



# Analyzing NYPD Arrest Data

Allocating proper resources for a safer NYC

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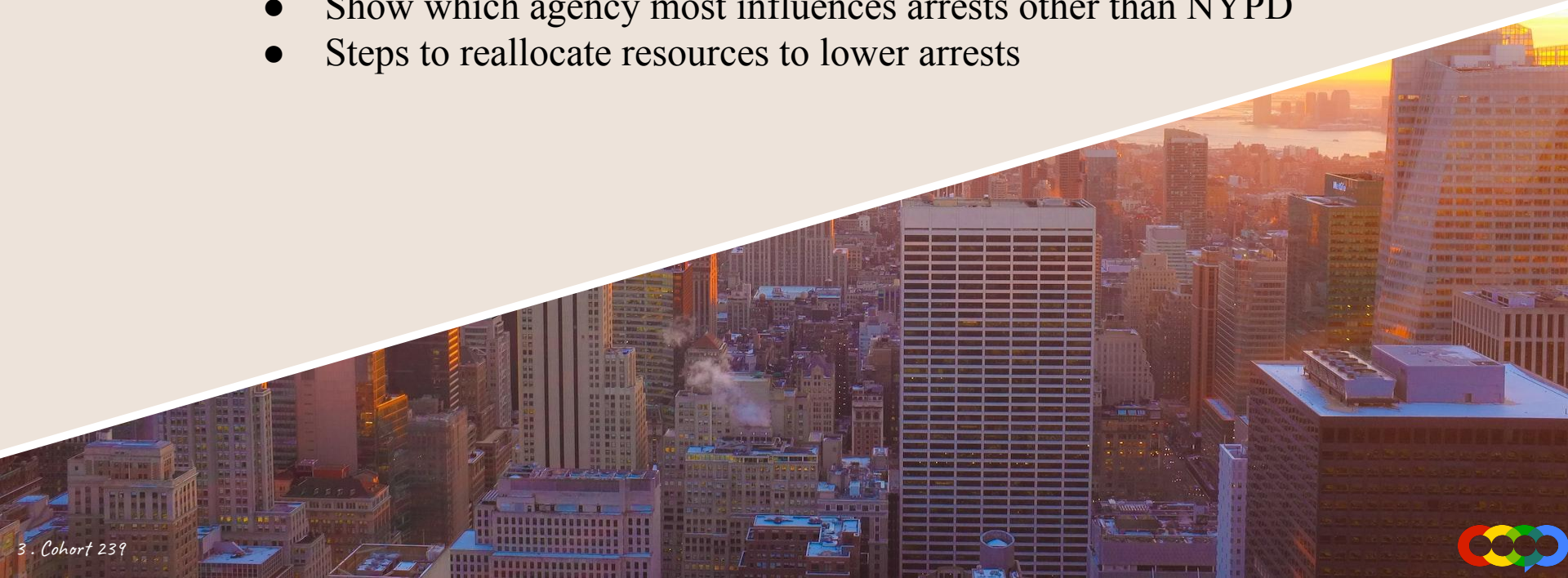


Client: New York City's Major Office of Management and Budget (OMB)



# 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

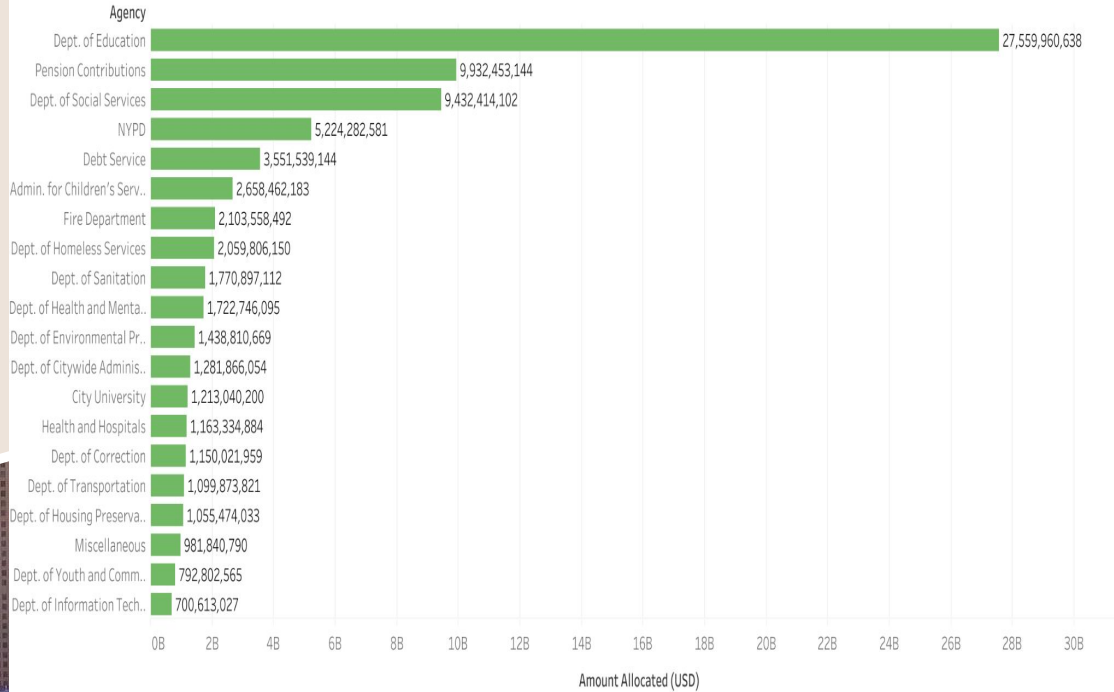
*Although NYC deals with crimes adequately, we believe data-driven decision making will lower arrests by allocating resources more effectively.*



