



Analyzing **NYPD** Arrest Data

Allocating proper resources for a safer NYC

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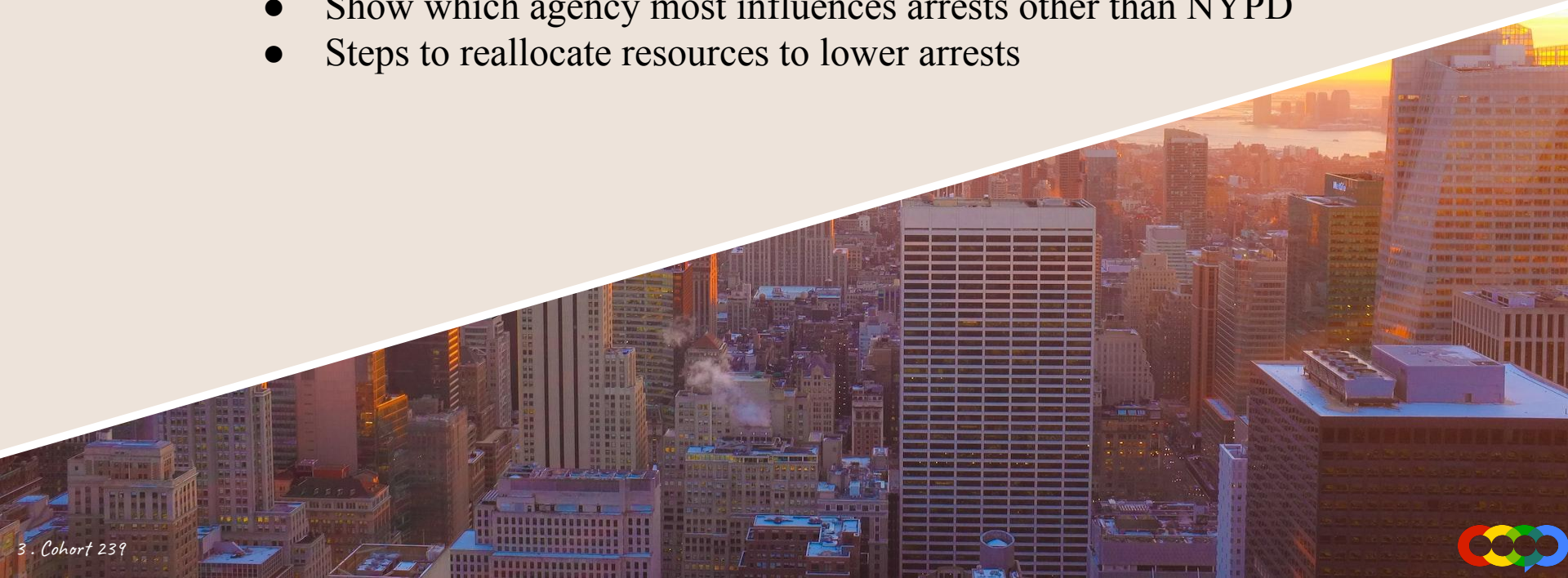




Client: New York City's Major Office of Management and Budget (OMB)

Agenda

- Introduce NYC's expense budget
- Visualize arrests within the five boroughs
- Show which agency most influences arrests other than NYPD
- Steps to reallocate resources to lower arrests



Thesis

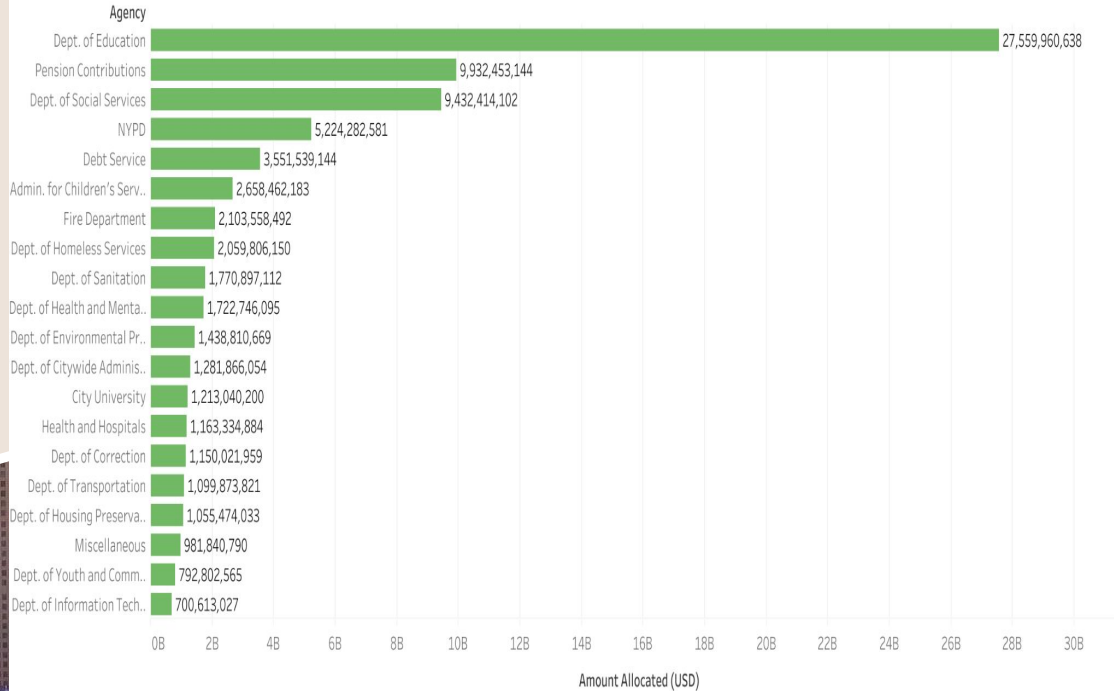
Although NYC deals with crimes adequately, we believe data-driven decision making will lower arrests by allocating resources more effectively.



