

## Introduction

The primary objective of the project is going to determine the best possible location to increase the chance of success of a restaurant located in New York. The name of the restaurant is going to be Ellington's and is going to be a bistro & bar and will have as its main concept a jazz experience.

To determine the best location the Foursquare API will provide information about each neighborhood and its venues.

Considerations:

- Locations that already have a great concentration of the target customer
- People with a high or medium high disposable income
- Zone price (costs)
- Proximity to other businesses with similar characteristics to Ellington's (Foursquare API venues)
  - Jazz Club
  - Piano Bar
  - Mexican Restaurant
  - Paella Restaurant
  - Sushi Restaurant
  - Steakhouse
  - Café
  - Seafood Restaurant
  - Bar
  - Bistro
  - Cocktail Bar
  - Gay Bar
  - Wine Bar
  - Whisky Bar

## Data

By doing some research online it is found that the target customer of these kind of restaurant is people between 25 and 45. These observations help narrow the search of locations with a high concentration of these kind of customer.

To find the highest concentration of the target customer the NYC open data webpage will be used. Inside the page we will use the following data frames:

### **New York City Population by Borough, 1950 – 2040 data frame**

The data frame contains information about NY boroughs, years population and share of NY population.

Age ...	Boro...	1950	1950 ...	1960	1960 ...	1970	1970 ...	1980	1980 ...	1990	1990 ...
Total Pop...	NYC Total	7,891,957	100%	7,781,984	100%	7,894,862	100%	7,071,639	100%	7,322,564	100%
Total Pop...	Bronx	1,451,277	18.39%	1,424,815	18.31%	1,471,701	18.64%	1,168,972	16.53%	1,203,789	16.44%
Total Pop...	Brooklyn	2,738,175	34.7%	2,627,319	33.76%	2,602,012	32.96%	2,230,936	31.55%	2,300,664	31.42%
Total Pop...	Manhattan	1,960,101	24.84%	1,698,281	21.82%	1,539,233	19.5%	1,428,285	20.2%	1,487,536	20.31%
Total Pop...	Queens	1,550,849	19.65%	1,809,578	23.25%	1,986,473	25.16%	1,891,325	26.75%	1,951,598	26.65%
Total Pop...	Staten Isl...	191,555	2.43%	221,991	2.85%	295,443	3.74%	352,121	4.98%	378,977	5.18%

## Projected Population 2010-2040 - Total by Age Groups

The data frame contains information about the age group and years population according to a specific age group.

Borough	Age	2010	2015	2020	2025	2030	2035	2040
NYC Total	0-4	521,990	535,209	545,778	547,336	542,426	540,523	546,426
NYC Total	15-19	539,844	505,783	492,532	519,298	535,024	546,062	546,750
NYC Total	20-24	647,483	646,075	606,203	591,683	625,253	643,728	657,403
NYC Total	25-29	736,105	770,396	763,956	715,824	698,195	740,437	762,757
NYC Total	30-34	667,657	707,726	743,916	740,268	693,684	675,497	715,486
NYC Total	35-39	592,299	611,239	649,594	684,249	682,964	639,237	621,899
NYC Total	40-44	571,825	550,097	569,628	606,185	638,148	637,517	596,493
NYC Total	45-49	570,273	535,998	517,668	537,516	571,723	600,792	600,514
NYC Total	50-54	546,204	552,074	520,597	504,322	523,815	556,586	584,164
NYC Total	55-59	479,661	493,997	501,239	474,319	459,574	477,052	506,390
NYC Total	60-64	418,127	449,279	464,187	472,842	447,688	434,046	450,353
NYC Total	65-69	299,533	353,131	380,864	395,585	403,234	382,256	370,119
NYC Total	70-74	236,401	256,786	304,072	330,132	342,704	350,069	331,544

