



Exploring the Distribution of Boxing Gyms in New York.

BY: OMARO TAYLOR

Background

- ▶ Boxing is a long-standing, traditional sport that has always been a staple of our sports community.
- ▶ The boxing fraternity does have a challenge where boxing interests have taken a dip since the beginning of the 20th century.
- ▶ The boxing fraternity does have a challenge however, since the beginning of the 20th century, boxing has become a bit lacklustre to say the least and has lost much of the public's interest, resulting in more expressive combat sports.
- ▶ There has been a spike of interest in boxing over the past 3 years wrought about by the YouTube community, bringing about a well-needed revival to boxing's popularity.

Problem

- ▶ For the owners of boxing gyms, this may very well be a breath of fresh air as business were having difficulties to reaching out to new customers due to the fall of interest towards the sport.
- ▶ Additionally, boxing gyms have been significantly affected due to the Covid-19 outbreak, therefore owners need to find a way to not only bounce back, but to also expand.
- ▶ However, a method does not exist where they can be able to visualize the distribution of boxing gyms throughout the state in order to determine the best location for the next site.

Interest

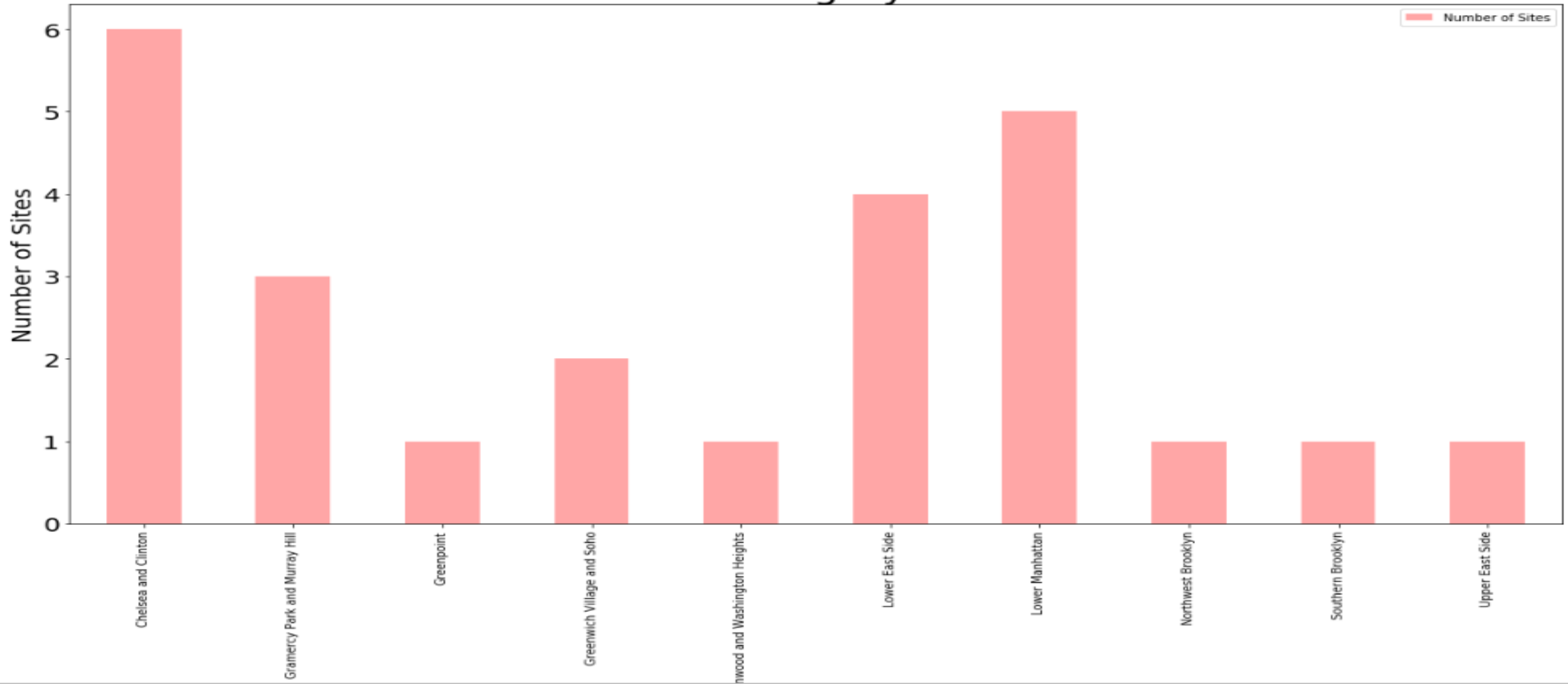
- ▶ This research is targeted towards both current and aspiring boxing gym owners who are aiming to get business afloat after the pandemic passes.

