

New York City Crime Analysis

Author : Mo. Helmi Boudhraa





Importance of Crime Analysis / Prediction

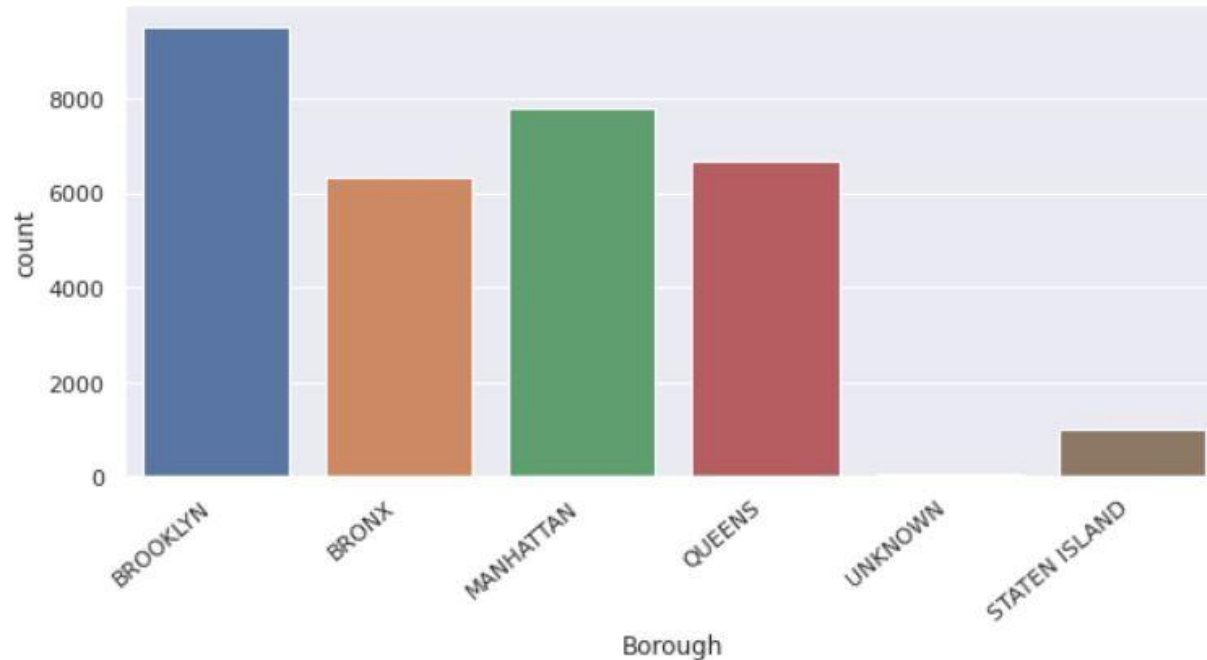
- Law Enforcement agencies are really interested / encourage any crime analyzing / prediction made by the public which will be helpful in their war against crime in the city.
- Venues - Crimes analysis can help people who want to go out to visit “safe” venues (we will discuss the criteria of safety later).



