

Mexican Restaurant In NYC

Introduction

New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States with a long history of international immigration. New York City was home to nearly 8.5 million people in 2018, accounting for over 40% of the population of New York State and a slightly lower percentage of the New York metropolitan area, home to approximately 23.6 million. Over the last decade the city has been growing faster than the region. The New York region continues to be by far the leading metropolitan gateway for legal immigrants admitted into the United States.

This final project explores the best locations for Mexican restaurants throughout the city of New York. As New York is the most diverse city in the world (800 languages are spoken in New York), it has a long tradition of different ethnical restaurants. Mexican restaurants have become extremely popular, as they offer a wide variety of dishes and specially tacos. Tacos is the big reason Americans love a Mexican place because it is something different than an American burger. Tacos can be prepared in so many different ways and other Mexican dishes are also extremely popular. Americans loves margaritas and tequila so that's why potentially the owner of a Mexican restaurant can have great success and consistent profit. However, as with any business, opening a new restaurant requires serious considerations and is more complicated than it seems from the first glance. In particular, the location of the restaurant is one of the most important factors that will affect whether it will have success or a failure. So, our project will attempt to answer the questions “Where should the investor open a Mexican Restaurant?” and “Where should I go If I want great Mexican food?”

Data

In order to answer the above questions, data on New York City neighborhoods, boroughs to include boundaries, latitude, longitude, restaurants, and restaurant ratings and tips are required.

New York City data containing the neighborhoods and boroughs, latitudes, and longitudes will be obtained from the data source: https://cocl.us/new_york_dataset

All data related to locations and quality of Mexican restaurants will be obtained via the FourSquare API utilized via the Request library in Python.

Methodology

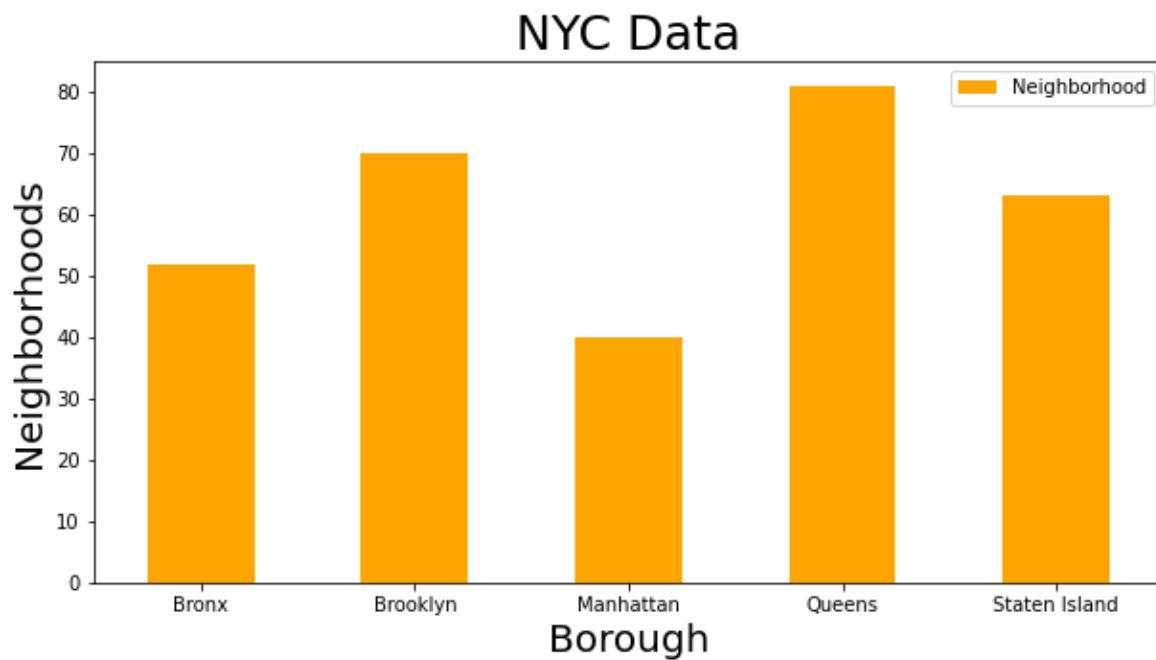
- Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a dataframe.
- FourSquare be used to locate all venues and then filtered by Mexican restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- Data will be sorted based on rankings.
- Finally, the data be will be visually assessed using graphing from Python libraries.

