

MTA

# MTA DATA ANALYSIS OF NEW YORK SUBWAY for the Electricity Company for the maintenance of lighting in stations

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# BACKSTORY

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- There is an electric company that wants to work with New York MTA subway stations to do lighting maintenance.
- And you want to know the peak times to avoid and non-peak times to send the maintenance team to the station.
- My goal in this analysis is to give the electricity company the best working hours for the maintenance team in the busiest, moderately crowded and least crowded stations.

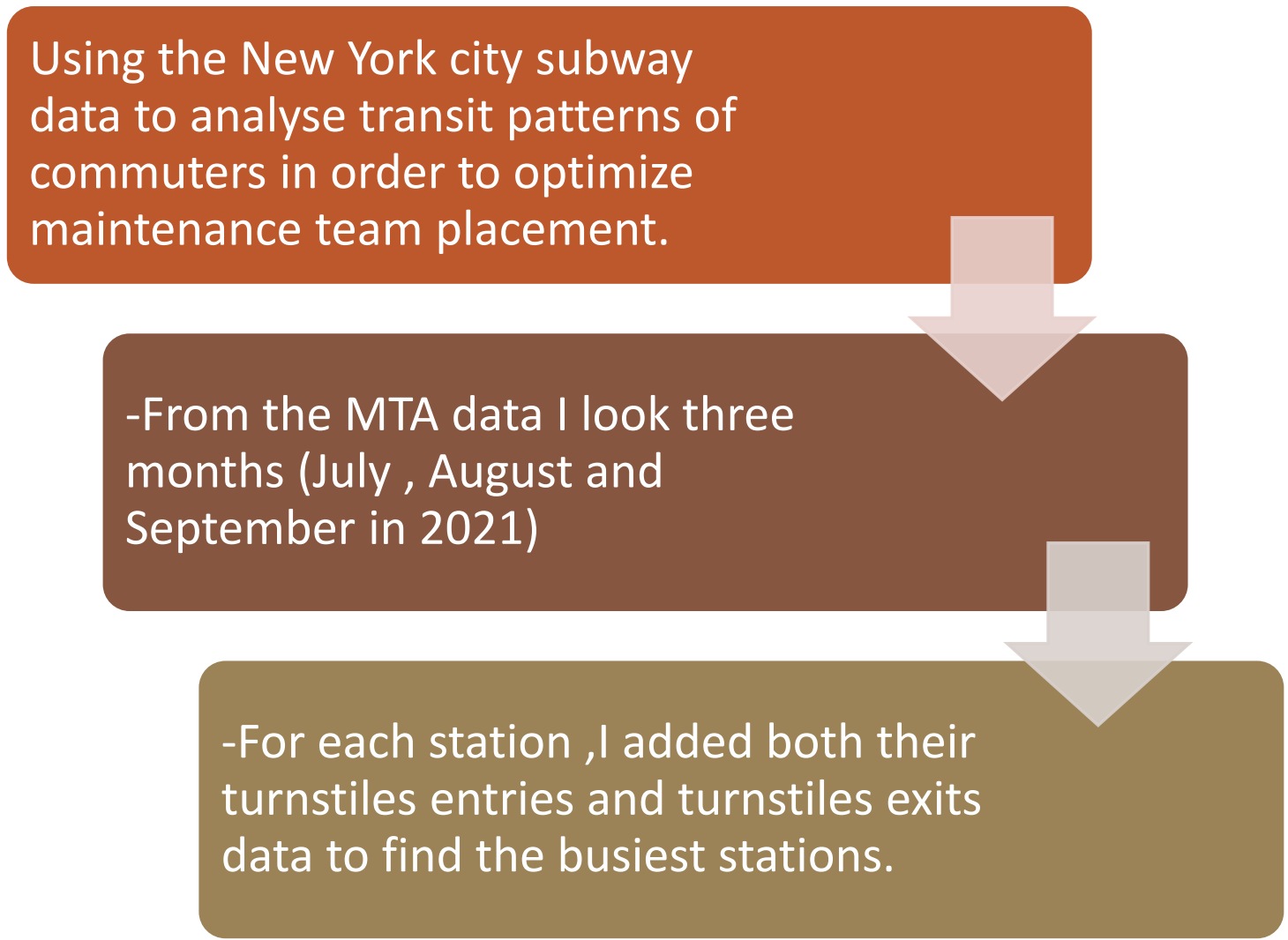
# TOOLS:

Data analysis with the following :

- Panda
  - Numpy
  - SQLAlchemy
  - Matplotlib
  - Seaborn
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Using the New York city subway data to analyse transit patterns of commuters in order to optimize maintenance team placement.