Background

- The NYPD is one of the most funded city agencies, ranking 4th in the top five for fiscal year 2021.
- The Department of Youth and Community Development (DYCD) ranks 19th for FY 2021.

New York City Expense Budget (USD)
Fiscal Year 2021

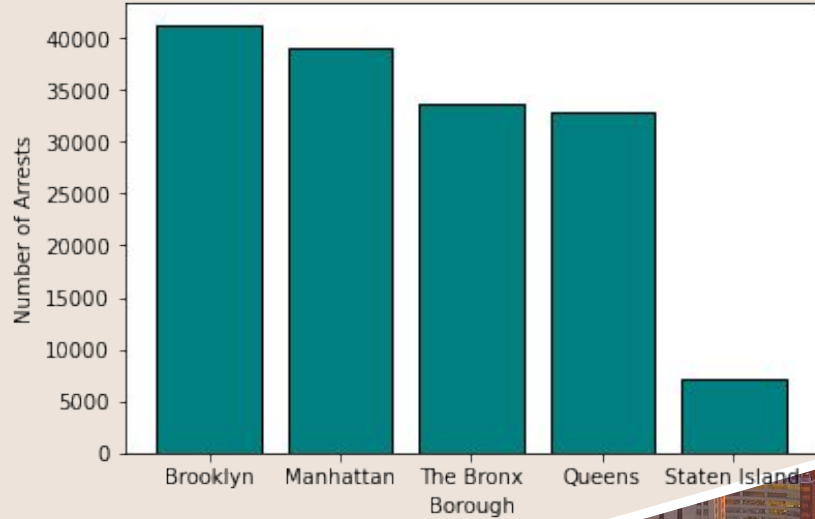


Source: OMB FY2021 Expense Budget

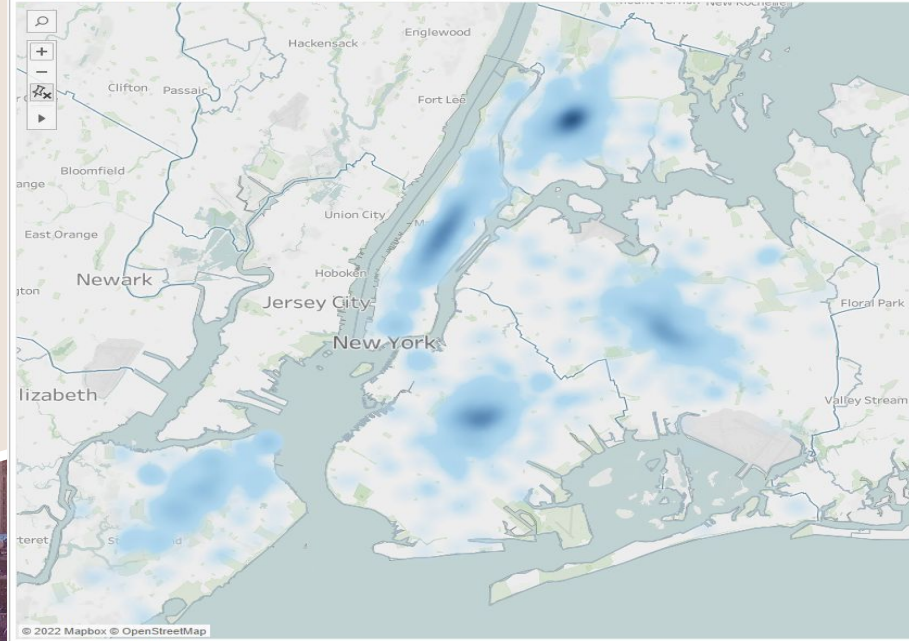


Arrests and Geography

Number of Arrests by Borough
Jan. 2021 - Dec. 2021

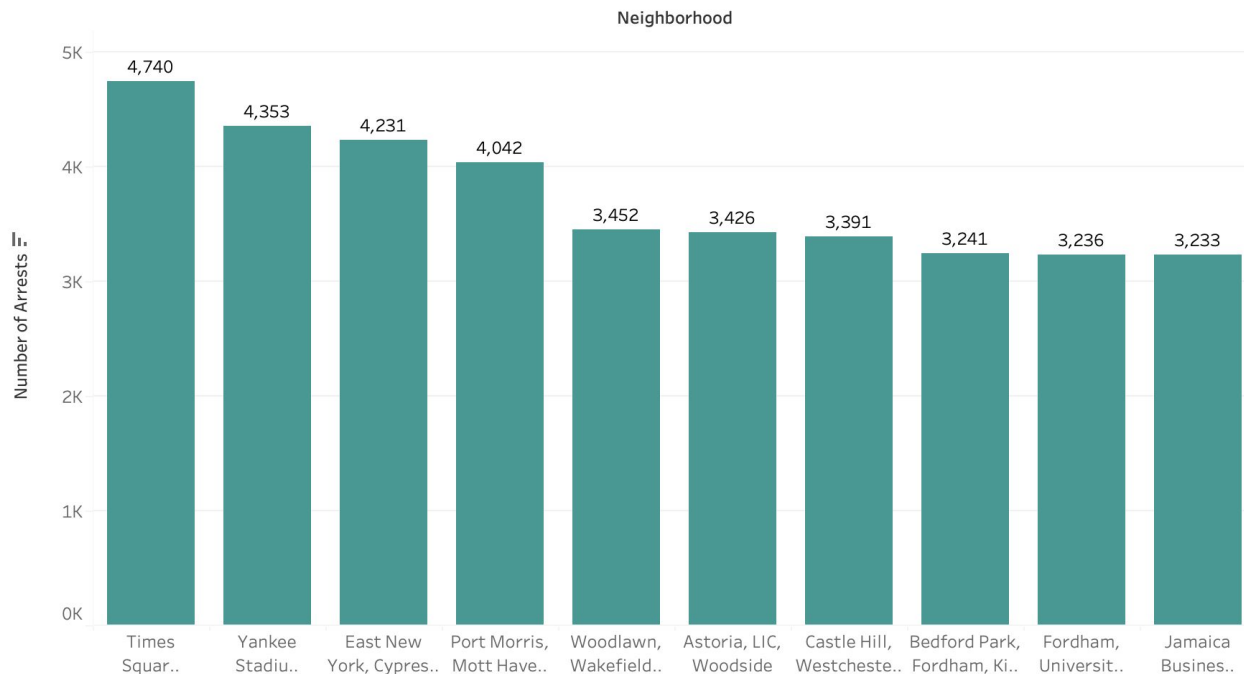


Crime density in New York City boroughs



Arrests and Precincts

Top 10 Precincts Reporting Arrests
2021



Source: NYPD Arrest Data - NYPD Open Data

Insights

- Brooklyn is the borough reporting the most arrests in 2021
- Bronx precincts are overrepresented in the top 10 precincts
- Precinct 14, which serves Times Square, Grand Central Station-area, reported the most arrests in 2021

