# **The Battle of Neighborhoods**[**¶**](https://dataplatform.cloud.ibm.com/data/jupyter2/runtimeenv2/v1/wdpx/service/notebook/conda2py36f3bf5f155f724e9ba653e394230f24d1/dsxjpy/SQMZNIfFwnNFqKIPTrxG7A:0fbw45T2f_7muMFfijBwJ4DnqbJ58FYhJWafM7_4vGCkYtOM4tWEvSe3l_heeQUTC9NWzaU/container/notebooks/7fe146b1-3863-48fc-aff9-e087d3840c38?api=v2&project=f3bf5f15-5f72-4e9b-a653-e394230f24d1#The-Battle-of-Neighborhoods)

## **Opening Chinese Restaurants in Sacramento, CA**

### **Introduction/Business Problem**

#### **Background Information**

Sacramento is the most populous city in Sacramento County and is known as the capital city of the state of California. Sacramento is located at the following coordinates: 38.5816° N, 121.4944° W. With an estimated population of 513,625, it is the sixth-largest city in California with the population divided up into 4 neighborhoods.

* Area 1
* Area 2
* Area 3
* Area 4

#### **Problem**

In this project, because Sacramento is such an ethnically diverse city, as suggested by Time magazine, I want to investigate if there are any locations that should open Chinese restaurants and whether or not there is a need for it.

#### **Interest**

Anyone who wants to open a new venue in any geographic location may be interested in this project by modifying search criteria.

### **Data**

#### **Data Sources**

To consider the problem we can list the following data sources, noted below:

* I get neighborhood data of Sacramento from Wikipedia
* I use python geocoder library to get geographical coordinates of neighborhoods
* I use the Foursquare API venues explore method to get the venues of given neighborhoods of Sacramento
* I use the Foursquare API venues method to get ranks and likes of restaurants by given venue id

#### **Feature Selection and Data Usage**

I will use neighborhood location values to analyze the Sacramento geographical structure. I will use the folium library of python to draw maps by using given latitude and longitudes of neighborhoods. Selected features will be as below.

I will use populations of neighborhoods who have big populations who may need a new restaurant.

I will also classify neighborhoods by using venues distribution and counts. In this way, I will find similarities of counties which will help me choose locations for opening a new restaurant. Similar structured counties may handle the same type of venues.

I will use the venue list category to find the distribution of restaurants and Chinese restaurants in neighborhoods.

I will also use ratings and likes of restaurants in the area. It may help me to find locations with bad rating restaurants which may need a new restaurant.