WomenTechWomenYes, Inc. Street Team Placement

Exploratory Data Analysis

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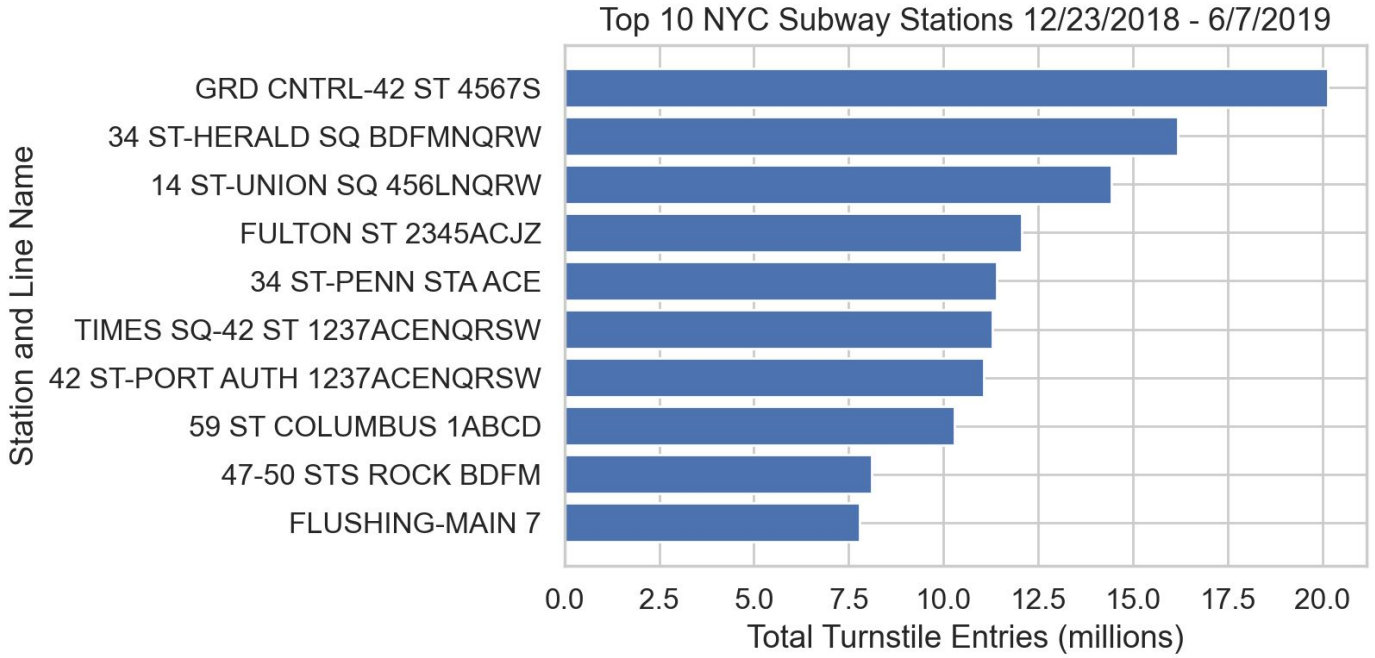
Background

- WTWY annual gala planned for summer 2022.
- Data analysis performed on NYC MTA turnstile data to inform WTWY decisions on where to place street teams.

