

2017 Reporting Database – Data Processing Notes

2010 and 2012 Election Contests

Election contest information was derived from VTD-level data files, provided by the North Carolina State Board of Elections. VTDs (either 'Voting Districts' or 'Voting Tabulation Districts', depending on the context) represent the voter precincts submitted to the U.S. Census Bureau and integrated with the 2010 decennial census geography. Within 60 days following an election, local boards of election were required to report all votes by VTD, including out-of-precinct votes. Even though the objective of VTD-level reporting was to have all votes reported based on a stable unit of geography, some votes in the data files did still show up in county-wide categories such as 'absentee', 'transfer', or 'provisional'. Those votes were not included in the redistricting database, and statewide candidate vote totals are sometimes marginally less than official contest results for that reason.

Because of the principal of secrecy of the ballot, vote counts are only reported down to the precinct/VTD level. Redistricting systems, and associated district plan definitions, resolve down to the much smaller census block level. To integrate election contest returns with a block-level database, the information has to be disaggregated. Contest results for the 2010 and 2012 elections were disaggregated using a weighting factor based on the ratio of block-level census voting age population to VTD-level voting age population. Fractional results were truncated down to the nearest whole vote. Remainders for all blocks within a VTD were then added to the highest population block within that VTD.

2014 Election Contests

For the 2014 general election, VTD-level reporting was still in effect. Results were collected and processed in similar fashion to 2010 and 2012 results. For the 2014 round, however, contest results were disaggregated using a weighting factor based on the ratio of the number of ballots cast by voters in each census block to the ballots cast in the corresponding VTD as a whole. Ballot counts by block were derived by using a combination of geocode results for voter addresses of record and voting history. Disaggregated vote counts were truncated down to the nearest whole vote. The overall vote remainder for each VTD was then distributed amongst the blocks sequentially, according to the size of the truncated fractional vote.

2016 Election Contests

Similar to the previous VTD reporting requirement, county boards of election are now required to report all votes by precinct, under [G.S. 163-132.5G](#). The NC State Board of Elections posted a corresponding data file on 2/7/2017, 'precinct_sort_statewide_at_large_contests_no_admin_precincts_20161108.txt'. The file contains statewide at-large contest votes from the 2016 general election, allocated back to voters' assigned precincts. Note that 100% of the votes cannot currently be allocated back to precincts. Vote totals in this file are therefore marginally lower than the official counts. All statewide candidate totals were found to be less than one half of one percent below official results. 2016 contest results were disaggregated in a manner similar to the 2014 contest results, using a weighting factor based on the ratio of the number of ballots cast by voters assigned to a given precinct in each census block to the ballots cast in the precinct as a whole.