Data acquisition and cleaning

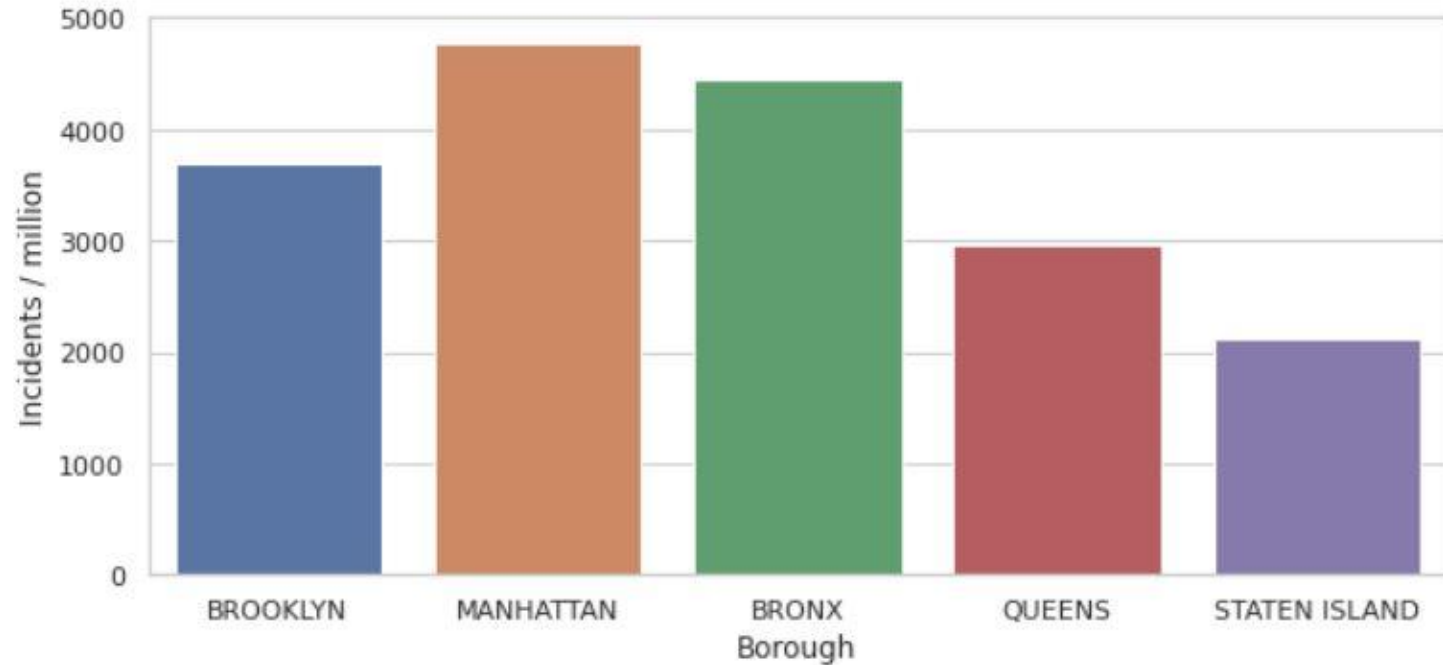
- New York City official Incidents Data from [NYPD Complaint Data Current \(Year To Date\)](#)
- New York City Population Data from [NYC Population by Borough](#)
- New York City Census Data from [NYC Census Data](#)
- Foursquare API Data from [Foursquare API](#)

