

# Capstone Project - The Battle of Neighborhoods

## Introduction

New York is the most densely populated major city in the United States. There are almost 20 million people in its metropolitan area; it is one of the world's most populous megacities.

Cuban American populations is a significant community throughout the United States. There is a population of 141,250 for the Cuban community in the New York metropolitan area, which is the largest Cuban community outside Florida.

New York City has been described as the cultural capital of the world. The diverse is incorporated in every aspect.

Today, we will see whether Cuban cuisine plays a crucial role in the restaurant industry in New York City. Which neighborhood is the best location to visit for a Cuban Restaurant?

If you want to open a Cuban restaurant, which location should you choose to have the best chance of being successful?

If you are traveling to New York City, where would you go to have the best Cuban food?

## Data:

1. **New York City data:** [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)

We use the above data to explore the neighborhoods of New York City. The data source contains information include boroughs, neighborhoods, latitudes, and longitudes.

## 2. Foursquare API:

We use Foursquare API to obtain all venues in the New York City. Then from those venues, we find all Cuban Cuban Restaurant information in the New York City.

3. **GeoSpace data:** <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>

The geospace data allows us to get the New York Borough boundaries, which could help us to get a visual choropleth map.

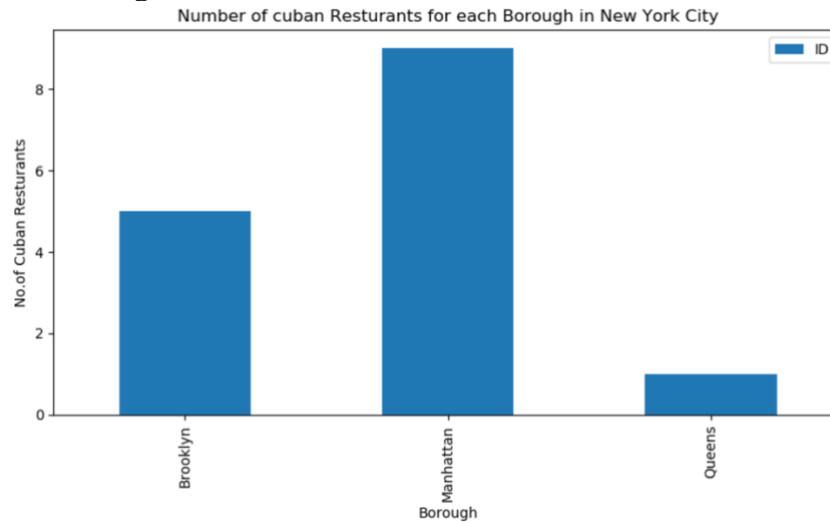
## Methodology:

- Collect the New York City data from [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)
- Use FourSquare API to find all venues for each neighborhood, and see all ventures that are Cuban Restaurant
- Use FourSquare API, to find the Cuban Restaurant with the best rating, tips and like count
- Sort the data and identify the neighborhoods with an average rate over 8.3