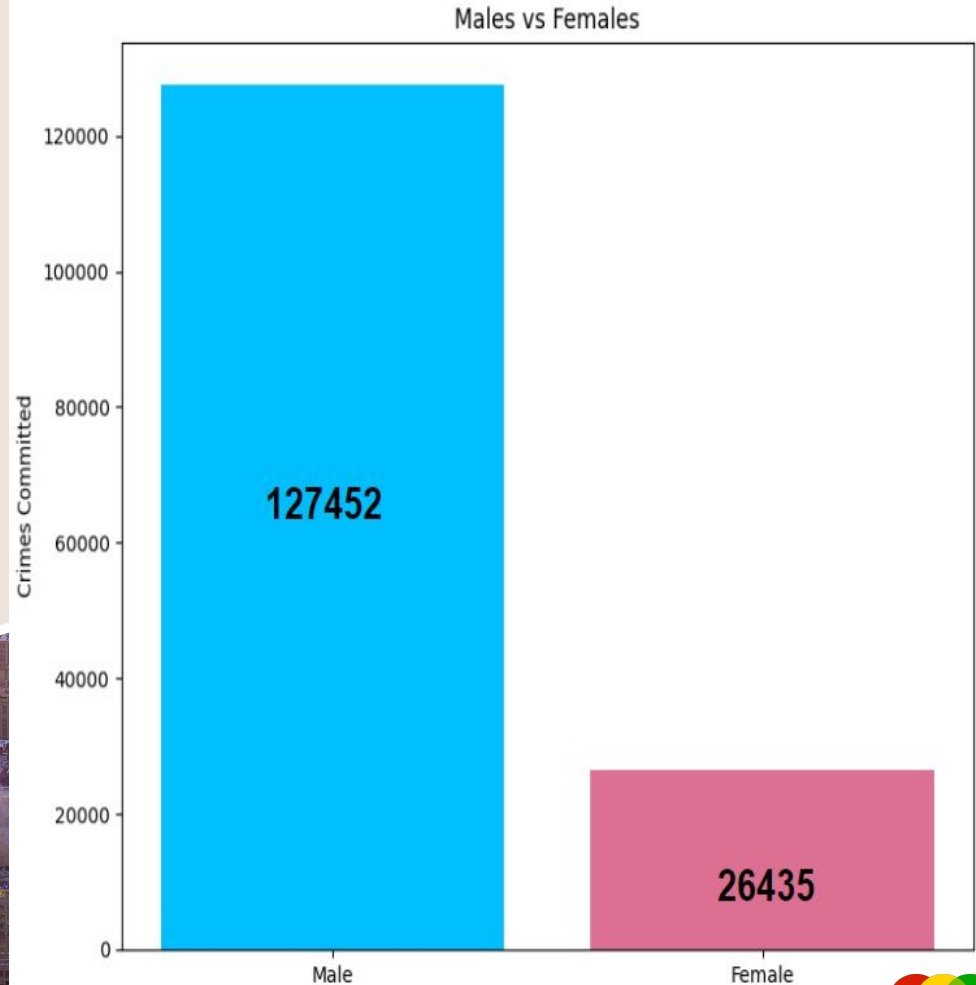
Recommendations

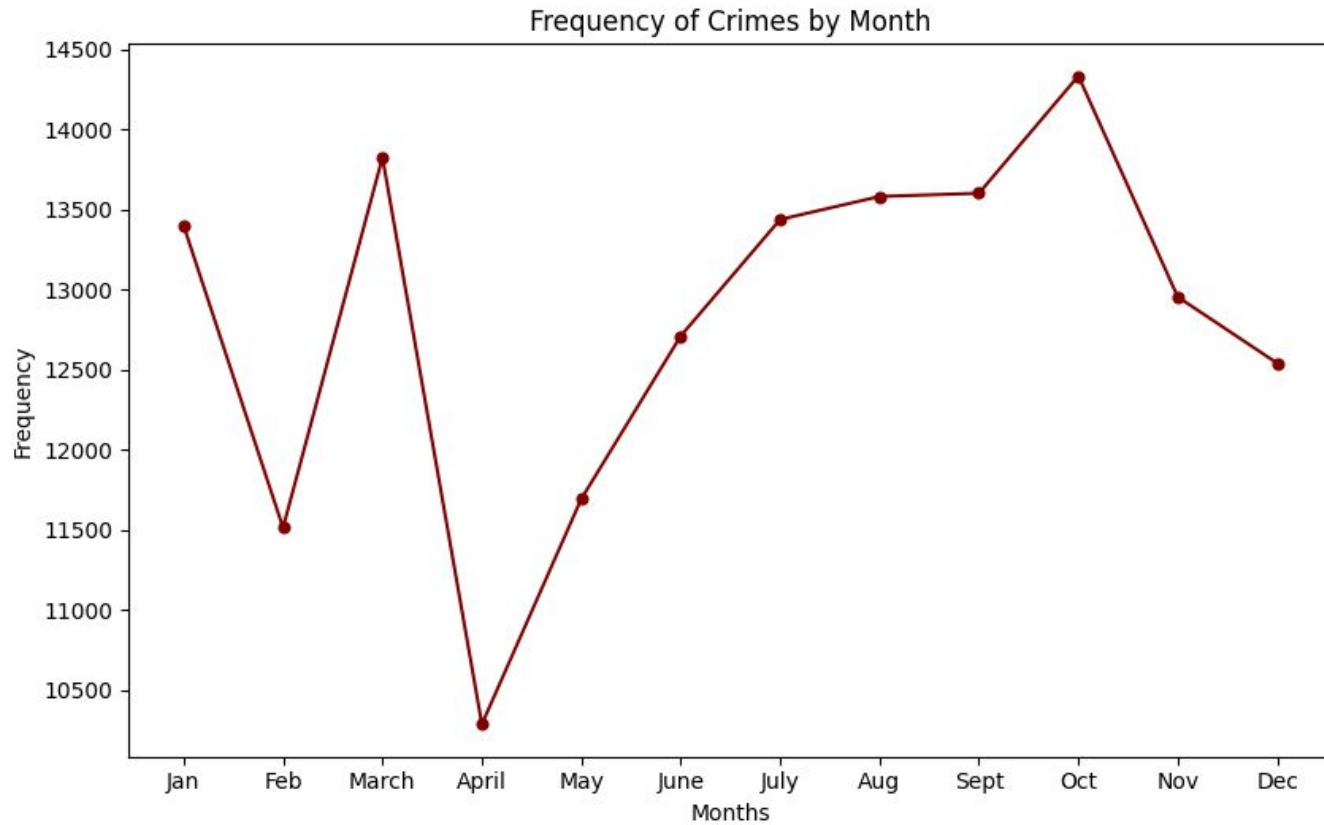
- Crime and consequent arrests can result from a variety of socio-economic factors (*source: [FBI](#)*), so there should be more targeted investments into communities reporting a relatively higher number of arrests
- The types of investments should be based on research conducted into socioeconomic conditions of communities reporting a relatively higher number of arrests



Gender

- *Males committed approximately 80% of the crimes in 2021*
- *Males commit more crimes than females by over 4x*