Manhattan with the highest crimes count and Staten Island have the lowest

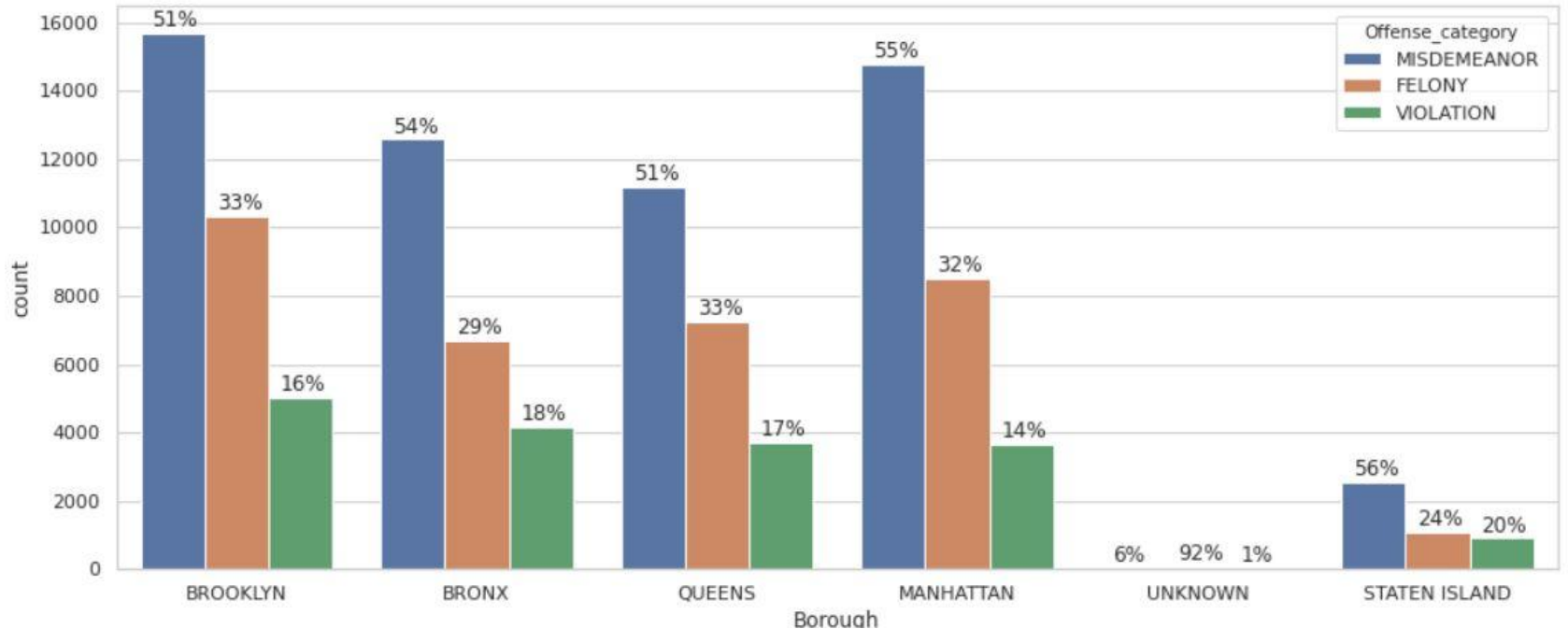




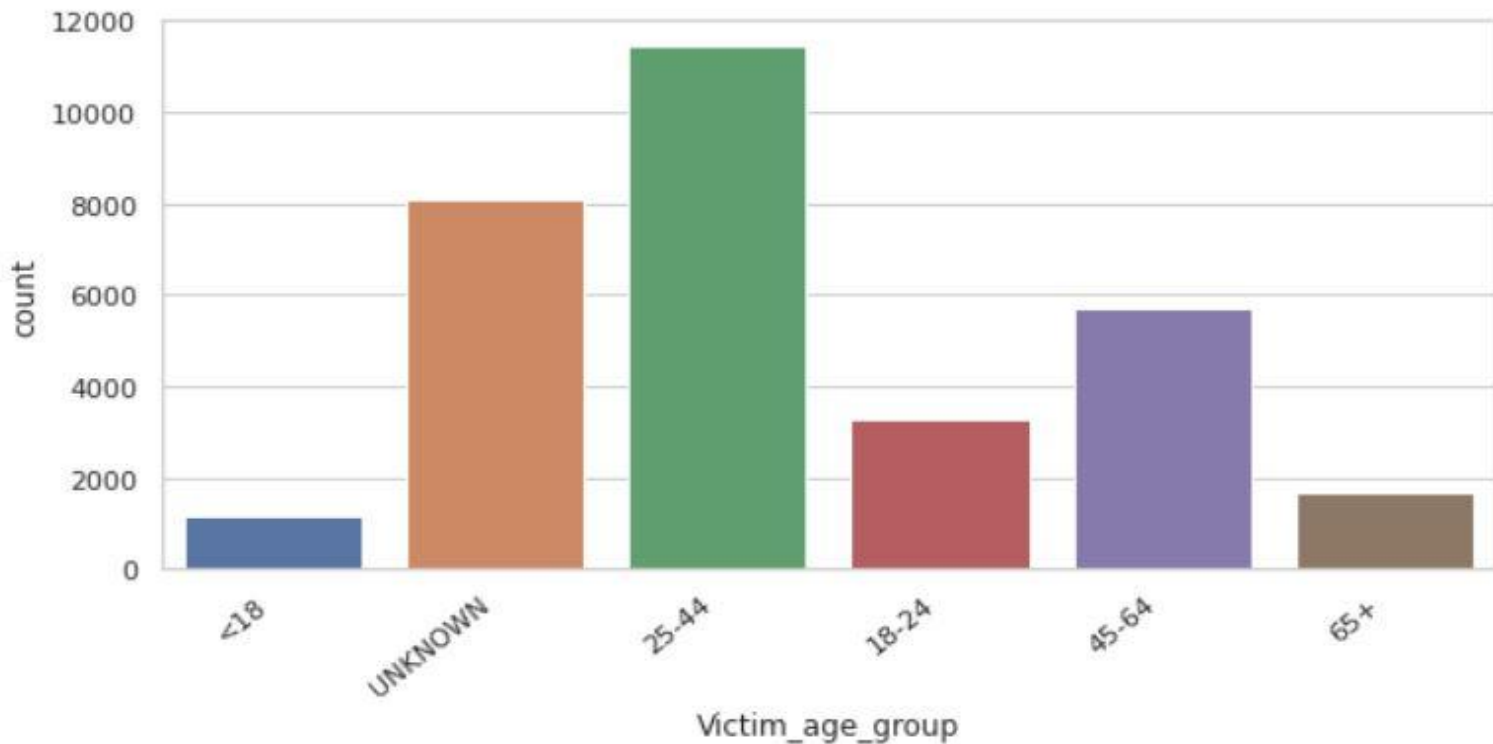
Manhattan and Bronx tops the Incidents / Million rate



