

VEST TX 2016

State: TX

Organization: Voting and Election Science Team (VEST)

File Year: 2016

Date Updated: Report: 3/16/2021, File: 7/15/2018

1. Is all raw data available?

Yes

- Accessible files:
 - VEST TX, 2016
 - Accessed: 3/2/2021
 - Source: VEST on the Harvard Dataverse
 - <https://dataverse.harvard.edu/file.xhtml?fileId=3184154&version=53.0>
 - Documentation file:
<https://dataverse.harvard.edu/file.xhtml?fileId=4441609&version=54.0>
 - TX Shapefile (2016 General Election VTDs):
 - Date Accessed: 3/2/2021
 - Source: Texas Legislative Council, Capitol Data Portal
 - <https://data.capitol.texas.gov/dataset/archived-precincts>
 - TX Election Results (reported by 2016 VTDs):
 - Date Accessed: 3/2/2021
 - Source: Texas Legislative Council, Capitol Data Portal
 - https://data.capitol.texas.gov/dataset/historical_elections

2. Processing steps available?

No

- Description of processing steps:

- VEST does not post any processing steps for this file, they only say: “Election results and precinct shapefile from Texas Legislative Council (ftp://ftpgis1.tlc.state.tx.us/)” and provide the field names in the file.
- Information not in their processing steps:
 - There are 222 precincts in the raw election results file that were merged into 100 precincts, if we follow the final file that VEST has posted. They did not describe any merges that were made in their processing steps, so it is possible that we found a different version of the raw source files.

3. Able to replicate joining election data and shapefiles?

Yes

- We were able to match the election results fully after completing the merges described above. We took the following steps:
 - Pivoted the election results table available from the TX site, and limited to the races and parties that VEST has on their file.
 - Joined the election results and the precinct shapefile on the ‘CNTYVTD’ field. These fields joined without issue, no changes needed to be made to the precinct IDs in either the raw election results or the raw precinct shapefile.
 - In order to replicate VEST’s file, however, we had to make merges in 222 election result rows. These merges were to merge precincts that had a letter appended to their ID into one. For example, we merged 1131065A, 1131065B, and 1131065C into 1131065 and aggregated the election results. After completing these steps, our number of precincts with election results matched the VEST file. However, VEST still had 13 precincts left over that had 0 votes in any elections, but did have area. We are not sure where these precincts came from. The following are the ID field in the VEST file, PCTKEY, for these 13 precincts: 293177, 294197, 410050, 410051, 550411, 1212098, 3030143, 3030144, 3030145, 3030146, 3030147, 3030149, 3030150.

4. Able to replicate joining demographic data to block-level shapefiles?

N/A, the file does not include demographic data.

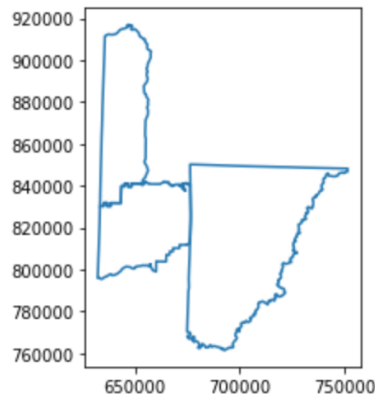
5. Able to replicate joining boundary data?

N/A, the file does not include boundary data.

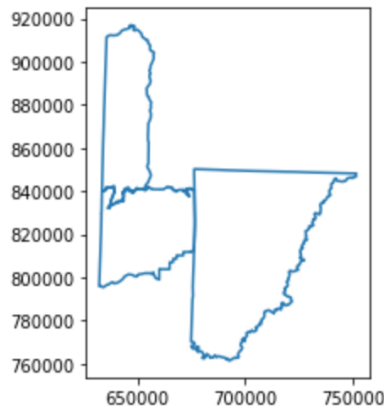
6. Successfully validated election results?

Yes

- Election results:
 - The column totals and precinct-by-precinct votes matched in 100% of precincts between the VEST file and the raw election results file from the TX Legislative Council.
- Geographies:
 - However, it seems that VEST may have used a different raw file than the one that is currently available on the TX Legislative Council website, at the time that this report is written.
 - The total area of the VEST precinct shapefile and the raw precinct shapefile are the same, however only 6,183 out of 8,819 precincts have the same area rounded to one place of precision. In 140 precincts, the total area difference is greater than 1 km². In the precinct with the largest area difference between the VEST file and the source file, the area difference is 66.96 km², and the geography of the precincts look substantively different. This large area difference is shown below in the precincts numbered CNTYVTD 430004, 430005, and 430006:



- VEST file:



- RDH file:

- As you can see, around (650000, 840000) there are substantive differences in the precinct geometries between the VEST file and the file on the TX Legislative Council site as of 3/2/2021.