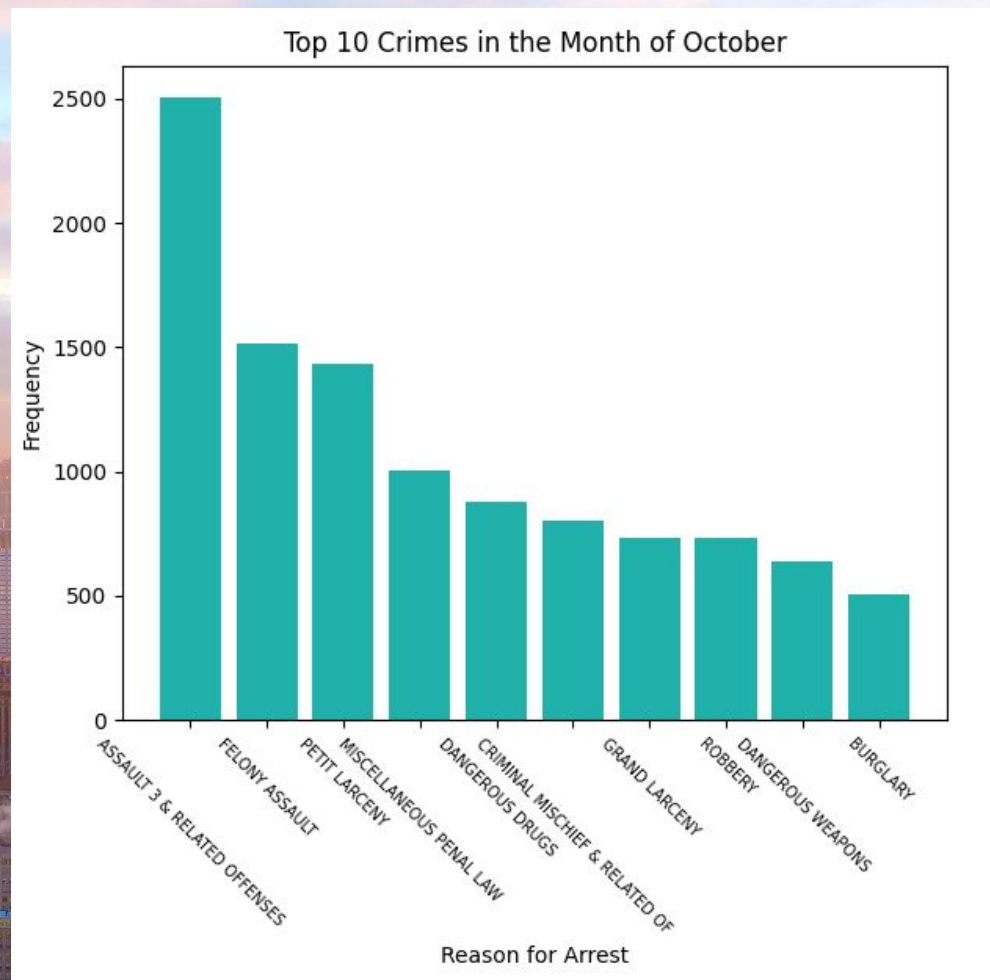




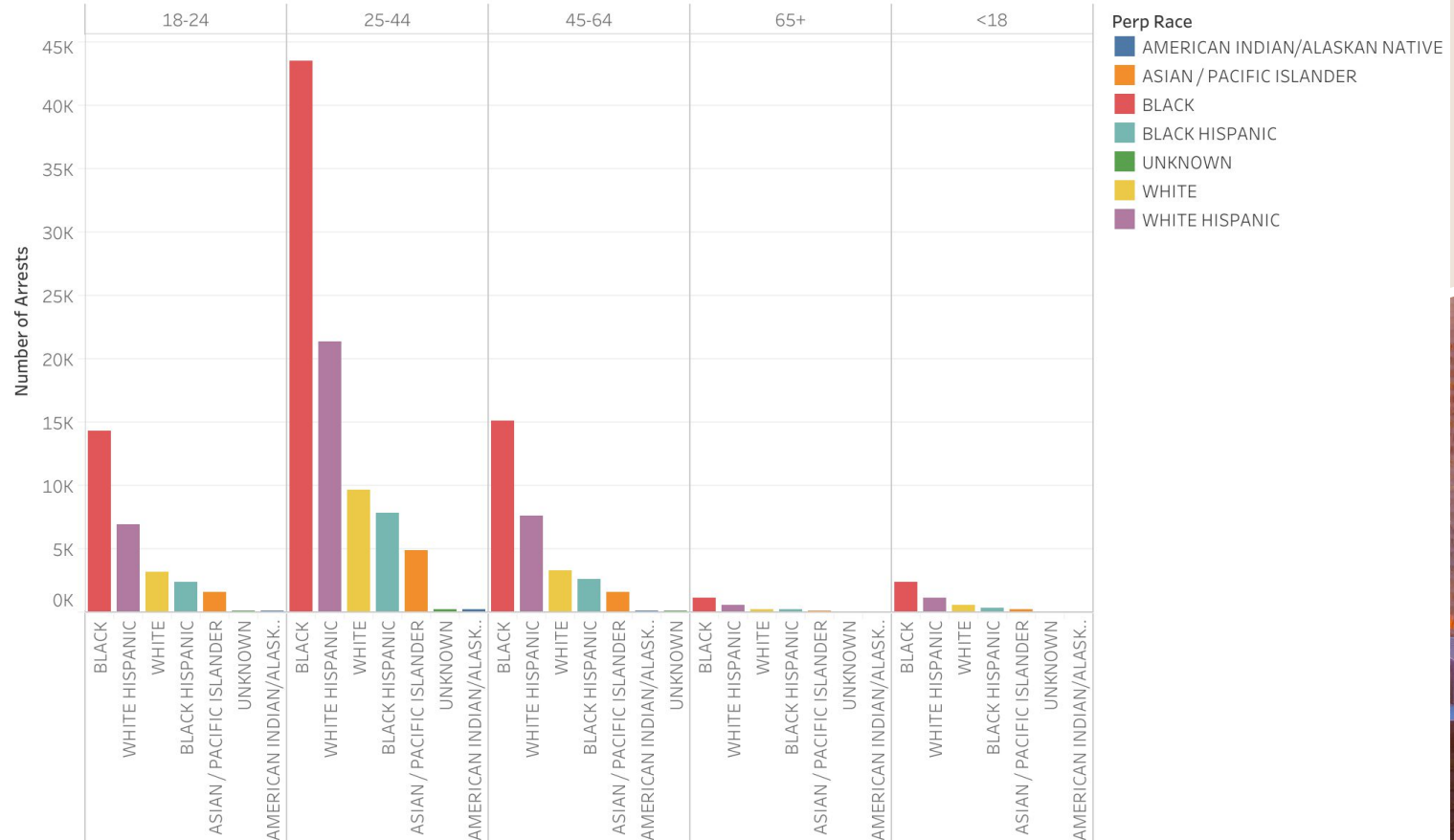
The greatest number of crimes committed was in the month of October, while the least amount of crimes occurred in April.



Since October has the greatest number of crimes consisting of mostly assaults and