

State Report Template

State: AZ

Organization: MGGG

Date Updated: 7/17/2020

1. Is raw data available? YES

Accessible files:

- Arizona Statewide Precinct Shapefile:
 - 5/22/2020
 - Link listed by MGGG [Boundary file for 2018 General and Primary Elections](#) - Source: Garrett Archer- (Senior Elections Data Analyst at the Arizona Secretary of State)
- Arizona Block-level Shapefile:
 - 5/22/2020
 - Not listed as a source on MGGG's GitHub [TIGER/Line Shapefile, 2017, 2010 state, Arizona, 2010 Census Block State-based](#)
 - Source: Census
- State Precinct-Level Returns 2018:
 - 5/22/2020
 - Link listed by MGGG - [MEDSL repository for official returns for the 2018 Midterm Elections](#)
 - dataset: State Precinct-Level Returns 2018 -- although this is not specified by mggg
- Block level demographic data for the 2010 Decennial Census
 - 5/22/2020
 - Linked: [Census API](#)
- Precinct map from AZ election website:
 - 5/22/2020
 - Linked [Redistricting 2011, La Paz County, Arizona](#)

- MGGG's final AZ shapefile
 - Date accessed: 7/17/2020
 - Link: [mggg-states repo](#)
 - Source: MGGG's Github
- Inaccessible files:
 - N/A

2. Processing steps available?

Yes

- Description of processing steps:
 - 7/9/20
 - Their documentation: "Some very limited merging of precincts in the original shapefile was necessary to join election results. La Paz County precincts were edited to match data provided on the county's election website. Demographic data were aggregated from the block level using MGGG's proration software. Congressional and state legislative district IDs were assigned to precincts also using this package."
 - What steps were completed that aligned with their processing steps?
 - La Paz County precincts were edited to match data provided on the county's election website
 - In that precinct shapefile, La Paz (LP) county has 12 precincts, but the county's election website and tabular election data indicate only 11 precincts
 - -> The Alamo precinct was merged into the Wenden precinct
- Information not in their processing steps:
 - Changed all shapefiles' projection to that of precincts (from Kaggle) for merging
 - This shapefile uses a NAD83/Arizona Central (ft) projection (ESPG:2223).
 - Filtered out elections of interest: Attorney General, Governor, Secretary Of State, State Senate, State Treasurer, US House, and US Senate
 - Pivoted election results table so that we'd have # votes for each election by each county
 - Got block-level demographic data (only variables of interest) and filtered out numbers for AZ (state 04)

3. Able to replicate joining election data and shapefiles?

No

Merging precinct shapefile and tabular election results: got stuck here because most precinct names didn't match (172 names exactly match out of 1489 (from election results) or 1470 (from precinct shapefile) precincts)

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

Yes

- Demographic data were aggregated from the block level using MGGG's proration software.
 - Merged block-level shapefile and demographic data based on blocks' GEOID -- this is where block-level shapefile was useful
 - Aggregated blocks to precincts using `maup`. Now we'd have precinct shapefiles with demographic data

5. Able to replicate joining boundary data?

NA

No additional boundary data were joined

6. Successfully ran validation?

No

Not ready because unable to merge *precinct shapefile and tabular election results* due to precinct names not matching