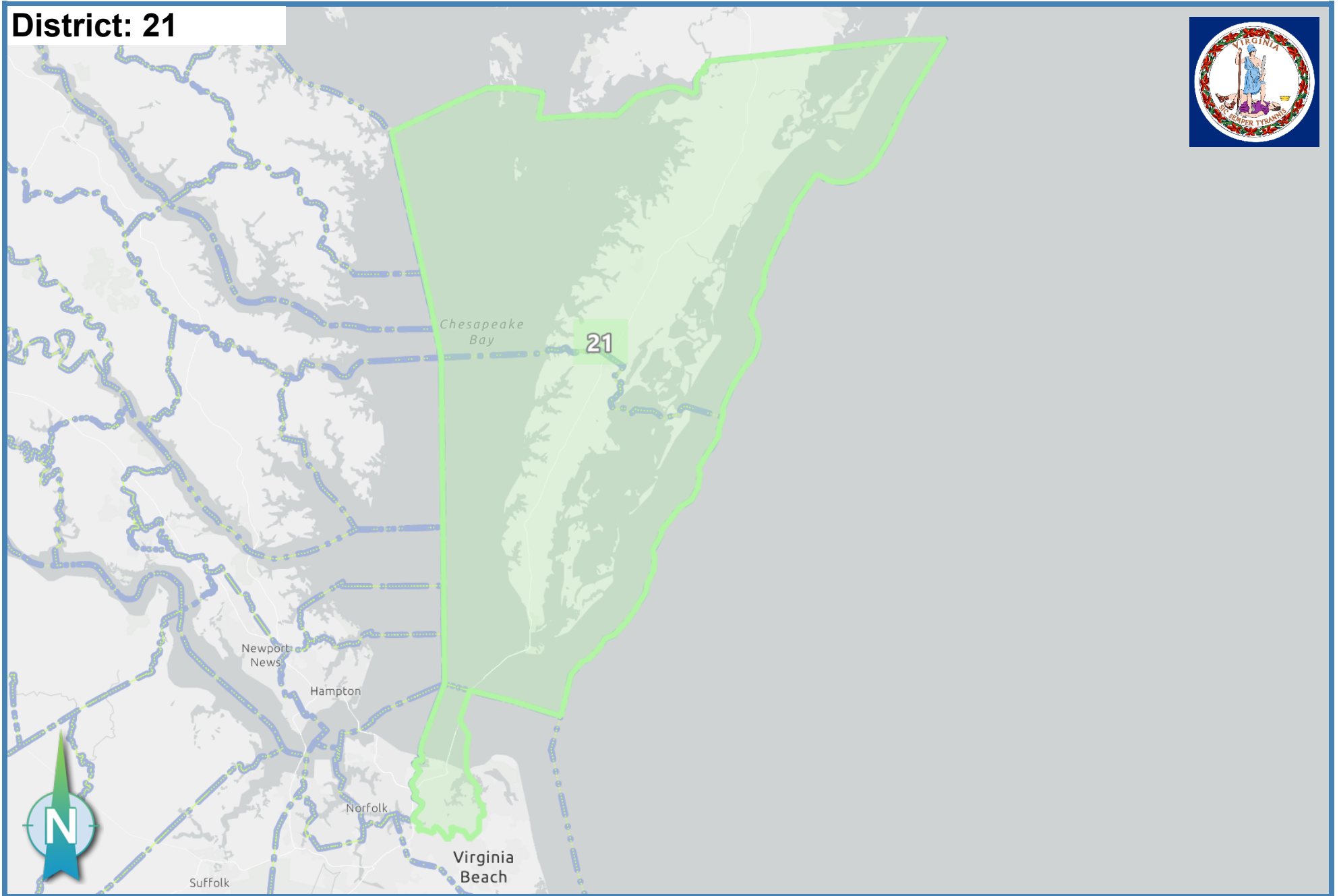
Ideal Population: 215,785

Deviation: -0.44 %

Total Population: **214,825**

Based on: 2020 Census Geography, 2020 PL94-171

District: 21



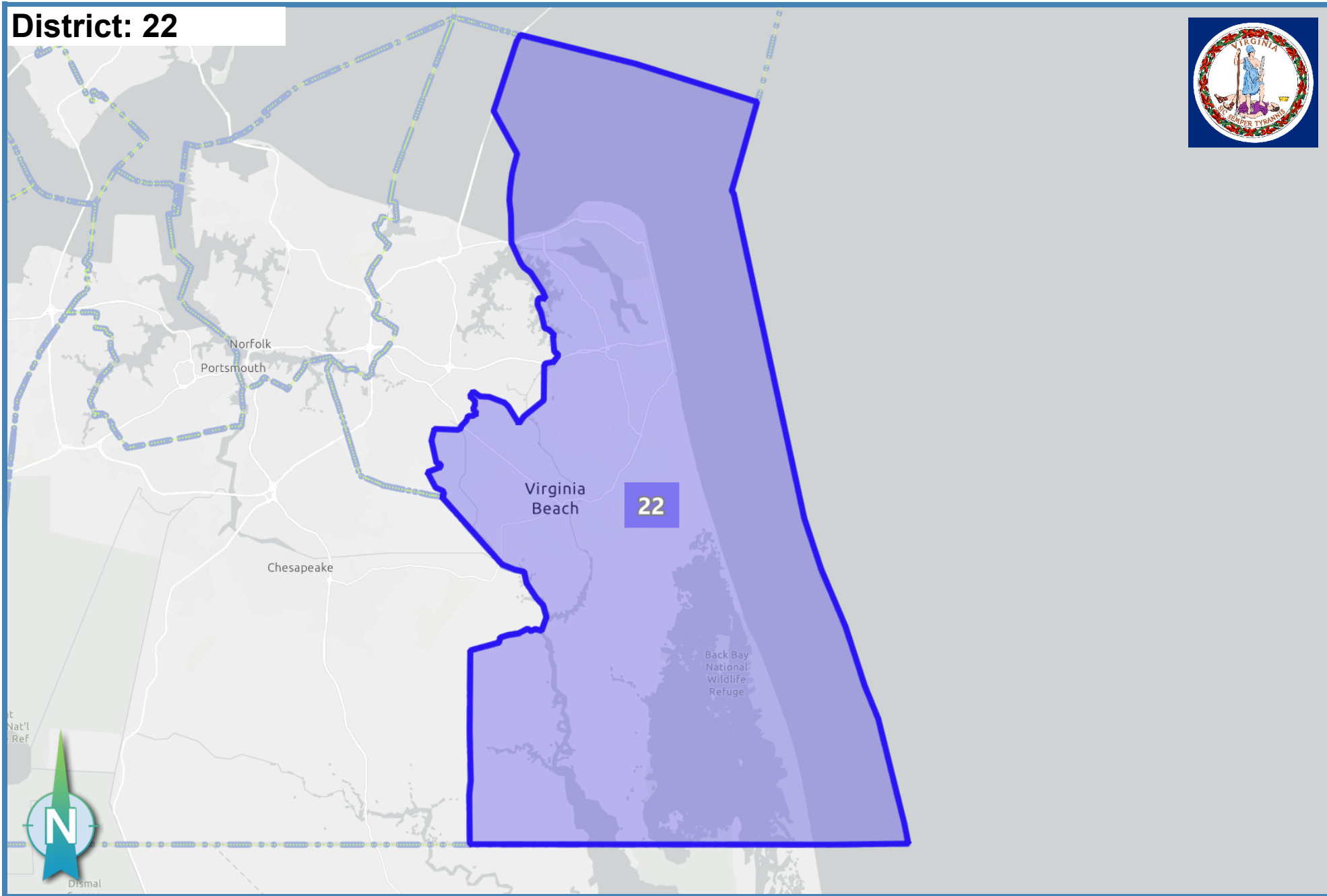
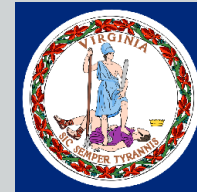
Ideal Population: 215,785

