

## VEST HI 2020

**State:** Hawaii

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

**Summary of Races included:** Presidential

**Date File Updated:** 05/27/2021

**Date Report Updated:** 07/06/2021

**RDH Validation Code (Github):**

<https://github.com/nonpartisan-redistricting-datahub/pdv-hi/tree/main/vest-hi-2020>

RDH Criteria	Explanation
<p><b>Is all raw data available?</b></p> <p>Yes</p>	<p><b><u>Accessible files:</u></b></p> <ul style="list-style-type: none"> <li>● Precinct Shapefile <ul style="list-style-type: none"> <li>○ Accessed: 07/02/2021, Source: Hawaii Statewide GIS Program</li> <li>○ Link: (<a href="http://geoportal.hawaii.gov/datasets/election-precincts-">http://geoportal.hawaii.gov/datasets/election-precincts-</a>)</li> </ul> </li> <li>● Precinct Election Results <ul style="list-style-type: none"> <li>○ Accessed: 07/02/2021, Source: Hawaii Office of Elections</li> <li>○ Link: (<a href="https://elections.hawaii.gov/election-results/">https://elections.hawaii.gov/election-results/</a>)</li> <li>○ Direct link to text file: (<a href="https://elections.hawaii.gov/wp-content/results/media.txt">https://elections.hawaii.gov/wp-content/results/media.txt</a>)</li> </ul> </li> <li>● VEST HI 2020 Data File <ul style="list-style-type: none"> <li>○ Accessed: 07/02/2021, Source: VEST on the Harvard Dataverse</li> <li>○ Link: (<a href="https://dataverse.harvard.edu/file.xhtml?fileId=4750434&amp;version=13.0">https://dataverse.harvard.edu/file.xhtml?fileId=4750434&amp;version=13.0</a>)</li> </ul> </li> <li>● VEST HI 2020 Documentation <ul style="list-style-type: none"> <li>○ Accessed: 07/02/2021, Source: VEST on the Harvard Dataverse</li> <li>○ Link: (<a href="https://dataverse.harvard.edu/file.xhtml?fileId=4863160&amp;version=13.0">https://dataverse.harvard.edu/file.xhtml?fileId=4863160&amp;version=13.0</a>)</li> </ul> </li> </ul>
<p><b>Processing steps available?</b></p> <p>Yes</p>	<p><b><u>Description of processing steps:</u></b></p> <ul style="list-style-type: none"> <li>● VEST did not provide processing steps in their documentation, beyond column header descriptions.</li> </ul>

	<p><b><u>Information not in their processing steps:</u></b></p> <ul style="list-style-type: none"> <li>• With the election results file from the Office of Elections, the RDH changed the state’s naming conventions of column headers to match VEST and pivoted the election results so that the contest and candidates were the column headers with votes as values in the table.</li> <li>• After pivoting the election results, the precinct identifiers matched VEST’s in all cases but the election results file was missing 13 precinct identifiers in VEST’s which had zero votes.</li> <li>• The precinct identifiers in the shapefile matched those of VEST.</li> </ul>
<p><b>Able to replicate joining election data and shapefiles?</b></p> <p><b>Yes</b></p>	<p>Yes, while VEST did not describe their processing steps in the documentation, because the precinct names matched up and election results were straightforward, it was possible to replicate VEST’s results without issue.</p> <ul style="list-style-type: none"> <li>• 250 precincts joined out of 262, the 12 remaining being zero-vote precincts. Therefore, once joined, all precincts from VEST’s file were accounted for.</li> <li>• All precinct names matched between VEST’s file, the election results and the precinct shapefile used from the state, and therefore no name changes were required.</li> <li>• The no-vote precincts are listed in the notebook.</li> </ul>
<p><b>Able to replicate joining demographic data to block-level shapefiles?</b></p> <p><b>N/A</b></p>	<p>There is no demographic data on the file.</p>
<p><b>Able to replicate joining boundary data?</b></p> <p><b>N/A</b></p>	<p>There is no boundary data on the file.</p>

Successfully  
ran validation?

Yes

**Election results: Yes**

- We validated election results at three different levels:
  - 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 the election results report for Hawaii from the New York Times.  
(<https://www.nytimes.com/interactive/2020/11/03/us/elections/results-hawaii.html>)
- At the countywide total level the election results matched VEST's.
- At the precinct-level the election results matched VEST's.

**Geographies: Yes**

- Out of 262 total precincts:
  - 262 precincts w/ a difference of 0 km<sup>2</sup>