# 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



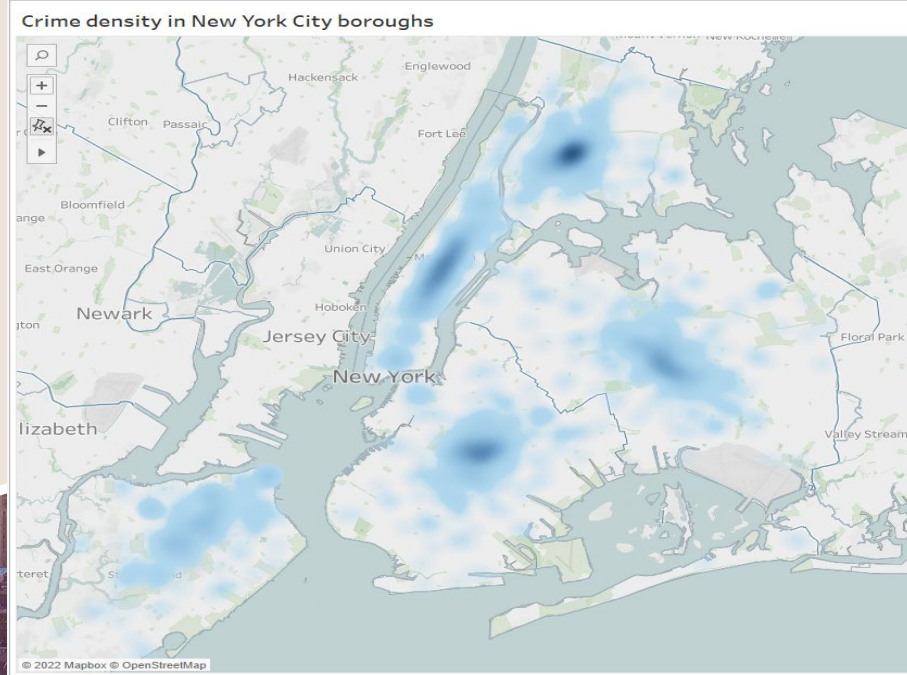
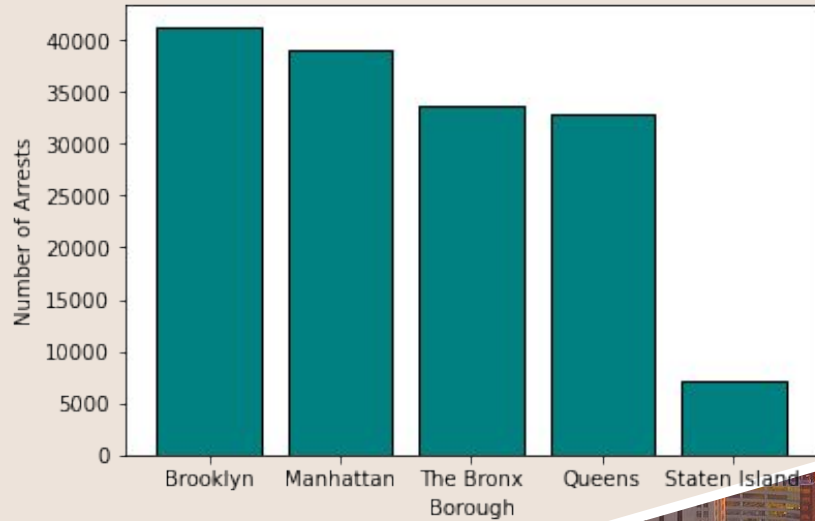
Source: OMB FY2021 Expense Budget