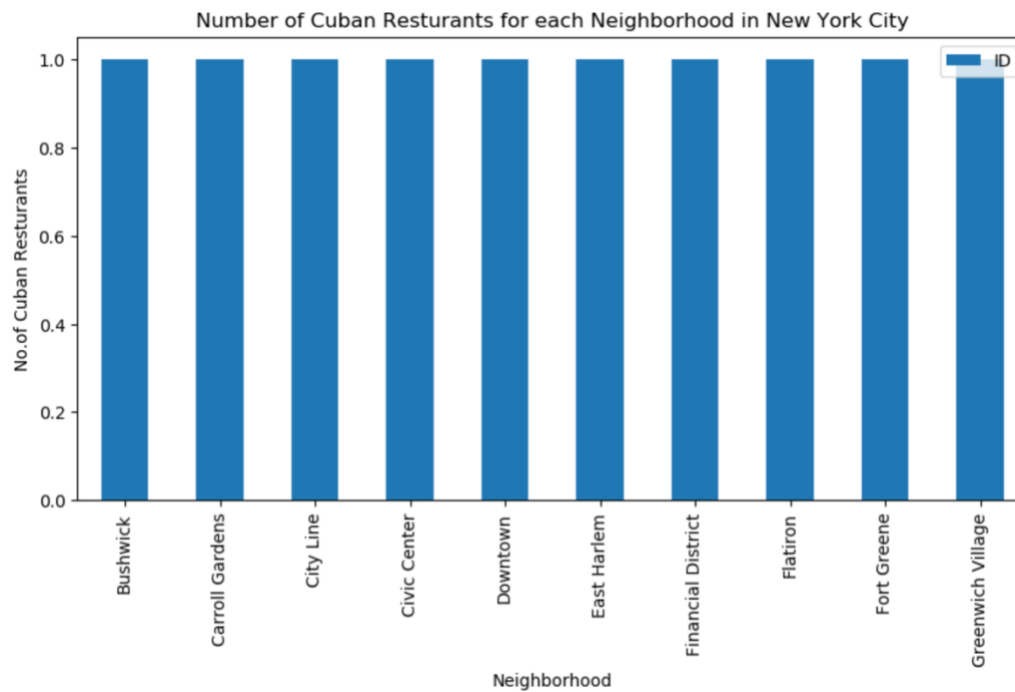
- Visualize the regions using folium library

## Results:

1. There are not many Cuban Restaurants in the New York City (15 in total).
2. Manhattan has the largest number of Cuban Restaurant.



3. All Cuban restaurants are evenly distributed in all neighborhoods.



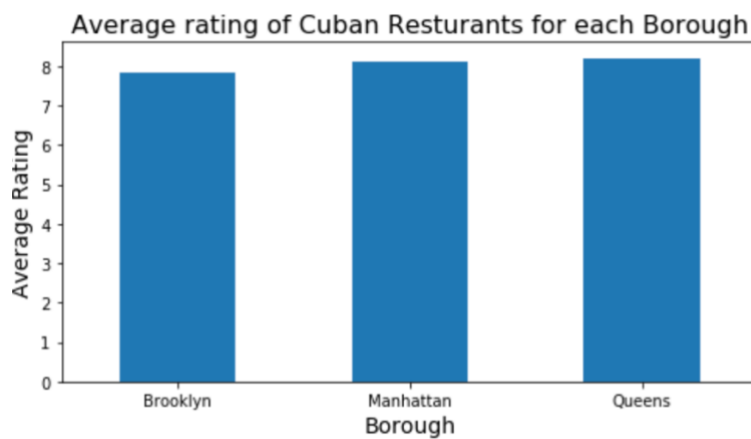
4. Most existing Cuban restaurants have a good rate, with a average rate of 8.02

	Borough	Neighborhood	ID	Name	Likes	Rating	Tips
0	Brooklyn	Bushwick	5b392628336273003994f438	Millie's Cuban Cafe	17.0	8.2	10.0
1	Brooklyn	Carroll Gardens	55d8f517498e3658c1387428	Cubana Cafe	70.0	7.8	17.0
2	Brooklyn	Fort Greene	42d1b680f964a5200b261fe3	Habana Outpost	779.0	8.5	249.0
3	Brooklyn	Downtown	50478b43e4b05a8c89d8198c	Sophies Cuban Cuisine	97.0	8.4	27.0
4	Brooklyn	City Line	4d978a6c61a3a1cde451b842	El Castillo De Jagua	3.0	6.5	2.0
5	Manhattan	Manhattanville	50cd10ffe4b0981e0a1a1c9e	Harlem's Floridita	59.0	6.7	39.0
6	Manhattan	East Harlem	4a6908c3f964a5207ecb1fe3	Amor Cubano	112.0	7.9	93.0
7	Manhattan	Lenox Hill	542c3100498e17795d2fc676	Sophie's Cuban Cuisine	49.0	8.1	11.0
8	Manhattan	Midtown	4ce5648a5fce5481ba5e5baa	Sophie's Cuban Cuisine	184.0	9.0	81.0
9	Manhattan	Murray Hill	4ac3af5f964a5205c9c20e3	Sophie's Cuban Cuisine	114.0	7.8	41.0
10	Manhattan	Greenwich Village	425f0400f964a52007211fe3	Cuba	427.0	8.5	169.0
11	Manhattan	Financial District	4a82f013f964a52096f91fe3	Sophie's Cuban Cuisine	117.0	8.1	59.0
12	Manhattan	Civic Center	4b311e89f964a520890025e3	Sophie's Cuban Cuisine	112.0	8.3	60.0
13	Queens	Hunters Point	4bddab2effdec928edece5a1	Madera Cuban Grill & Steakhouse	82.0	8.2	63.0
14	Manhattan	Flatiron	4ad64e3f964a520700621e3	Sophie's Cuban Cuisine	201.0	8.5	82.0