larceny (theft not involving force), we believe there might be connection between the frequency and Halloween.

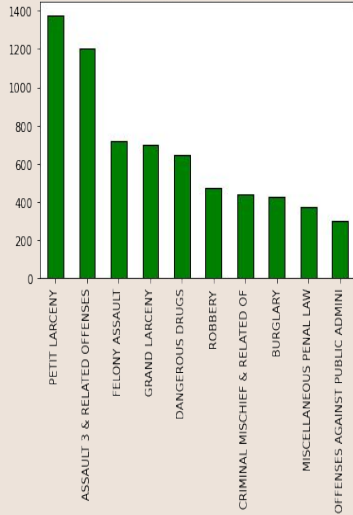


Age & Race



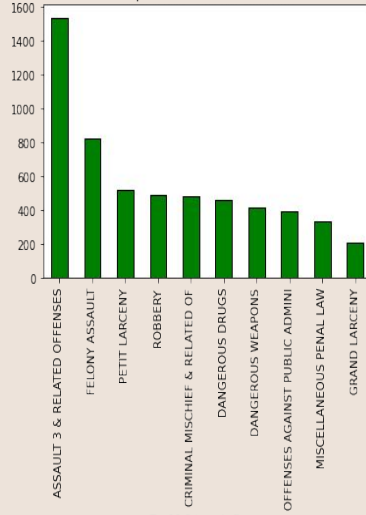
The Top 10 Youth Crimes In All Boroughs Of NYC

Top 10 Crimes In Manhattan.