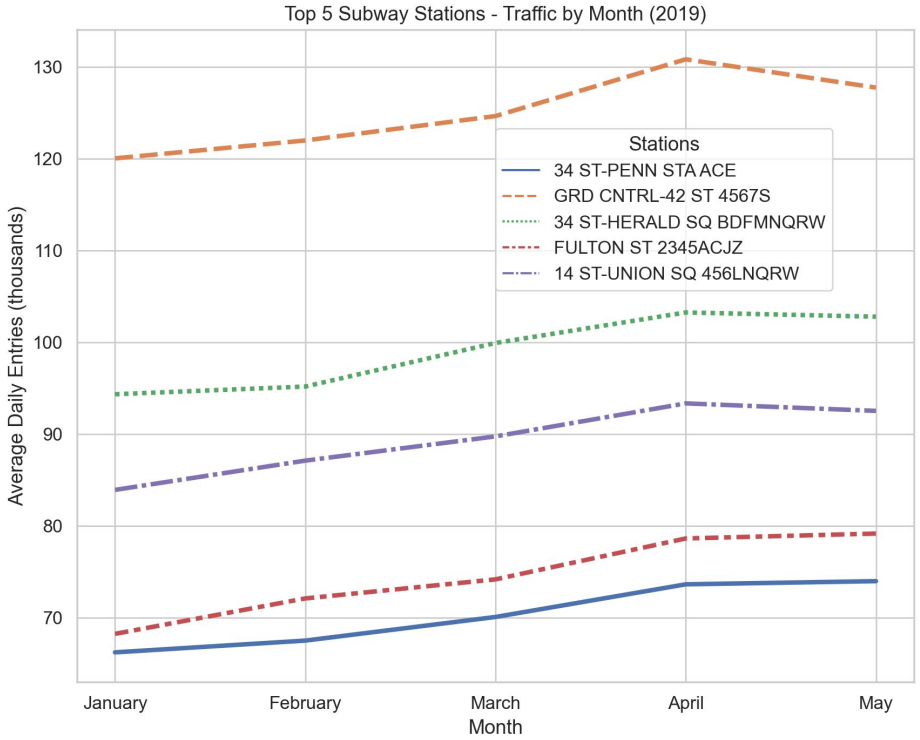
Data Set

- Data primarily from 2019 Q1 and Q2 selected for analysis.
- Spring 2020 and 2021 data also evaluated, but traffic drastically reduced from 2019 due to COVID-19 pandemic.
- 2020 and 2021 data is not anticipated to be representative of MTA traffic during the promotional period for the gala in 2022.
- Q1 and Q2 evaluated since this is the anticipated time of year for promotion of the gala.