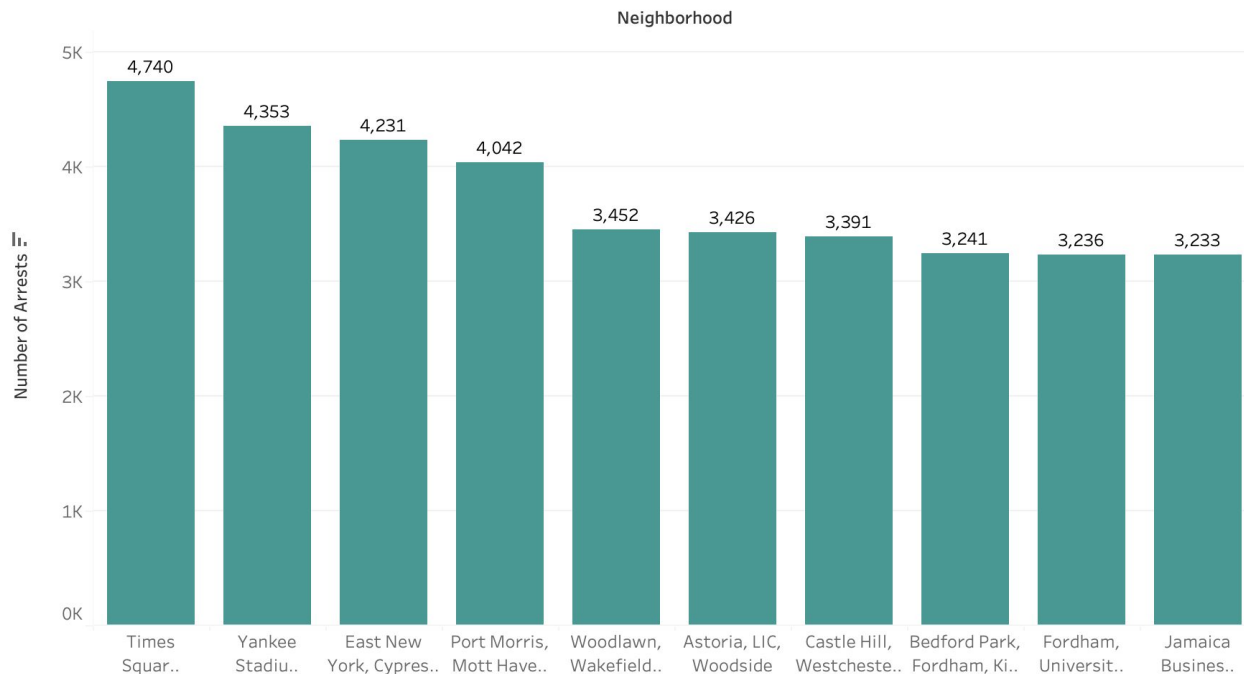
# Arrests and Geography

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



# 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

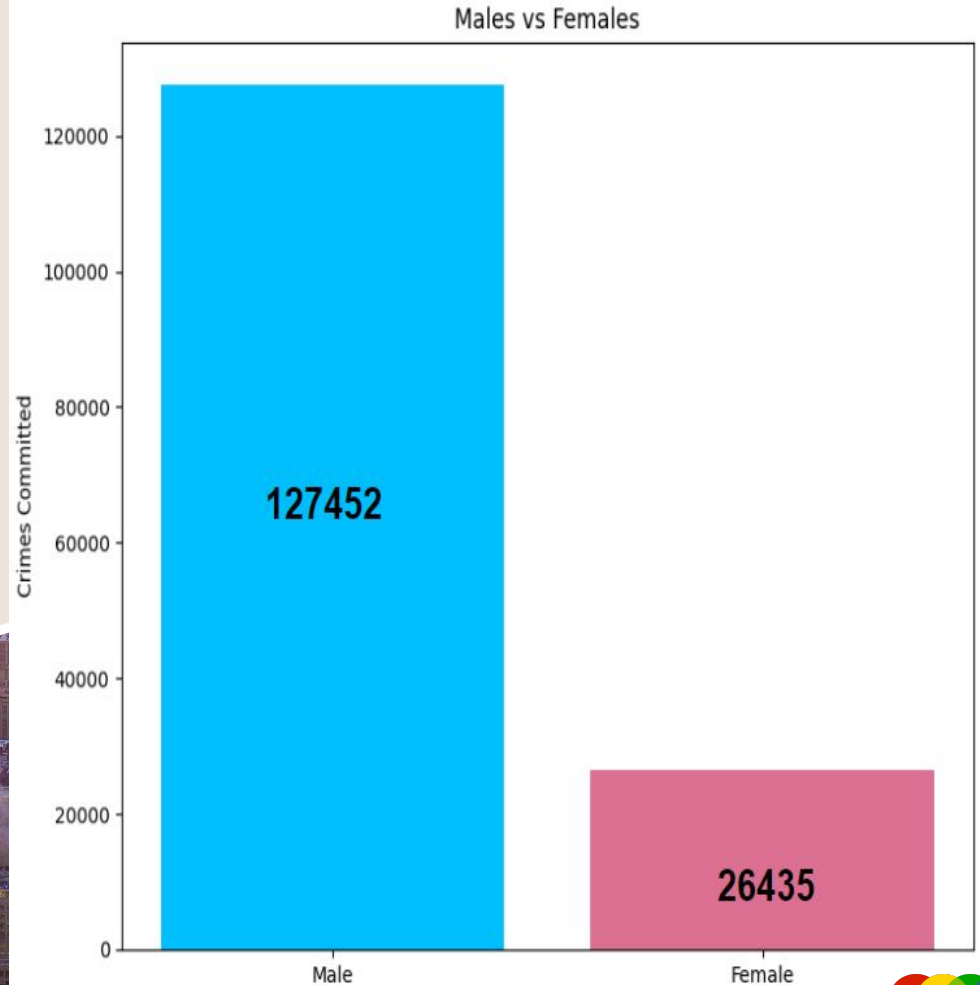
- Crime and consequent arrests can result from a variety of socio-economic factors (*source: [FBI](#)*), so there should be more targeted investments into communities reporting a relatively higher number of arrests
- The types of investments should be based on research conducted into socioeconomic conditions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