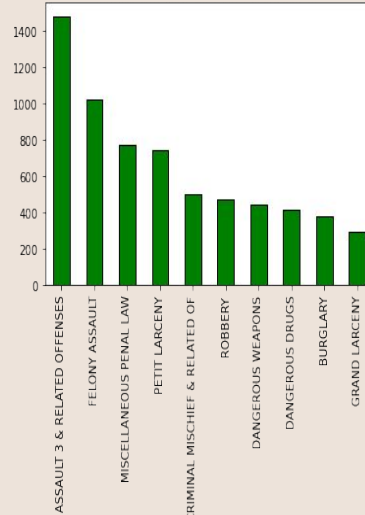
Top 10 Crimes In Manhattan.

Top 10 Crimes In Bronx.



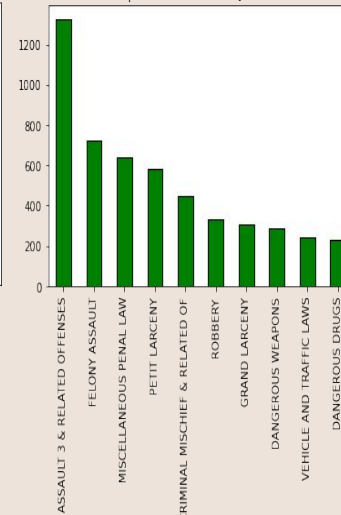
Top 10 Crimes In Bronx.

Top 10 Crimes In Kings County.



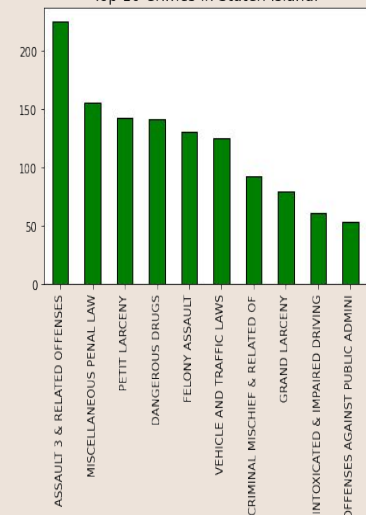
Top 10 Crimes In Kings County

Top 10 Crimes In Queens.



Top 10 Crimes In Queens.

Top 10 Crimes In Staten Island.

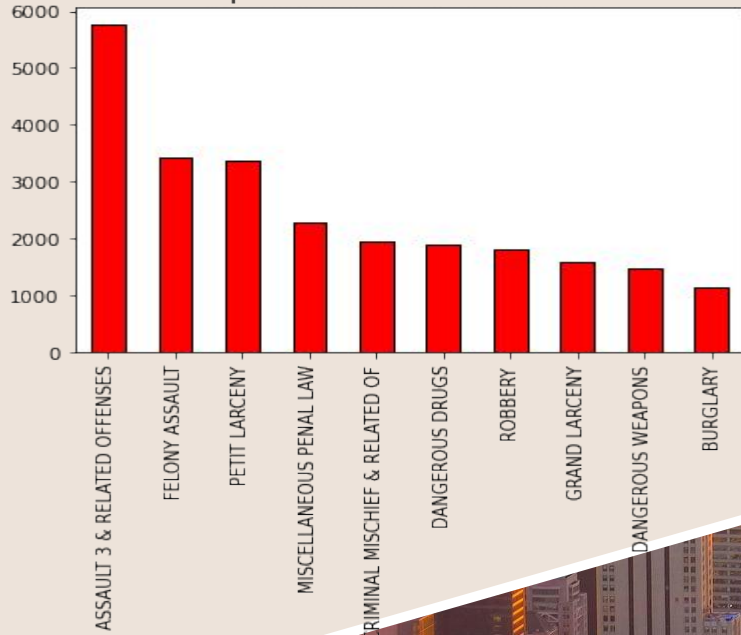


Top 10 Crimes In Staten Island.