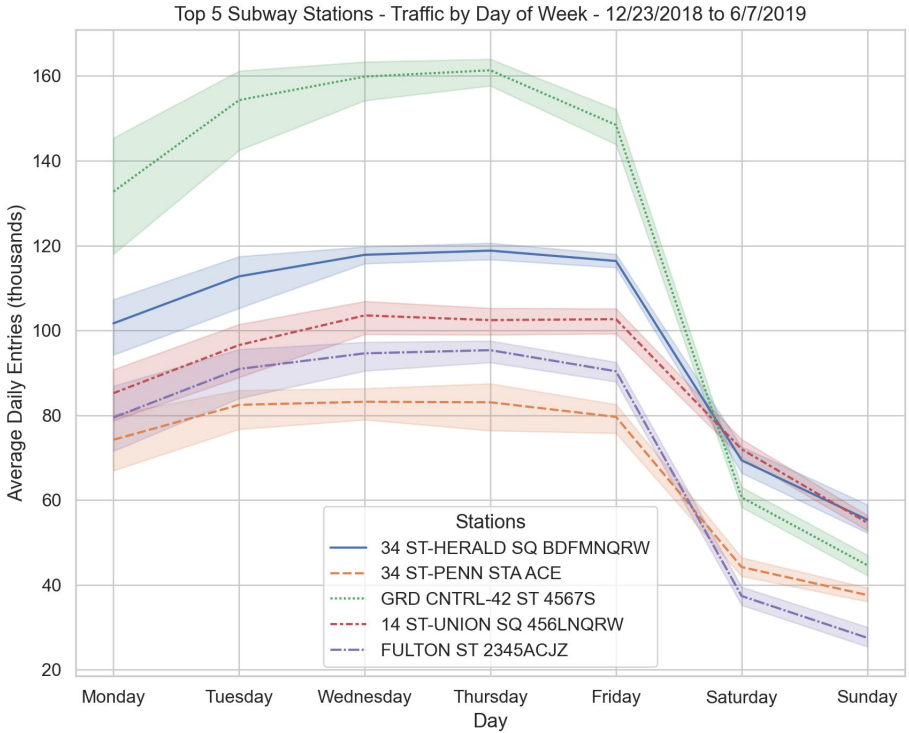
Total Traffic



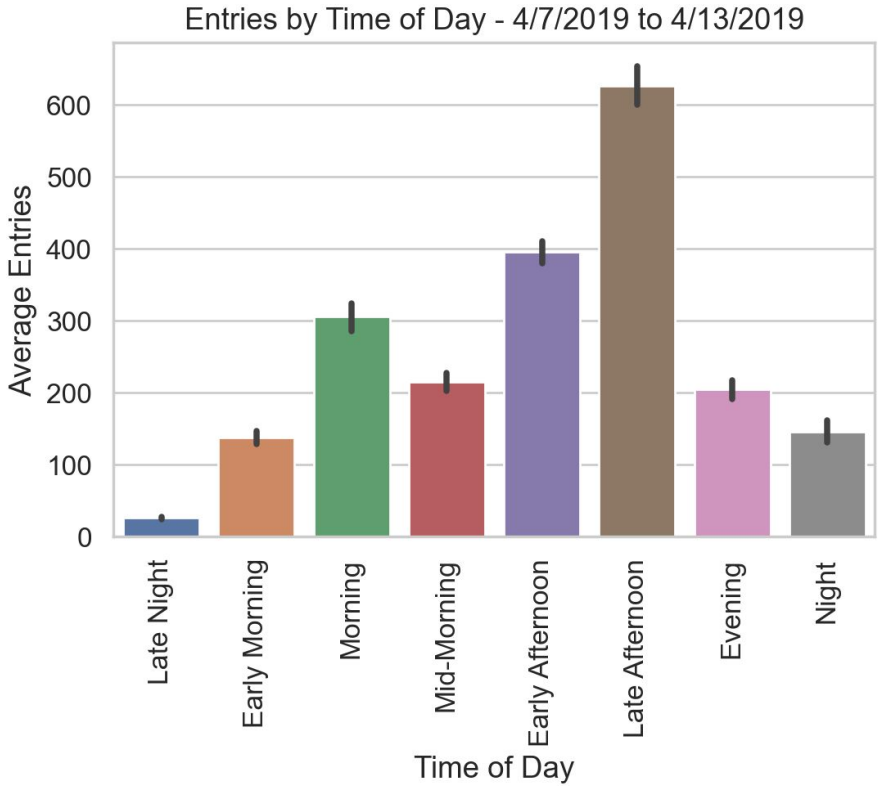
Monthly Traffic



Weekly Traffic



Intraday Traffic



Takeaways

1. Stations with the highest traffic are Grand Central, Times Square, Union Square, Herald Square, Penn Station, and Fulton Street. Consistent even in post-pandemic times.
2. Weekday traffic is higher than weekends. Wednesday to Friday traffic is consistently higher than the rest of the week.
3. Peak traffic is in the afternoons.