Deviation: 1.68 %

Total Population: **219,412**

Based on: 2020 Census Geography, 2020 PL94-171

District: 22



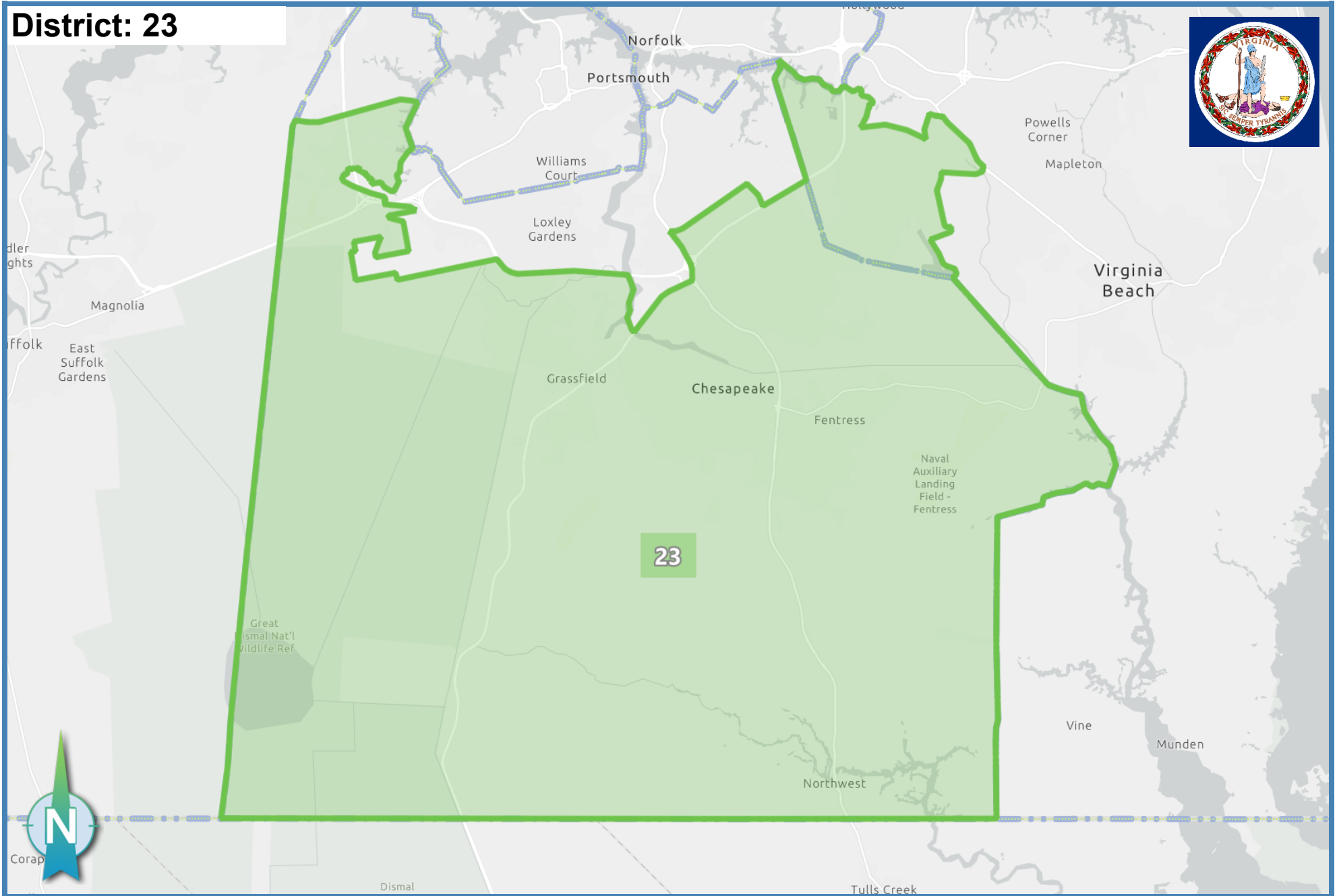
Ideal Population: 215,785

Deviation: 1.74 %

Total Population: 219,536

Based on: 2020 Census Geography, 2020 PL94-171

District: 23



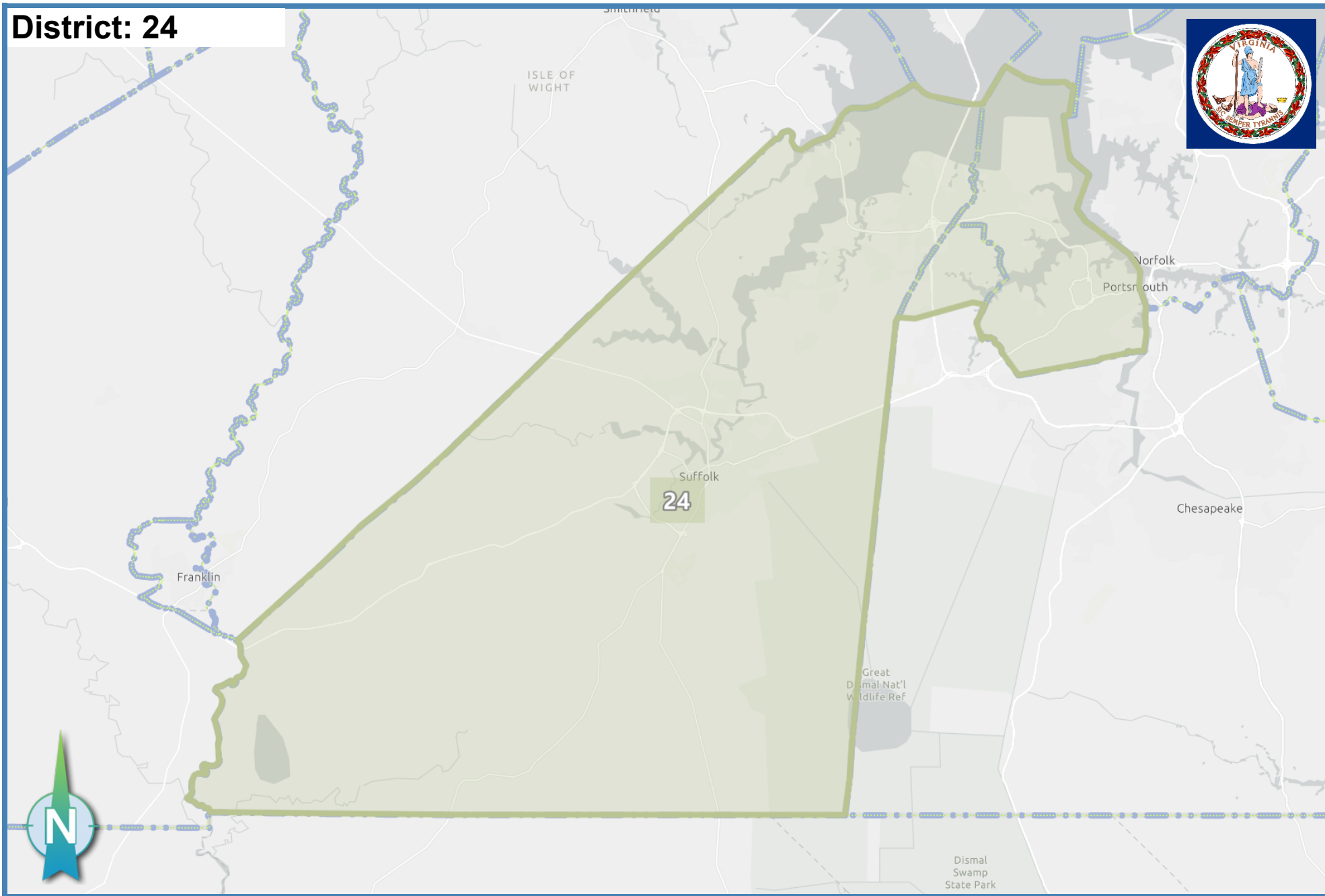
Ideal Population: 215,785

Deviation: 1.84 %

Total Population: **219,748**

Based on: 2020 Census Geography, 2020 PL94-171

District: 24



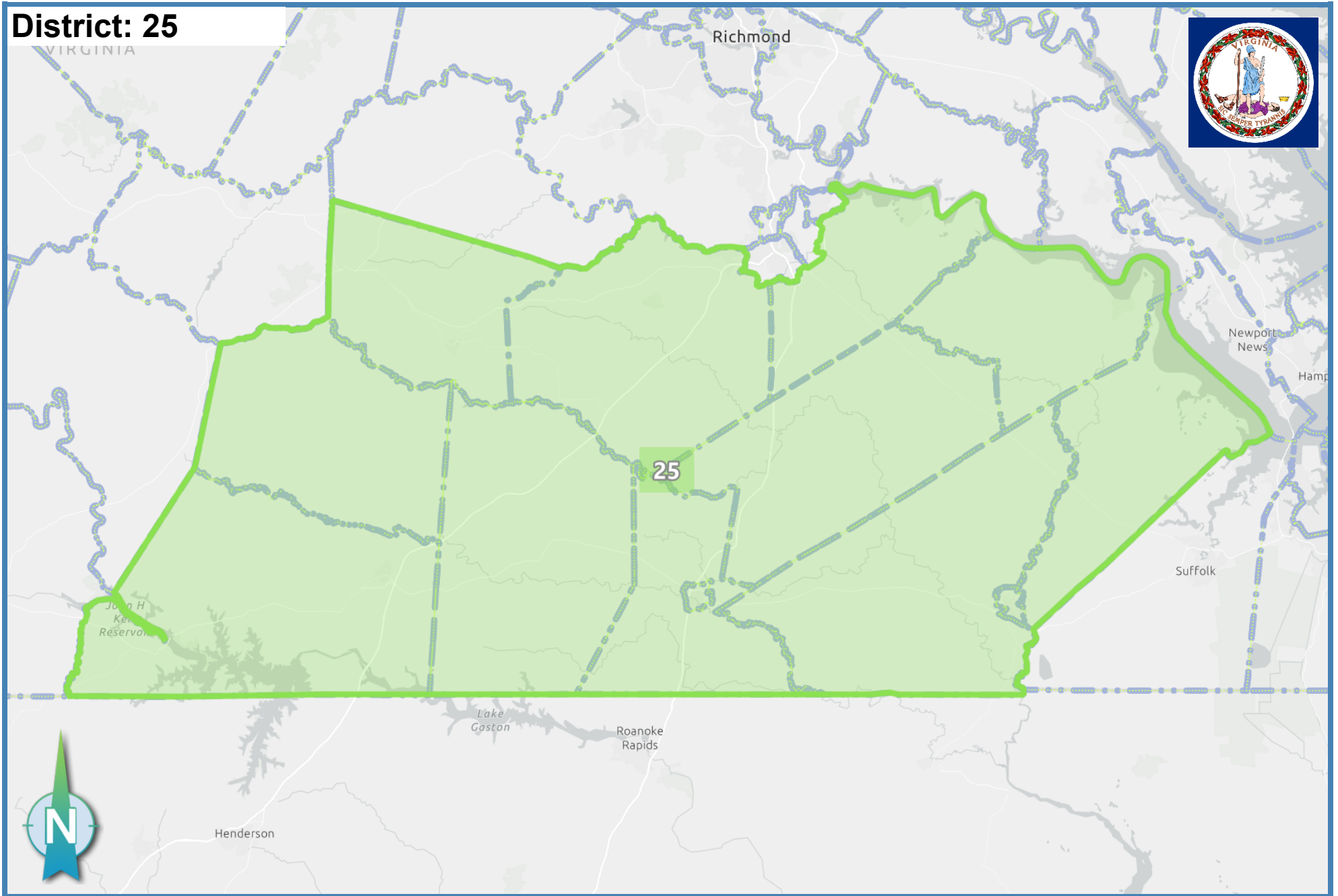
Ideal Population: 215,785

Deviation: -0.75 %

Total Population: **214,170**

Based on: 2020 Census Geography, 2020 PL94-171

District: 25



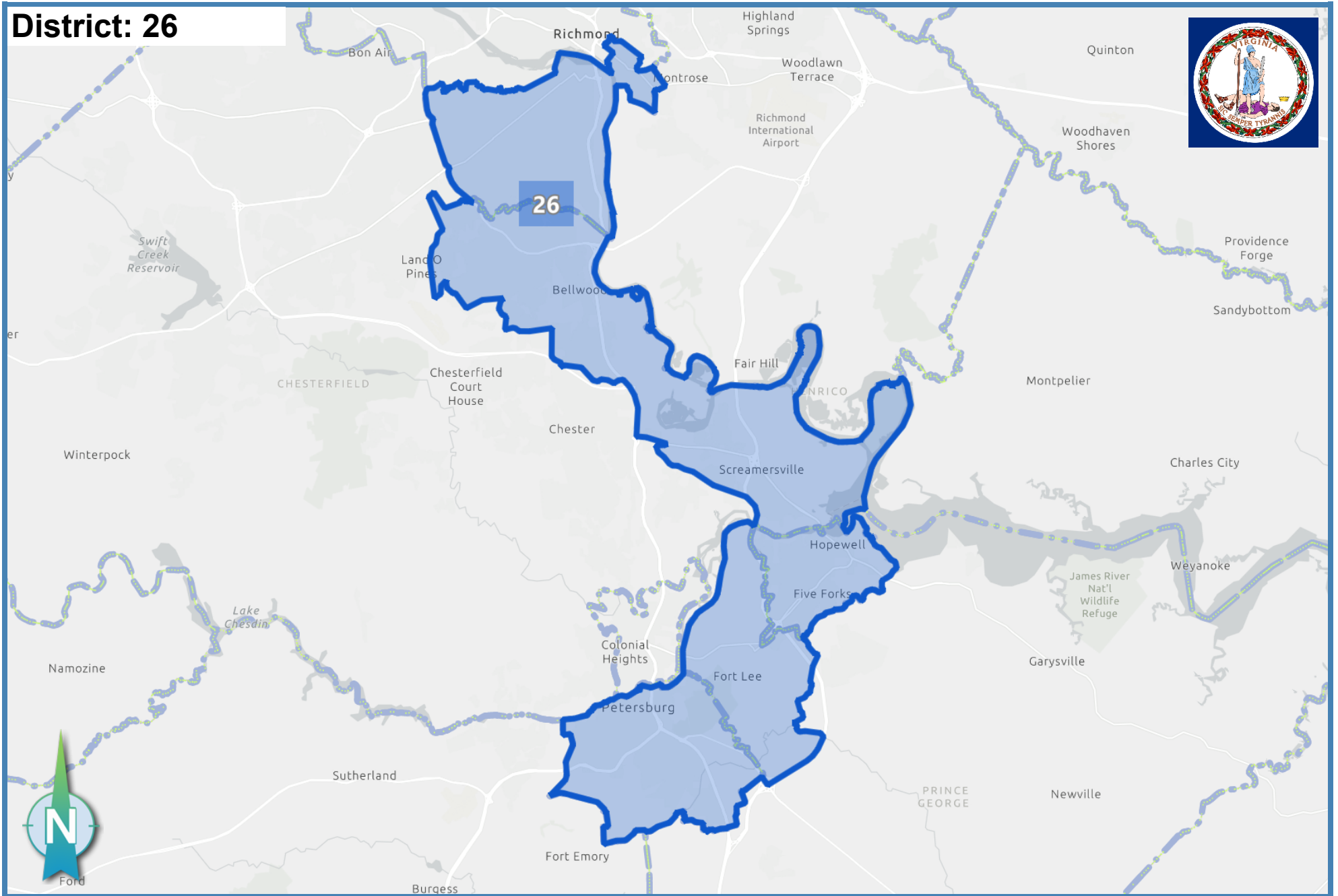
