

MTA EXPLORATORY DATA ANALYSIS

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Introduction

Motivation

NYC DOT and MTA want to add/construct several new stations to satisfy the growing post-pandemic daily public transit needs.

Objectives and goals

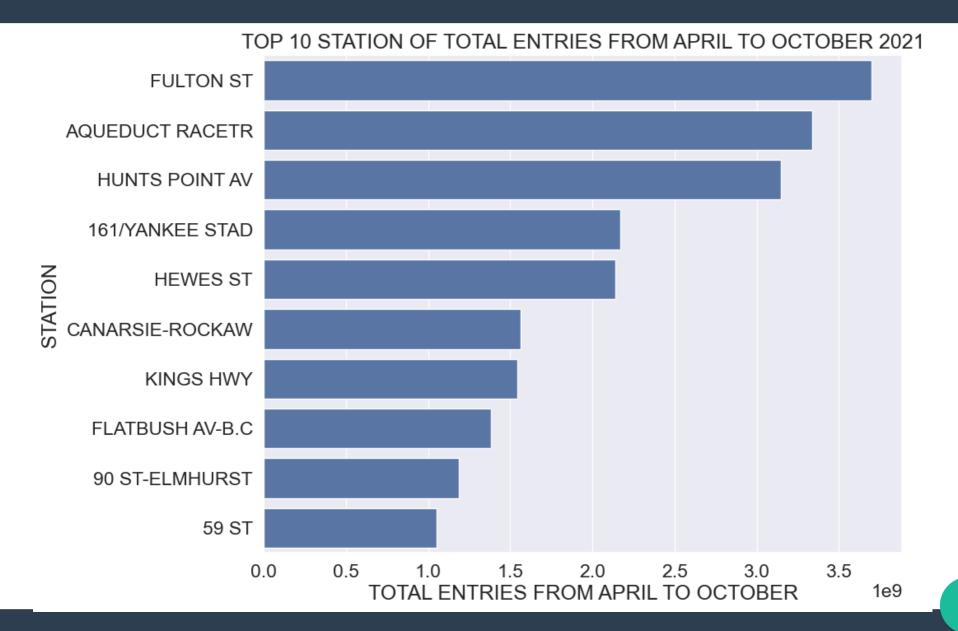
We plan to send out several groups of surveyors to collect information from the passengers entering the subway stations. So that it is necessary to come out a reasonable and efficient survey plan to save time and labor. We want to find out the busiest station and time blocks for the preliminary survey plan.

