

VEST WA 2020

State: Washington

Organization: Voting and Election Science Team (VEST)

Summary of Races included: Presidential, Governor, Lieutenant Governor, Secretary of State, State Treasurer, State Auditor, Attorney General, Commissioner of Public Lands, Insurance Commissioner [General]

Date File Updated: 08/25/2021

Date Report Updated: 10/20/2021

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

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 WA 20 Data File <ul style="list-style-type: none"> ○ Accessed: 10/20/21, Source: VEST on the Harvard Dataverse ○ https://dataverse.harvard.edu/file.xhtml?fileId=5007851&version=21.0 ● VEST WA 20 documentation file <ul style="list-style-type: none"> ○ Accessed: 10/20/21, Source: VEST on the Harvard Dataverse ○ https://dataverse.harvard.edu/file.xhtml?fileId=5206372&version=21.0 ● WA 20 Precinct-Level Results <ul style="list-style-type: none"> ○ Accessed: 10/20/21, Source: Washington Secretary of State ○ https://www.sos.wa.gov/elections/research/2020-general-election.aspx ○ Note: These can be downloaded by clicking "GIS Ready Precinct Results". ● WA Precinct Shapefile <ul style="list-style-type: none"> ○ Accessed: 10/20/21, Source: Washington Secretary of State ○ https://www.sos.wa.gov/elections/research/precinct-shapefiles.aspx ○ Note: Download "Statewide_Precincts_2020General.zip". ● WA Cartographic Boundary File <ul style="list-style-type: none"> ○ Accessed: 10/14/21, Source: US Census ○ https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html

	<ul style="list-style-type: none"> ○ Note: Download "cb_2018_us_county_5m.zip". This file was not needed for the validation, but used because we suspected VEST clipped their precinct shapefile using a cartographic boundary file.
<p>Processing steps available?</p> <p>Yes</p>	<p>Description of processing steps:</p> <ul style="list-style-type: none"> ● VEST's documentation, which can be fully accessed at the link above are pasted below: <ul style="list-style-type: none"> ○ Election results and precinct shapefile from the Washington Secretary of State (https://www.sos.wa.gov/elections/research/election-results-and-voters-pamphlets.aspx) ○ In Kittitas County the votes reported as Ellensburg 28 in the Secretary of State results are actually those of Cle Elum 2. Ellensburg 28 was not a distinct voting precinct for the 2020 general election.
<p>Able to replicate joining election data and shapefiles?</p> <p>Yes</p>	<p>Yes, given the documentation they provided we were able to complete the join and joined 7464 out of 7464 precincts.</p> <ul style="list-style-type: none"> ● 31 of these precincts were zero-vote precincts that were not initially present in the election results. ● 3 precincts were disregarded as they were zero-vote precincts that appeared in the election results but did not have any geometries associated with them.
<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>There is no boundary data on the file.</p>

N/A	
<p>Successfully ran validation?</p> <p>Yes</p>	<p><u>Election results:</u> Yes</p> <ul style="list-style-type: none">● We validated election results at three different levels:<ul style="list-style-type: none">○ Statewide candidate vote totals○ Countywide candidate vote totals○ Precinct-level candidate votes● At the statewide total level, the election results matched VEST's. The totals also matched those of WA's election summary report (https://www.sos.wa.gov/assets/elections/research/official%20canvass%20of%20the%20returns%20g2020%20certification%2012%2001%202020.pdf).● At the countywide total level, the election results matched VEST's. The totals also matched those of WA's county-level election summary report (https://results.vote.wa.gov/results/20201103/).● At the precinct-level, all 7433 precincts matched exactly. There were 31 zero-vote precincts in VEST's file not present in the election results that were not compared at this step. <p><u>Geographies:</u> Yes</p> <ul style="list-style-type: none">● Out of 7462 total precincts (there were 2 precincts with invalid geometries that we were unable to fix):<ul style="list-style-type: none">○ 3003 precincts w/ a difference of 0 km²○ 4307 precincts w/ a difference between 0 and .1 km²○ 40 precincts w/ a difference between .1 and .5 km²○ 19 precincts w/ a difference between .5 and 1 km²○ 24 precincts w/ a difference between 1 and 2 km²○ 25 precincts w/ a difference between 2 and 5 km²○ 44 precincts w/ a difference greater than 5 km²● It appears as though close to all the precinct area differences occurred due to water boundaries, which led us to suspect that VEST clipped it's geometry file using a cartographic file. After clipping the WA precinct shapefile with a cartographic map from the census, we found that the water differences largely disappeared.