Ideal Population: 215,785

Deviation: 1.15 %

Total Population: **218,256**

Based on: 2020 Census Geography, 2020 PL94-171

District: 26

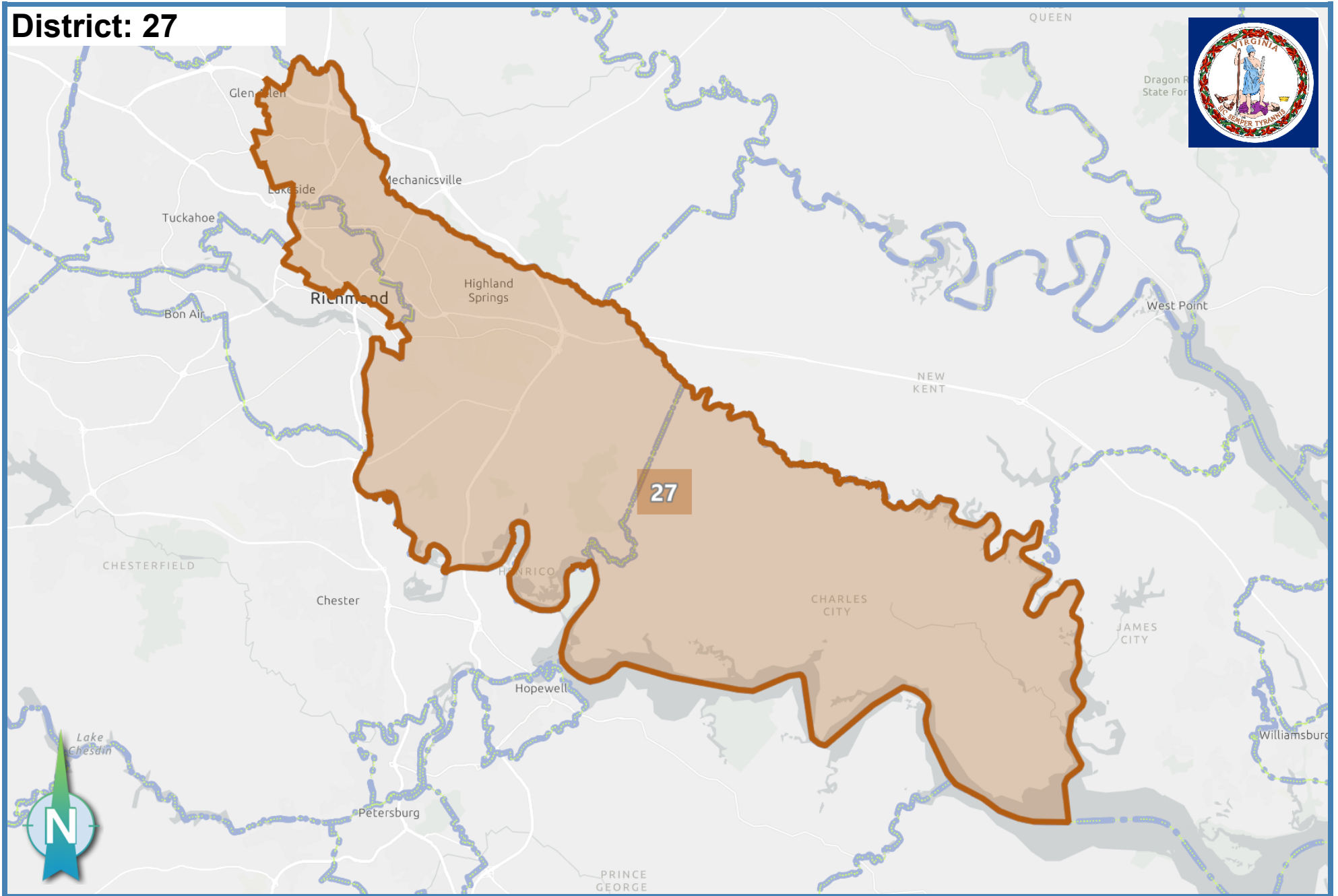


Ideal Population: 215,785 Deviation: 0.18 % Total Population: **216,173**

Based on: 2020 Census Geography, 2020 PL94-171



District: 27



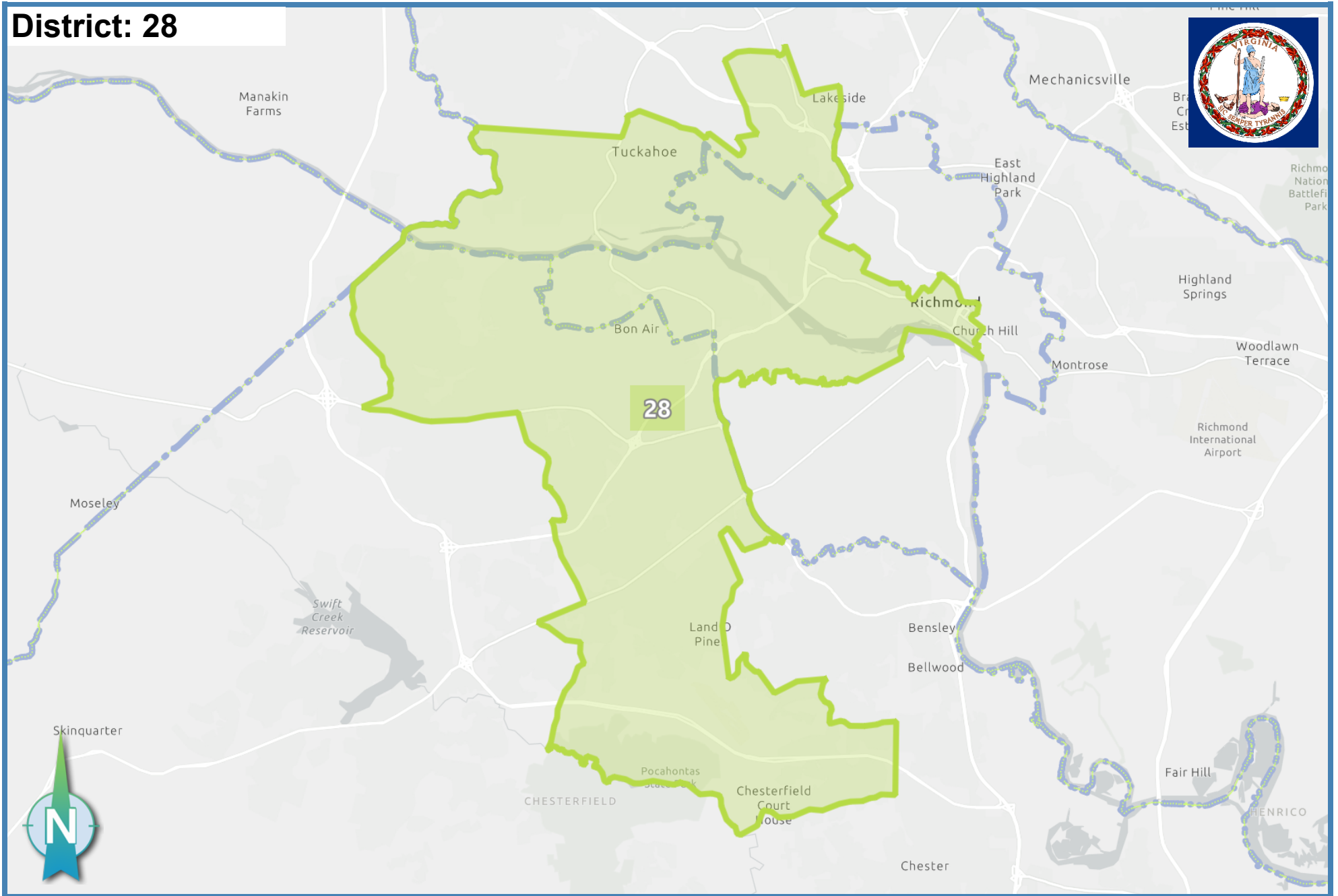
Ideal Population: 215,785

Deviation: -1.17 %

Total Population: **213,251**

Based on: 2020 Census Geography, 2020 PL94-171

District: 28



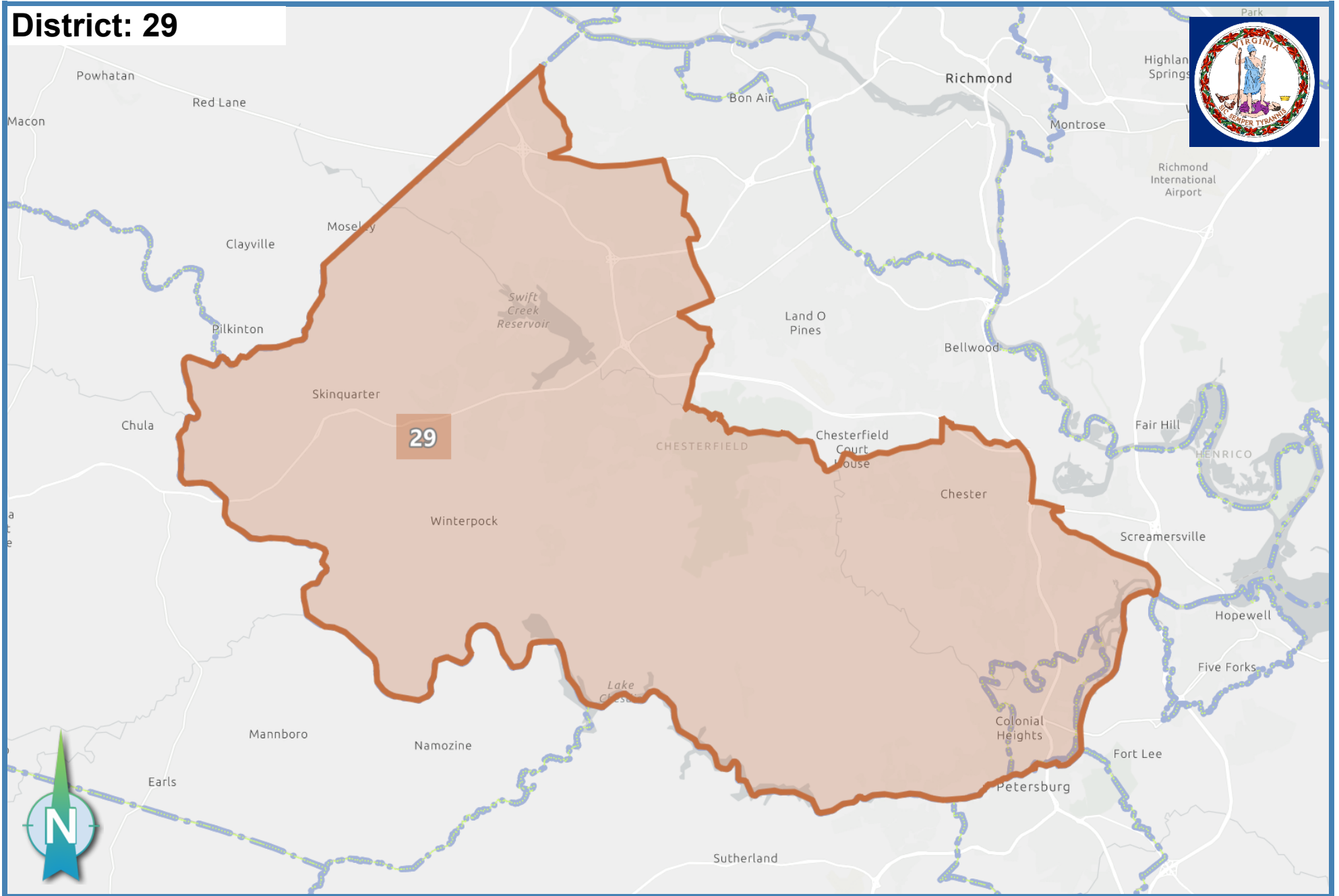
Ideal Population: 215,785

Deviation: 1.48 %

Total Population: **218,978**

Based on: 2020 Census Geography, 2020 PL94-171