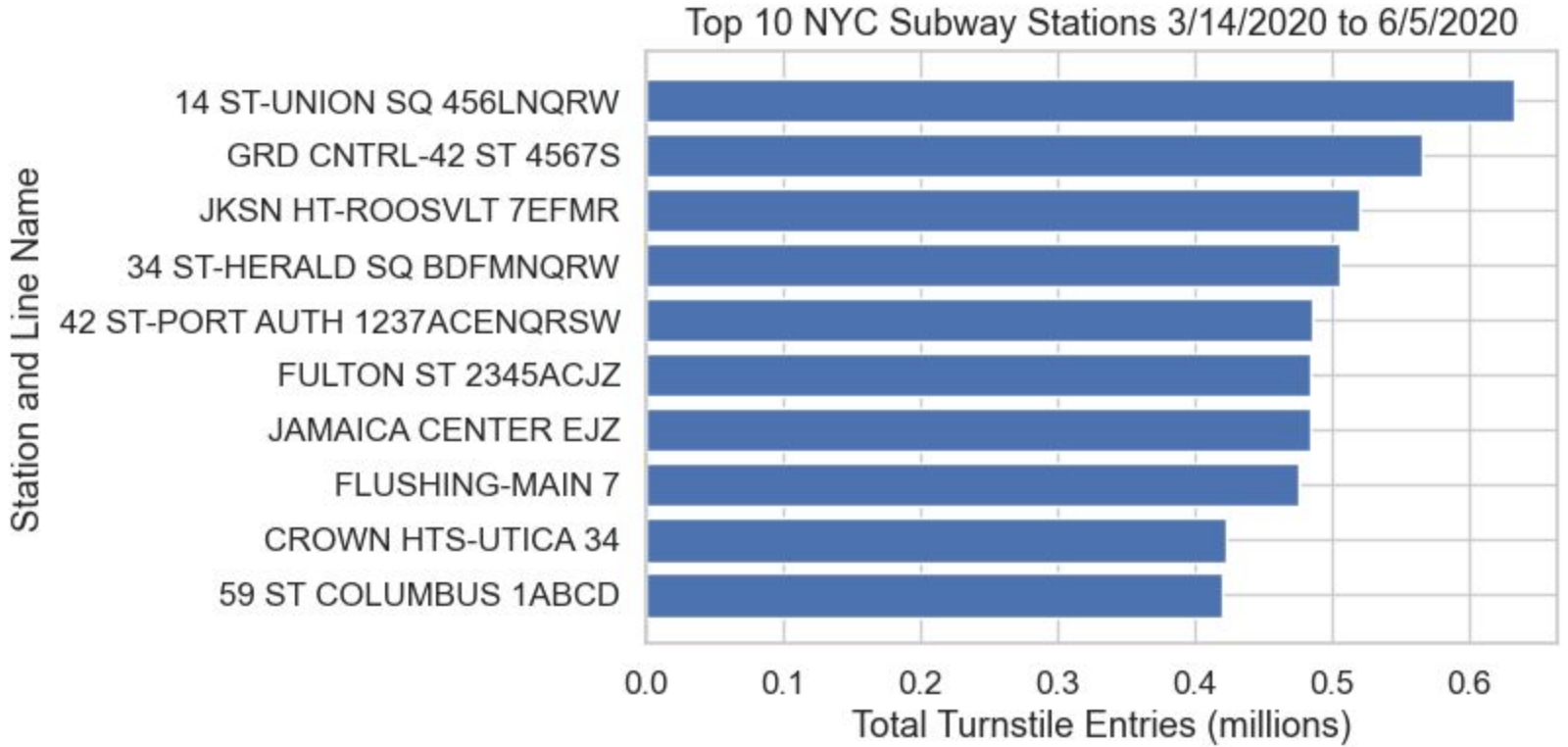
Recommendations

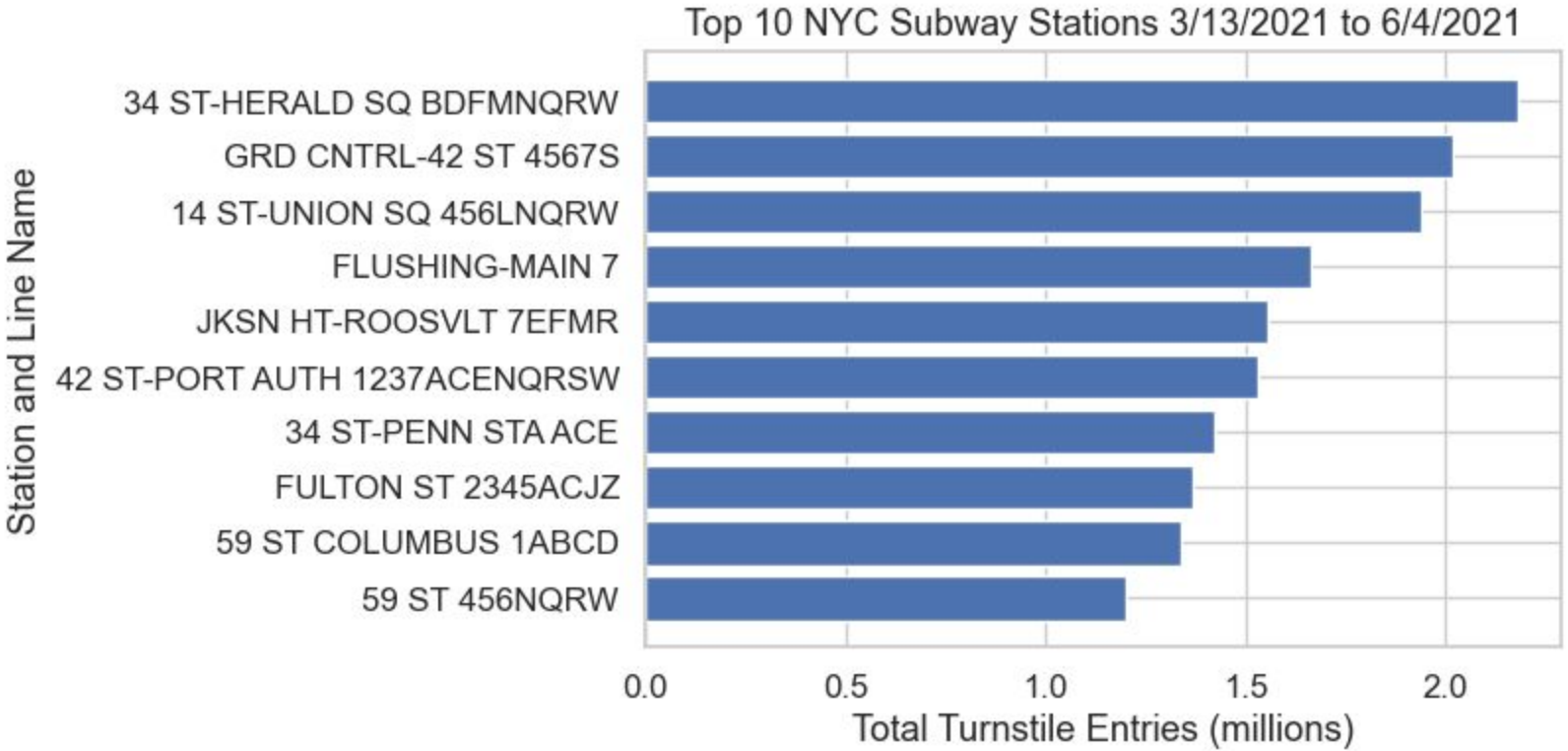
1. Plan to place street teams at turnstile entrances for the highest traffic stations.
2. Focus on weekday afternoons with priority given to Wednesday through Friday.
3. Rotate teams through different stations to reach a wider base.