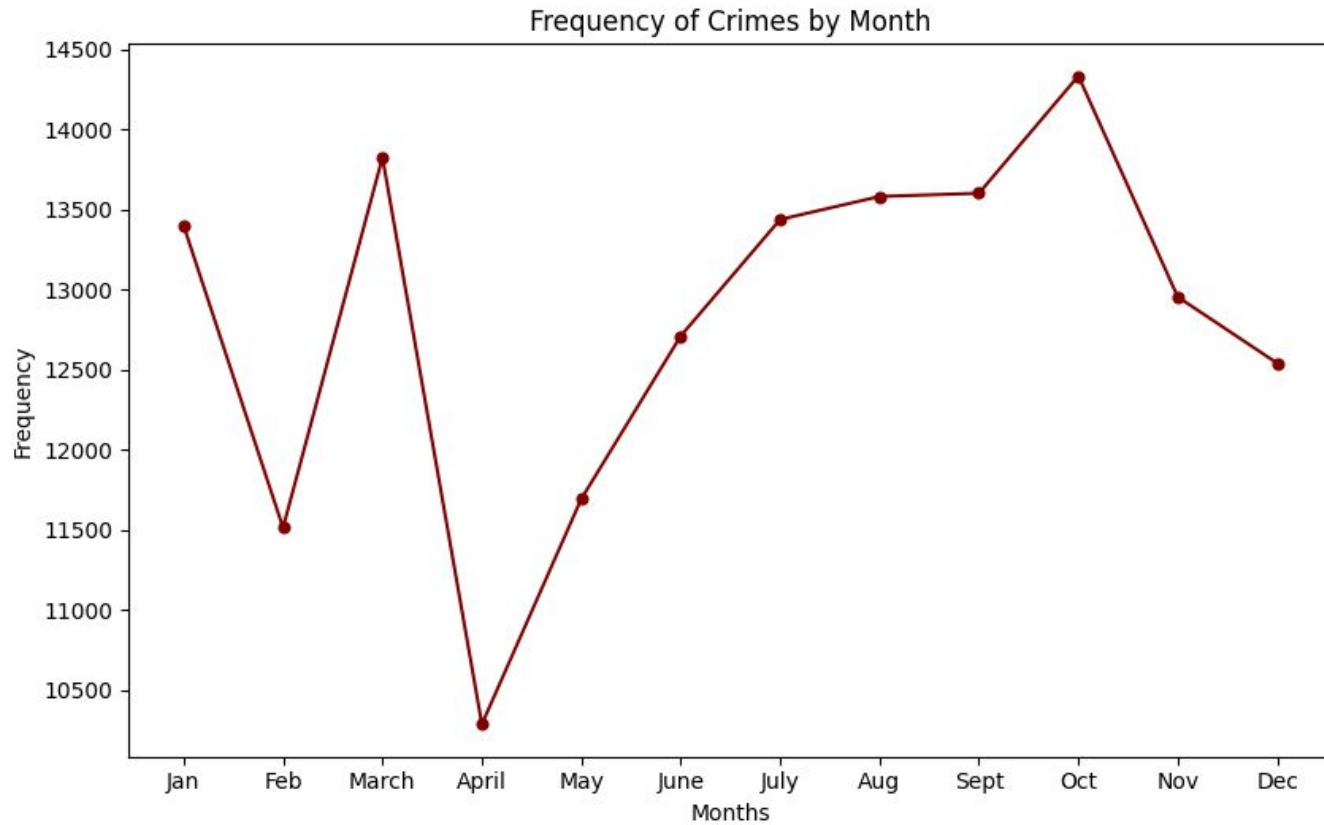




## Gender

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

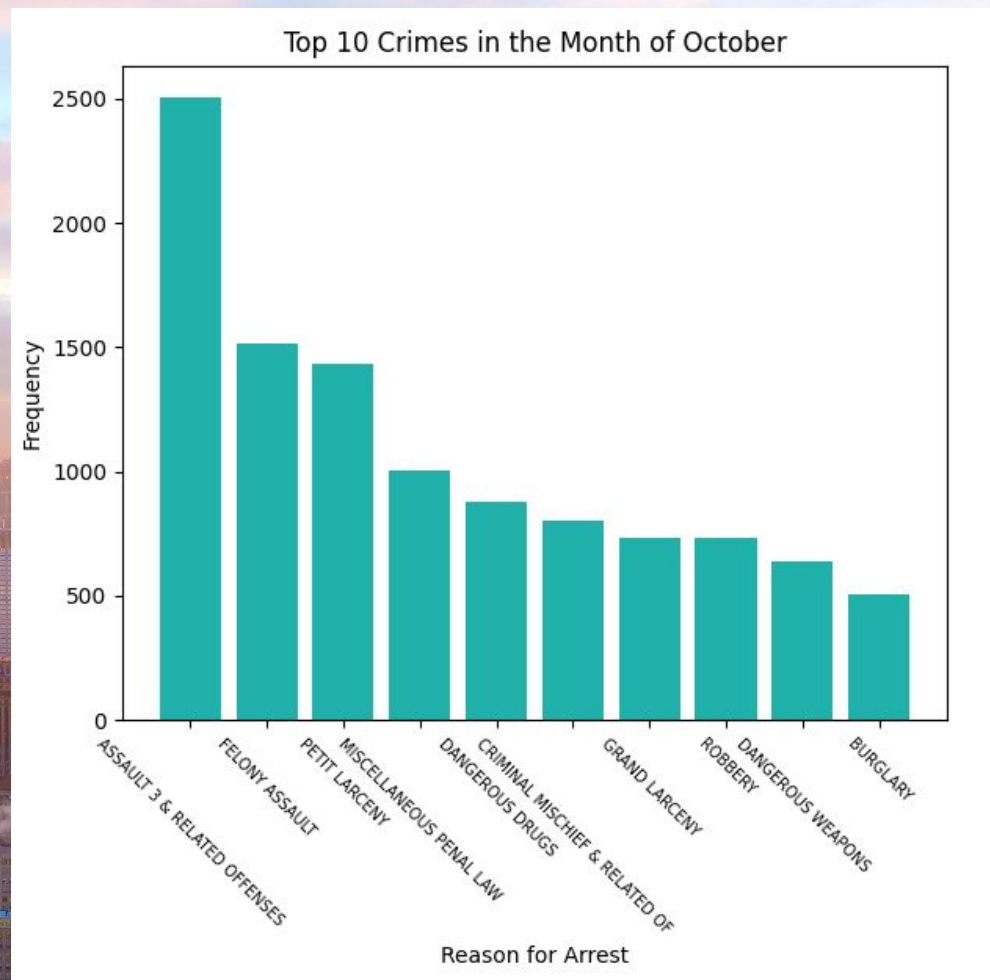




*The greatest number of crimes committed was in the month of October, while the least amount of crimes occurred in April.*