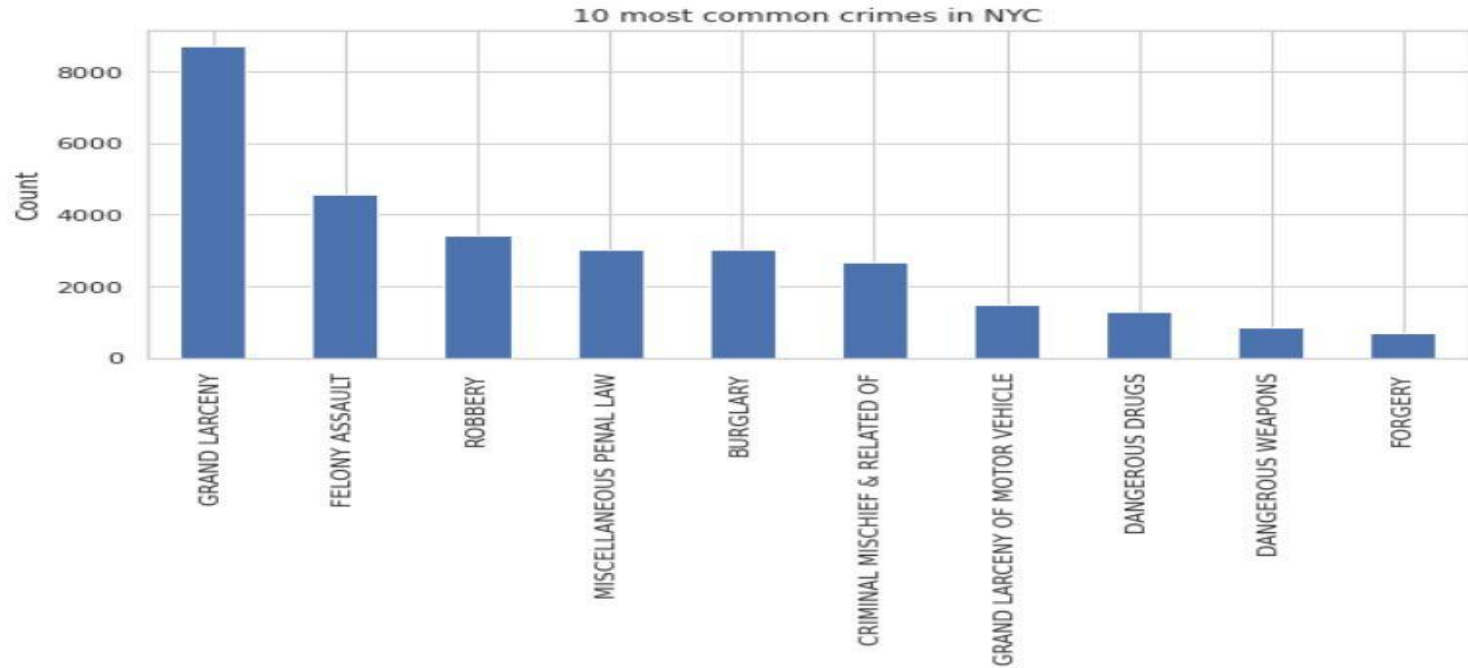
Brooklyn with the highest Felonies count and Staten Island have the lowest



