

Motivation:

Due to the increase in violence against Asian American Pacific Islanders in the past year, the Stop AAPI Hate organization wants to raise awareness to the severity of this issue and let people know what resources are available to help those in need

Objective:

Find the stations that will make the most impact by analyzing the MTA ridership trends



Methodology

- Data: MTA Turnstile Data and Zip Code Population Data
 - 10/10/2020 – 03/20/2021 (6 months time period)

- Tools:

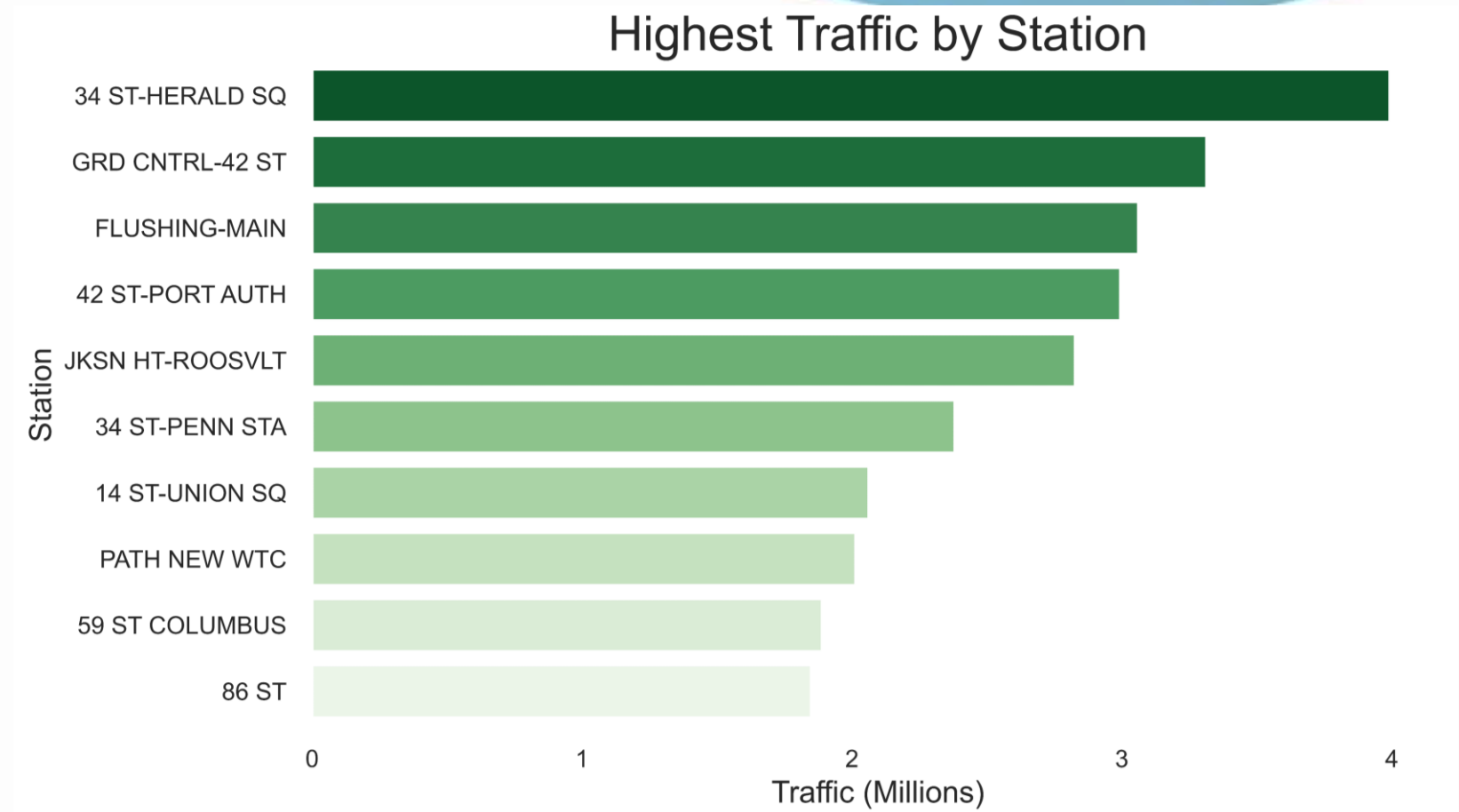


- Metric: Bivariate Analysis

Results

Top 5 Busiest Stations:

1. 34 St-Herald Square
2. Grand Central-42 St
3. Flushing-Main St
4. Jackson Heights
5. 34 St-Penn Station



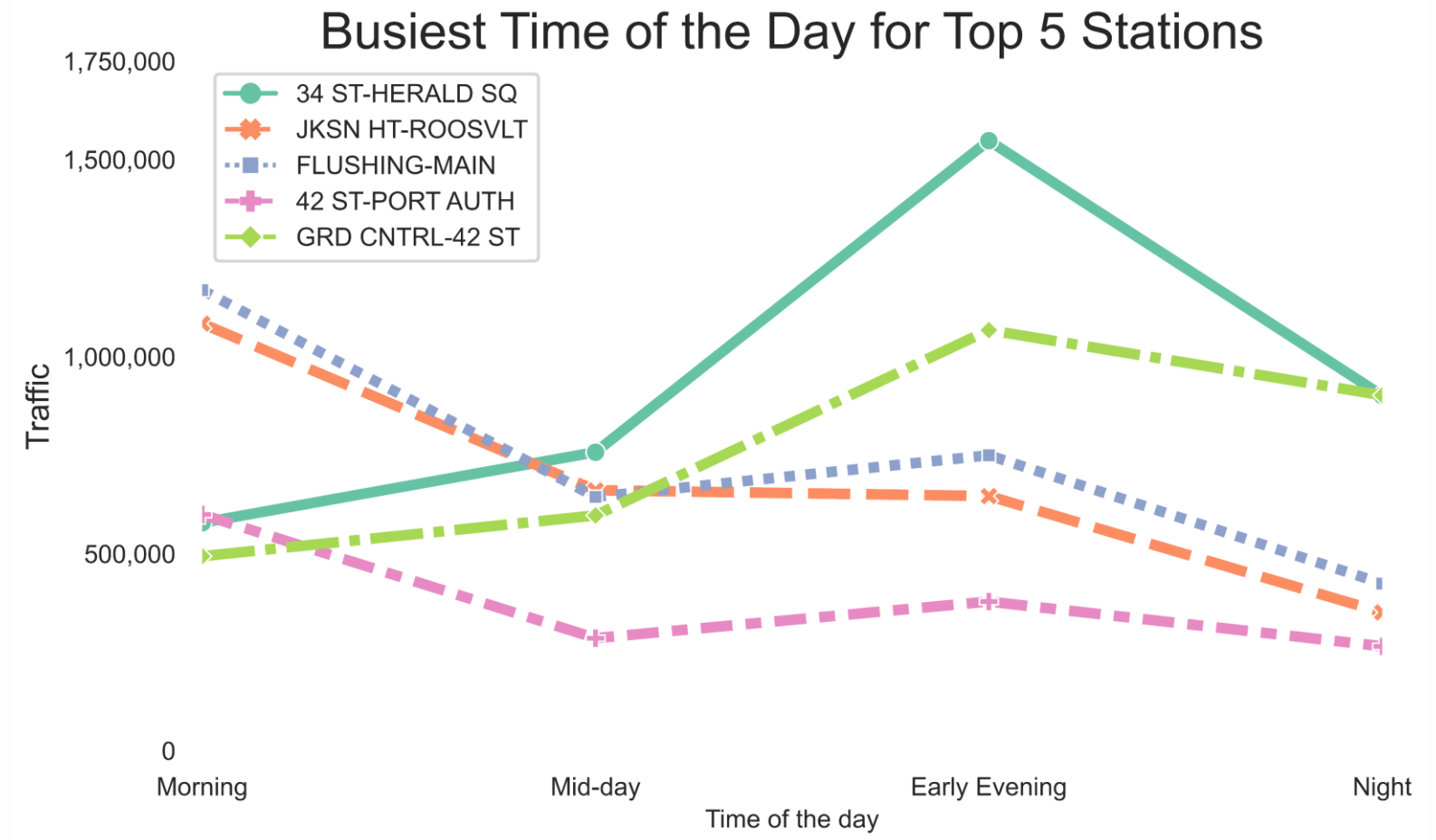
Best Time for Outreach

Morning(7AM – 11AM):

- Flushing-Main St
- Jackson Heights
- 42 St-Port Authority

Early Evening(3PM – 7PM):

