## **VEST CO 2018**

<u>State:</u> Colorado <u>Organization:</u> VEST <u>Date Updated:</u> Report Date: 04/23/21, File Date: 11/08/20

#### 1. Is all raw data available?

#### Yes

- VEST files:
  - co\_2018.shp
    - Date accessed: 04/12/20
    - https://dataverse.harvard.edu/dataverse/electionscience/?q=colorado+2018+precincts
    - Found by navigating to the bottom of the page above
- Elections files
  - 2018GEPrecinctLevelResults.xlsx
    - Date accessed: 04/12/20
    - https://www.sos.state.co.us/pubs/elections/Results/archive2000.html
- Raw precincts shapefiles downloaded individually for each county between 4/12/20 and 4/16/20
  - Adams County
    - https://data-adcogov.opendata.arcgis.com/search?q=precinct
  - Arapahoe County
    - https://www.arapahoegov.com/1151/GIS-Data-Download
  - Boulder County
    - https://opendata-bouldercounty.hub.arcgis.com/datasets/precincts?geometry=-106 .243%2C39.904%2C-104.503%2C40.272
  - Delta County
    - Requested data from <u>gis@deltacounty.com</u>, shapefiles received via email from Carrie Derco, GIS coordinator at Delta county
  - Denver County
    - https://www.denvergov.org/opendata/dataset/city-and-county-of-denver-electionprecincts

- Douglas County
  - https://hub.arcgis.com/datasets/dougco::voter-precincts-1?geometry=-106.172%2 C39.162%2C-103.814%2C39.533
- El Paso County
  - Received shapefiles directly from GIS director Dwayne Liller, <u>DwayneLiller@elpasoco.com</u>
- Fremont County
  - https://www.fremontco.com/clerk-and-recorder/elections
- Garfield County
  - Received shapefiles directly from GIS coordinator Andrea Grygo, agrygo@garfield-county.com
- Gilpin County
  - Received shapefiles directly from County Planner Tami Archer, <u>tarcher@gilpincounty.org</u>
- Jefferson County
  - <u>https://data-jeffersoncounty.opendata.arcgis.com/datasets/county-precinct-1?geo</u> metry=-107.581%2C39.151%2C-102.865%2C39.893
- La Plata County
  - https://www.co.laplata.co.us/services/elections/index.php
- Larimer County
  - https://www.larimer.org/it/services/gis/digital-data
- Mesa County
  - https://opendata-mesacounty.hub.arcgis.com/datasets/7dd0dcebc31944ba8eea467 c997c3829\_15?geometry=-110.582%2C38.559%2C-105.866%2C39.307
- Pitkin County
  - <u>https://pitkincounty.com/874/Base-Map</u>
- Pueblo County
  - Data requested from <a href="mailto:edgis@pueblocounty.us">edgis@pueblocounty.us</a>, and shapefiles received directly from Robert Deherrera <a href="mailto:robde@pueblocounty.us">robde@pueblocounty.us</a>
- Summit County
  - <u>https://data-summitcountyco.opendata.arcgis.com/search?groupIds=548c92e5e1a</u> <u>f41a09155d6ff7141fba0</u>
- Weld County
  - https://gishub.weldgov.com/datasets/7205d33baa7d48d285bf08c5e9803213\_0?g eometry=-106.670%2C40.137%2C-101.954%2C40.867
- Census precinct shapefiles
  - All other county shapefiles were downloaded from the Census Phase 2 Redistricting data
    - https://www.census.gov/geo/partnerships/pvs/partnership19v2/st08\_co.html

#### 2. Processing steps available?

- Yes
  - VEST's documentation is as follows:
    - Las Animas County precinct assignments in the voter file differ markedly from both the Census VTD boundaries and from maps received from the county. All precincts were revised to match the geocoded voter file and the list of districts assigned to precinct splits. As appropriate, precinct boundaries were revised using Census blocks, the Trinidad municipal boundary shapefile, school district or fire district boundaries, and the parcel shapefile from the Las Animas County Assessor.
    - The following additional revisions were made to match the 2018 precinct boundaries:
      - Logan: Align Sterling City precincts with city limits
      - Montezuma: Precincts renumbered to match county maps
      - Otero: Align La Junta City precincts with county maps
      - Prowers: All precincts adjusted to match county maps
      - Rio Grande: Adjust Precincts 2/3 to match county maps
  - We were able to recreate all of VEST's processing with the exception of some larger changes to Las Animas county and a few one-off precincts that were split unevenly. These precincts are listed in the following section under "precincts with difference larger than 1 km<sup>2</sup>"

#### 3. Able to replicate joining election data and shapefiles?

Yes, with the exception of 2 precincts in Las Animas county, which VEST documented to have substantial changes from the raw shapefiles.

Those Las Animas precincts were: Las Animas 015 and Las Animas 011.

### 4. <u>Able to replicate joining demographic data to block-level shapefiles?</u> N/A

# 5. Able to replicate joining boundary data?

N/A

#### 6. Successfully validated election results?

Yes

• There are 3126 VEST precincts for CO

- All VEST precincts have correct vote totals
- Of those, 1294 have shapefiles identical to the raw data
- However, 2981 precincts have a difference of less than .1 km<sup>2</sup>, which is 95.1% of the precincts
- Additionally, 3089 precincts have a difference of less than 1 km<sup>2</sup>, which is 98.5% of the precincts
- The VEST precincts that differ from the raw shapefiles by more than 1 km<sup>2</sup> are as follows:
  - Arapahoe 365
  - Boulder 918
  - Denver 742
  - Douglas 403
  - Douglas 332
  - El Paso 740
  - Jefferson 047
  - Jefferson 036
  - Larimer 520
  - Larimer 417
  - Larimer 401
  - Pueblo 110
  - La Plata 028
  - La Plata 015
  - Mesa 011
  - Summit 012
  - Elbert 002
  - Elbert 005
  - Summit 008
  - Pitkin 010
  - Pitkin 009
  - Pitkin 001
  - Prowers 011
  - Prowers 005
  - Garfield 024
  - Gunnison 004
  - Gunnison 007
  - Gunnison 008
  - Gunnison 006
  - Gunnison 013
  - Gunnison 005
  - Delta 001
  - Las Animas 012
  - Las Animas 009
  - Las Animas 005

- Las Animas 006
- Las Animas 007
- Las Animas 003
- Las Animas 016
- Las Animas 013
- Las Animas 001
- Las Animas 002
- Las Animas 008
- Las Animas 004
- Las Animas County
  - VEST's Las Animas county precincts underwent significant processing that we were unable to fully recreate, but could very well be correct. We advise anyone seeking to use VEST's data for Las Animas county to reach out to VEST or the Las Animas county officials to confirm that VEST's alterations align with the actual 2018 precincts.