District: 29



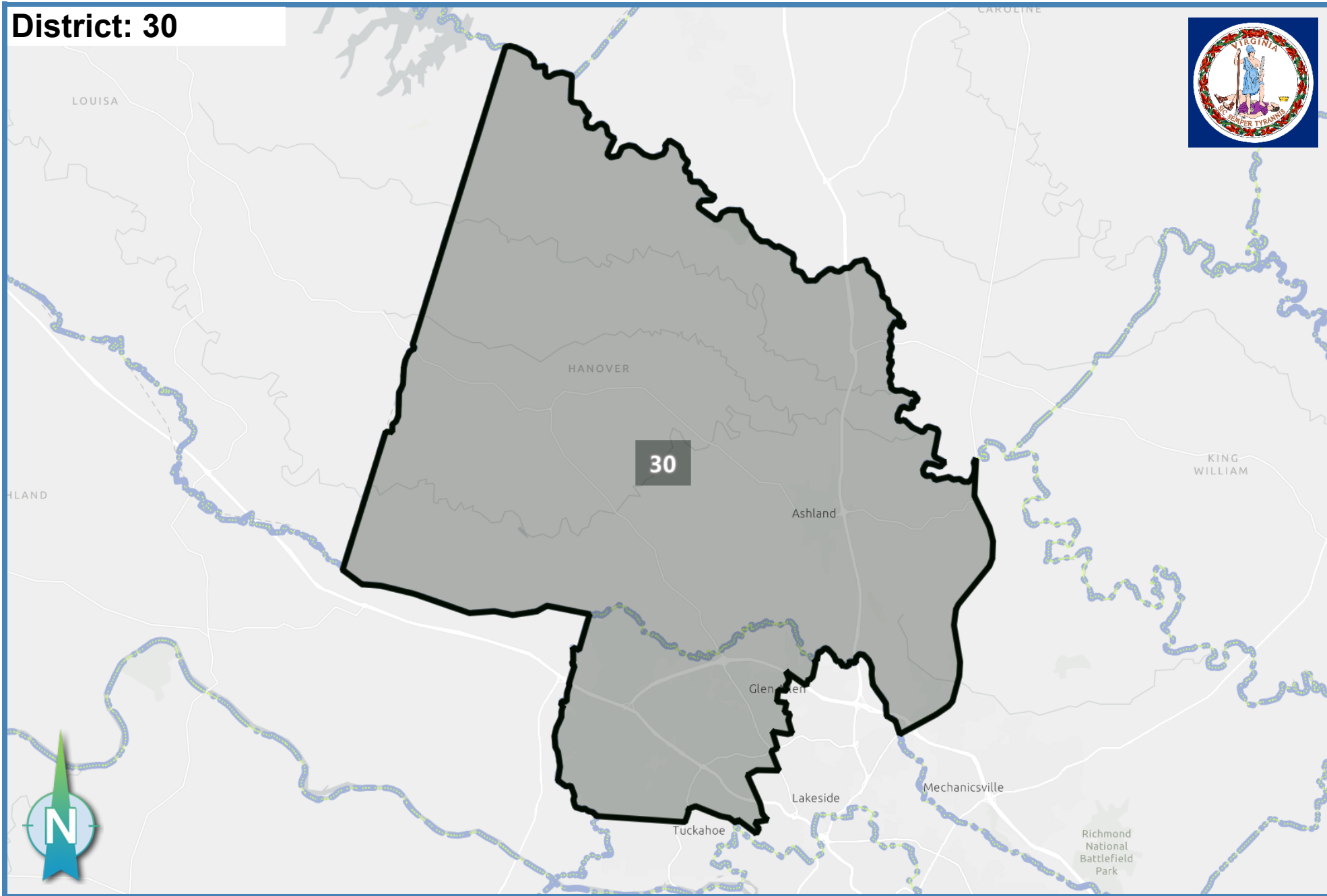
Ideal Population: 215,785

Deviation: 1.74 %

Total Population: **219,543**

Based on: 2020 Census Geography, 2020 PL94-171

District: 30



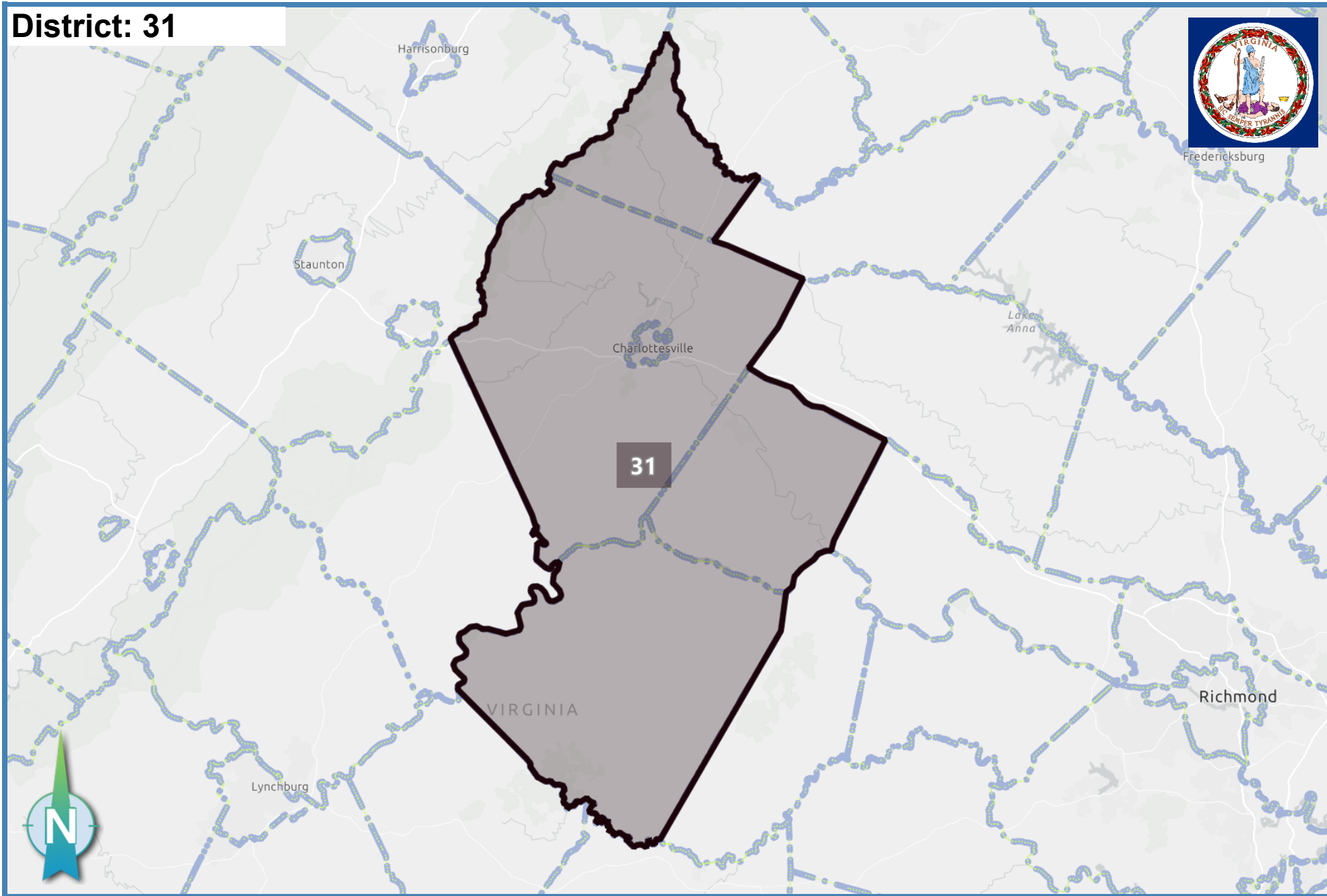
Ideal Population: 215,785

Deviation: 0.79 %

Total Population: 217,498

Based on: 2020 Census Geography, 2020 PL94-171

District: 31



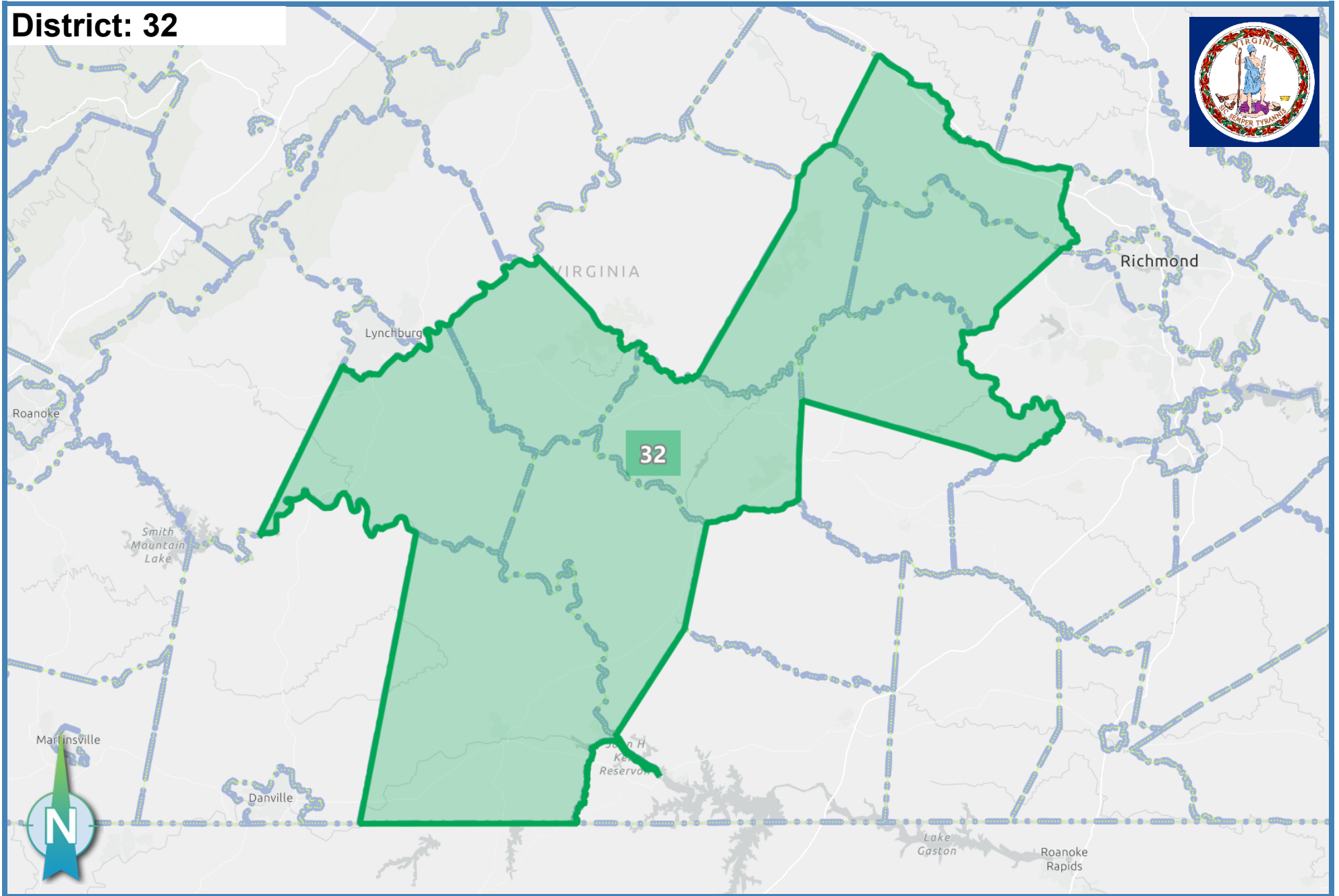
Ideal Population: 215,785

Deviation: 2.79 %

Total Population: **221,797**

Based on: 2020 Census Geography, 2020 PL94-171

District: 32



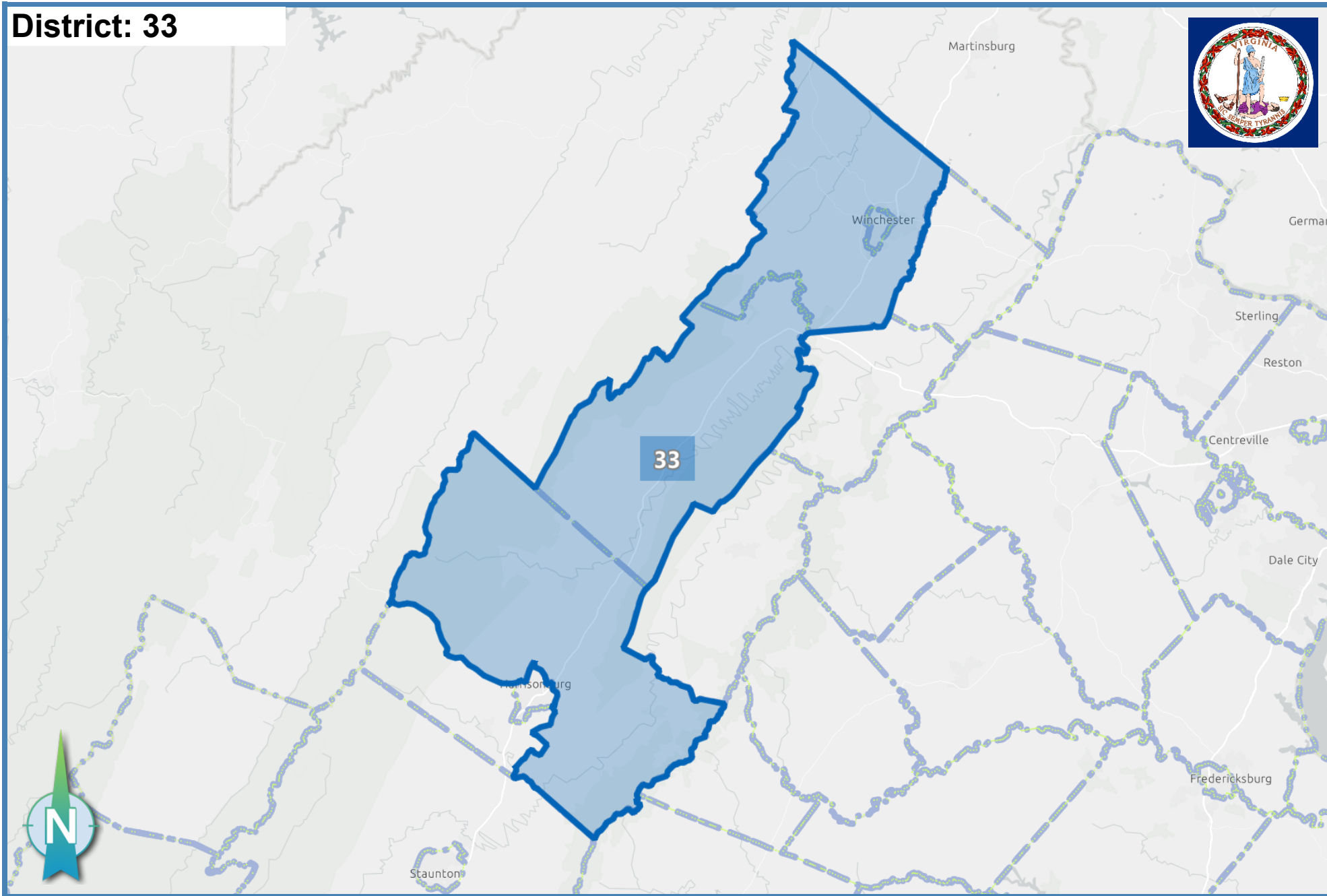
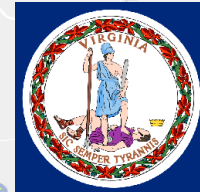
Ideal Population: 215,785