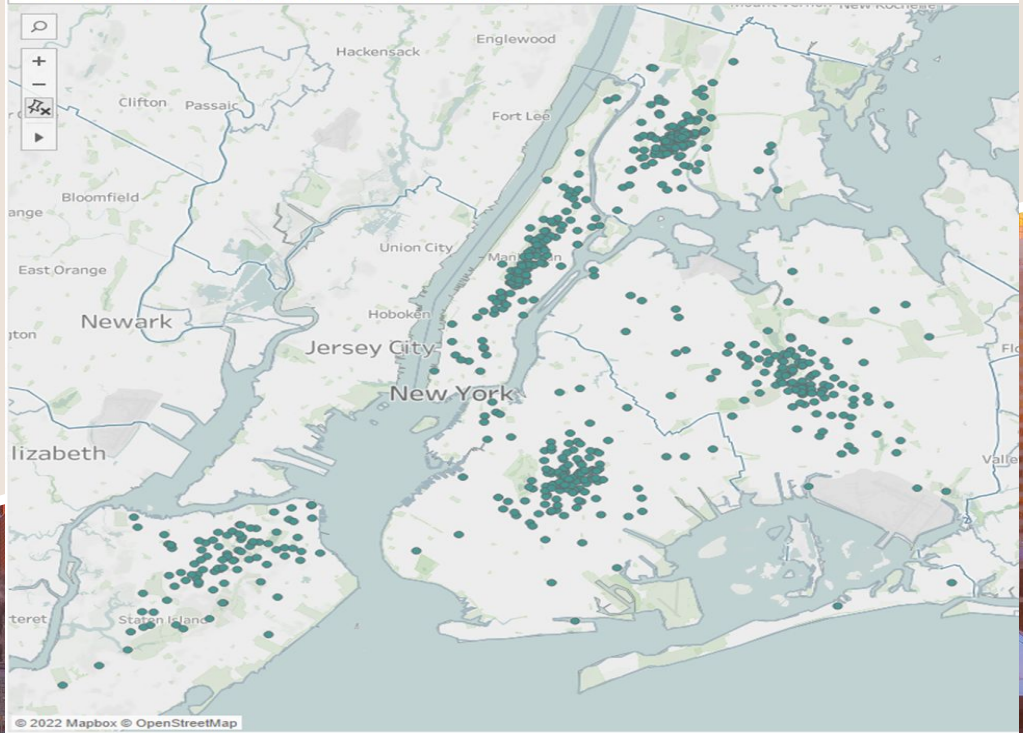


Youth Crime Distribution in New York City

Top 10 Youth Crimes In NYC.



Youth Crime Density in New York Boroughs

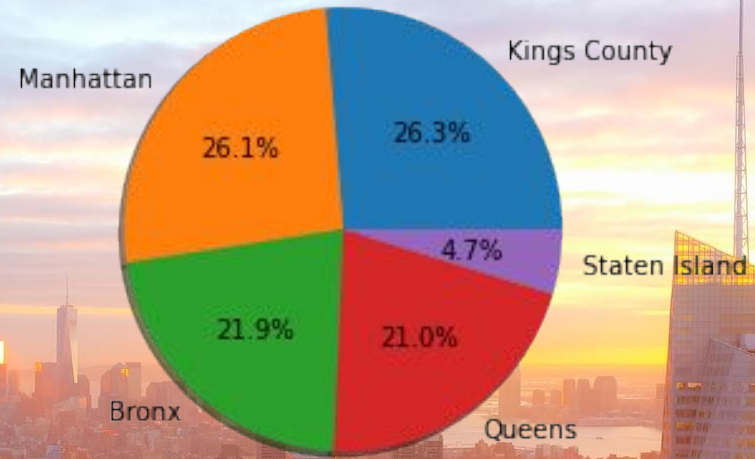


Top 10 Youth Crimes In NYC

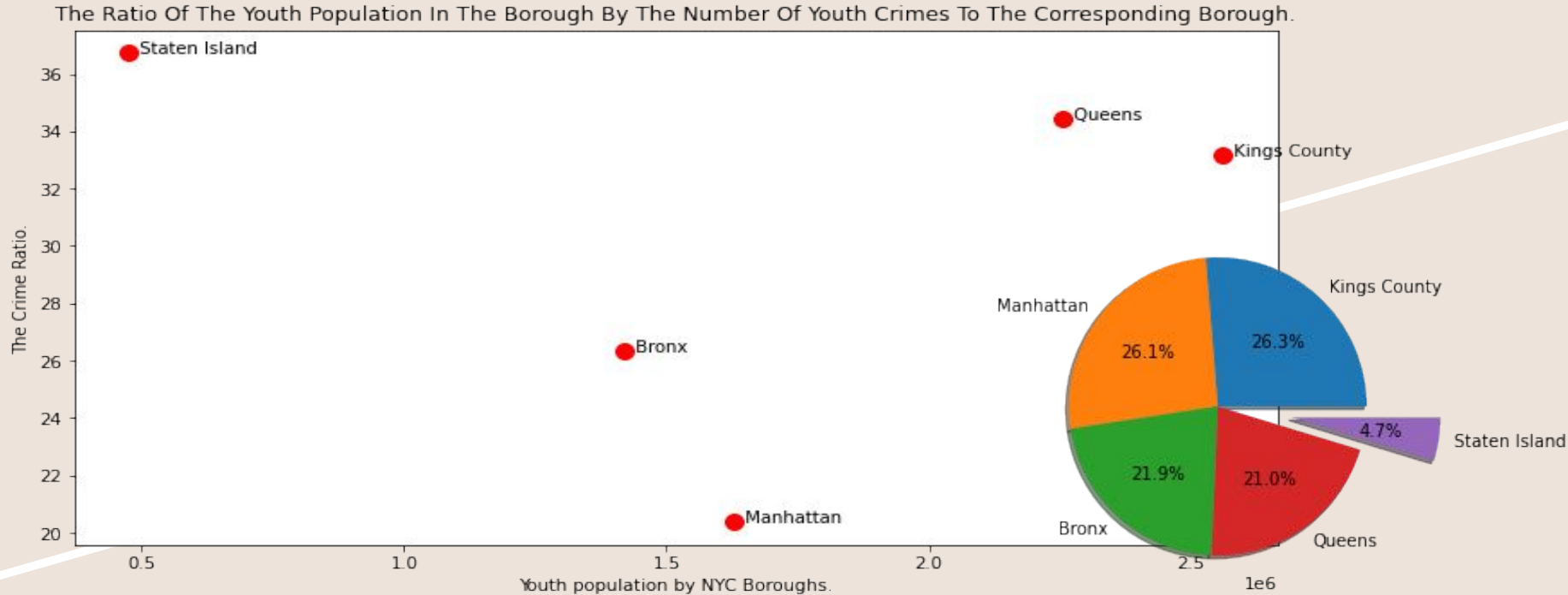
Percentage

- *Manhattan: the prevalence of youth crime is 26.1%*
- *Kings County: the prevalence of youth crime is 26.3%*
- *Staten Island: the prevalence of youth crime is 4.7%*
- *Queens: the prevalence of youth crime is 21%*
- *Bronx: the prevalence of youth crime is 21.9%*

Youth Crime Distribution In NYC Boroughs.



