# **Data Table Schema**

#### chemicals

Data about the measured mean concentration of a particular chemical or substance in community water systems throughout the counties in the United States from 2000 – 2016. ~882,000 rows & 12 columns. Size: ~100MB. Source: Centers for Disease Control and Prevention.

| Field             | Туре    | Description                                 |
|-------------------|---------|---|
| cws_name          | STRING  | Name of community water system              |
| chemical_species  | STRING  | Type of chemical contaminant or particulate |
|                   | STRING  | Classification of contaminant measurement   |
|                   |         | (three types: less than/greater than mean   |
| contaminant_level |         | concentration level, non-detect)            |
| county            | STRING  | County name                                 |
| pws_id            | STRING  | Public water supply identification code     |
|                   | INTEGER | Total population which public water supply  |
| pop_served        |         | serves                                      |
| state             | STRING  | Name of state                               |
| unit_measurement  | STRING  | Measurement units of the contaminant        |
|                   | FLOAT   | Measure contaminant value, in               |
| value             |         | measurement units                           |
| year              | INTEGER | Year of data measured                       |
| fips              | INTEGER | FIPS code for the particular state+county   |
| state_fips        | INTEGER | FIPS code for state                         |

# droughts

Data containing the particular percentage of various range of drought severities, indexed by counties for particular start-end periods throughout the United States. ~1.35 million rows & 11 columns. Size: ~100MB. Source: U.S. Drought Monitor.

| Field                                | Туре    | Description  |
|--------------------------------------|---------|--|
| fips                                 | INTEGER | FIPS code for the particular county  |
| county                               | STRING  | County name  |
| state                                | STRING  | State code (2-letters)   |
| Classification of Droughts (6 total) | FLOAT   | Percentage of population affected by severity of droughts by: no drought (none), D0 = abnormally dry, D1 = moderate, D2 = severe, D3 = extreme, D4 = exceptional  Additional Information |
| valid_start                          | STRING  | Start date of event in form of YYYY-MM-DD  |

| valid_end | STRING | End date of event in form of YYYY-MM- |
|-----------|--------|---------------------------------------|
|           |        | DD                                    |

### earnings

Information about industry-specific median earnings (in that year's USD, inflation adjusted) indexed by counties for all of the United States, taken from 2010 – 2016. 21,999 rows & 31 columns. Size: ~5MB. Source: U.S. Census.

| Field                             | Туре               | Description  |
|-----------------------------------|--------------------|--|
| geo_id                            | STRING             | Particular ID used by U.S. Census  |
| fips                              | INTEGER            | FIPS code of county as (YYZZZ)   |
| county                            | STRING             | Name of county and state in form (county, state)   |
| total_med                         | INTEGER            | Total median earnings in the particular county   |
| Median Industry Income (26 total) | INTEGER/<br>STRING | Specific median earnings for various industries. * There may be instances when the value is "2,500-" or "250,000+" which indicates: '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.  An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.  Additional Description |
| year                              | INTEGER            | Year of data collected   |

## education\_attainment

Data containing the educational attainment of the US population by county from 1970 – 2000 and estimates of 2012 – 2016, based on U.S Census Data & American Community Survey.

16,416 rows & 12 columns. Size: ~2MB. Source: U.S. Department of Agriculture.

| Field                      | Type    | Description   |
|----------------------------|---------|---|
| fips                       | INTEGER | FIPS code of county as (YYZZZ)  |
| state                      | STRING  | State code (2-letter) or country (US)                                   |
| county                     | STRING  | Name of county  |
| year                       | INTEGER | Year in which data was recorded for of form YYYY.                       |
| less_than_hs               | INTEGER | Number of people with less than a high school diploma                   |
| hs_diploma                 | INTEGER | Number of people with only a high school diploma                        |
| some_college_or_associates | FLOAT   | Number of people with some college (1-3 years) or an Associate's degree |

| college_bachelors_or_higher | INTEGER | Number of people with a college or    |
|-----------------------------|---------|---------------------------------------|
|                             |         | Bachelor's degree or higher           |
| Percentages of various      | FLOAT   | Percentage of each respective         |
| educations (4 total)        |         | educational degree as a total of 100. |

# industry\_occupation

Data containing the estimated working population (16 years and over) for the various industries indexed by counties, taken from 2010 – 2016.

5,712 rows & 18 columns. Size: ~0.7MB. Source: U.S. Census.

| Field                         | Туре    | Description                          |
|-------------------------------|---------|--------------------------------------|
| geo_id                        | STRING  | Particular ID used by U.S. Census    |
| fips                          | INTEGER | FIPS code of county as (YYZZZ)       |
| county                        | INTEGER | County                               |
| Various industries (14 total) | INTEGER | Estimated working population in that |
|                               |         | particular industry                  |
| Year                          | INTEGER | Median household income              |

#### water\_usage

Information about particular water usage (irrigation, public supply, crop, etc.) and thermoelectric power generated for counties that were found for the year 2010. 3,225 rows & 23 columns. Size: ~2MB. Source: U.S. Department of the Interior.

| Field                  | Туре    | Description                                   |
|------------------------|---------|---|
| state                  | STRING  | State code                                    |
| state_fips             | INTEGER | FIPS code for state (1-78)                    |
| county                 | STRING  | Name of particular county                     |
| county_fips            | INTEGER | FIPS code for the particular county (001-840) |
| fips                   | INTEGER | Total FIPS of county of form YYZZZ (YY =      |
|                        |         | state_fips, ZZZ = county_fips)                |
| year                   | INTEGER | Year of data in form of YYYY                  |
| population             | FLOAT   | Total population of county, in thousands      |
| Parameters (110 total) | FLOAT/  | Information of various water metrics          |
|                        | INTEGER |   |

## water\_usage\_dictionary

Detailed description of each of the fields with units of measurement.

117 rows & 2 columns Size: 8KB. Source: U.S. Department of the Interior.