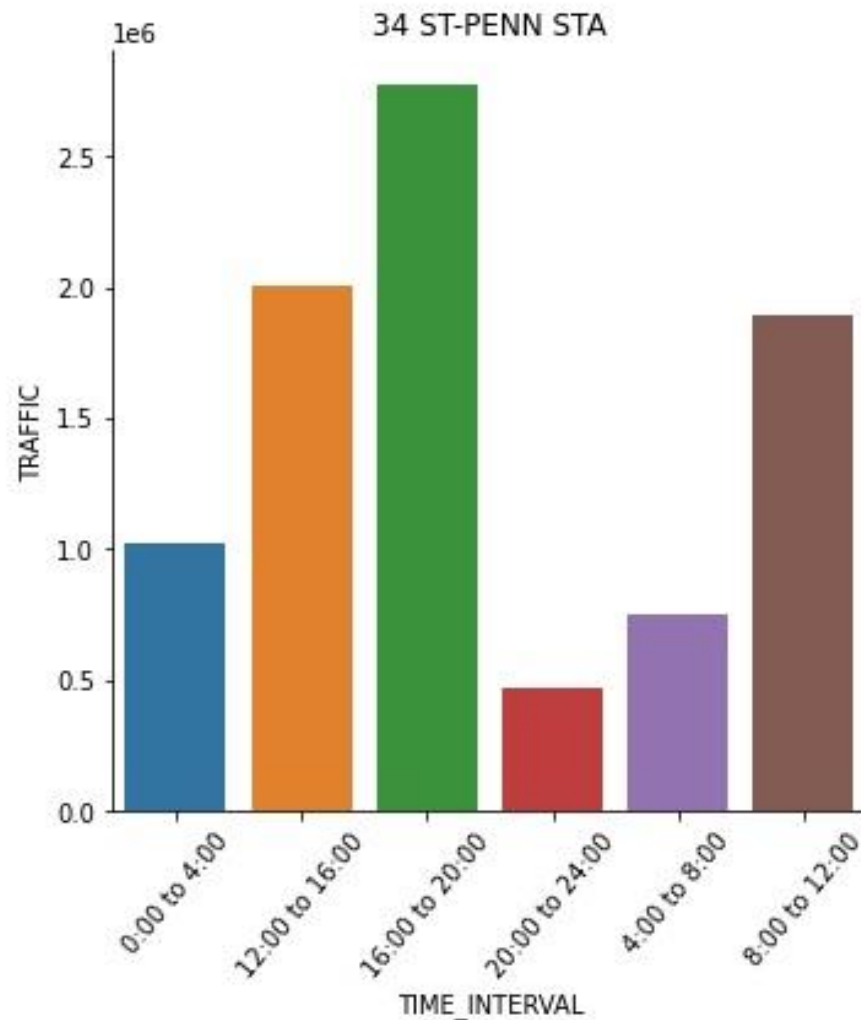


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graph TD; A[Using the New York city subway data to analyse transit patterns of commuters in order to optimize maintenance team placement.] --> B[-From the MTA data I look three months (July , August and September in 2021)]; B --> C[-For each station ,I added both their turnstiles entries and turnstiles exits data to find the busiest stations.];
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-From the MTA data I look three months (July , August and September in 2021)