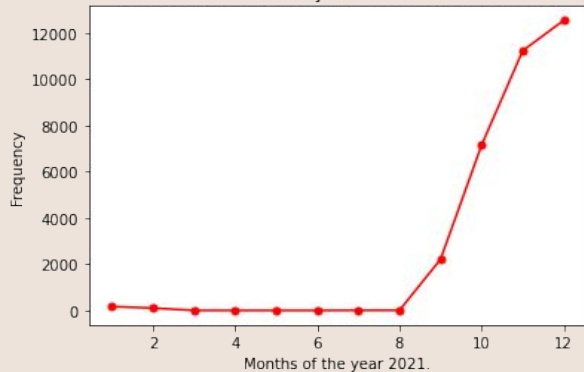
The Ratio Of The Youth Population In The Borough By The Number Of Youth Crimes To The Corresponding Borough.



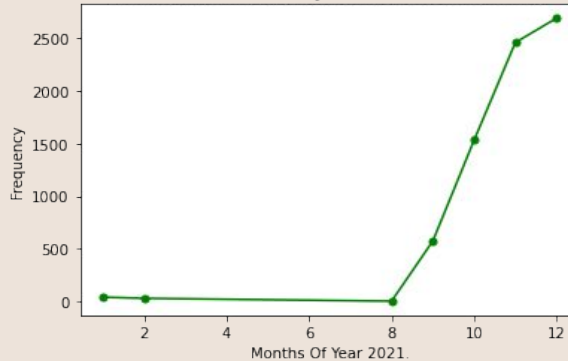
Staten Island, Queens, and Kings County have the highest youth crime rates of the five New York City boroughs.



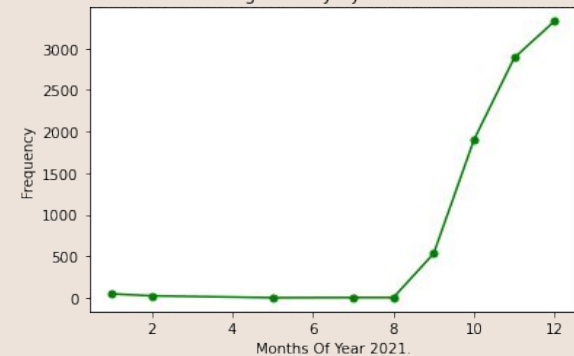
Youth Crime In NYC By Months Of the 2021 Year



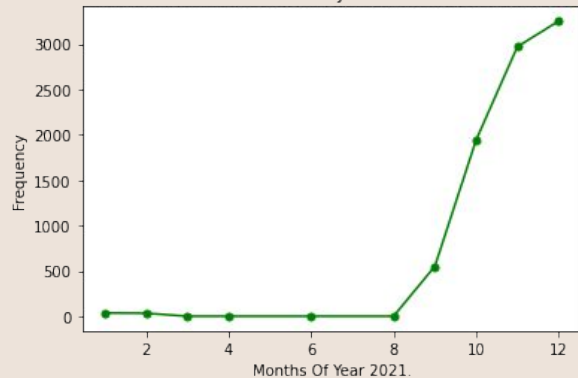
Youth Crime In Bronx By Months Of the 2021 Year



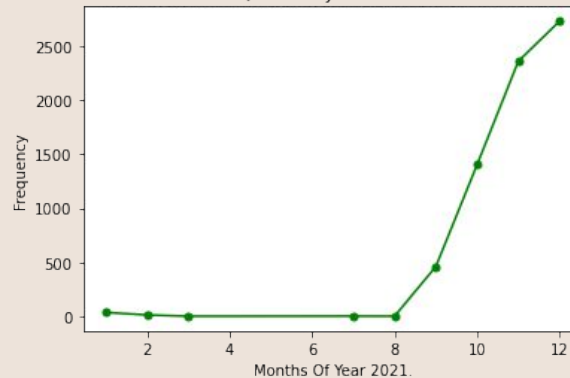
Youth Crime In Kings County By Months Of the 2021 Year



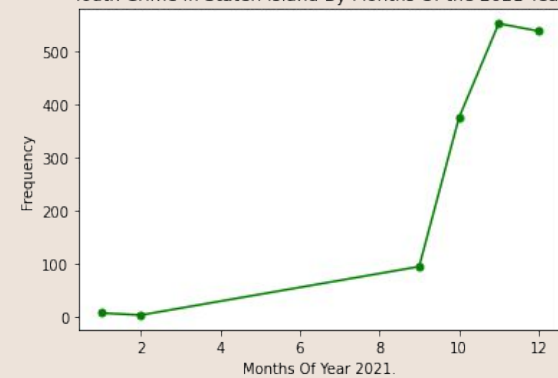
Youth Crime In Manhattan By Months Of the 2021 Year.



Youth Crime In Queens By Months Of the 2021 Year



Youth Crime In Staten Island By Months Of the 2021 Year



Distribution of youth crime by boroughs



Insights:

- The three boroughs Staten Island, Queens, Kings County need more attention.
- Most crimes began to rise by September and peaked in December.

Hypothesis:

- With the beginning of the school year, children spent most of the daytime at school and were deprived of activity, having no outlet for their energy.

Recommendation:

Distribute money to the Department of Youth and Community Development (DYCD), which oversees and monitors a range of programs for young New Yorkers under contract with local community organizations, for DYCD to distribute budget to areas that need more attention to provide indoor activities for youth.

- Youth are less likely to become a victim of a crime, or engage in dangerous activities if they are kept busy.



Sources

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Thank You!

(Open to Q&A)