Problem Statement

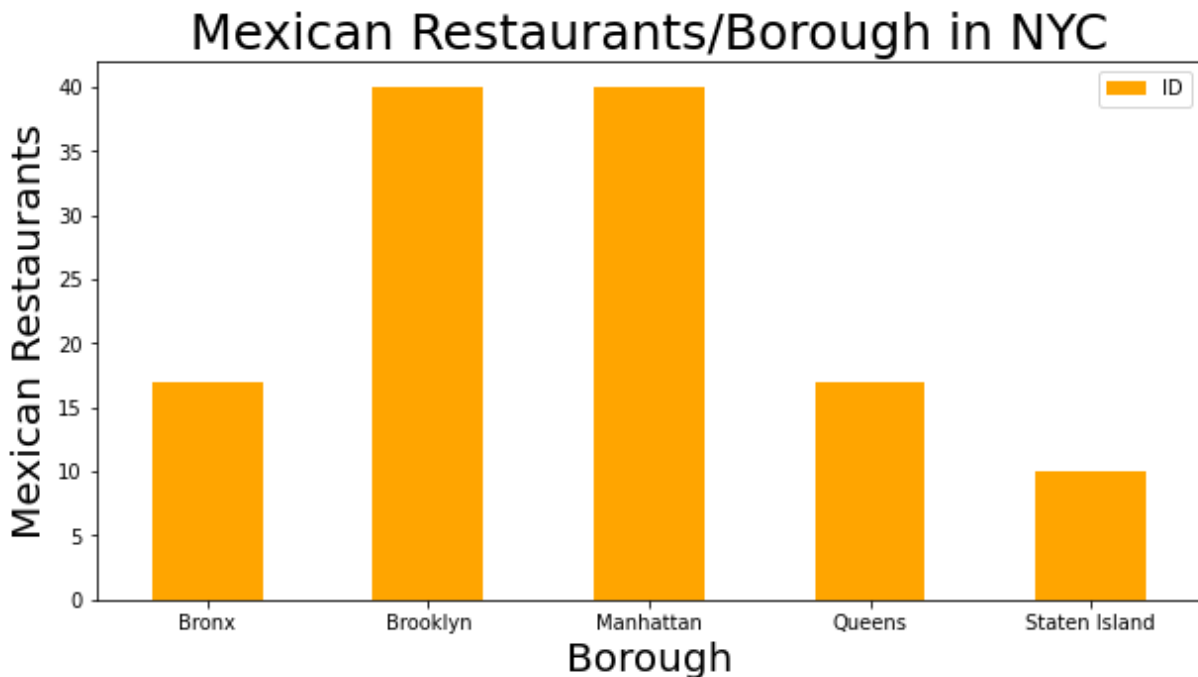
1. What is / are the best location(s) for Mexican restaurant in New York City?
2. In what Neighborhood and/or borough should the investor open a Mexican restaurant to have the best chance of being successful?
3. Where would I go in New York City to have the best Mexican food?

Analysis

We will start analyzing all neighborhoods in NYC.