Deviation: 0.23 %

Total Population: **216,288**

Based on: 2020 Census Geography, 2020 PL94-171

District: 33



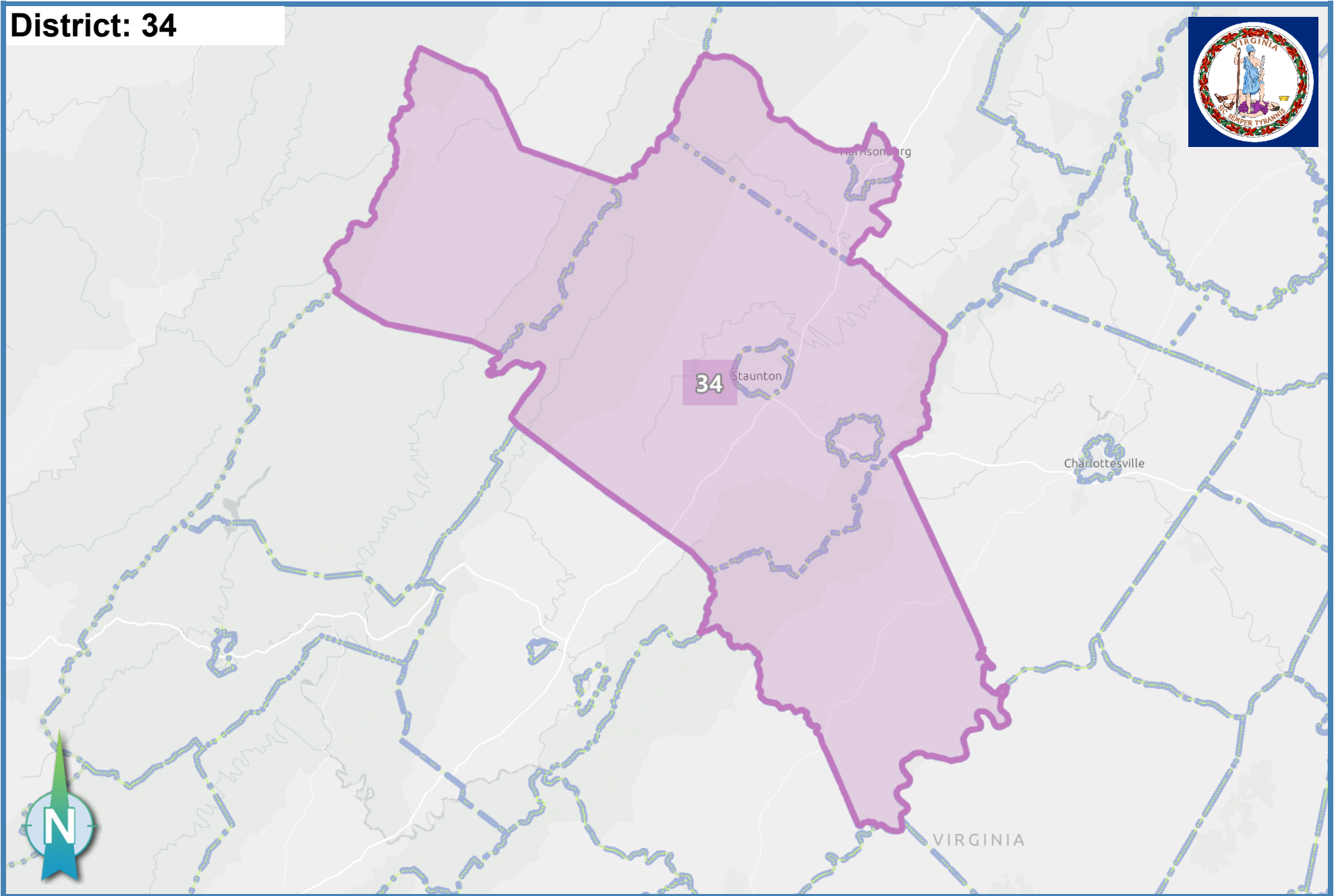
Ideal Population: 215,785

Deviation: 2.03 %

Total Population: **220,167**

Based on: 2020 Census Geography, 2020 PL94-171

District: 34



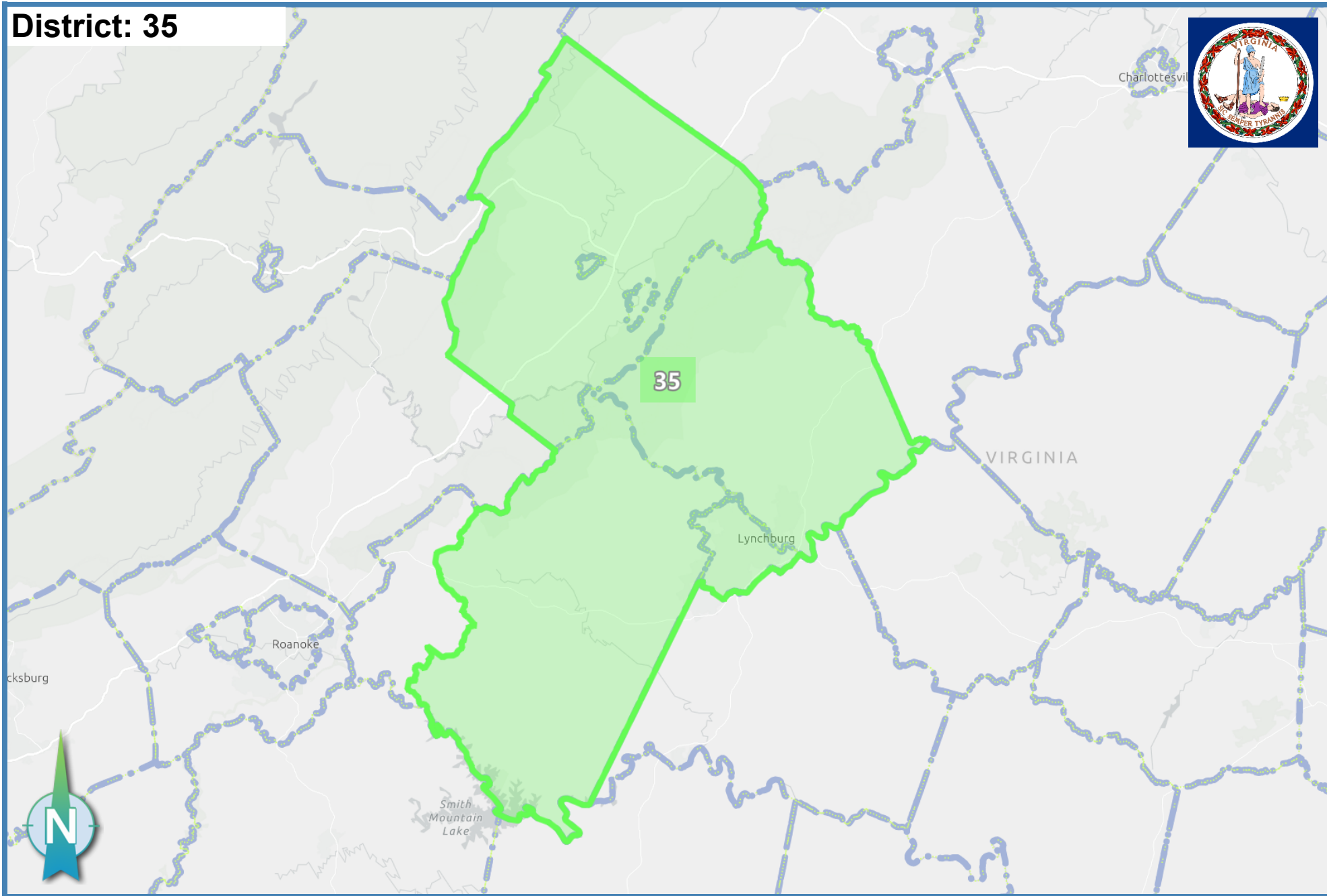
Ideal Population: 215,785

Deviation: 2.81 %

Total Population: **221,839**

Based on: 2020 Census Geography, 2020 PL94-171

District: 35



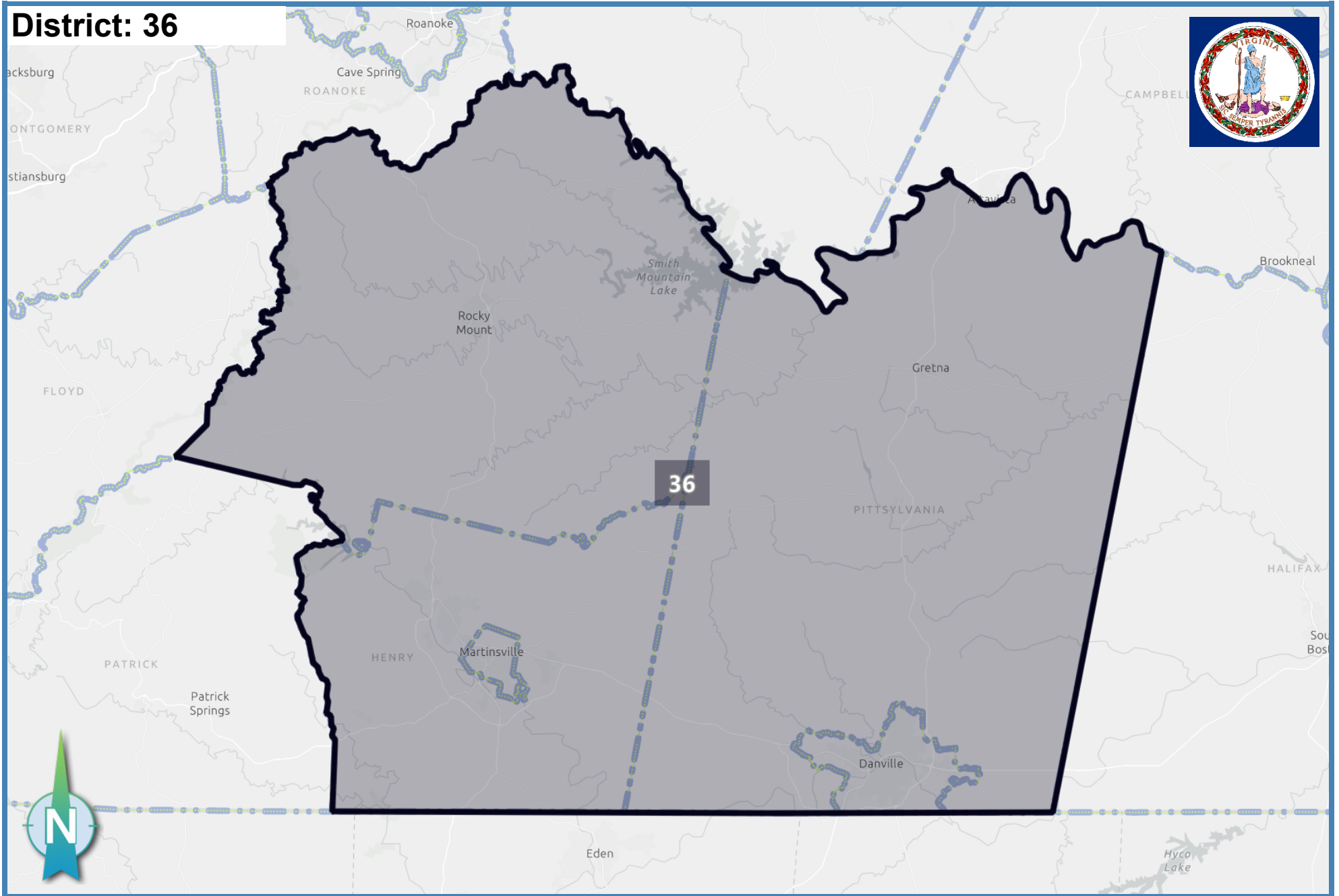
Ideal Population: 215,785

Deviation: -0.96 %

Total Population: **213,720**

Based on: 2020 Census Geography, 2020 PL94-171

District: 36



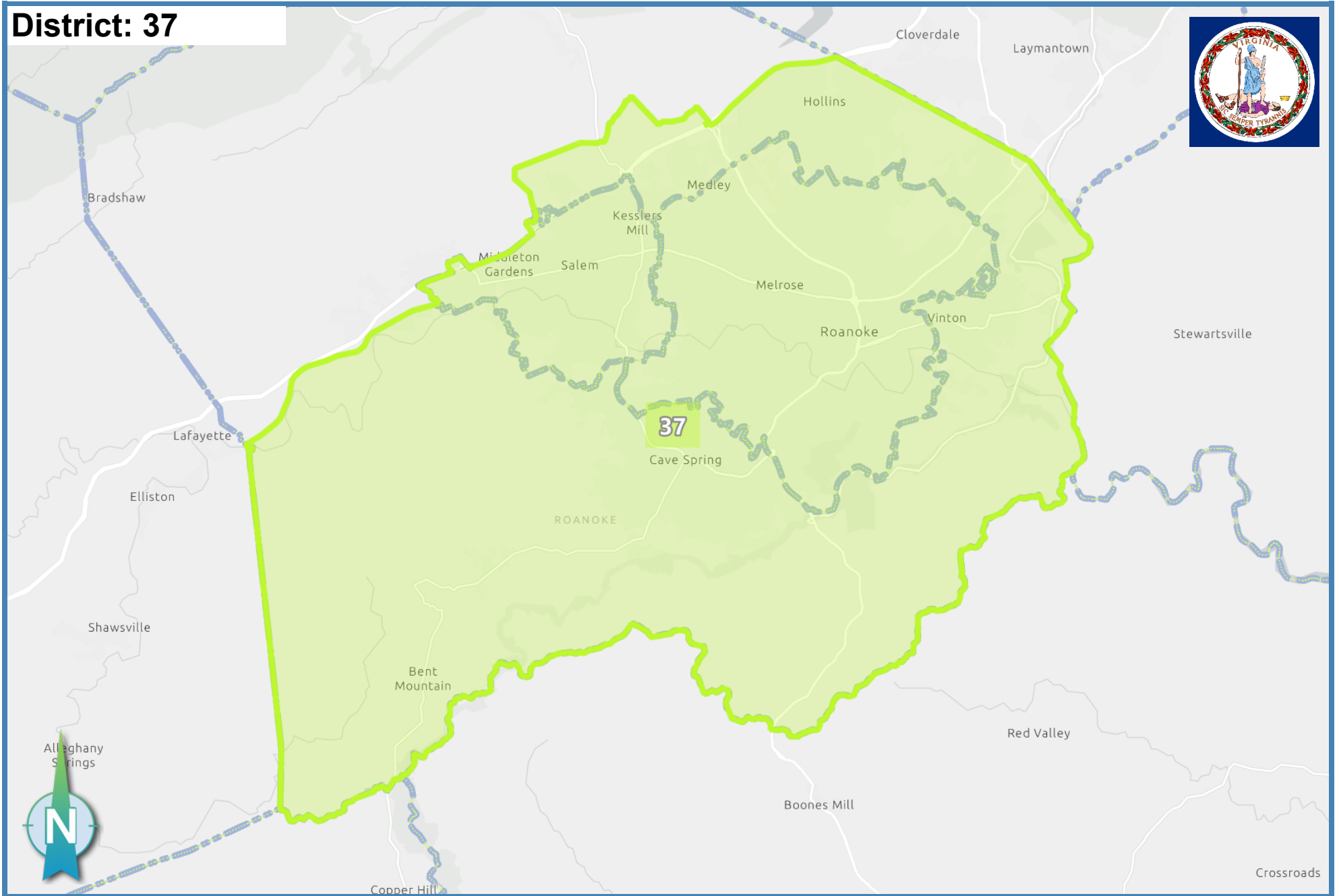
Ideal Population: 215,785

Deviation: 3.24 %

Total Population: 222,772

Based on: 2020 Census Geography, 2020 PL94-171

District: 37



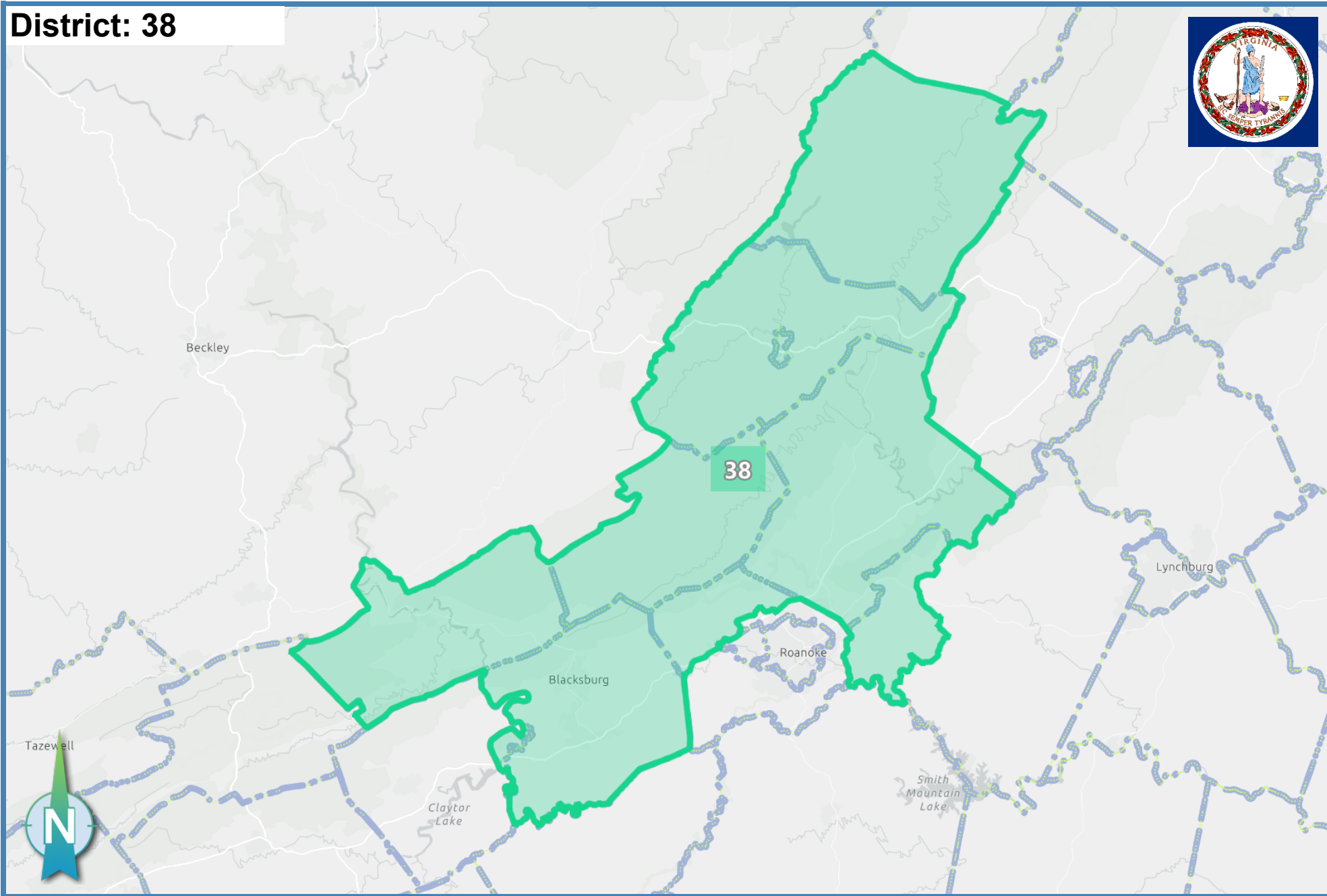
Ideal Population: 215,785

Deviation: -1.07 %

Total Population: **213,485**

Based on: 2020 Census Geography, 2020 PL94-171

District: 38



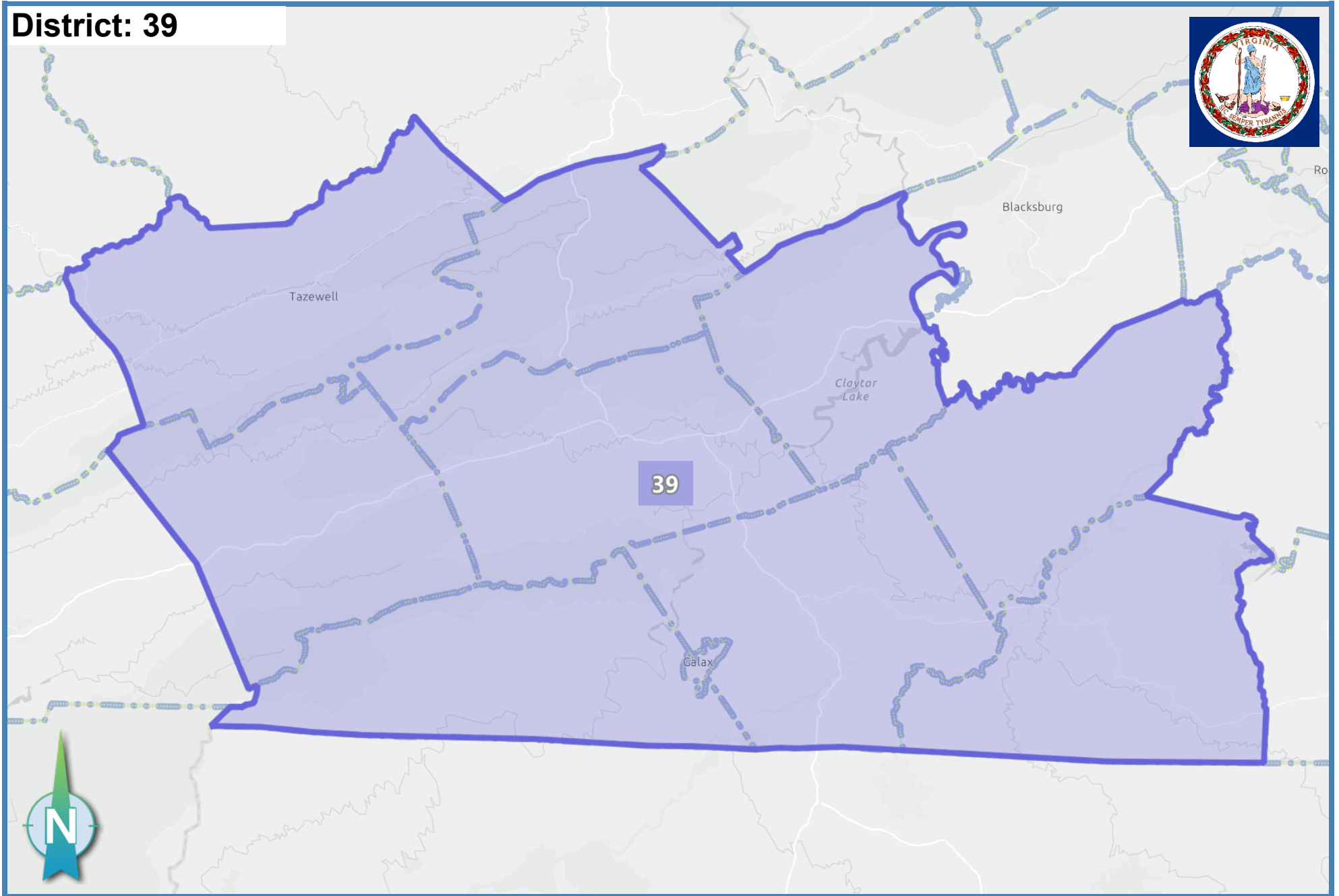
Ideal Population: 215,785

Deviation: 1.58 %

Total Population: **219,204**

Based on: 2020 Census Geography, 2020 PL94-171

District: 39



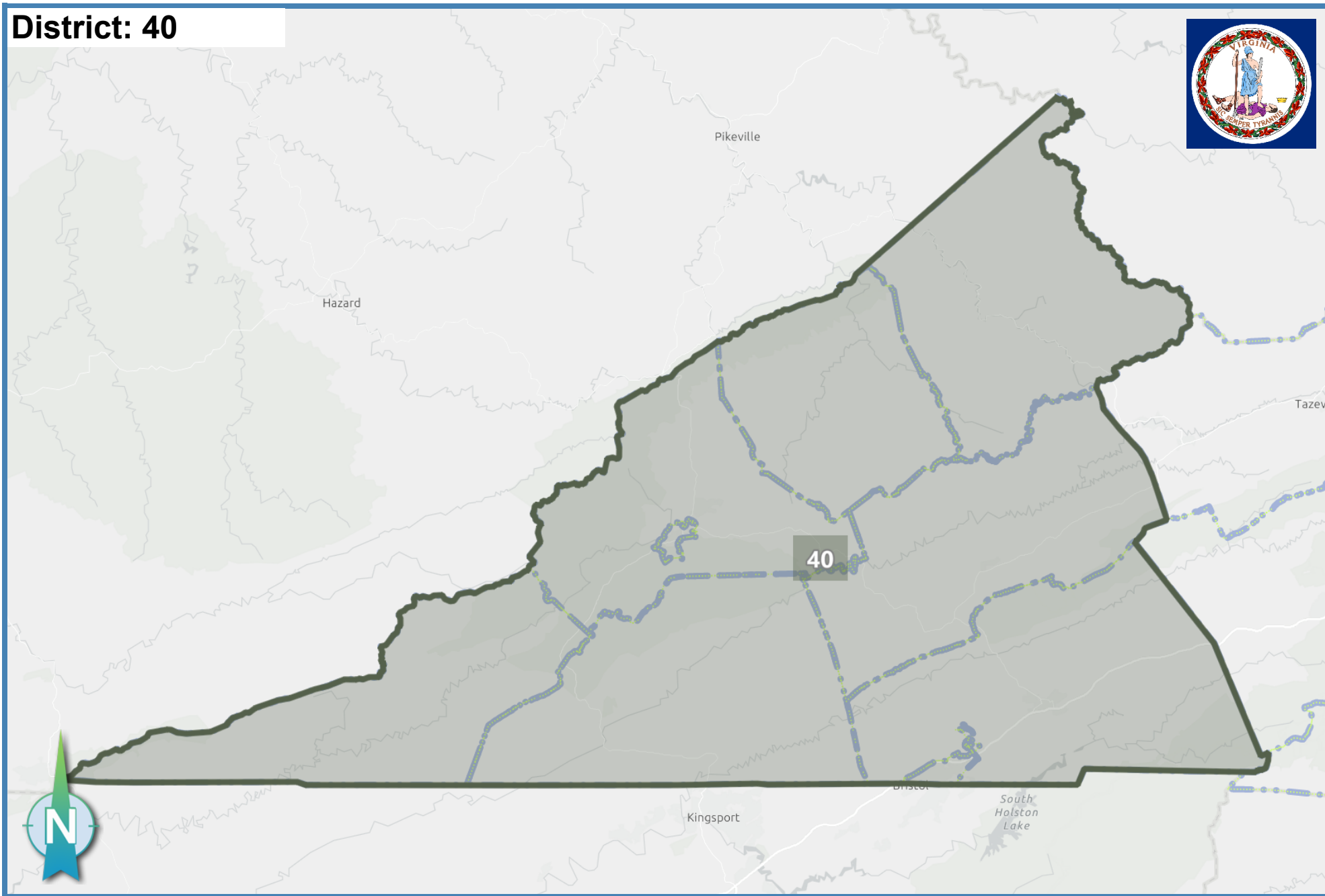
Ideal Population: 215,785

Deviation: 2.78 %

Total Population: **221,784**

Based on: 2020 Census Geography, 2020 PL94-171

District: 40



Ideal Population: 215,785

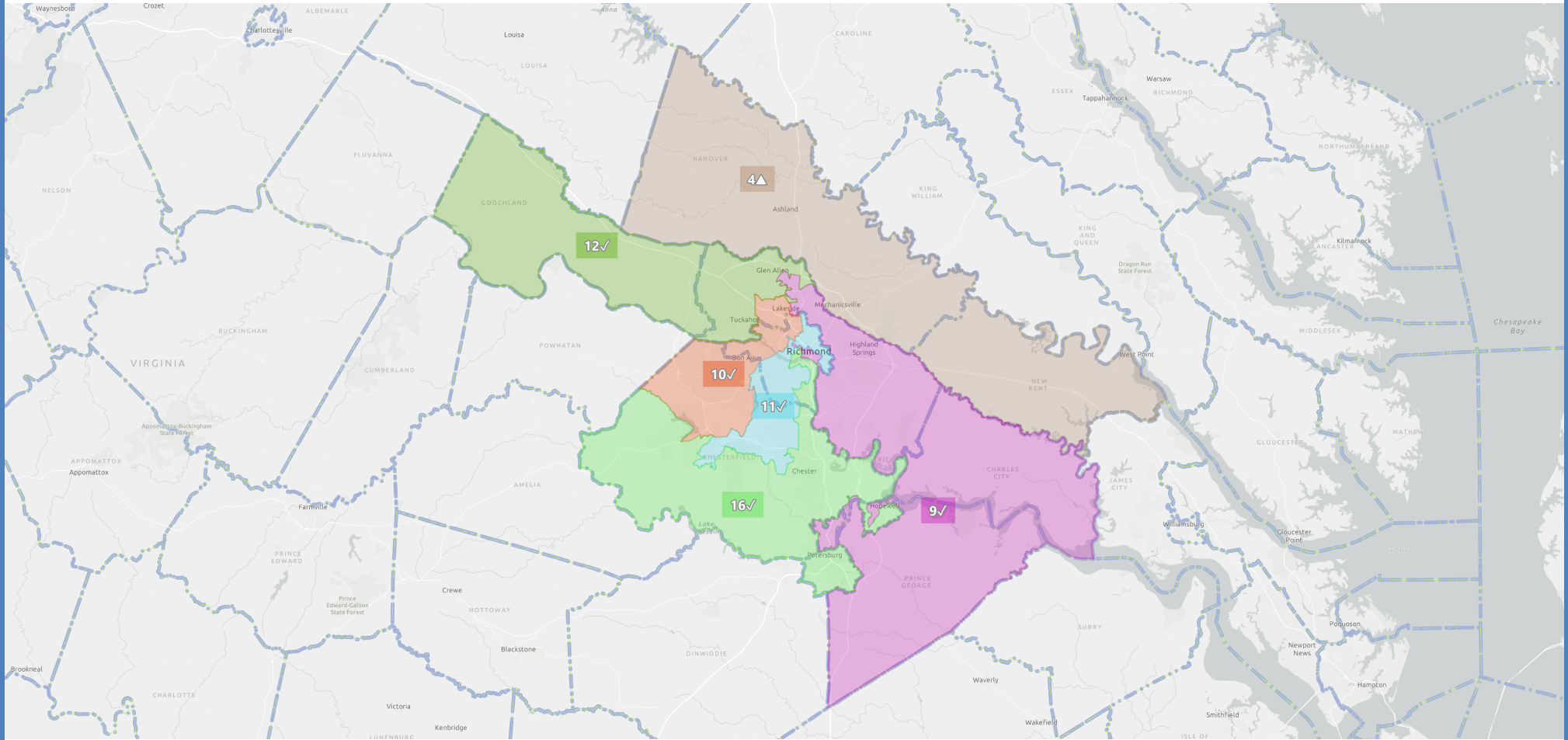
Deviation: -1.03 %

Total Population: **213,557**

Based on: 2020 Census Geography, 2020 PL94-171

Sen. Barker Partial Plan SD

Sen. Barker Partial Plan SD

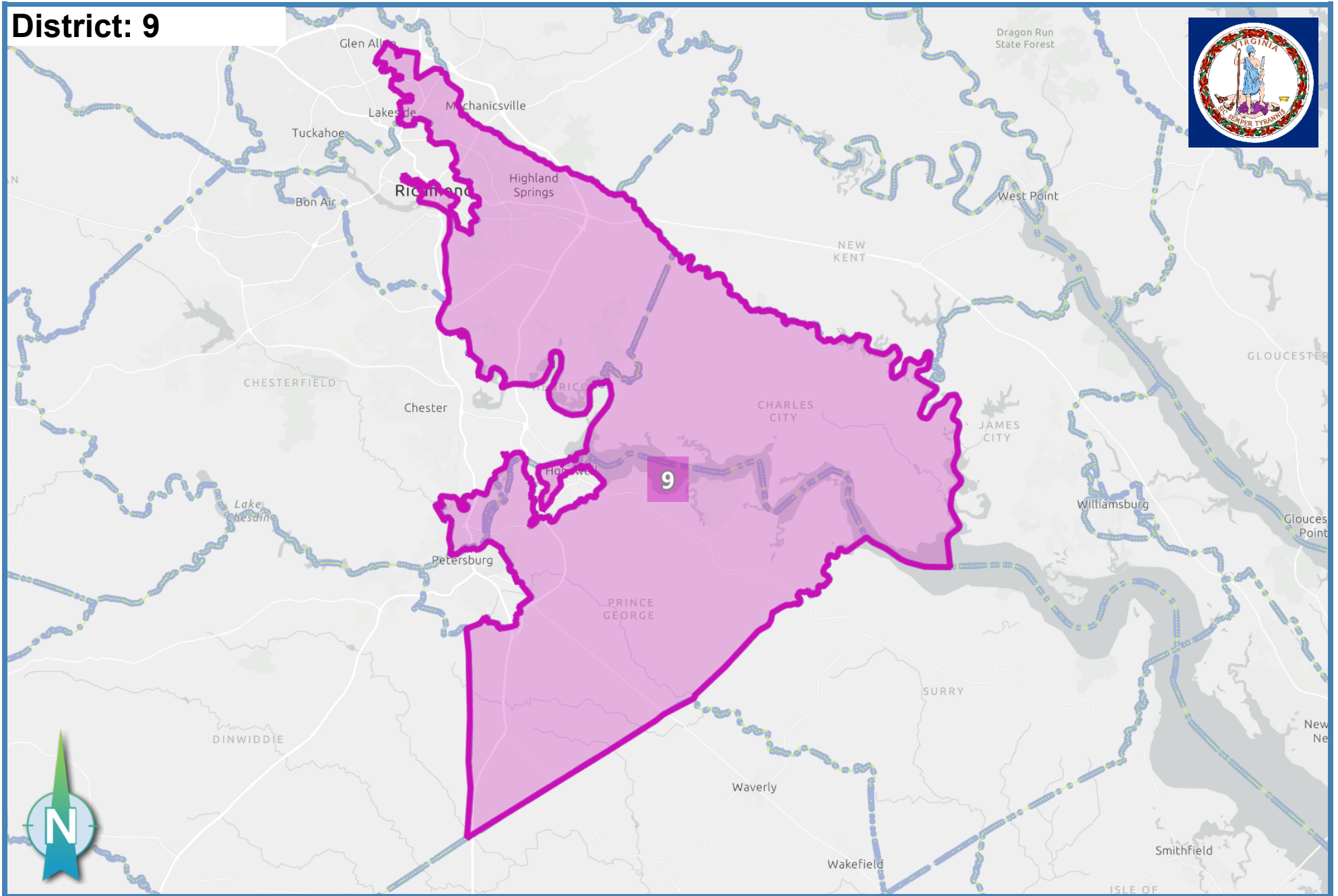


AutoBound Edge MAP - Based on: 2020 Census Geography, 2020 PL94-171

Map Date: 9/24/2021 3:17:51 PM Last Edit:9/24/2021 3:17:33 PM



District: 9



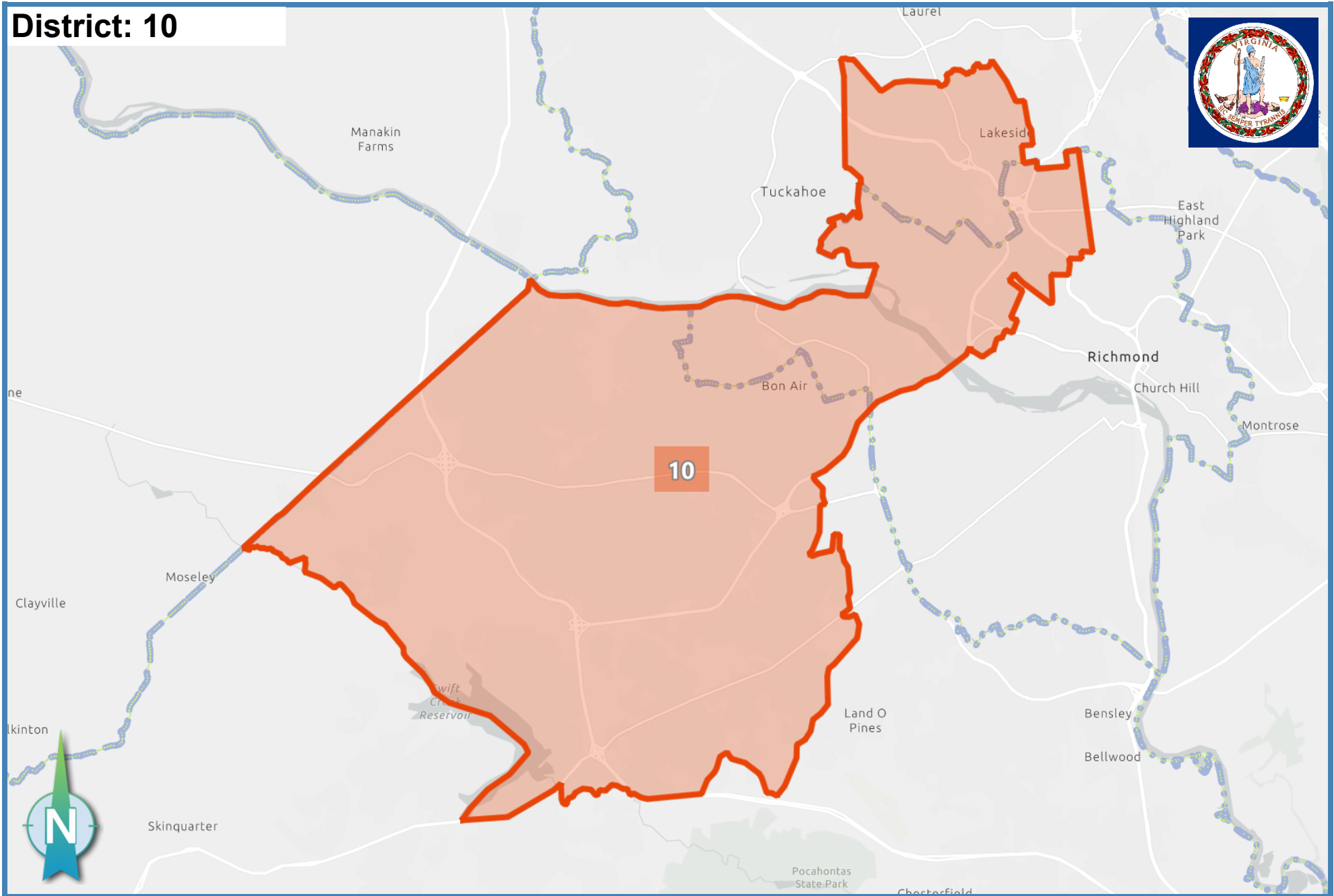
Ideal Population: 215,785

Deviation: -0.62 %

Total Population: **214,449**

Based on: 2020 Census Geography, 2020 PL94-171

District: 10



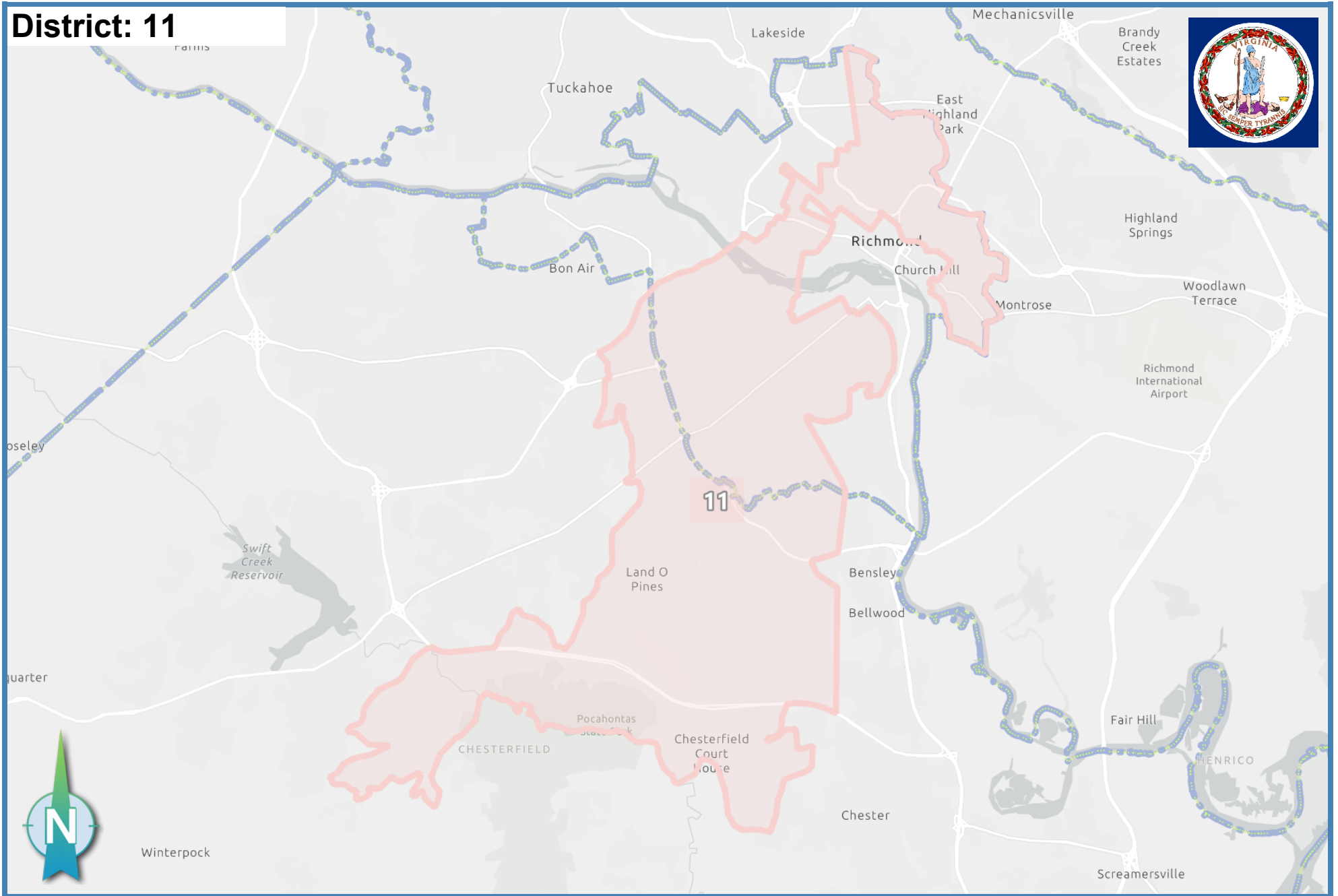
Ideal Population: 215,785

Deviation: 1.44 %

Total Population: **218,901**

Based on: 2020 Census Geography, 2020 PL94-171

District: 11



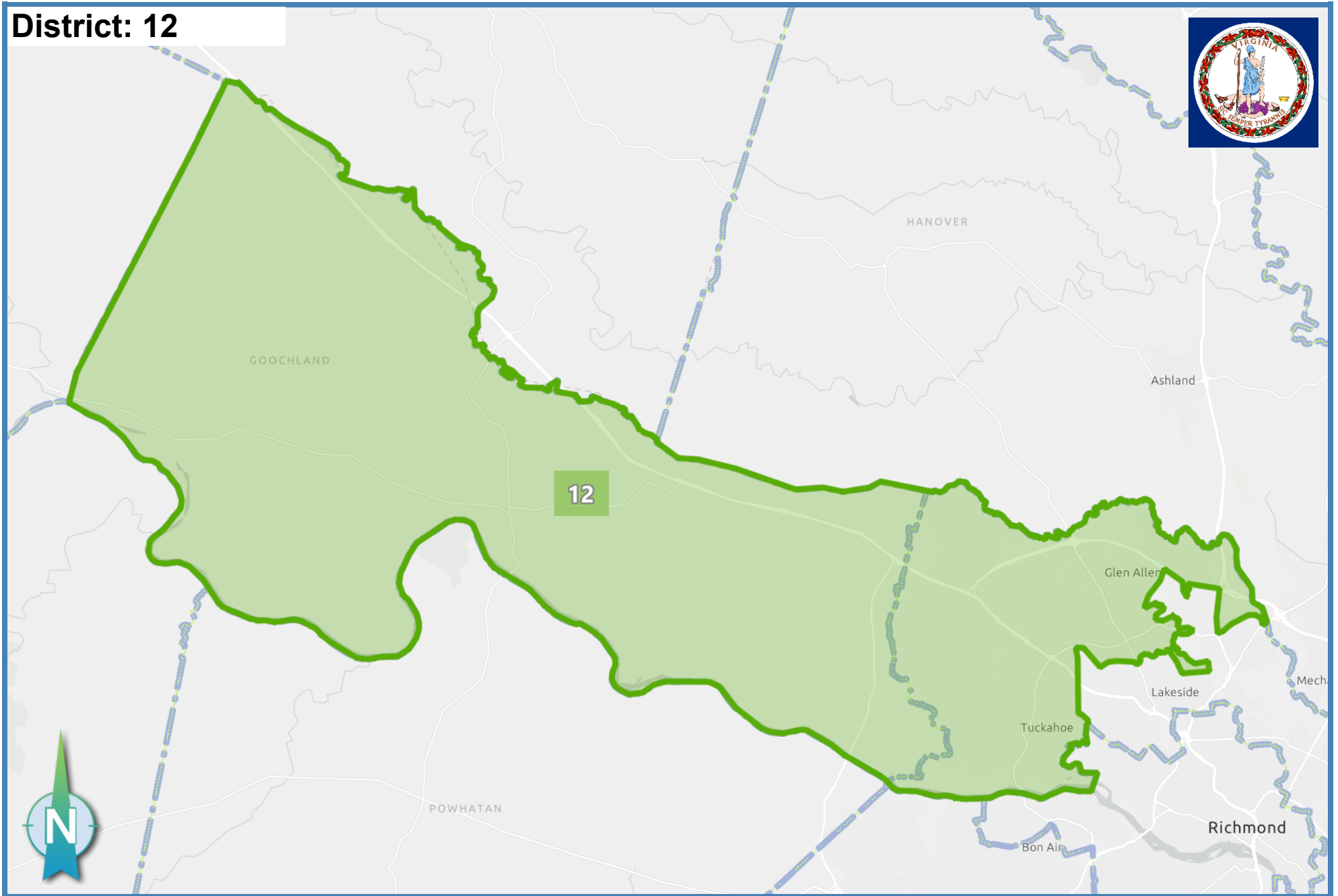
Ideal Population: 215,785

Deviation: -1.27 %

Total Population: **213,045**

Based on: 2020 Census Geography, 2020 PL94-171

District: 12



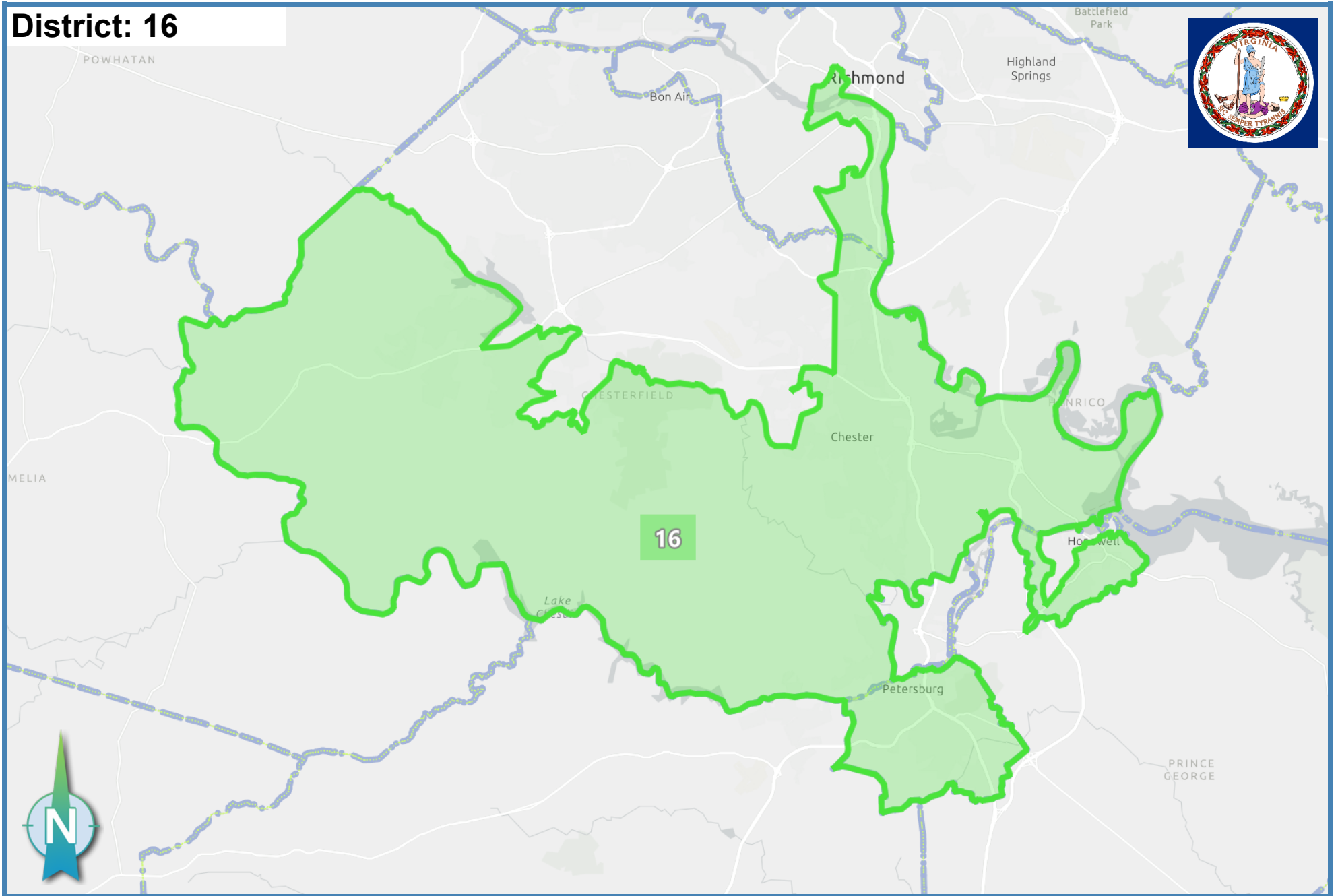
Ideal Population: 215,785

Deviation: -1.34 %

Total Population: **212,894**

Based on: 2020 Census Geography, 2020 PL94-171

District: 16



Ideal Population: 215,785

Deviation: 1.20 %

Total Population: 218,382

Based on: 2020 Census Geography, 2020 PL94-171

Supplement to Racially Polarized Voting Analysis: Virginia Primary Elections

Maxwell Palmer and Benjamin Schneer

9/26/2021

We were asked to analyze racially polarized voting (RPV) in Virginia using recent statewide primary elections. We analyzed election data for the 2018 Republican Senate Primary, 2017 Democratic Lieutenant Governor Primary, 2013 Democratic Lieutenant Governor Primary, and 2013 Democratic State Attorney General Primary, and Citizen Voting Age Population (CVAP) data from the American Community Survey.¹ Following the methodology outlined in our previous report, we performed ecological inference to estimate group-level voting behavior at the statewide level and by region.

