

## **VEST SD 2016**

## Election Results Validation Report

To request a full validation report for this data file, email info@redistrictingdatahub.org

State: South Dakota

**Organization:** Voting and Election Science Team (VEST)

Summary of Races included: Presidential, U.S. Senate, Representative in Congress, Public Utilities

Commissioner [General Election]

Date File Updated: 06/12/2020

Date Report Updated: 09/22/2021

RDH Validation Code (Github):

https://github.com/nonpartisan-redistricting-datahub/pdv-sd/tree/main/vest-sd-2016

RDH Criteria	Explanation
Is all raw data available? Yes	Accessible files:  Precinct-level Election Results, 2016  Date accessed: 08/11/2021, Source: Secretary of State  http://electionresults.sd.gov/resultsSW.aspx?type=SWR↦=CTY&eid=178  Notes: Selected 'EXPORT' and downloaded 'Precinct' data for each election  VEST SD 2016 Data File  Accessed: 08/25/2021, Source: VEST on the Harvard Dataverse https://dataverse.harvard.edu/file.xhtml?persistentId=doi:10.7910/DVN/NH5S2I/DQRXXM&version=66.0  VEST SD 2016 Documentation  Accessed: 08/25/2021, Source: VEST on the Harvard Dataverse https://dataverse.harvard.edu/file.xhtml?fileId=4986638&version=66.0  2020 Redistricting Data Program Final Release (SD Partnership Shapefile)  Data accessed: 08/25/2021, Source: U.S. Census Bureau  https://www.census.gov/geo/partnerships/pvs/partnership19v2/st46 sd.html

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Election results validated for every candidate statewide?

Yes

At the statewide total level, the election results matched VEST's.

However, the totals did not match those of South Dakota's official election summary report. The difference may be because we had used the unofficial election results in our validation process. The South Dakota Secretary of State had not released the precinct-level data for their official results and there may have been additional updates to election results when SOS was working on their official results.

(https://sdsos.gov/elections-voting/assets/2016GeneralElectionOfficialResultsState Canvass.pdf)

Candidate	RDH Total	Partner Data Total (VEST)	SD SOS Report	Difference (RDH, Partner vs SOS)
G16PRERTRU	227731	227731	227721	10
G16PREDCLI	117466	117466	117458	8
G16USSRTHU	265527	265527	265516	11
G16USSDWIL	104147	104147	104140	7
G16HALRNOE	237172	237172	237163	9
G16HALDHAW	132819	132819	132810	9
G16PUCRNEL	268959	268959	268948	11
G16PUCDRED	87864	87864	87859	5

Election results validated for every candidate by county?

No

At the county total level, the election results did not match VEST's. 46 out of 66 counties matched; 20 out of 66 counties showed vote differences.

There were differences in vote totals for every candidates in all elections and they occurred in Brookings, Brown, Butte, Custer, Dewey, Grant, Harding, Hughes, Lake, Lawrence, Lincoln, Minnehaha, Moody, Pennington, Potter, Roberts, Shannon, Union, Yankton, and Ziebach counties. The differences ranged from 1 to 9 votes.



We were not able to figure out why VEST's file contains these differences, although it may have something to do with how they dealt with vote centers.

VEST's county totals also did not match those of South Dakota's election summary report

(https://sdsos.gov/elections-voting/assets/2016GeneralElectionOfficialResultsState Canvass.pdf), due to differences in Minnehaha County, all other counties matched.

Minnehaha County vote totals:

Candidate	VEST Total	SD SOS Report	Difference
G16PRERTRU	42053	42043	10
G16PREDCLI	30618	30610	8
G16USSRTHU	52505	52494	11
G16USSDWIL	22366	25359	7
G16HALRNOE	44818	44809	9
G16HALDHAW	33193	33184	9
G16PUCRNEL	53405	53394	11
G16PUCDRED	20820	20815	5

Note: The difference between county totals and South Dakota's election summary report is the same as the difference between statewide totals and South Dakota's election summary report.

Election results validated for every candidate by precinct?

No

We were not able to validate precinct-level votes because we were not able to join all the precincts between the two files. There were 87 precincts in the VEST file and 42 precincts in the state file that we could not match.

Of the 658 precincts that did join, 65 of them had showed election result differences. The largest difference was 4 votes and the average difference was 1.09 votes.

The unjoined precincts occur in Brookings, Brown, Hughes, Hyde, Potter, Sully, and Yankton counties. All of these counties use countywide vote centers rather than polling locations by precinct and do not record votes by precinct. Although VEST



disaggregated these votes to the precinct level, we were not able to recreate their process with their given documentation.