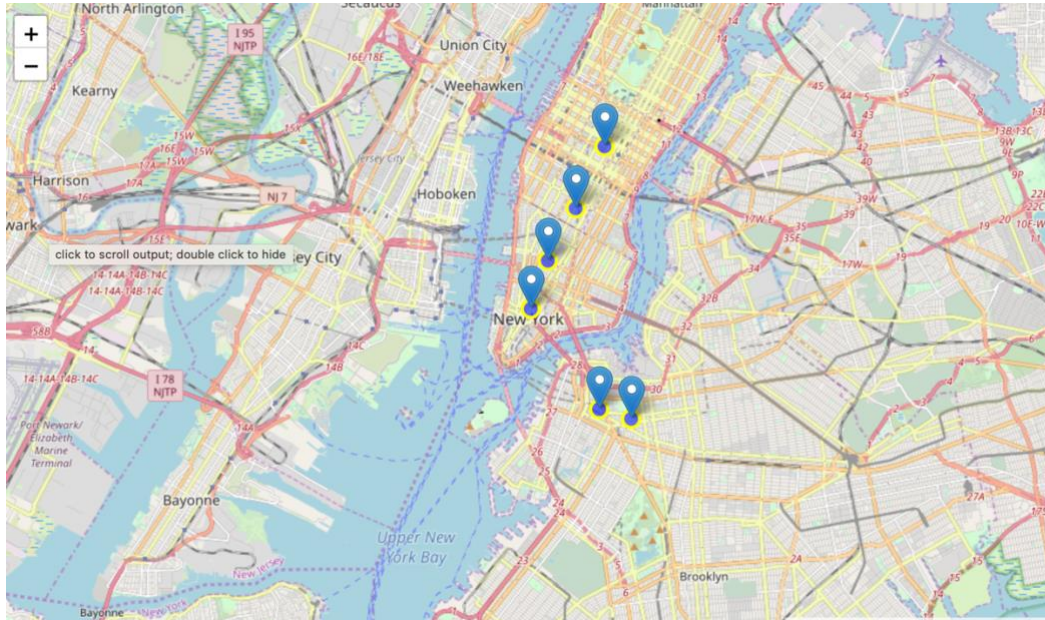
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cuban_rest_stats_ny.describe()
```

	Likes	Rating	Tips
<b>count</b>	15.000000	15.000000	15.000000
<b>mean</b>	161.533333	8.020000	66.866667
<b>std</b>	198.389540	0.667832	65.967380
<b>min</b>	3.000000	6.500000	2.000000
<b>25%</b>	64.500000	7.850000	22.000000
<b>50%</b>	112.000000	8.200000	59.000000
<b>75%</b>	150.500000	8.450000	81.500000
<b>max</b>	779.000000	9.000000	249.000000

5. Compared to other boroughs, Cuban Restaurants in Manhattan has a slice higher rating rate.



## 6. Overall, Manhattan has the best Cuban restaurants



### Discussion:

Currently, there are not many Cuban restaurants in New York City. Cuban restaurants are not the major players in the restaurant industry. However, the rating for the existing Cuban restaurants is excellent, especially in Manhattan. I recommend that Cuban restaurant owners consider opening new restaurants in the Manhattan area.

Due to the limit number of the total sample size, the accuracy of data depends on the Four Square data.

### Conclusion:

Manhattan has an excellent potential Cuban Restaurant Market, and it is the best place to go if you want to try some good Cuban food.