

## VEST OH 2020

**State:** Ohio

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

**Summary of Races included:** Presidential [General]

**Date File Updated:** 04/06/2021

**Date Report Updated:** 09/21/2021

**RDH Validation Code (Github):**

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

RDH Criteria	Explanation
<p>Is all raw data available?</p> <p>Yes</p>	<p><b><u>Accessible files:</u></b></p> <ul style="list-style-type: none"> <li>● VEST OH 2020 Data File <ul style="list-style-type: none"> <li>○ Accessed: 05/26/2021, Source: VEST on the Harvard Dataverse</li> <li>○ <a href="https://dataverse.harvard.edu/file.xhtml?fileId=4499012&amp;version=5.0">https://dataverse.harvard.edu/file.xhtml?fileId=4499012&amp;version=5.0</a></li> </ul> </li> <li>● VEST OH 2020 Documentation File <ul style="list-style-type: none"> <li>○ Accessed: 05/26/2021, Source: VEST on the Harvard Dataverse</li> <li>○ <a href="https://dataverse.harvard.edu/file.xhtml?fileId=4499010&amp;version=5.0">https://dataverse.harvard.edu/file.xhtml?fileId=4499010&amp;version=5.0</a></li> </ul> </li> <li>● Election Results, SOS 2020 <ul style="list-style-type: none"> <li>○ Accessed: 05/26/2021, Source: OH SOS</li> <li>○ <a href="https://www.sos.state.oh.us/elections/election-results-and-data/2020/">https://www.sos.state.oh.us/elections/election-results-and-data/2020/</a></li> <li>○ Note: selected "Results by Precinct (XLSX)" under "Court of Appeals"</li> </ul> </li> <li>● Precinct Shapefile <ul style="list-style-type: none"> <li>○ Accessed: 05/26/2021, Source: US Census</li> <li>○ <a href="https://www2.census.gov/geo/tiger/TIGER2020PL/STATE/39_OHIO/39/">https://www2.census.gov/geo/tiger/TIGER2020PL/STATE/39_OHIO/39/</a></li> <li>○ Note: VEST refers to their precinct shapefile source as 'the U.S. Census Bureau's 2020 Redistricting Data Program final release'. We believe this is the 2020 TIGER/Line VTD file. Download 'tl_2020_39_vtd20.zip'</li> </ul> </li> </ul> <p>Note: VEST mentions a handful of municipal-level files used in their shapefile processing. We did not attempt to locate these.</p>

<p>Processing steps available?</p> <p>Yes</p>	<p><b><u>Description of processing steps:</u></b></p> <ul style="list-style-type: none"> <li>● VEST’s documentation, accessed 05/26/2021, is pasted below: <ul style="list-style-type: none"> <li>○ Election results from the Ohio Secretary of State (<a href="https://www.sos.state.oh.us/elections/election-results-and-data/">https://www.sos.state.oh.us/elections/election-results-and-data/</a>). Precinct shapefile from the U.S. Census Bureau's 2020 Redistricting Data Program final release. Note that some VTDs were relabeled to match precinct names and/or precinct codes in the November 2020 general election returns.</li> <li>○ The following counties include adjustments to account for corporate annexations that are not specified below by precinct: Adams, Athens, Butler, Franklin, Guernsey, Montgomery, Stark, Tuscarawas, Warren, Wayne.</li> </ul> </li> <li>● VEST also mentions specific boundary changes there were made in Athens, Brown, Butler, Champaign, Clark, Crawford, Cuyahoga, Delaware, Fairfield, Greene, Hamilton, Knox, Lake, Medina, Richland, Stark, Summit, and Warren Counties. A full list of these can be found in the documentation.</li> </ul> <p><b><u>Information not in their processing steps:</u></b></p> <ul style="list-style-type: none"> <li>● More detailed information about the shapefile processing.</li> </ul>
<p>Able to replicate joining election data and shapefiles?</p> <p>Yes</p>	<p>Yes, we were able to replicate joining election data and shapefiles.</p> <p>We joined all 8941 precincts. 8 of these precincts were zero-vote precincts that were initially not present in the election results.</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</p>	<p>There is no boundary data on the file.</p>

<p>joining boundary data?</p> <p>N/A</p>	
<p>Successfully ran validation?</p> <p>Yes</p>	<p><b><u>Election results:</u> Yes</b></p> <ul style="list-style-type: none"> <li>● We validated election results at three different levels: <ul style="list-style-type: none"> <li>○ Statewide candidate vote totals</li> <li>○ Countywide candidate vote totals</li> <li>○ Precinct-level candidate votes</li> </ul> </li> <li>● At the statewide total level, the election results matched VEST's. The totals also matched those of OH's election summary report (<a href="https://www.sos.state.oh.us/elections/election-results-and-data/2020/">https://www.sos.state.oh.us/elections/election-results-and-data/2020/</a>).</li> <li>● At the countywide total level, the election results matched VEST's. The totals also matched those of OH's county-level election summary report (<a href="https://www.sos.state.oh.us/elections/election-results-and-data/2020/">https://www.sos.state.oh.us/elections/election-results-and-data/2020/</a>).</li> <li>● At the precinct-level, all 8933 precincts matched exactly. There were 8 zero-vote precincts in VEST's file that were not present in the election results. These 8 were later added to the election results with zero-votes as they also appeared in the shapefile.</li> </ul> <p><b><u>Geographies:</u> Yes</b></p> <ul style="list-style-type: none"> <li>● Out of 8941 total precincts: <ul style="list-style-type: none"> <li>○ 8659 precincts w/ a difference of 0 km<sup>2</sup></li> <li>○ 254 precincts w/ a difference between 0 and .1 km<sup>2</sup></li> <li>○ 23 precincts w/ a difference between .1 and .5 km<sup>2</sup></li> <li>○ 3 precincts w/ a difference between .5 and 1 km<sup>2</sup></li> <li>○ 0 precincts w/ a difference between 1 and 2 km<sup>2</sup></li> <li>○ 2 precincts w/ a difference between 2 and 5 km<sup>2</sup></li> <li>○ 0 precincts w/ a difference greater than 5 km<sup>2</sup></li> </ul> </li> <li>● In their documentation, VEST mentions shapefile modifications in the following counties: Adams, Franklin, Guernsey, Montgomery, Tuscarawas, Wayne, Athens, Brown, Butler, Champaign, Clark, Crawford, Cuyahoga, Delaware, Fairfield, Greene, Hamilton, Knox, Lake, Medina, Richland, Stark, Summit, and Warren. <ul style="list-style-type: none"> <li>○ The 28 precincts with differences over .1 km<sup>2</sup> are all located in Crawford, Greene, Warren, Clark, and Butler counties, which are all on the above list.</li> </ul> </li> </ul>

redistricting  
... data hub