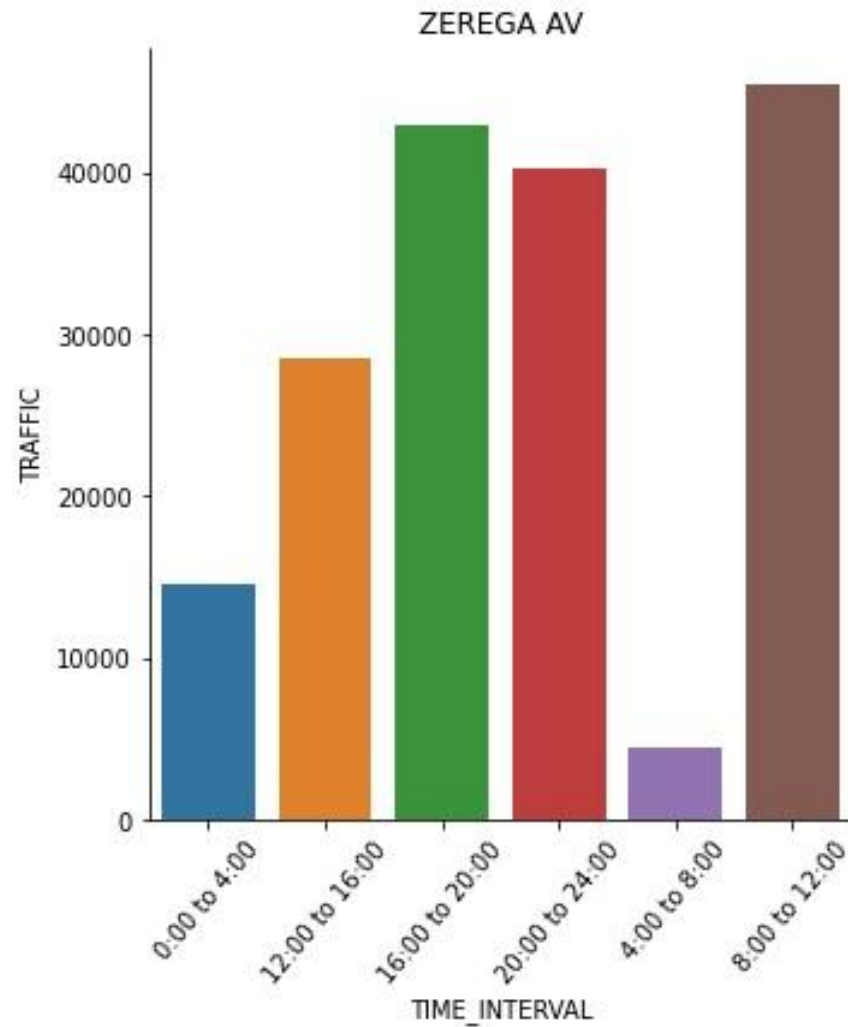
-For each station ,I added both their turnstiles entries and turnstiles exits data to find the busiest stations.

## Data Sources



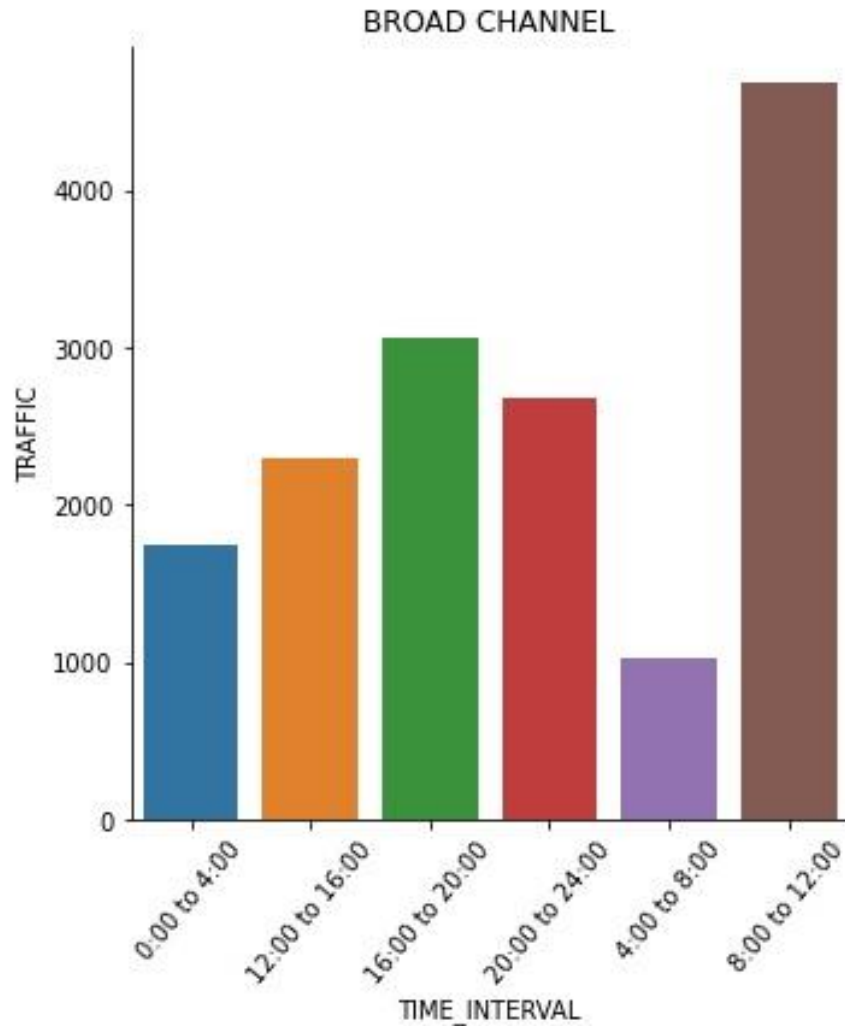
In the busiest stations such as the 34 ST-PENN STA, the work of the maintenance team is from 20:00 to 24:00