At the outset, we note that primaries can have limited utility for analyzing racially polarized voting, because the existence of RPV in the primary does not mean that there is RPV in the general election, and the lack of RPV in the primary also does not mean that there is not RPV in the general election. Furthermore, the electorates in partisan primaries and in general elections are very different. For example, in the 2017 election for Lieutenant Governor, 2,595,538 voters cast ballots in the general election, but only 867,271 voters cast ballots in the primary elections (33.4%).² However, the presence of RPV in primaries may be useful to the Commission when considering different ways to draw particular districts.

At the statewide level, we find (1) a relatively consistent pattern of racially polarized voting and some evidence of cohesion among minority groups in selecting a candidate of choice for Democratic primary elections, and (2) no clear evidence of racially polarized voting or cohesion for Republican primary elections. In particular, Black and Hispanic voters appear to share a candidate of choice in several of the Democratic primary elections we analyze.

The figure below reports our point estimates and 95% confidence intervals for votes cast by each racial group, aggregated to the statewide level, for Democratic primary elections. In the 2013 Democratic Attorney General Primary, we find that Black voters supported Justin Fairfax, with 72% casting votes for him. A clear majority of Black voters supported Fairfax in this primary election. We estimate that 31% of White voters who turned out supported Fairfax in this election, and the confidence intervals on this estimate do not overlap with the 50% threshold. In tandem, these estimates are suggestive of racially polarized voting in this primary. On the question of cohesion between different racial groups, we note that Hispanic voters split their votes between Fairfax and Herring, supporting Fairfax with 50% of the vote. Given the confidence interval around this estimate, this does not provide evidence for or against cohesion between Black and Hispanic voters in this primary. If we estimate vote choice using just two racial groups — White voters and Minority voters — as in Appendix Figure 5, we can say that on average Minority voters as a whole supported Fairfax enough to consider him the candidate of choice for the group in this primary election.

In the 2013 Democratic Lieutenant Governor Primary, Aneesh Chopra was the clear candidate of choice for Black voters. His opponent, Ralph Northam, was the clear candidate of choice for White voters — again, evidence of racially polarized voting. Hispanic voters split their vote between Chopra and Northam, supporting Chopra with 50% of the vote. Given the confidence interval around this estimate, this does

