# **Battle of Neighborhoods**

### **Final Report**

### Introduction

This final project explores the best locations for Indian restaurants throughout the city of New York. Food Business News stated that worldwide pasta sales were up for the second year in a row with the United Sates holding the largest market (Donley, 2018). New York is a major metropolitan area with more than 8.4 million (Quick Facts, 2018) people living within city limits. The history and the way of life of New York Indians was profoundly affected by newcomers to the area. The indigenous people had occupied the land thousands of years before the first European explorers arrived. The Europeans brought with them new ideas, customs, religions, weapons, transport (the horse and the wheel), livestock (cattle and sheep) and disease which profoundly affected the history of the Native Indians. With almost 400,000 inhabitants reporting Indian ancestry, the need to find and enjoy Indian cuisine is on the rise. This report explores which neighborhoods and boroughs of New York City have the most as well as the best Indian restaurants. Additionally, I will attempt to answer the questions "Where should I open an Indian Restaurant?" and "Where should I stay If I want great Indian 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: <a href="https://cocl.us/new\_york\_dataset">https://cocl.us/new\_york\_dataset</a>

New York City data containing neighborhood boundaries will be obtained from the data source: <a href="https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm">https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm</a>

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

## Methodology

Data will be collected from <a href="https://cocl.us/new\_york\_dataset">https://cocl.us/new\_york\_dataset</a> and cleaned and processed into a dataframe.

FourSquare will be used to locate all venues and then filtered by Italian 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 will be visually assessed using graphing from various Python libraries.

#### **Results**

- Fort Greene and Chelsea have the best rated Indian restaurants on average.
- Staten Island and The Bronx have the least amount of Indian restaurants per borough.
- However, of note, Clinton Hill is the neighborhood in all of NYC with the most Indian Restaurants.
- Despite all others having the least number of neighborhoods in all five boroughs, it has the most Indian restaurants.
- Based on this information, I would state that Manhattan and Brooklyn are the best locations for Indian cuisine in NYC.
- To have the best shot of success, I would open an Indian restaurant in Bronx. Bronx has multiple neighborhoods with average ratings exceeding 8.0 of a scale of 1.0 to 10.0 and has the least number of Indian restaurants making competition easier than in other boroughs.
- Finally, I would go to Midtown in Manhattan for the best Indian food based on 834 likes.

### **Discussion**

As a final note, all of the above analysis is depended on the adequacy and accuracy of Four Square data. A more comprehensive analysis and future work would need to incorporate data from other external databases.

### **Conclusion**

From the results above we have answered all the Problem statements regarding Indian Restaurants in New York.