Parking violations in NYC

Presentation By:

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Objective and Data Description

INTRODUCTION:

- Parking Violations are very high in New York City and hence the parking fines are set to a higher margin.
- The NYC Department of Finance collects data on every parking ticket issued in NYC.
- This data is made publicly available to aid in ticket resolution and to guide policymakers

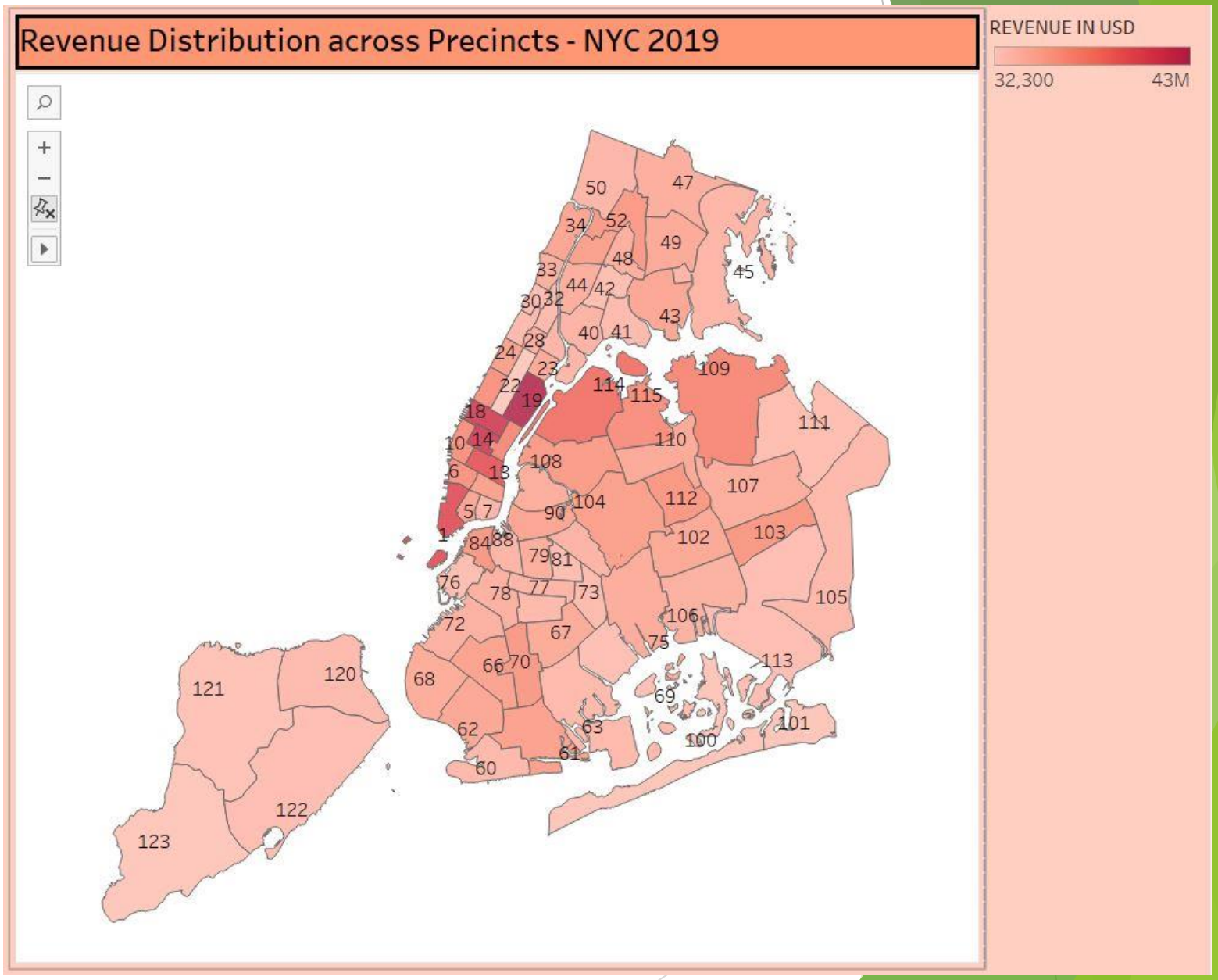
OBJECTIVE:

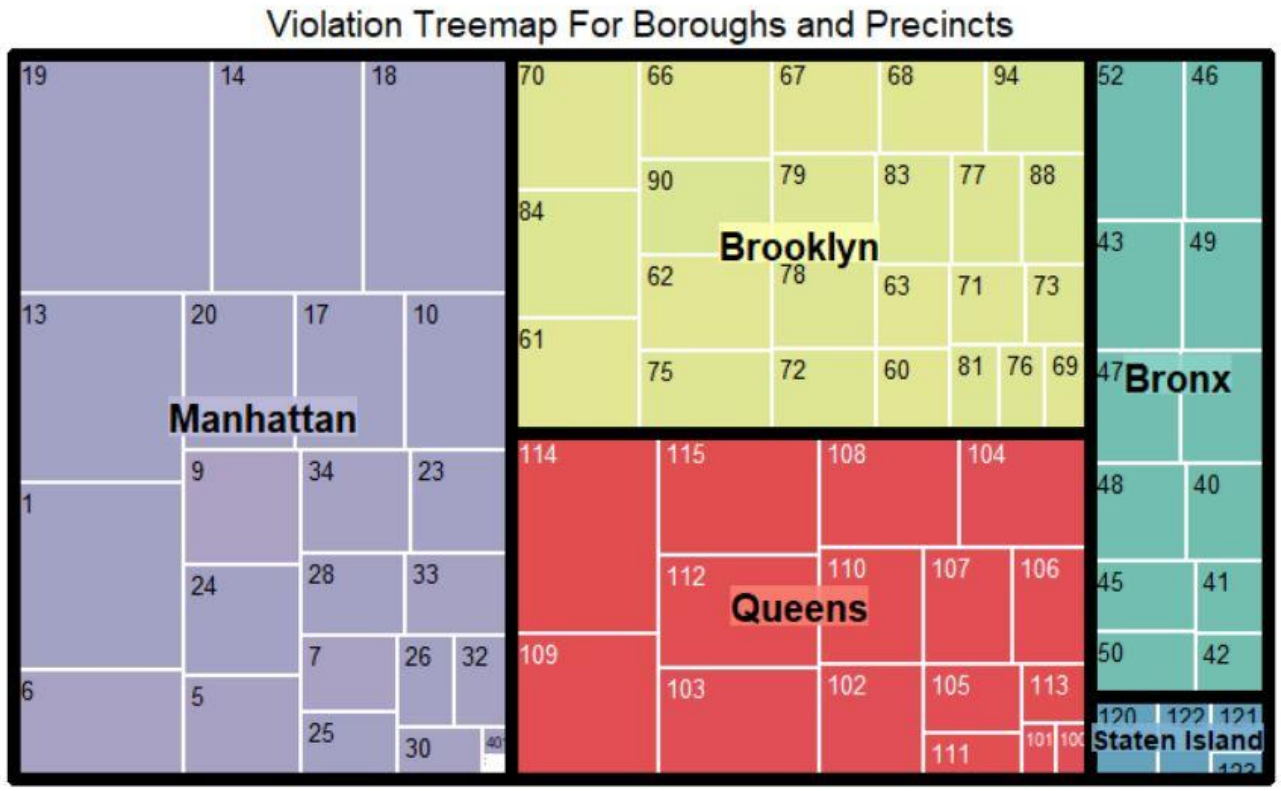
- To analyze the trend of parking violations in NYC
- To present the analysis as visualizations that are easier to understand

DATA DESCRIPTION:

- Our dataset consists of Parking Violations in the city of NY
- We have multiple datasets with about 10 million plus rows in each dataset.
- Each row in the dataset is a recording of the violation occurrence.
- There are more than 40 columns and few of the major columns are Violation code, Violation type, Vehicle Body Type, Vehicle Make, Violation County, Violation Issue Date, Registration State etc.