¹Election data provided by the Virginia available at <https://virginiarestricting.org/PageReader.aspx?page=2020DataDownload> as of September 24, 2021. See our previous report for a discussion of CVAP data and our methodology for analyzing racially polarized voting. Report available at https://www.virginiarestricting.org/2021/Data/Publications/palmer_schneer_rpv_report.pdf.

²https://historical.elections.virginia.gov/elections/search/year_from:2013/year_to:2017/office_id:4/show_details:1

not provide evidence for or against cohesion between Black and Hispanic voters in this primary. When we estimate vote choice using two racial groups (White and Minority voters), Chopra is the clear candidate of choice for Minority voters in this election (See Figure 5 in the Appendix).

In the 2017 Democratic Primary for Lieutenant Governor, Justin Fairfax faced two White candidates, Susan Platt and Gene Rossi, in an open-seat race. Fairfax ultimately won the primary election race with 49% of the vote. Platt received 39% of the vote, and Rossi received 12%. Black voters supported Fairfax with 66% of the vote, compared to 18% and 16% for Platt and Rossi, respectively. In fact, at the state-wide level, Black voters supported Fairfax at substantially higher rates than any other racial group did.

In contrast, White voters slightly preferred Platt to Fairfax (49% to 42%). When we estimate vote choice using two racial groups (White and Minority voters), Fairfax is the clear candidate of choice for Minority voters (See Figure 5 in the Appendix).³

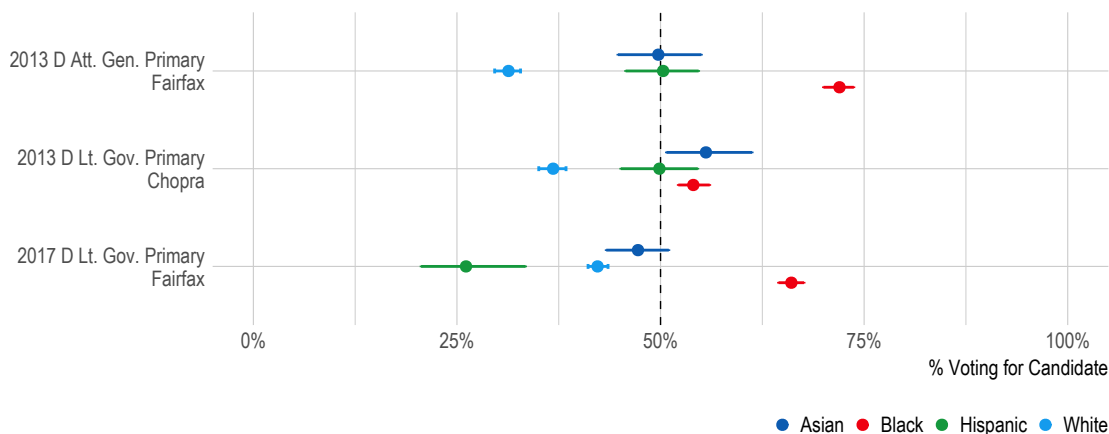


Figure 1: Ecological Inference Results — Statewide Democratic Primary Elections

The extent of racially polarized voting in Democratic primaries varies across regions and elections. Figure 2 presents our estimates by region for the three Democratic primaries that we analyze. In the 2017 primary for Lieutenant Governor, Minority voters gave a plurality of their support to Fairfax in every region, according to our estimates. We observe consistent evidence of racially polarized voting (e.g., clear cut RPV in at least two of three elections) in the Central (Richmond area) and Hampton Roads regions, qualified evidence of it in West Central, Southside, and Northern regions, and no evidence in the remaining regions.⁴

Figure 3 presents results of our analysis for Republican primaries. In the 2018 Republican Senate Primary, there were three candidates, Corey Stewart, Nicholas Freitas, and E.W. Jackson, Sr. We report our estimates of support by racial group for Jackson, a Black candidate. We estimate that Black voters supported him with 40% of the vote, compared to 30% and 29% for Freitas and Stewart, respectively. In contrast, White voters significantly preferred Freitas (45%) and Stewart (46%) to Jackson (9%). When we estimate vote choice using two racial groups (White and Minority voters), Jackson received the highest vote share from Minority voters (See Figure 5 in the Appendix).

