Los Angeles Out Migration Analysis Tools

This goal of this project was to gain insight on various demographic and economic characteristics of former Los Angeles residents. The primary data source for this information was US census data from IPUMS (<https://usa.ipums.org/usa/index.shtml>).

After discussion on which geographic variables to use, the decision was made to filter by metropolitan area, since smaller geographic units did not yield enough data or were not available for all years covered in this analysis (2006-2017). While one variable sufficed for filtering current metro area of residence (MET2013) two variables were required to filter for previous place of residence (MIGMET1 & MIGPUMA1), due to the new Census methodology for geographic data from 2012 onwards.

Note: After exploring the geographic variables it was discovered that MET2013 essentially categorized Los Angeles metro residents as anyone residing in either Los Angeles or Orange counties. Therefore, the same definition was used in filtering for previous metro area of residence.

The following is a summary of the primary variables used to filter the data:

1. MET2013 (<https://usa.ipums.org/usa-action/variables/MET2013#description_section>):

\*Indicates the metropolitan area an individual *currently* resides in.

- The data were filtered to exclude missing metro data (indicated by the value: 0) and records of *current* LA metro residents (indicated by the value: 31080)

1. MIGMET1 (<https://usa.ipums.org/usa-action/variables/MIGMET1#description_section>)

\*Indicates the county an individual resided in during the previous year.

- The data were filtered to include records of individuals who previously resided in Los Angeles or Orange counties (indicated by the values: 4480 & 4482, respectively)

1. MIGPUMA1 (<https://usa.ipums.org/usa-action/variables/MIGPUMA1#description_section>):

\*Indicates the county an individual resided in during the previous year.

- The data were filtered to include records of individuals who previously resided in Los Angeles or Orange counties (indicated by the values: 3700 & 5900, respectively). This variable is required to use in conjunction with MIGPLAC1, since the values in this variable are not unique to each state.

1. MIGPLAC1 (<https://usa.ipums.org/usa-action/variables/MIGPLAC1#description_section>):

\*Indicates the state an individual resided in during the previous year.

- The data were filtered to only include records of individuals who resided in California during the previous year (indicated by the value: 06).

1. PERWT (<https://usa.ipums.org/usa-action/variables/PERWT#description_section>):

\*Indicates the number of individuals a record represents.

- This variable is required to produce accurate statistical analysis of the data (refer to the jupyter notebooks in the visuals folder for a demonstration on how to use it, such as cell #6 in this one: <https://github.com/CityOfLosAngeles/Data-Angels/blob/master/Fall%202018%20Projects/LA_Outmigration/Visuals/Education.ipynb>)