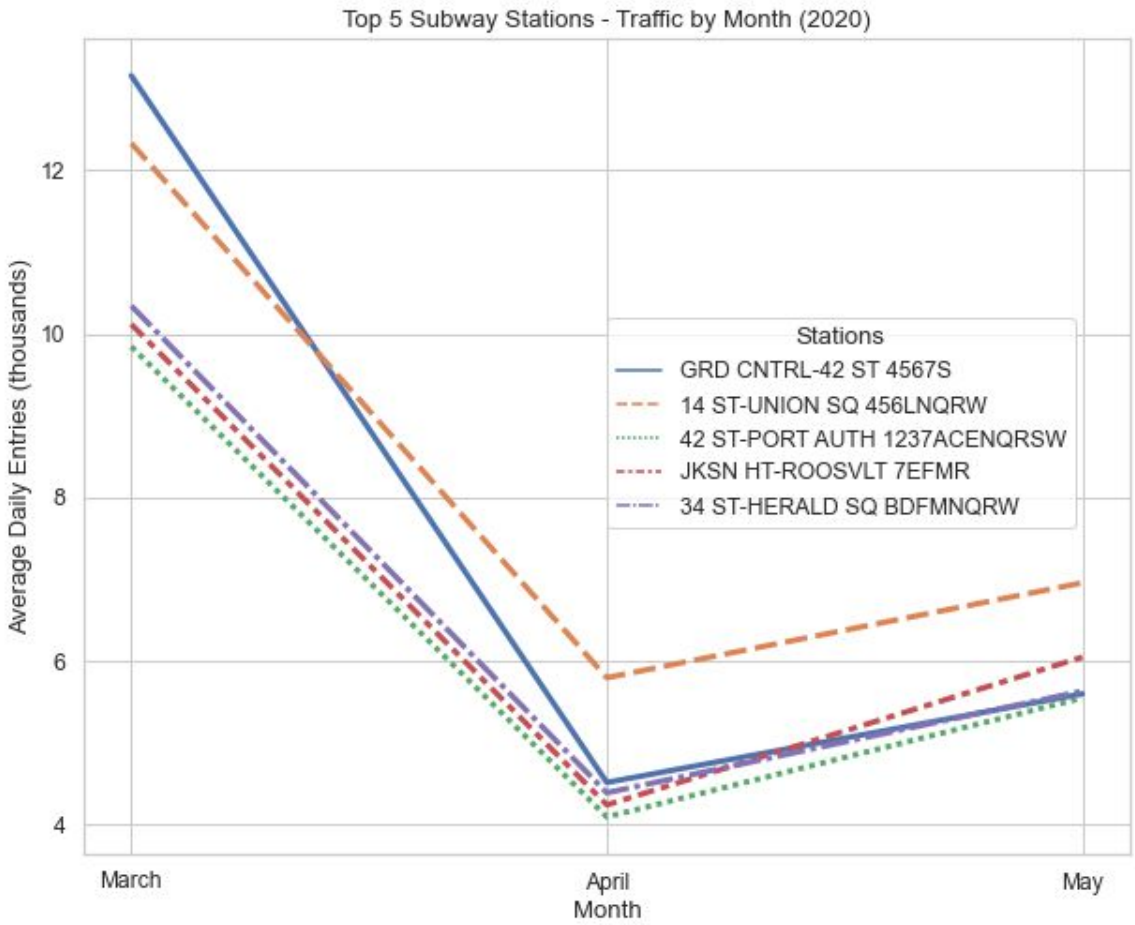
Proposal for Further Analysis

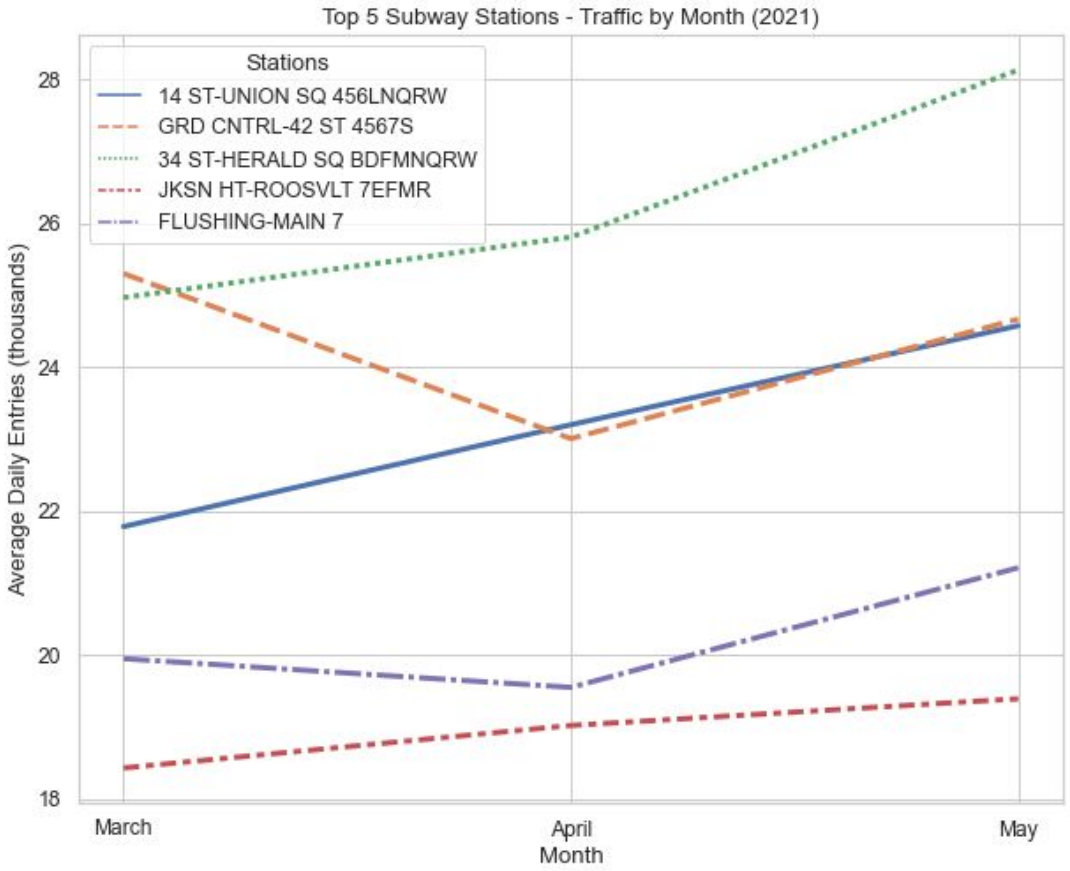
- WTWY to provide target audience demographics.
- Recommendations on locations to place street teams can be refined after taking demographic information into account.
- Traffic data can be combined with location data into an interactive tool which will allow for evaluation of candidate subway stations in specific neighborhoods.

