City Boundaries Project Outline

# **Datasets:**

**Spatial:**

1. 2022 TIGER/Line Zip Code Tabulation Areas
   * File Name: *tl\_2022\_us\_zcta520.shp*
   * Data Source: https://www.census.gov/cgi-bin/geo/shapefiles/index.php?year=2022&layergroup=ZIP+Code+Tabulation+Areas

**Non-Spatial:**

1. US States Cities Database
   * File Name: *uscities.csv*
   * Data Source: https://simplemaps.com/data/us-cities#zip\_method

# **Goal:**

Create city boundary polygons by combining the two datasets.

# **Methodology:**

Combine city names from US States Cities dataset zip codes in 2022 TIGER/Line Zip Code dataset.

Joining criteria:

* US States Cities has **nested** zip codes in [‘zips’] column
* 2022 TIGER/Line Zip Code has zip codes in [‘GEOID20’] column

Steps:

1. Create Pandas data frame for US States Cities dataset.
2. Un-nest [‘zips’] column to have 1 row per zip code.
3. Create geospatially enabled Pandas data frame for 2022 TIGER/Line Zip Code dataset.
4. Merge the datasets together using the **joining criteria**.
5. Clean data.
6. Export result to new polygon shapefile.
7. Dissolve features based on [‘city’] column to create city boundaries.