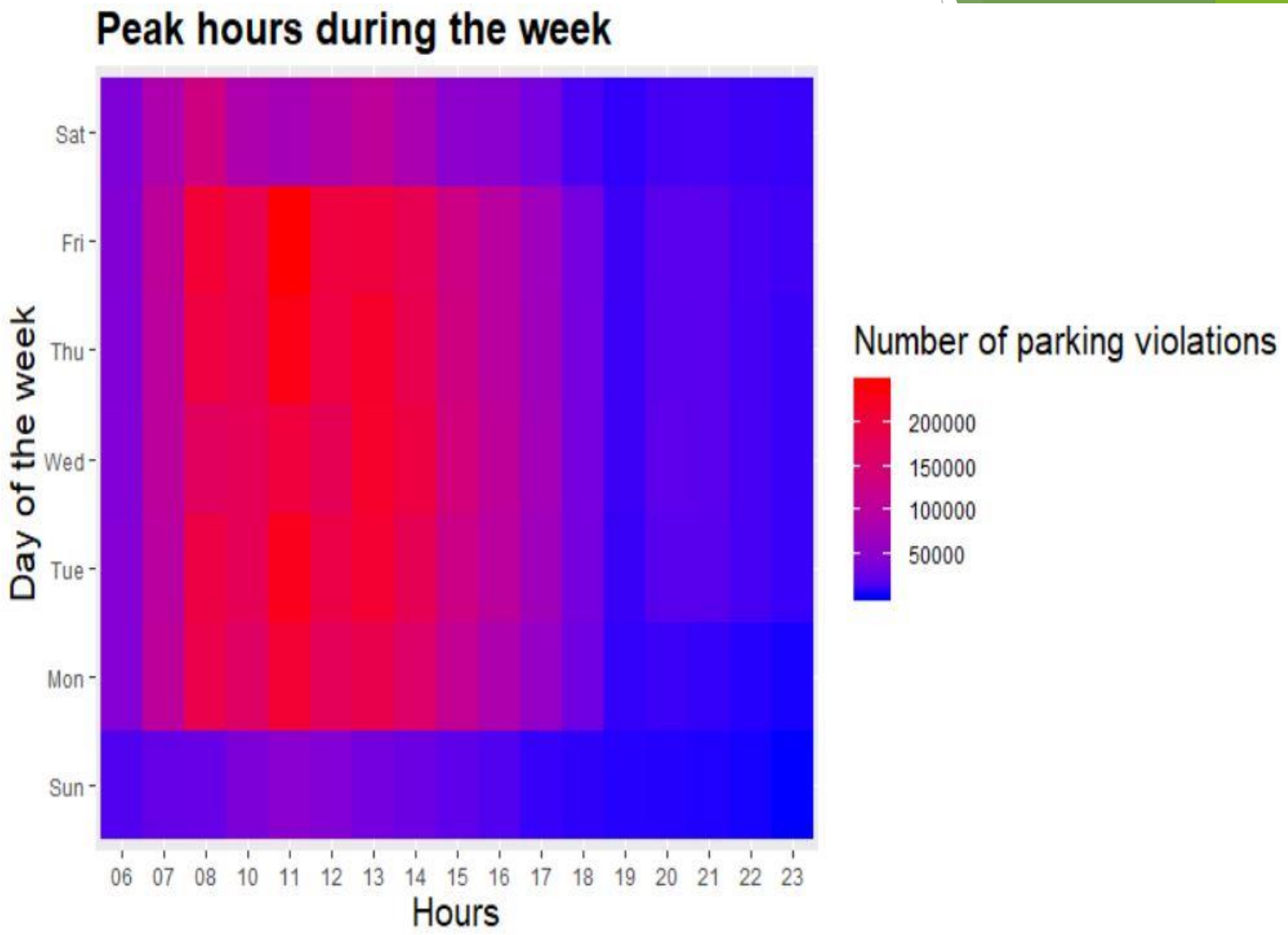
- The map-based visualization indicates the density of violations in different boroughs throughout NYC.
- The higher the violations, higher is the revenue collected from fines.
- It is evident from the visualization that, the maximum revenue collected is from the Manhattan region.
- The numbers indicate the precincts in each borough.





- The tree map classifies each borough as precincts and orders the precincts based on the number of violations.
- Manhattan has a clear lead in the number of violations recorded with precinct 19 recording the highest violations.
- Brooklyn and Queens closely follow Manhattan with Staten Island having the least record of violations.

- NYC is a small city with large population.
- The time-based visualization indicates distribution of parking violations throughout the week.
- Maximum number of violations are observed during the day with the peak at 11:00 A.M.
- Almost all the days of the week follow the same pattern except Wednesdays where there is a lower density of violations during the day



Conclusions

- Manhattan has the highest population and hence the number of violations observed are high.
- The population density of the New York City is around 27,000 people per square mile which is a high number.
- Due to the high population density, the number of automobiles are high as well.
- As observed in the visualization of peak hours of parking violations, the violations are recorded only on weekdays and during the working hours of corporate firms.
- We can conclude that the increase in the number of corporate companies in the city has increased the population which in-turn increased the number of automobiles on the street.
- Another contributing factor to this issue is the attraction of tourists to NYC.
- The large number of vehicles on the street with nowhere to park has contributed to the high density of parking violations in NYC.
- The New York City subways have exponentially reduced the density of cars on the street. More number of public transports will help in the reduction of violations and at the same time contribute towards the improvement of the ecology.