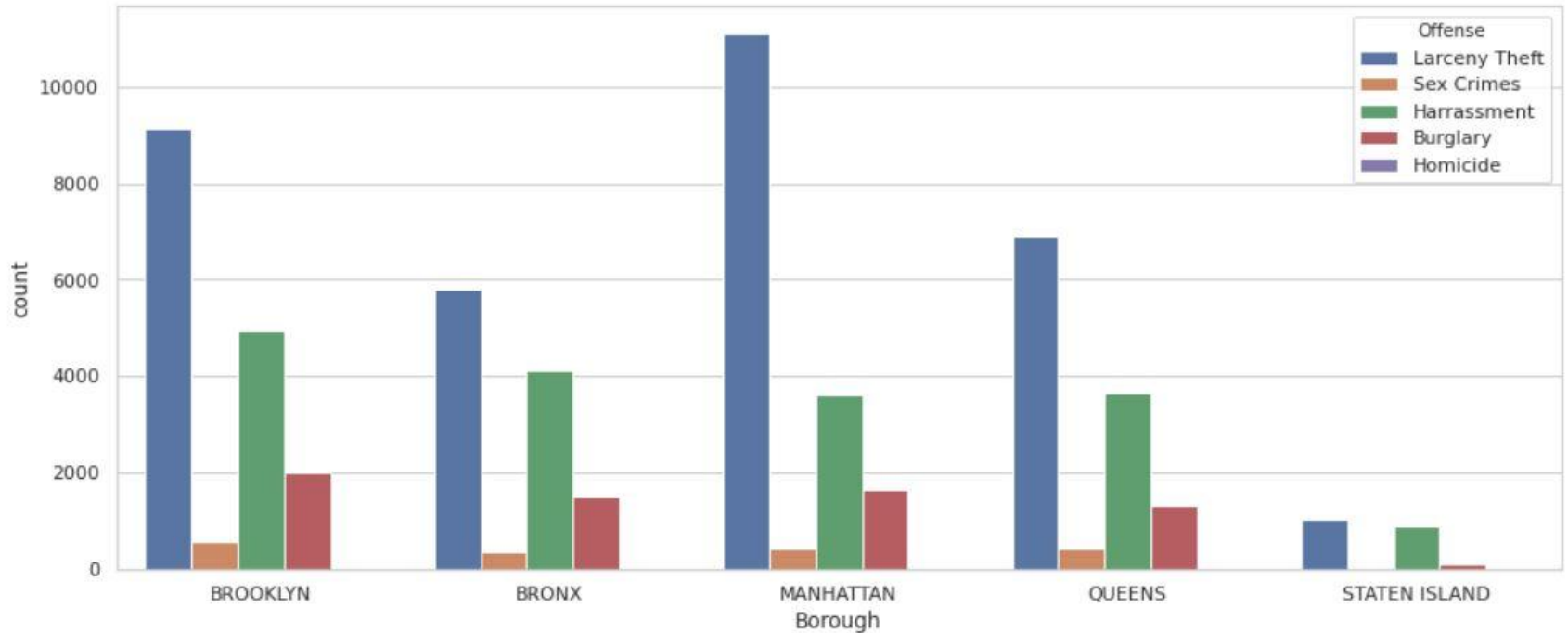
Nearly a Third of the victims are between



