

# Central Los Angeles Demographic & Ethnic Restaurant Analysis

## A. Introduction

### A.1. Description and Background

Central Los Angeles is a historic urban and cultural diversified region where over 800 thousand residents live in 60 square miles and comprises of 26 neighborhoods. It is a cultural melting pot as the population consists of 46% Latino, 26% white, 16% Asian, and 8% African-American.

Being a cultural diversified community with different ethnicities leads restaurant owners a huge decision that will give them the best odds at success. A cuisine for target consumers at the right location is one of the biggest factors that can make restaurant business successful. As business owners, they would want to choose a neighborhood where the residents are likely to go to a restaurant offering the similar ethnic foods. At the same time, they would want to choose the most populated neighborhood so that it could bring more customers.

In order to provide information and direction to restaurant owners, we can use heat map to represent Central Los Angeles neighborhood demographic where the ethnic restaurant type is placed on the map and clustered according to its density.

### A.2. Data Description

The following data sources are obtained and used in analysis

1. Census Tract Locations (LA) from Neighborhood Data For Social Change : This comma delimited file contains LA neighborhood census track number, GEOID, neighborhood name. It is used as a neighborhood reference table for other data sources
2. Living Wage (2017) from County of Los Angeles Open Data: This comma delimited file contains Los Angeles county median income by GEOID and track number.
3. County of Los Angeles Estimated Population by Census Tract, City Name, Ethnicity, Gender, and Age Group CY 2016 - This json file contains Los Angeles county population by ethnicity, gender, age group by census track number.
4. LA County City Boundaries from ArcGIS Hub - this json file contains coordinates of LA county city boundaries. It is used to draw the neighborhood map
5. Foursquare venue explore API - it is used to explore restaurants proximity to the center coordinates of each neighborhood.