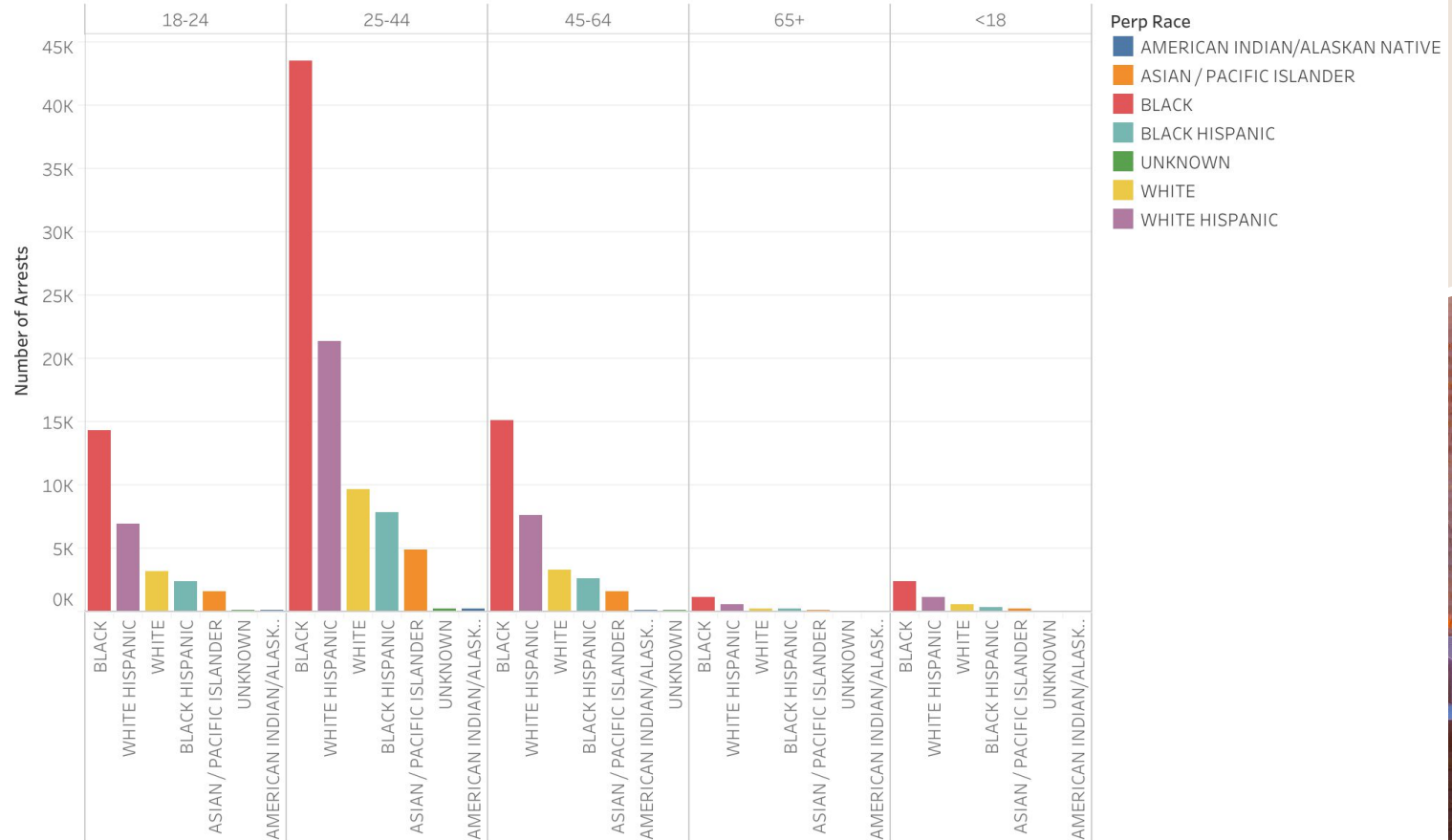


*Since October has the greatest number of crimes consisting of mostly assaults and larceny (theft not involving force), we believe there might be connection between the frequency and Halloween.*



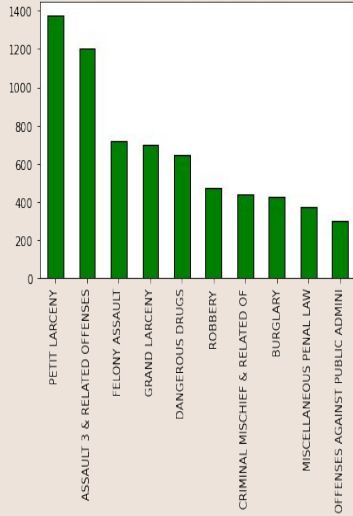


## Age & Race



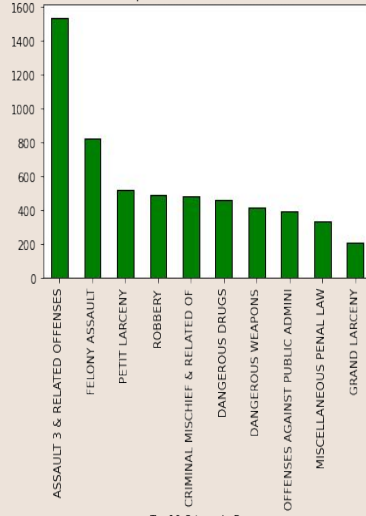
# The Top 10 Youth Crimes In All Boroughs Of NYC

Top 10 Crimes In Manhattan.



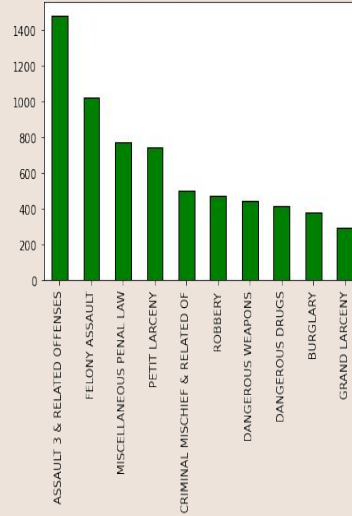
Top 10 Crimes In Manhattan.

Top 10 Crimes In Bronx.



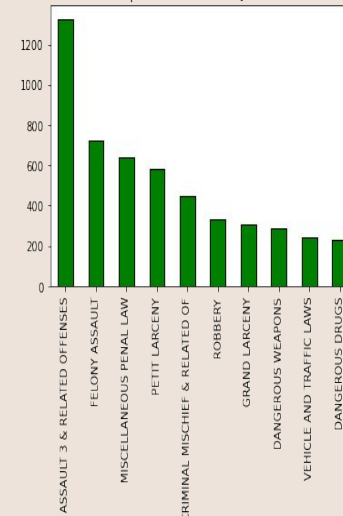
Top 10 Crimes In Bronx.