- 34 St-Herald Sq
- Grand Central-42 St

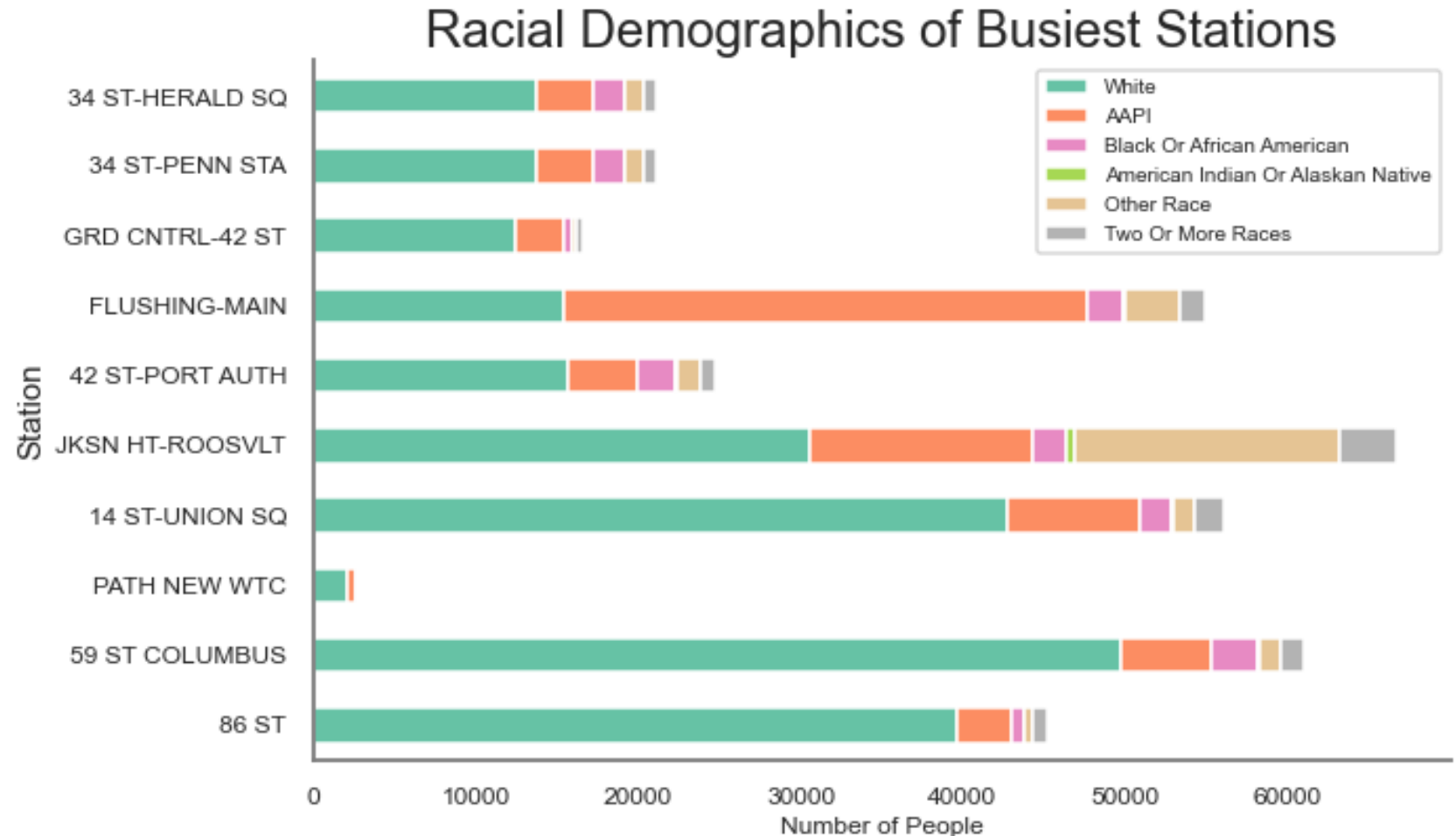


Recommendations

- 3 out of the top 5 busiest stations do not have a high AAPI population

Best Stations to Provide Outreach:

1. Flushing-Main St
2. Jackson Heights
3. 14 St-Union SQ
4. 59 St Columbus
5. 42 St-Port Authority



Future Work

- Create a model predicting which subway stations will increase in traffic as the city reopens and Covid-19 restrictions are lifted
- Work with geo-mapping to find stations with higher college densities to raise awareness as well as recruit volunteers

Appendix

MTA Turnstile Data:

<http://web.mta.info/developers/turnstile.html>

Zip Code Population Data obtained from:

<https://www.unitedstateszipcodes.org/>