

VEST NC 2018

State: North Carolina

Organization: Voting and Election Science Team (VEST)

Summary of Races included: NC Supreme Court Associate Justice Seat 1, NC Court of Appeals Judge

seats 1-3 [General]

Date File Updated: 06/28/2021 Date Report Updated: 11/02/2021

RDH Validation Code (Github): https://github.com/nonpartisan-redistricting-datahub/pdv-nc

RDH Criteria	Explanation
Is all raw data available? Yes	Accessible files: VEST NC 18 data file Accessed 10/06/21, Source: VEST https://dataverse.harvard.edu/file.xhtml?fileId=4863186&version=47.0 VEST NC 18 documentation file Accessed: 10/06/21, Source: VEST https://dataverse.harvard.edu/file.xhtml?fileId=5194701&version=47.0 NC Unsorted Precinct-Level Election Results Accessed: 10/06/21, Source: ID Secretary of State https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/2018_11_06/results_p_ct_20181106.zip Note: Used for the counties listed by VEST in their documentation. NC Sorted Precinct-Level Election Results Accessed: 10/06/21, Source: ID Secretary of State https://dl.ncsbe.gov/?prefix=ENRS/2018_11_06/results_precinct_sort/ Note: Used for the counties listed by VEST in their documentation. NC Voting Precincts "20170519" Shapefile Accessed: 10/06/21, Source: North Carolina State Board of Elections https://dl.ncsbe.gov/?prefix=PrecinctMaps/
Processing steps available?	The full processing steps can be accessed at the link above and were accessed on 10/06/21. Part of the documentation is copied below:

redistricting ... data hub

Yes

- Election results and precinct shapefile from the NC State Board of Elections (https://www.ncsbe.gov/results-data)
- North Carolina produces two sets of election results data. The precinct results are the unaltered results as initially reported by the counties. Many counties report early votes by vote center while provisional and other nonstandard ballots may be reported countywide. The precinct-sorted results are then produced within 30 days after the election. In the precinct-sorted data nearly all votes are assigned to precincts regardless of the manner by which the ballots were cast. However, North Carolina law requires the addition of statistical "noise" to the precinct-sorted data wherever any given vote by any specific voter may otherwise be deduced via cross referencing the various election-related data sets produced by the SBE.
- For the 2018 general election 39 counties reported all votes by precinct in their initial precinct results. The precinct-sorted data set was used instead for the counties listed below.
- Ashe, Avery, Beaufort, Bertie, Bladen, Brunswick, Buncombe, Cabarrus, Caldwell, Camden, Caswell, Chatham, Chowan, Cumberland, Currituck, Dare*, Davidson, Davie, Duplin, Durham*, Edgecombe, Forsyth, Greene*, Halifax*, Harnett, Haywood, Henderson, Hyde, Jackson, Johnston, Jones, Lee, Lenoir, Lincoln, Macon*, Martin*, Mecklenburg, Moore, Nash, New Hanover*, Northampton*, Orange, Pamlico, Pender, Perquimans*, Pitt*, Polk, Richmond, Rutherford, Sampson, Scotland, Stanly*, Stokes, Surry, Tyrrell, Wake, Washington*, Watauga, Wayne, Wilkes, Yadkin
- In counties marked by asterisk some votes were still reported by vote center or countywide in the precinct-sorted data. These were distributed by candidate to precincts based on the precinct-level reported vote. The precinct-sorted results were further adjusted to match the certified countywide totals based on the precinct-level vote by candidate.

Information not in their processing steps:

• List of adjustments done to precinct-sorted results.

Able to replicate joining election data and

Yes, given the documentation they provided we were able to join 2706 precincts. There were 9 election result precincts that were not joined that all contained zero votes and were not present in VEST's file.



··· data nub	
shapefiles? Yes	
Able to replicate joining demographic data to block-level shapefiles?	There is no demographic data on the file.
Able to replicate joining boundary data?	There is no boundary data on the file.
Successfully ran validation? No	 Election results: No We attempted to validate the election results at the state, county and precinct levels. VEST's statewide totals and county-level totals match those of the official totals from the North Carolina State Board of Elections (https://er.ncsbe.gov/). Our totals do not match either VEST or the official totals due to differences in counties where we used the precinct-sorted results. This is likely due to the statistical noise and further adjustments that VEST mentions in its documentation. "The precinct-sorted results were further adjusted to match the certified countywide totals based on the precinct-level vote by candidate." VEST's county-level totals match those of the official totals from the North Carolina State Board of Elections (https://er.ncsbe.gov/). Our totals do not match either VEST or the official totals due to differences in counties where we used the precinct-sorted results. This is likely due to the statistical noise that VEST mentions in its documentation. Counties that were not listed by VEST as using sorted results but have vote differences



- are Guilford, Hertford, McDowell, Madison, and Pasquotank. VEST totals for these counties match the official totals.
- At the precinct-level, candidate vote totals did not match and were off by a number of votes likely due to the noise differences described above. Neither VEST nor the state provide enough information on their changes or the extent of the statistical noise added to the data to be totally sure.

Geographies: Yes

- We were able to fully validate the geographies
- We were able to validate 2706 precincts. There were 2706 total precincts in VEST's file. Of the 2706 precincts we were able to compare:
 - o 2706 precincts w/ a difference of 0 km^2