Grand Larceny is the most frequent incident

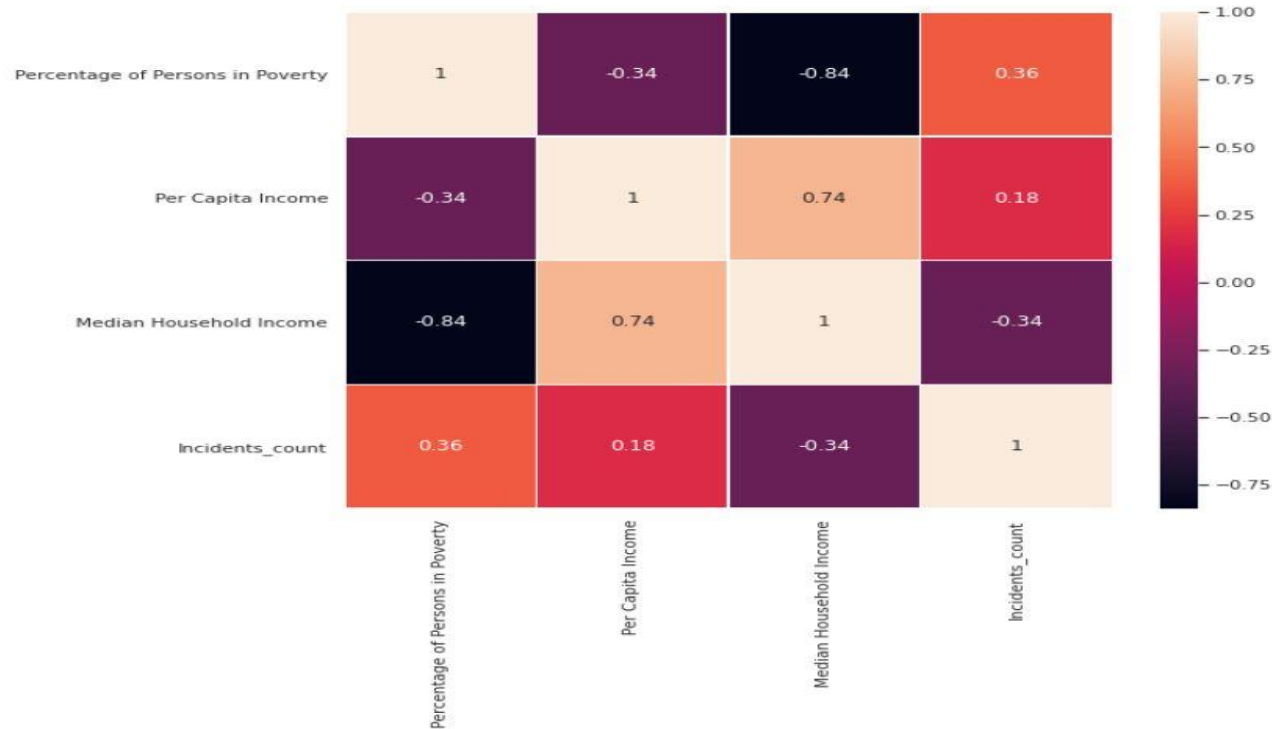


Common crimes by Borough