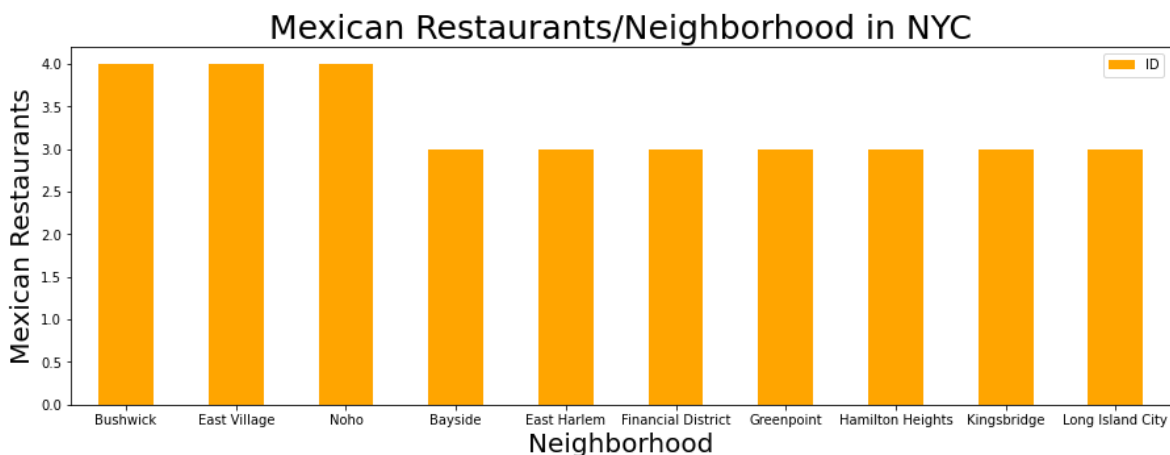


Next, we will visualize the number of Mexican Restaurants per Borough.



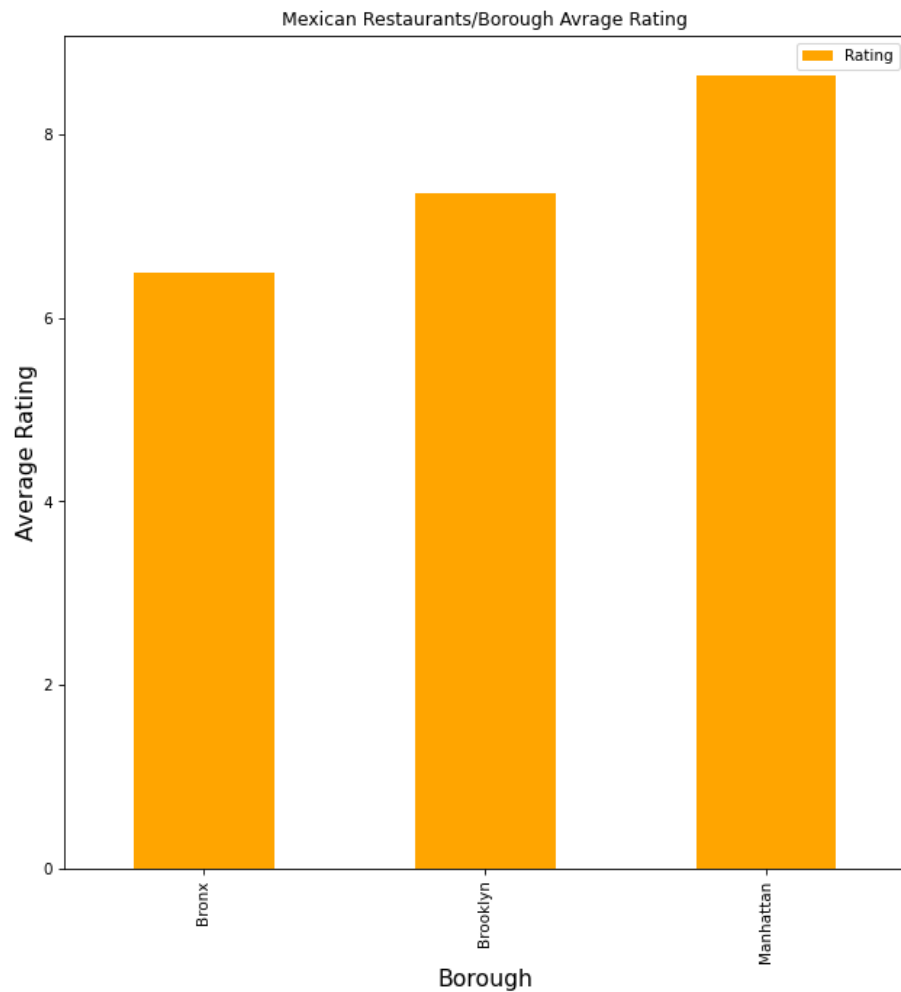
Although Queens has the most neighborhoods Manhattan and Brooklyn managed to have the most Mexican Restaurants with a total of 40 each. Based only on this information we can say that Manhattan and Brooklyn should be our place to open a new restaurant. Doing more research, in tie for third place is Queens & Bronx with more than 15. These Boroughs will be the "top 3" options.