To get the New York data from the boroughs and neighborhoods the JSON file provided in the **Segmenting and Clustering Neighborhoods in New York City**.

```
▼ root:
  type: "FeatureCollection"
  totalFeatures: 306
  ▼ features: [ ] 306 items
    ▼ 0:
      type: "Feature"
      id: "nyu_2451_34572.1"
      ► geometry:
        geometry_name: "geom"
      ▼ properties:
        name: "Wakefield"
        stacked: 1
        annoline1: "Wakefield"
        annoline2: null
        annoline3: null
        annoangle: 0
        borough: "Bronx"
      ▼ bbox: [ ] 4 items
        0: -73.84720052054902
        1: 40.89470517661
        2: -73.84720052054902
        3: 40.89470517661
```

To get the data from the cost and incomes of the borough the United States Census Bureau webpage will be used. From the generated table the data will be pulled.

Table

All Topics	New York County (Manhattan Borough), New York	Bronx County (Bronx Borough), New York	Queens County (Queens Borough), New York	Kings County (Brooklyn Borough), New York	Richmond County (Staten Island Borough), New York	New York city, New York
Housing units, July 1, 2019, (V2019)	892,878	537,232	869,400	1,065,399	181,751	X
PEOPLE						
Population						
Population estimates, July 1, 2019, (V2019)	1,628,706	1,418,207	2,253,858	2,559,903	476,143	8,336,817
Population estimates base, April 1, 2010, (V2019)	1,586,381	1,384,580	2,230,619	2,504,721	468,730	8,175,031
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	2.7%	2.4%	1.0%	2.2%	1.6%	2.0%
Population, Census, April 1, 2020	X	X	X	X	X	X
Population, Census, April 1, 2010	1,585,873	1,385,108	2,230,722	2,504,700	468,730	8,175,133
Age and Sex						
Persons under 5 years, percent	△ 4.7%	△ 7.1%	△ 6.1%	△ 7.1%	△ 5.7%	△ 6.5%
Persons under 18 years, percent	△ 14.3%	△ 24.6%	△ 20.0%	△ 22.7%	△ 21.8%	△ 20.8%
Persons 65 years and over, percent	△ 17.0%	△ 13.3%	△ 16.3%	△ 14.4%	△ 16.7%	△ 14.5%
Female persons, percent	△ 52.6%	△ 52.8%	△ 51.5%	△ 52.6%	△ 51.4%	△ 52.3%
Race and Hispanic Origin						
White alone, percent	△ 64.6%	△ 44.7%	△ 47.8%	△ 49.8%	△ 74.5%	△ 42.7%
Black or African American alone, percent (a)	△ 17.8%	△ 43.6%	△ 20.7%	△ 33.8%	△ 11.6%	△ 24.3%
American Indian and Alaska Native alone, percent (a)	△ 1.2%	△ 2.9%	△ 1.3%	△ 0.9%	△ 0.7%	△ 0.4%
Asian alone, percent (a)	△ 12.8%	△ 4.6%	△ 26.9%	△ 12.7%	△ 10.9%	△ 14.1%
Native Hawaiian and Other Pacific Islander alone, percent (a)	△ 0.2%	△ 0.4%	△ 0.2%	△ 0.1%	△ 0.1%	△ 0.1%

## Data Resources

- <https://www.census.gov/quickfacts/fact/table/newyorkcountymanhattanboroughnewyork,bronxcountybronxboroughnewyork,queenscountyqueensboroughnewyork,kingscountybrooklynboroughnewyork,richmondcountystatenislandboroughnewyork,newyorkcitynewyork/HSG010219>
- <https://data.cityofnewyork.us/City-Government/New-York-City-Population-by-Borough-1950-2040/xywu-7bv9>
- <https://data.cityofnewyork.us/City-Government/Projected-Population-2010-2040-Total-By-Age-Groups/97pn-acdf>

## RESOURCES

- <https://ranktoday.com/20-things-to-consider-before-opening-a-restaurant/>
- <https://www.entrepreneur.com/article/73384>
- <https://www.inc.com/jeff-haden/how-to-find-the-perfect-location-for-a-new-restaurant-6-ways.html>
- <https://fitsmallbusiness.com/choose-a-restaurant-location/>