Looking across regions, we see no clear evidence of racially polarized voting for Minority and White voters in Republican primaries. Figure 4 reports the results by region.

³Note that there will be small discrepancies in our estimates in this report compared to our original report due to small changes between the sources of election data used for each report; these differences do not affect our substantive conclusions.

⁴The regional results, for the separate racial categories, are reported in the Appendix.

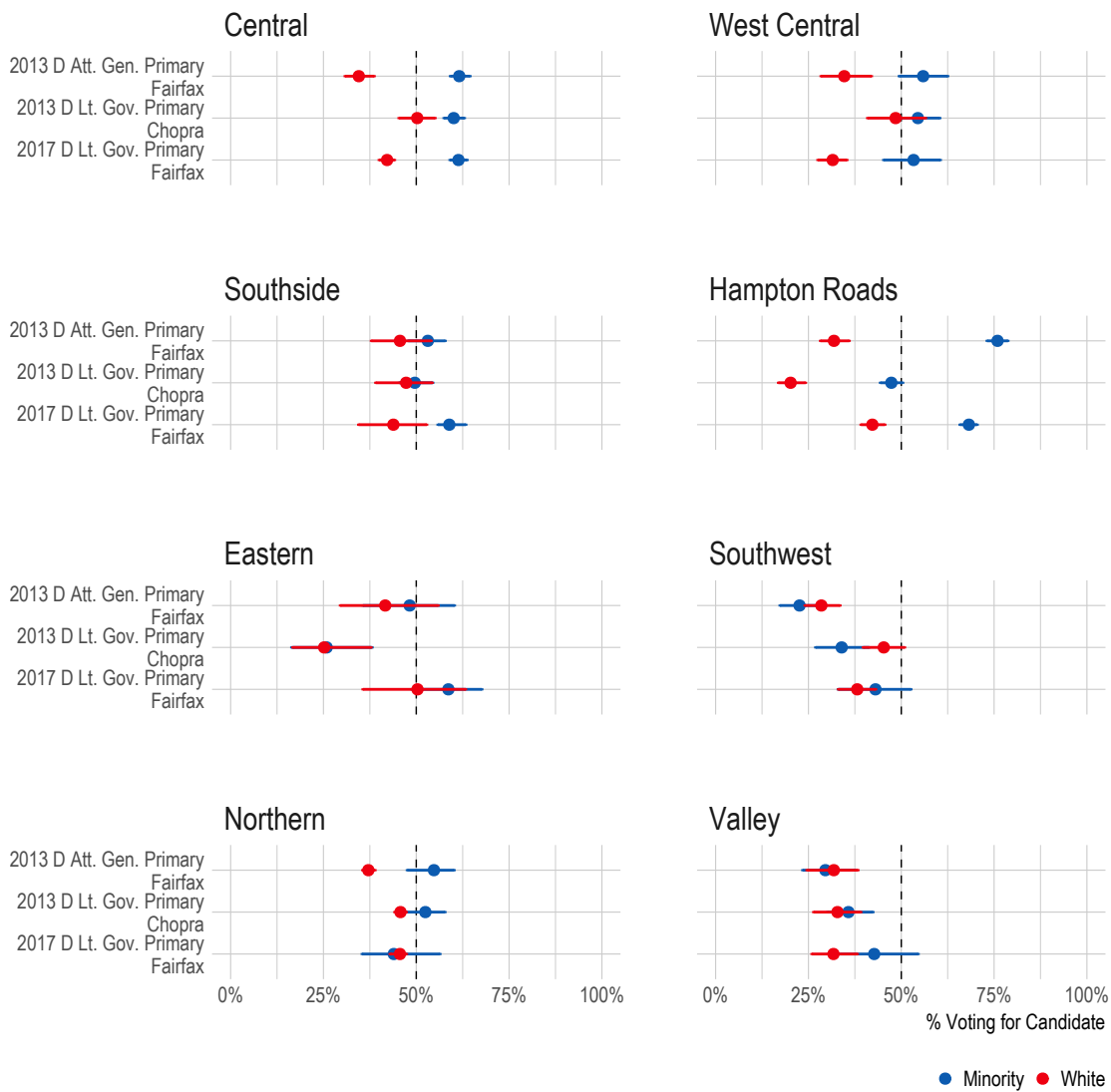


Figure 2: Ecological Inference Results — Democratic Primary Elections by Region (White and Minority Voting Behavior)

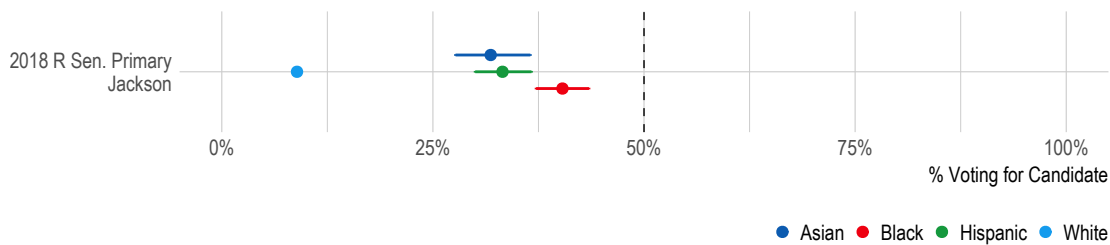


Figure 3: Ecological Inference Results — Statewide Republican Primary Elections

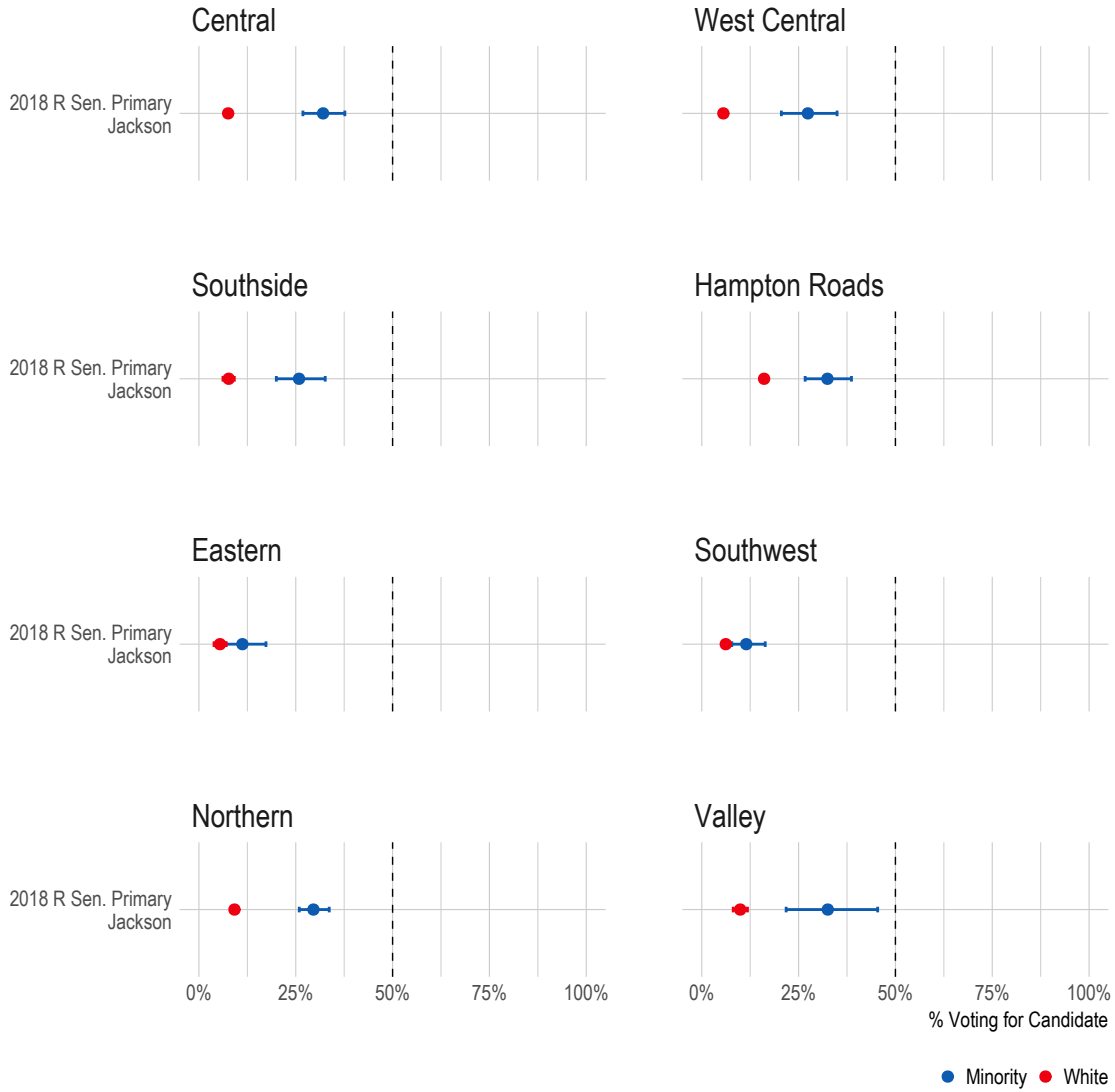


Figure 4: Ecological Inference Results — Republican Primary Elections by Region (White and Minority Voting Behavior)

Appendix

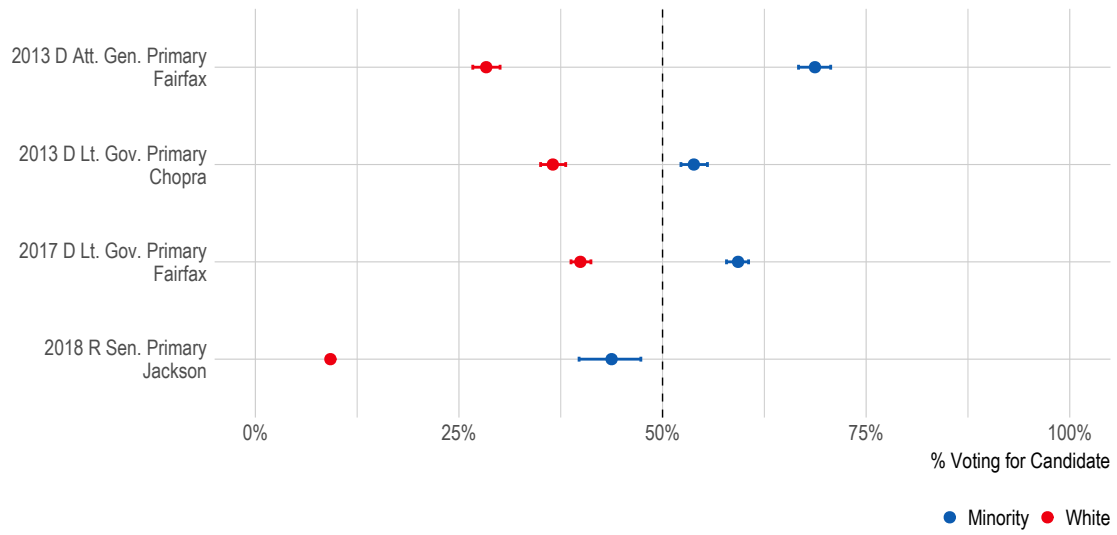


Figure 5: Ecological Inference Results — Statewide Primary Elections (White and Minority Voting Behavior)

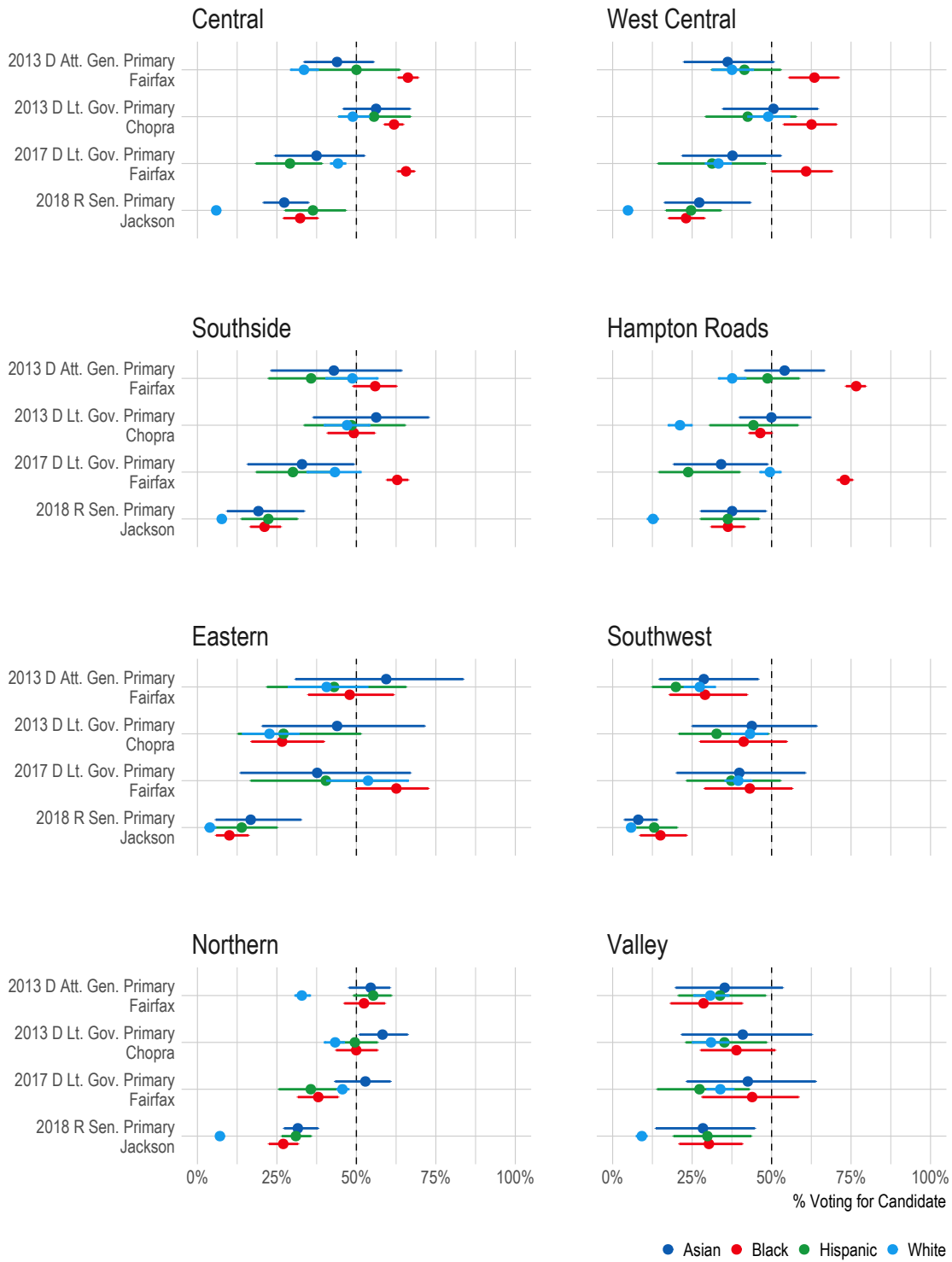


Figure 6: Ecological Inference Results — Primary Elections by Region