Top 10 Crimes In Kingsborough.



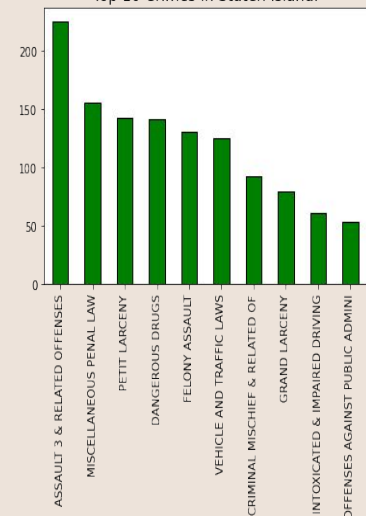
Top 10 Crimes In Kingsborough.

Top 10 Crimes In Queens.



Top 10 Crimes In Queens.

Top 10 Crimes In Staten Island.

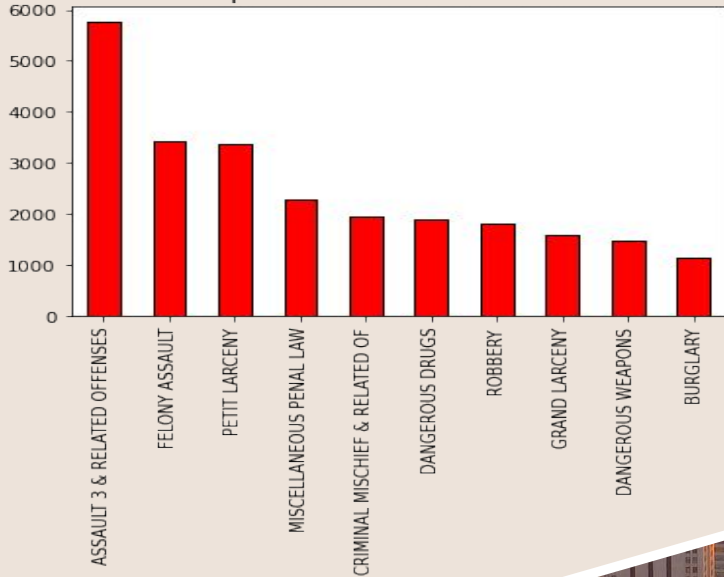


Top 10 Crimes In Staten Island.

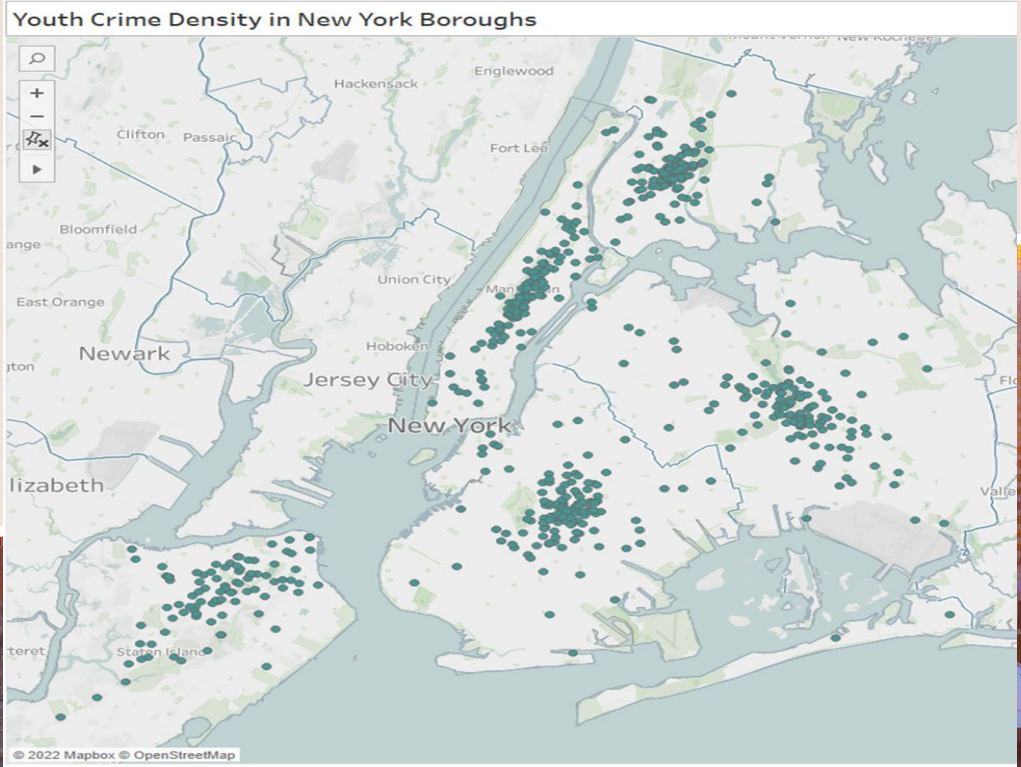


# Youth Crime Distribution in New York City

Top 10 Youth Crime In NYC.



Top 10 Youth Crime In NYC.