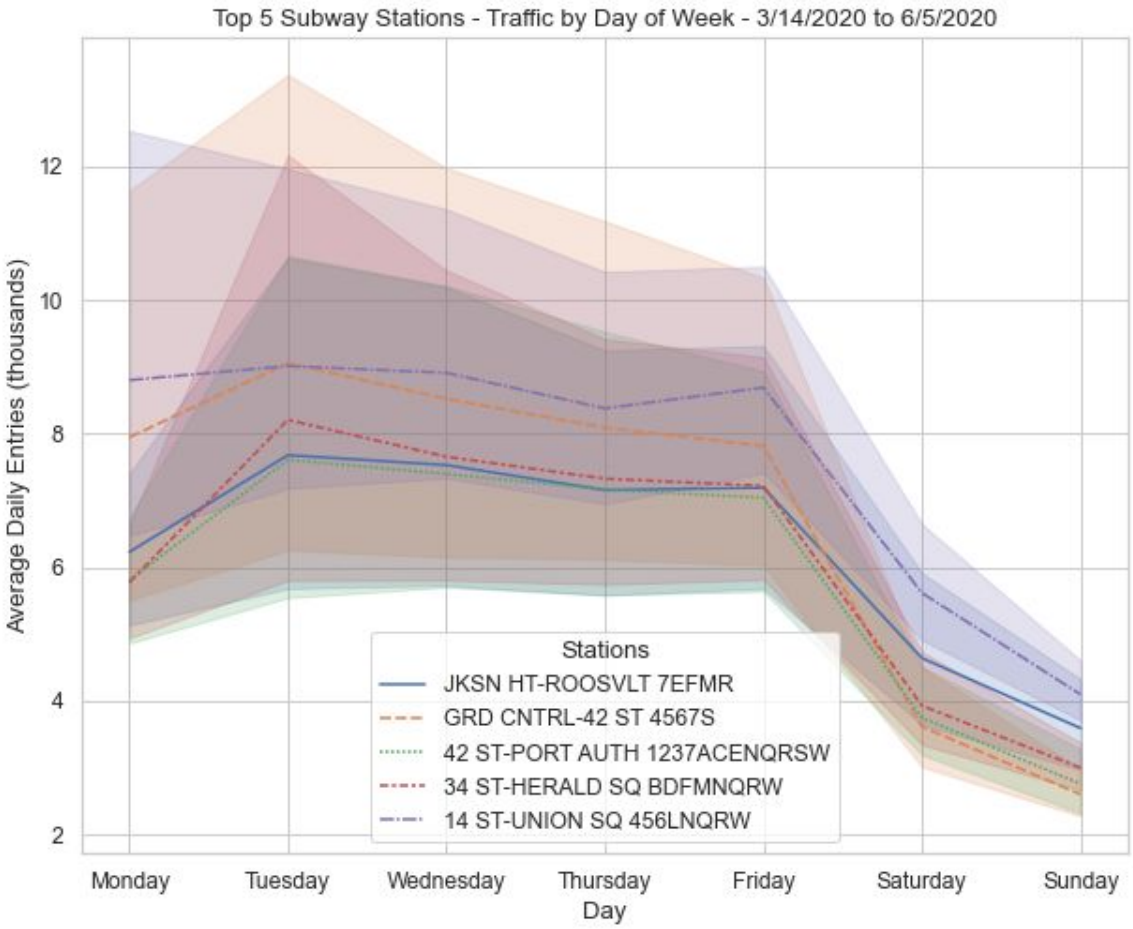
Appendix

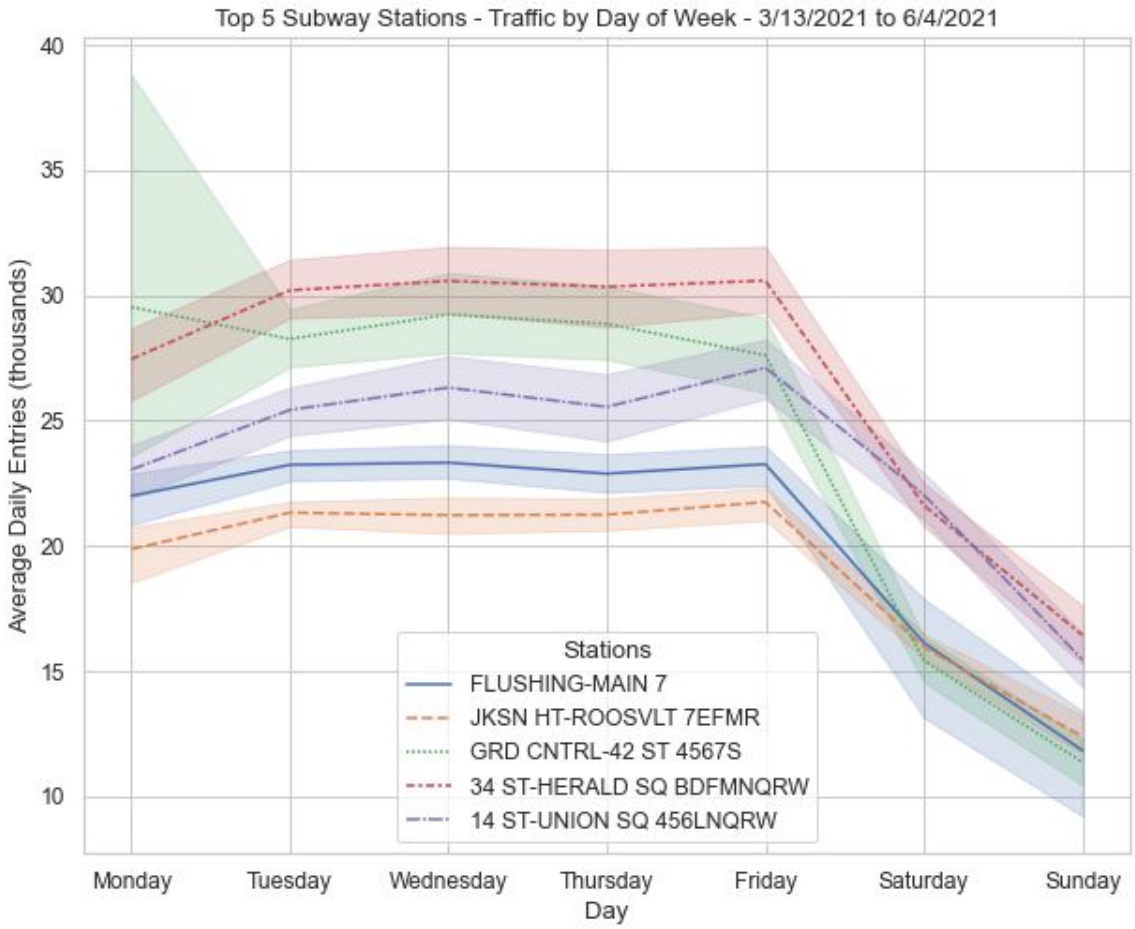

Top 10 NYC Subway Stations 3/14/2020 to 6/5/2020
Station and Line Name
14 ST-UNION SQ 456LNQRW
GRD CNTRL-42 ST 4567S
JKSN HT-ROOSVLT 7EFMR
34 ST-HERALD SQ BDFMNQRW
42 ST-PORT AUTH 1237ACENQRSW
FULTON ST 2345ACJZ
JAMAICA CENTER EJZ
FLUSHING-MAIN 7
CROWN HTS-UTICA 34
59 ST COLUMBUS 1ABCD