Next, we will visualize the number of Mexican Restaurants per Neighborhood.



As for the neighborhoods we have that Bushwick, East Village and Noho are the ones with more restaurants (4), so although Manhattan and Brooklyn are tied with 40 Restaurants each, since Noho & East Village are from Manhattan, Manhattan would be the best Borough for opening a new Mexican Restaurant based on this information.

Next, we will visualize the number of Mexican Restaurants per Borough Average rating.



Further analysis leads us that Manhattan has the best Average rating for Mexican restaurants, second place Brooklyn and third place the Bronx, I must note that this last information was limited to only 50 ratings from 306 restaurants, it is a very small sample from the total restaurants but due to Foursquare limited calls these is the most information I can gather with a free account.

With that said, some valuable information that we need to note here is that although Manhattan is always in first place based in these data, the restaurants with the most likes and best tips are the ones from Brooklyn, and as a matter of fact the BEST Mexican restaurant was rated with 9.1 and this restaurant was from the Bronx, who is in third place on average.

Shown in next figure:

```
[26]: # Restaurant with maximum Likes
mexican_stats_nyc.iloc[mexican_stats_nyc['Likes'].idxmax()]

[26]: Borough                Brooklyn
      Neighborhood          Greenpoint
      ID                5ae8ed8eb3c961002b3360da
      Name                Oxomoco
      Likes                250
      Rating                9
      Tips                54
      Name: 17, dtype: object

[27]: # Restaurant with maximum Ratings
mexican_stats_nyc.iloc[mexican_stats_nyc['Rating'].idxmax()]

[27]: Borough                Bronx
      Neighborhood          Parkchester
      ID                4b4929d2f964a520656826e3
      Name                Taqueria Tlaxcali
      Likes                131
      Rating                9.1
      Tips                73
      Name: 7, dtype: object

[28]: # Restaurant with maximum Tips
mexican_stats_nyc.iloc[mexican_stats_nyc['Tips'].idxmax()]

[28]: Borough                Brooklyn
      Neighborhood          South Side
      ID                430d0a00f964a5203d271fe3
      Name                Taco Chulo
      Likes                209
      Rating                7.9
      Tips                88
      Name: 46, dtype: object
```

Some additional information would lead us to final conclusions.

Manhattan is the most densely populated of New York City's 5 boroughs. It's mostly made up of Manhattan Island, bounded by the Hudson, East and Harlem rivers. Among the world's major commercial, financial and cultural centers, it's the heart of "the Big Apple." Its iconic sites include skyscrapers such as the Empire State Building, neon-lit Times Square and the theaters of Broadway. (Google,2020)

Brooklyn is a borough of New York City, co-extensive with Kings County, in the U.S. state of New York. It is the most-populous county in the state, the second-most densely populated county in the United States, and New York City's most populous borough, with an estimated 2,648,403 residents in 2020. (Google, 2020)

Although Our

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Based only on these data we can conclude that Manhattan should be the best choice for opening a restaurant, further analysis needs to be done in order to get the whole data and make a better decision for the investor.