

VEST AK 2016

State: Alaska

Organization: Voting and Election Science Team (VEST)

Summary of Races included: Presidential, U.S. Senate, House At-Large [General]

Date File Updated: 06/08/2020

Date Report Updated: 05/26/2021

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

RDH Criteria	Explanation
<p>Is all raw data available?</p> <p>Yes</p>	<p><u>Accessible files:</u></p> <ul style="list-style-type: none"> ● VEST, Alaska 2016 Data File <ul style="list-style-type: none"> ○ Accessed, 05/25/2021, Source: VEST on the Harvard Dataverse ○ Link: https://dataverse.harvard.edu/file.xhtml?persistentId=doi:10.7910/DVN/NH5S2I/T9HQ58&version=56.0 ● VEST, Alaska 2016 Documentation <ul style="list-style-type: none"> ○ Accessed, 05/25/2021, Source: VEST on the Harvard Dataverse ○ Link: https://dataverse.harvard.edu/file.xhtml?fileId=4499004&version=56.0 ● VEST, Alaska 2018 Documentation <ul style="list-style-type: none"> ○ Accessed, 05/26/2021, Source: VEST on the Harvard Dataverse ○ Direct link: https://dataverse.harvard.edu/file.xhtml?fileId=4499066&version=36.0 ○ Note: This was used to see VEST's methodology for allocating state-level votes. ● Precinct Shapefile for Alaska <ul style="list-style-type: none"> ○ Accessed, 05/25/2021, Source: Alaska Division of Elections ○ Link: https://www.elections.alaska.gov/Core/districtmaps.php ○ Note: Select "Statewide Precinct Shape files" on the page above to download the relevant file. ● Election results for Alaska, November 8, 2016: <ul style="list-style-type: none"> ○ Accessed, 05/25/2021, Source: Alaska Division of Elections

	<ul style="list-style-type: none"> ○ Link: https://www.elections.alaska.gov/results/16GENR/index.shtml ○ Note: At the link above, right-click the hyperlink for “TEXT BY PRECINCT” under “Statewide Summary” and click "Save File As" and you can download the txt file locally.
<p>Processing steps available?</p> <p>Yes</p>	<p><u>Description of processing steps:</u></p> <ul style="list-style-type: none"> ● VEST’s processing steps, which can be accessed at the link above, were accessed on 05/25/21. ● The first part of their processing steps mentions the sources for their election results and precinct shapefile, which are the same as the sources listed above. ● The second part mentions how they carried out their State House district level vote allocation: <ul style="list-style-type: none"> ○ <i>Early, Absentee, and Questioned votes are only reported at the State House district level (since Alaska has portions of the state with no lower level of government, HDs serve a similar purpose as counties do in other states for the purpose of reporting votes). These votes are apportioned to precincts by candidate in the same shares that the Election Day vote was split among precincts within an HD.</i> ● We were able to follow this step to allocate the State House district level votes, although, as is mentioned below, our allocation resulted in minor differences of 1 to 2 votes in certain precincts, likely due to differences in rounding methods. <p><u>Information not in their processing steps:</u></p> <ul style="list-style-type: none"> ● In the election results file, there are votes recorded for “HD99 Fed Overseas Absentee “. These votes are reported at the statewide level, no at the State House district level, there isn’t a HD99, and as such, these votes require a different allocation method from the one VEST mentions above. ● To resolve this issue, we took a look at VEST’s documentation for their 2018 Alaska file, where they describe their method of allocating such votes: <ul style="list-style-type: none"> ○ <i>Similarly, federal-only ballots that are reported at the statewide level were apportioned to precincts by candidate based on their share of the precinct-level vote.</i>
<p>Able to replicate joining election data and shapefiles?</p>	<p>Yes, following VEST’s documentation we were able to fully join all 441 election data precincts to shapefiles.</p>

<p>Yes</p>	
<p>Able to replicate joining demographic data to block-level shapefiles?</p> <p>N/A</p>	<p>There is no demographic data on the file.</p>
<p>Able to replicate joining boundary data?</p> <p>N/A</p>	<p>There is no boundary data on the file.</p>
<p>Successfully validated election results?</p> <p>Options: Yes</p>	<p><u>Election results:</u></p> <ul style="list-style-type: none"> • We validated election results at three different levels: race totals, districts (which, as VEST mentions, effectively function as counties) and precincts. • Due to the vote allocation system described above, we checked the election results at the race total before allocating any state-wide or district-wide votes (and again after to confirm our allocation did not add votes) and at the district and precinct levels after allocation. Because we do not know VEST’s exact voting allocation system, especially how they round fractions and break ties, we expected some minor differences to be present. • At the race total level, the election results matched exactly before and after the voter allocation. • At the State House district level, after vote allocation, there were differences present in 15 of the 19 races, although the largest difference for any particular race in one State House was 5 votes, with most being 1 or 2 votes. • At the precinct level, after vote allocation, there are differences in 440 of the 441 precincts, although the max difference between a race’s results in one precinct is 2 votes and the average difference is 1.03 votes.

- In summary, although there are differences in the election results at the State House district and precinct levels, since the race totals match and the differences are very small, we believe they are due to slight variations in how we performed vote allocation.

Geographies:

- All 441 of the precincts have a difference of 0 km².