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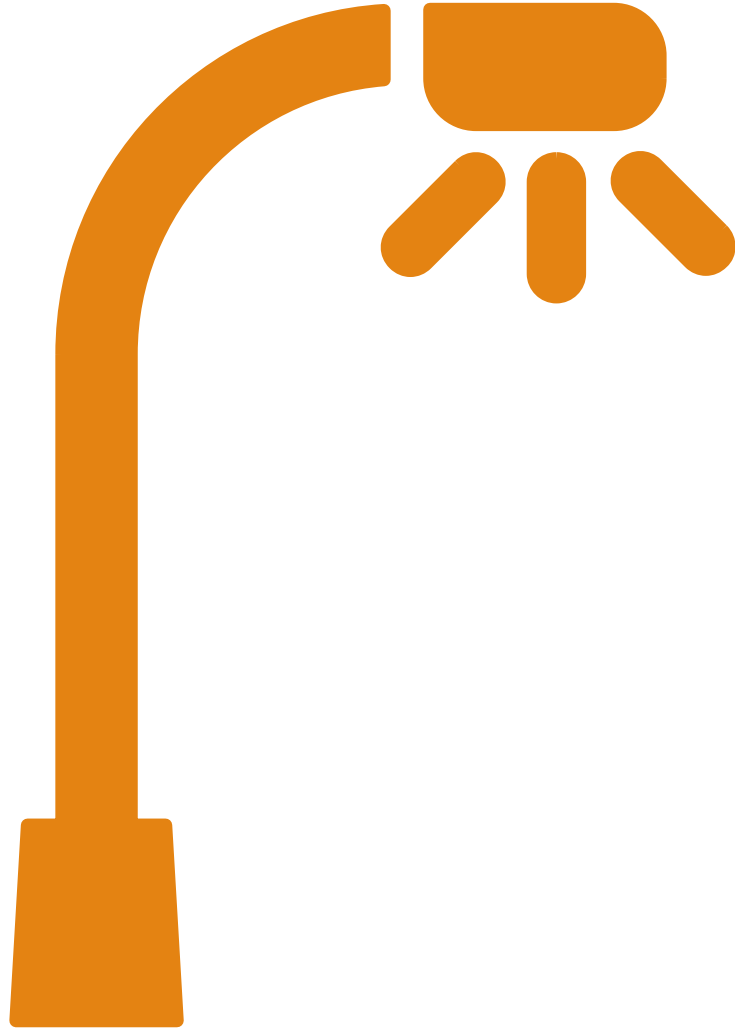
In stations of medium congestion, such as ZEREGA AV station, the work of the maintenance team is from 4:00 to 8:00

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In less crowded stations such as BROAD CHANNEL station, the work of the maintenance team is from 4:00 to 8:00

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# Conclusion

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My recommendation is that the best time for maintenance work for lighting in crowded stations is from 20:00 to 24:00, and in the rest of the stations the work is from 4:00 to 8:00



Thank you