Data Cleaning

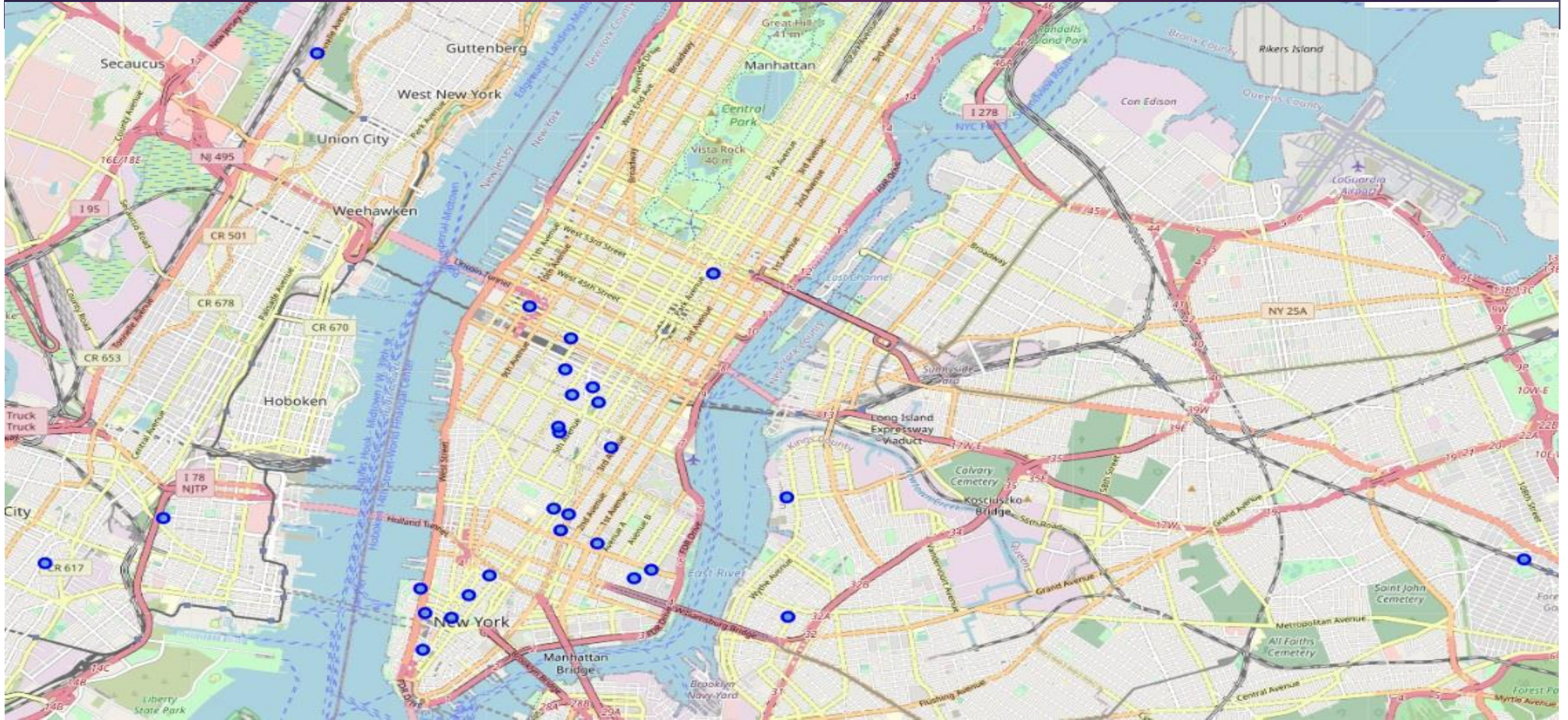
- ▶ The data retrieved from the Foursquare API was in the form of a json file (dictionary format) .
- ▶ This file was then transformed into a data frame that displays the boxing gyms that are present in New York.
- ▶ Several columns were dropped as they were not relevant for the analysis, leaving us with the site's **name**, **postal code**, **longitude** and **latitude**.
- ▶ As there was a need to sort these gyms into different communities, another data set will need to be utilized to fill in the communities. This was done by leveraging data scraped from the New York State Department of Health's Website.

Exploratory Data Analysis

Distribution of Boxing Gyms in New York.



Exploratory Data Analysis



Results/ Observations

- ▶ The data returned has been frankly underwhelming, as there was a mere 30 gyms within the entirety of New York.
- ▶ This has limited the level of exploratory analysis that was sought to be performed.
- ▶ Out of 150 communities within New York, only 10 have operating boxing gyms.
- ▶ Chelsea and Clinton, Lower Manhattan and Lower East Side have come out on top as the communities that have the highest concentration of boxing gyms.
- ▶ Northwest Brooklyn, Southern Brooklyn, Upper East Side, Green Point, Inwood and Washington Heights follow as communities that have lower numbers of gyms, ranging from 1 to 3 gyms at best per community.

Recommendations

- ▶ From a business perspective, it may be best to avoid areas that is already saturated with competition, like those listed above, as it will be a bit tough to get ahead unless owners have something new to offer to the arena.
- ▶ In the same breath, starting in a totally untouched neighbourhood may be just as risky as there's no means to properly gauge the interest of target audiences.
- ▶ Therefore, it is recommended to establish a new branch where there is already moderate activity that can act as a catalyst but not too much activity to stifle growth.
- ▶ Target areas include: Northwest Brooklyn, Southern Brooklyn, Upper East Side, Green Point, Inwood and Washington Heights .