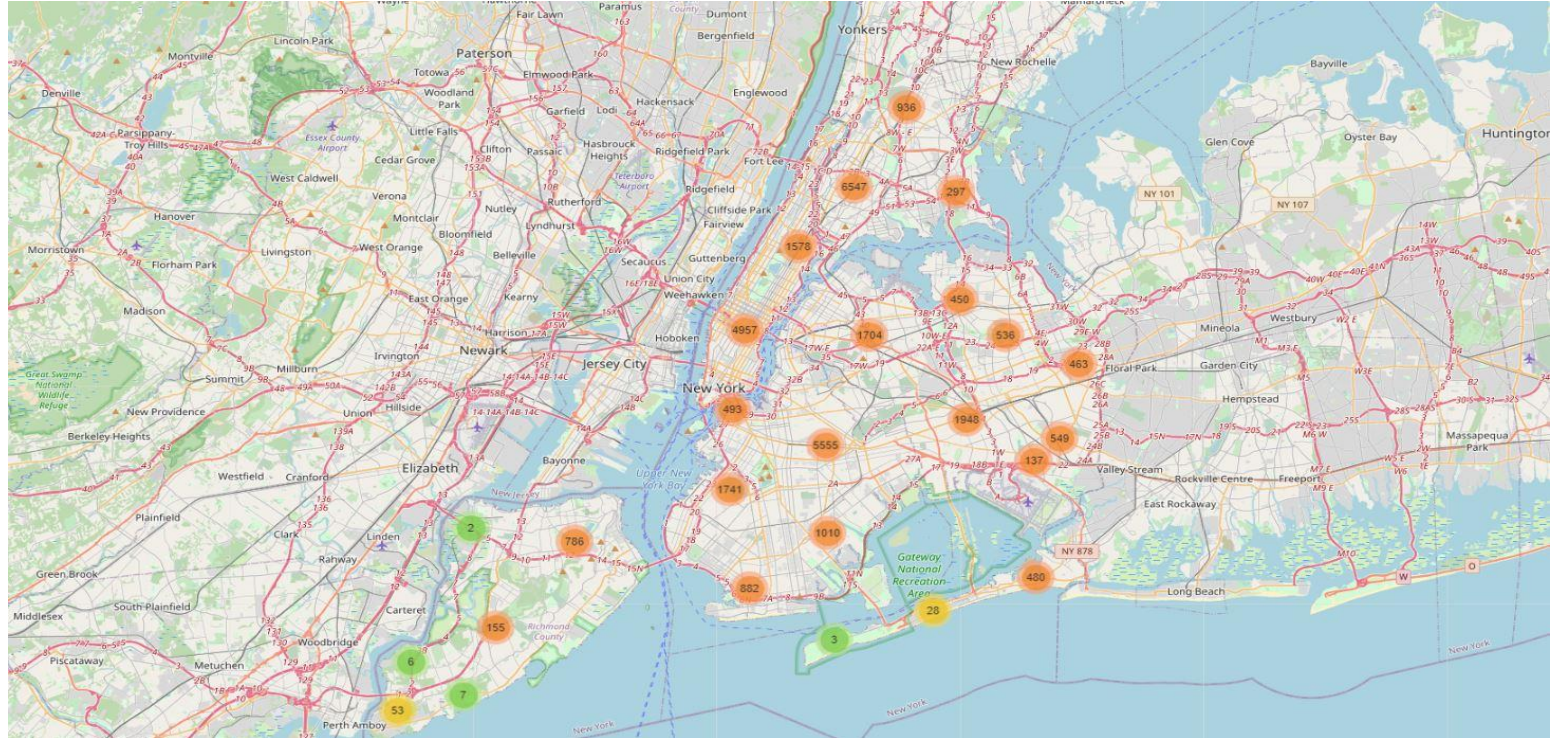
Positive Correlation between Poverty and Crime rate