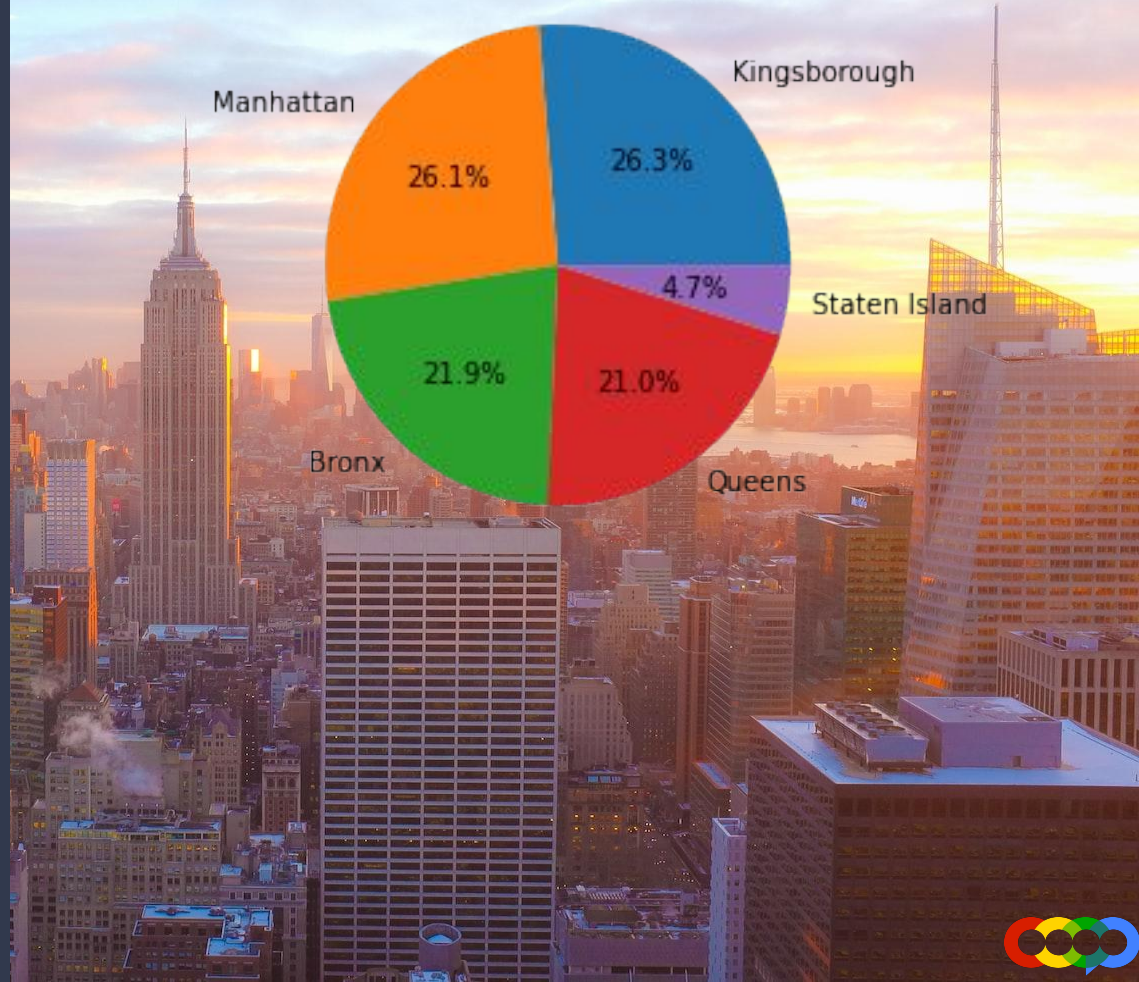




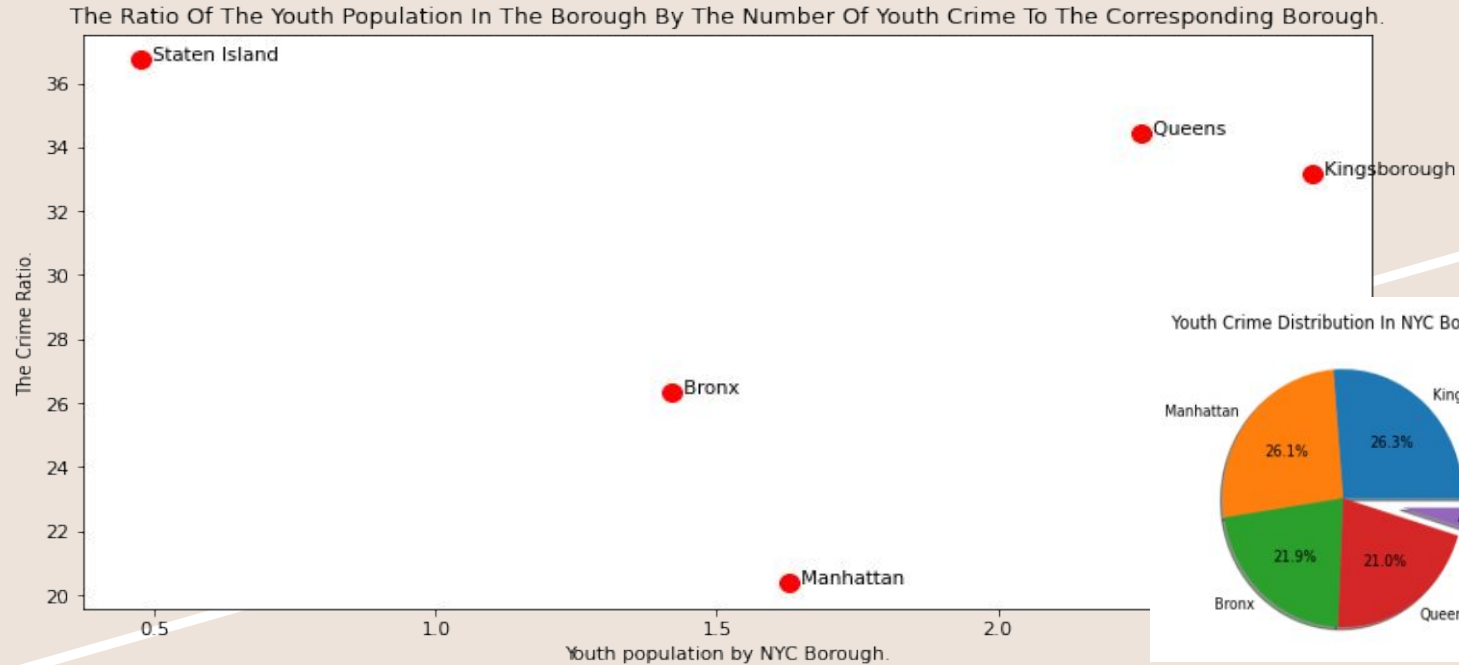
## Percentage

- *Manhattan: the prevalence of youth crime is 26.1%*
- *Kingsborough: 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%*

