

## *SOC 4650/5650: Lab-08 - Accessing Demographic Data*

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### *Directions*

Using data accessed from `tidycensus` and `tigris`, create `.csv` and `.shp` files describing SNAP benefit useage in Missouri and St. Louis County. Your entire project folder system, including data and RMarkdown output, should be uploaded to GitHub by **Wednesday, March 20<sup>th</sup>** at 5:00pm.

### *Analysis Development*

The goal of this section is to create a self contained project directory with all of the data, code, map documents, results, and documentation a project needs. Please ensure **all** required elements are present.

#### *Part 1: Download County Data*

The goal of this section is to be able to create a shapefile with SNAP benefit data for counties in Missouri and one for SNAP benefit data for census tracts in St. Louis.

1. Download the list of variables for the 2017 American Community Survey, and find the variable `B19058_002` - what is its description?<sup>1</sup>
2. Download the data for variable `B19058_002` for each county in Missouri.
3. Download a shapefile of all counties in Missouri that *is not* generalized.
4. Use data cleaning functions to limit and rename columns as necessary, and then join your tabular data to your geometric data before you export them as a shapefile.

<sup>1</sup> *Hint:* Hover your mouse over the field if some of the text is obscured, and the full text will appear as a “tooltip”.

#### *Part 2: Download Census Tract Data*

The goal of this section is to be able to create a shapefile with SNAP benefit data for census tracts in St. Louis.

5. Download the data for variable B19058\_002 for census tracts in St. Louis County (FIPS code is 189).
6. Download a shapefile of all census tracts in St. Louis County (FIPS code is 189) that *is not* generalized.
7. Use data cleaning functions to limit and rename columns as necessary, and then join your tabular data to your geometric data before you export them as a shapefile.