High density of crimes in Manhattan and Brooklyn

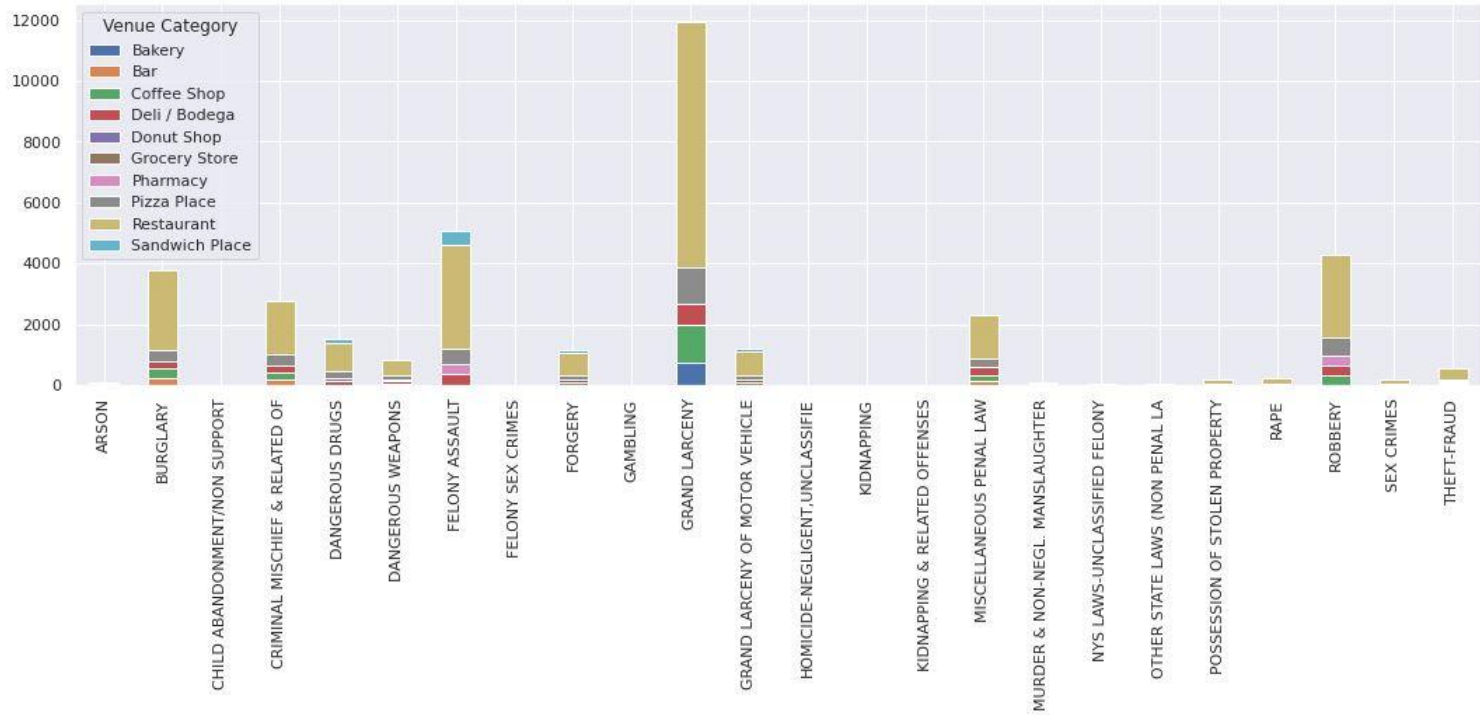


Many Crime clusters in Manhattan / Brooklyn, fewer in Staten Island



Most of the venues are safe except of some with many crimes nearby







Conclusions

- From the exploratory analysis and statistical approaches, I can say that different boroughs do have significant differences in terms of crime level and crime type with each other.
- Most of the venues in NYC are safe, except some that have a very high of incidents happening in their surroundings.



- Confirming the obvious, poverty is the essence of crime !
- Common assumptions on the safety of some Boroughs (Bronx) are, surprisingly, not validated by the data.
- Due to the extreme diversity (entropy) of NYC and the big spread of venues all over the city, we can't strongly relate some types of crimes to some specific venues.