# Exercise Background

You will be working with the American Community Survey (ACS) data provided by the US Census.

[Documentation on how to access and download ACS data can be found here.](https://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html)

# #1. Data Munging and Loading Exercise

In this test example, we’re interested in examining the following key attributes of the Illinois population, **split by geographic location**:

* Sex by Age (only the most aggregated column)
* Race
* Median Household Income In The Past 12 Months (In 2019 Inflation-Adjusted Dollars)
* Total Population
* Types Of Health Insurance Coverage By Age

Download the appropriate files and, using Python (Pandas and Jupyter are great starting points for this), structure all data for the columns above into a single data structure.

**Save this flat file as a CSV as part of your final submission.**

**Save your Python file as part of your final submission.**

# #2. Data Presentation & Visualization Exercise

Using the data you’ve put together up to this point, create a brief “presentation” (PowerPoint, memo, recorded video, etc.) that answers the following prompt:

*“We have a client who wants to increase the number of people in Illinois with their, slightly more expensive/premium, private health insurance. They want to use Upfront’s personalized, omni-channel communication platform to send out messages to people across Illinois, but they don’t want to spam people who aren’t interested in their product.*

*What populations would you recommend they target first, and why?”*

Include at least 2 visualizations/charts as part of your presentation. Feel free to use any data visualization tool you’d like.

**Save the presentation as part of your final submission.**