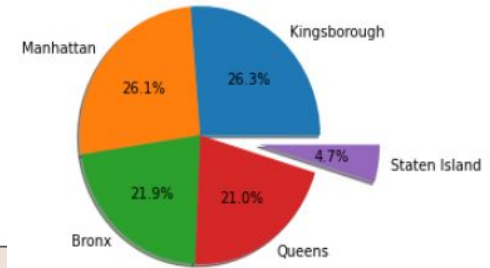
Youth Crime Distribution In NYC Borough.



# Ratio Of The Youth Population To The Respective Borough



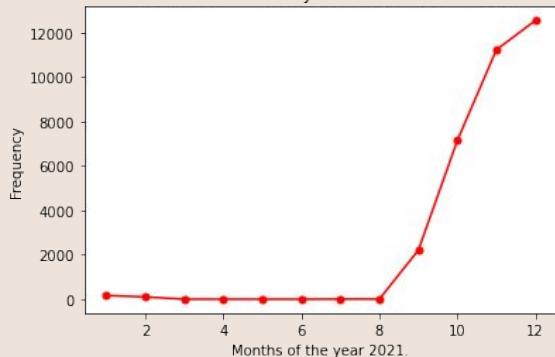
Youth Crime Distribution In NYC Borough.



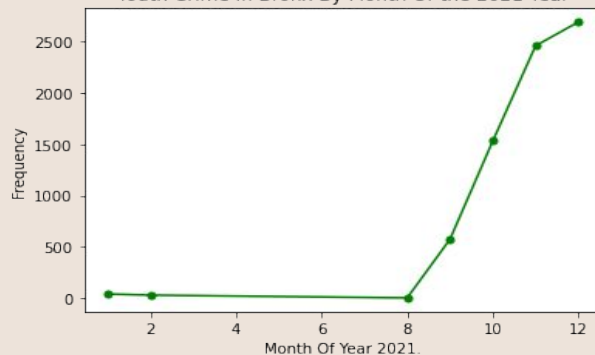
*Staten Island, Queens, and Kingsborough have the highest youth crime rates of the five New York City boroughs.*



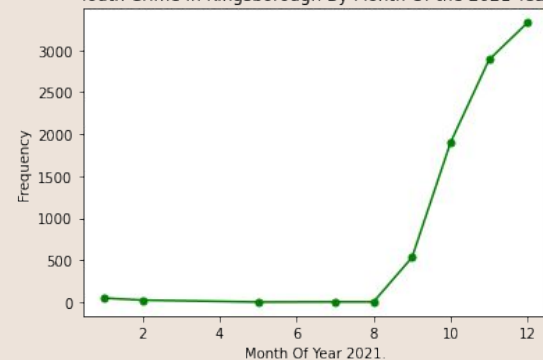
Youth Crime In NYC By Month Of the 2021 Year



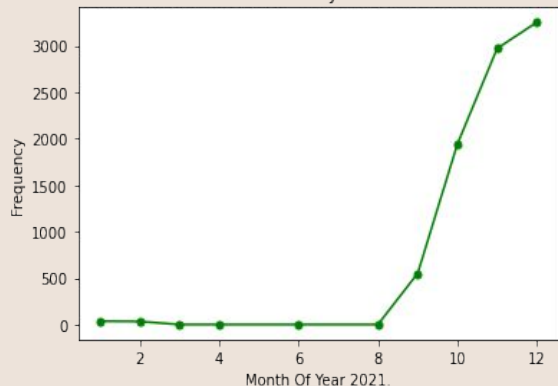
Youth Crime In Bronx By Month Of the 2021 Year



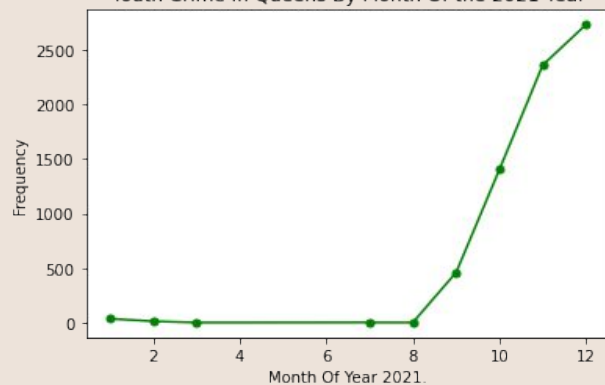
Youth Crime In Kingsborough By Month Of the 2021 Year



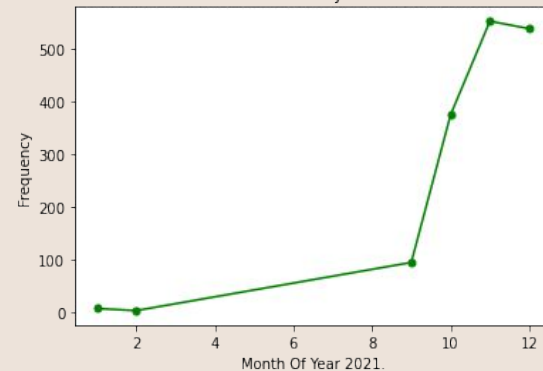
Youth Crime In Manhattan By Month Of the 2021 Year.



Youth Crime In Queens By Month Of the 2021 Year



Youth Crime In Staten Island By Month Of the 2021 Year



## Borough Distribution of Youth Crime





Insights:

- The three boroughs Staten Island, Queens, Kingsborough needed 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)

