

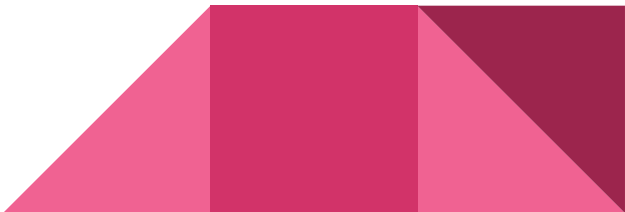


# Identifying Neighborhoods to locate a new Mexican Restaurant

# Business Problem

New York city is the financial headquarters of United States with high density of people and restaurants spread out across the various neighborhoods. Given the number of businesses operating in such a small area, it is not easy to pick areas for locating a business.

Problem - Mexican restaurant franchisee would like to open up a new restaurant in the Manhattan Borough of New York city. The restaurateur has asked us to recommend neighborhoods within Manhattan that they should focus on for identifying the next location for their restaurant.



# Approach

Analyze the neighborhoods within Manhattan Borough with these two primary goals:

- More restaurants indicate more customer traffic in the area
- Less Mexican restaurants indicates less competition for the client



# Data acquisition

New York neighborhood data was scrapped from  
[https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)

Number of total restaurants and number of Mexican Restaurants for Manhattan Borough was obtained using Foursquare API

Borough Boundary data was scrapped from New York city website:  
<https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>



# Methodology

**Step 1** - Focus on the top 25 Neighborhoods - based on total number of restaurants. Once we have a list of the neighborhoods, we will count the number of Mexican Restaurants in each neighborhood.

**Step 2** - To ensure that we identify areas with the most potential, we will cluster these neighborhoods using K-cluster.

**Step 3** - Finally Map these clusters to give a better visual picture of where the opportunities lie.



# Analysis

- **TOTAL**
  - 40 Neighborhoods
  - 1653 restaurants
  - 110 Mexican restaurants
- **TOP 25 NEIGHBORHOODS**
  - Avg number of restaurants per neighborhood - 55
  - Avg number of Mexican restaurants - 3
  - Maximum number of restaurants - 76
  - Maximum number of Mexican restaurants - 7



# Clusters

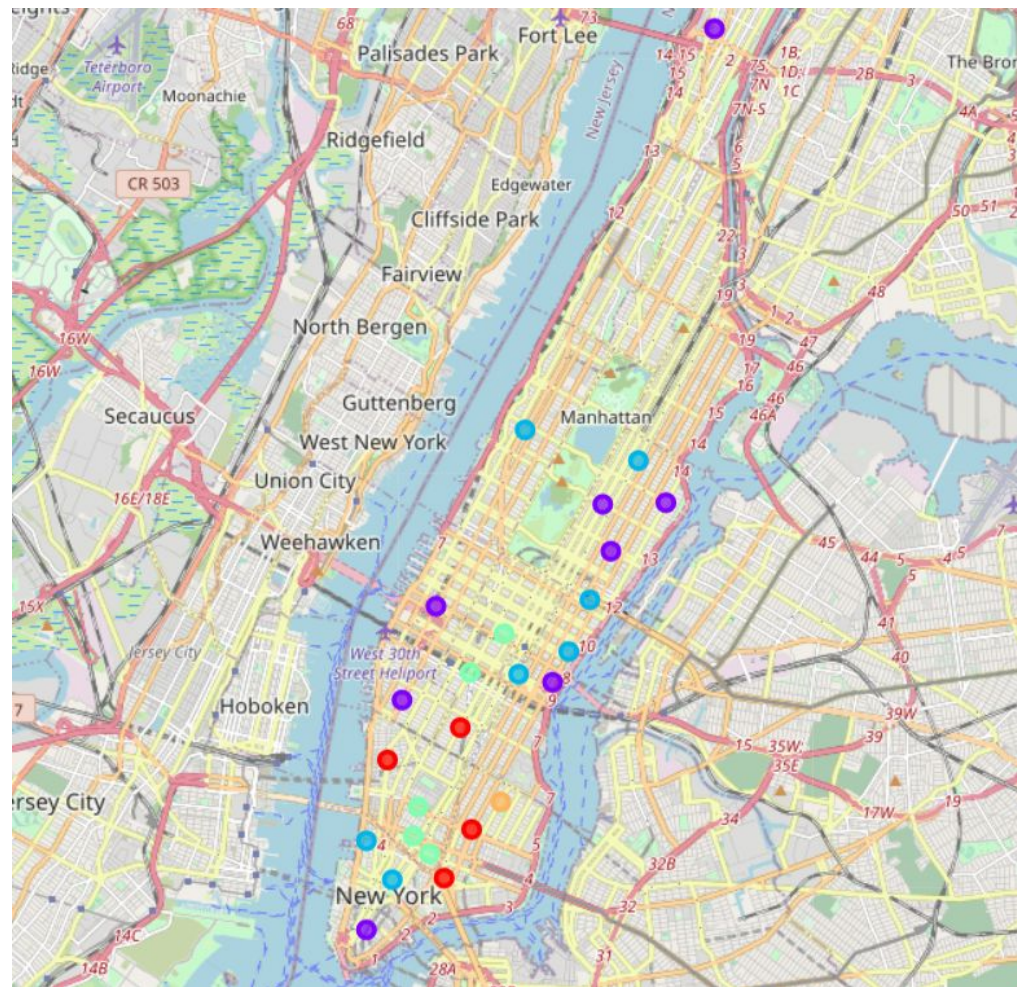
Cluster 0 - 4 neighborhoods

Cluster 1 - 8 neighborhoods

Cluster 2 - 7 neighborhoods

Cluster 3 - 5 neighborhoods

Cluster 4 - 1 neighborhood



# Recommended Area

Area between 23rd Street and Canal Street

The characteristics of the area:

- High Total No. of restaurants
- Fewer Mexican establishments