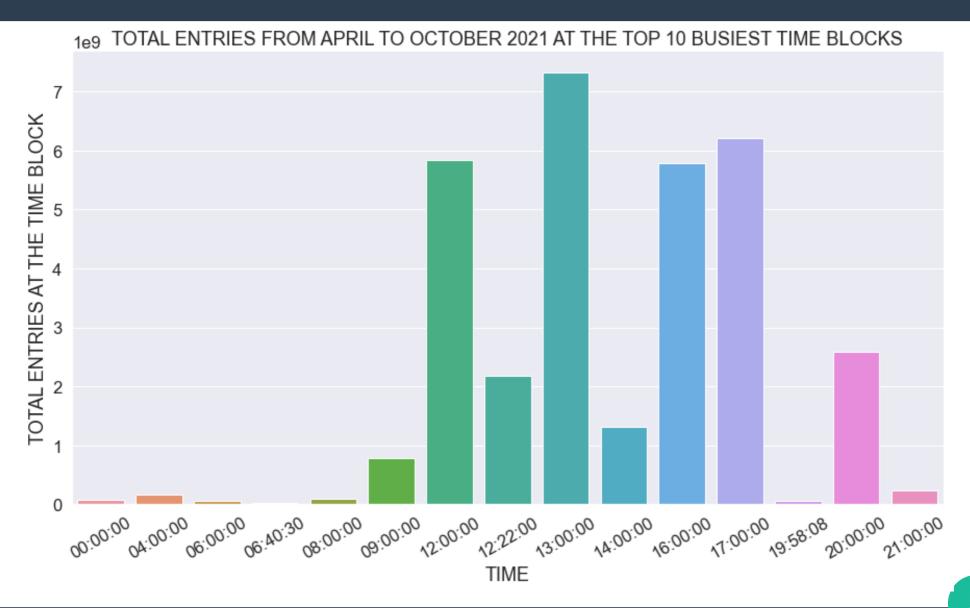
• Final results

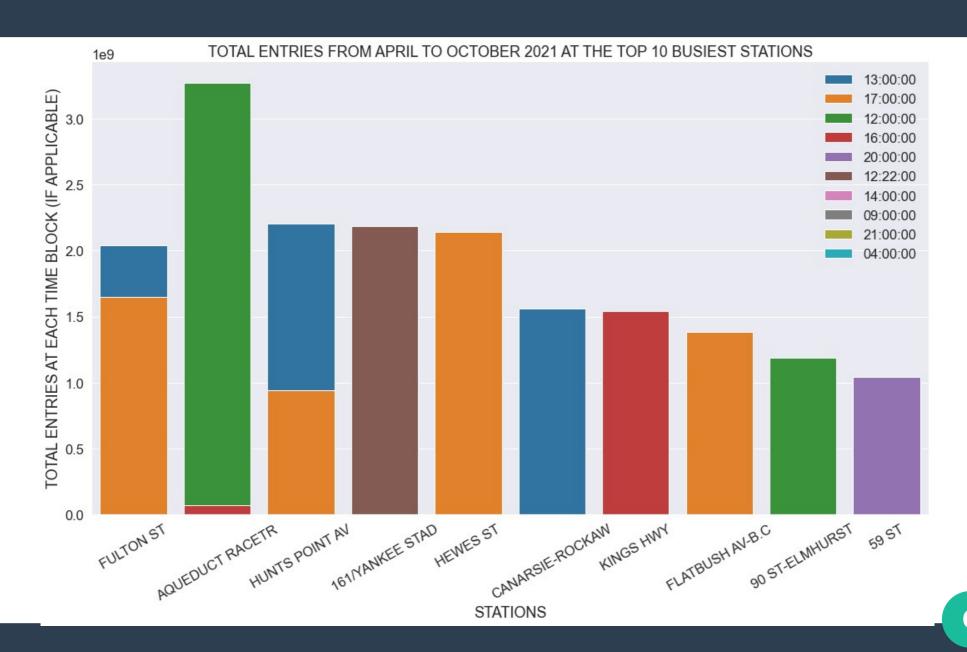
After the data analysis, we selected several stations for the survey plan. Additional metrics that can be discussed in the future are considered and presented.

Methodology

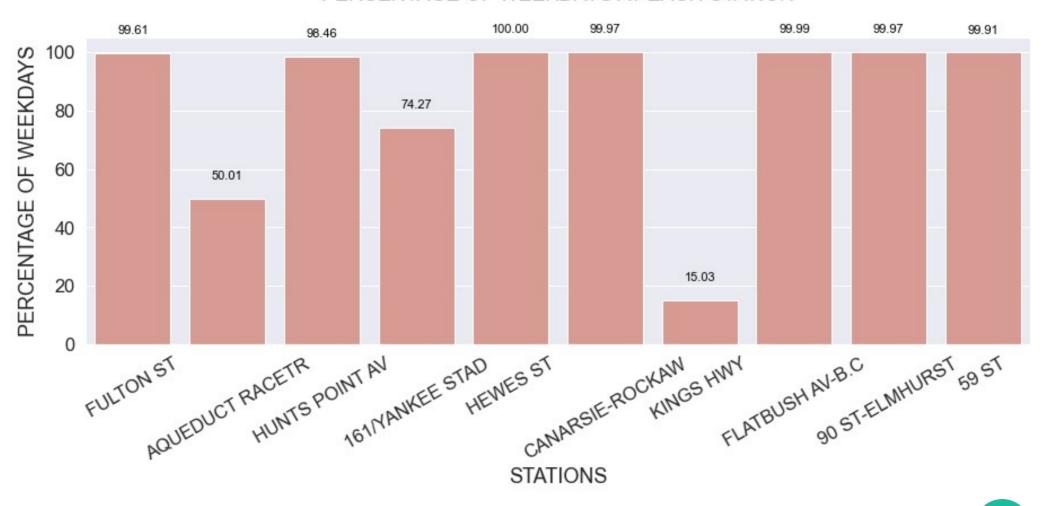
- Pandas
- Numpy
- Matplotlib
- Seaborn

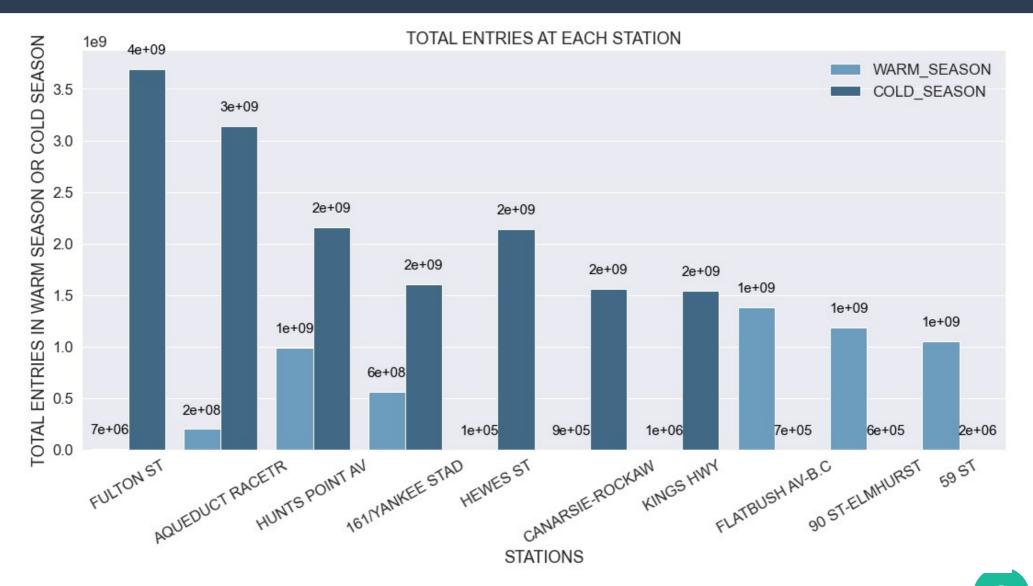












Conclusions

PRELIMINARY SURVEY PLAN - TIME AND LOCATION

Station	Time	Weekday/ Weekends	Season
FULTON ST	17:00:00	Weekday	Cold
AQUEDUCT RACETR	12:00:00	Both Weekday/W eekends	Cold
HUNTS POIN AV	13:00:00	Weekday	Cold/Warm

Future Work

- Distance between stations
- Correlate the census characteristics near each station with the daily entries

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Thank you!