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Total Turnstile Entries (millions)

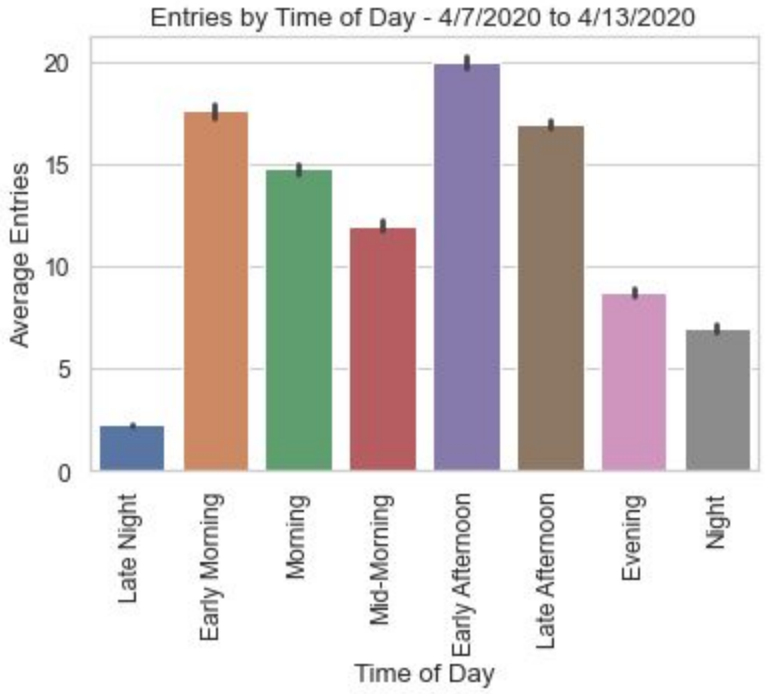

Top 10 NYC Subway Stations 3/13/2021 to 6/4/2021
Station and Line Name
34 ST-HERALD SQ BDFMNQRW
GRD CNTRL-42 ST 4567S
14 ST-UNION SQ 456LNQRW
FLUSHING-MAIN 7
JKSN HT-ROOSVLT 7EFMR
42 ST-PORT AUTH 1237ACENQRSW
34 ST-PENN STA ACE
FULTON ST 2345ACJZ
59 ST COLUMBUS 1ABCD
59 ST 456NQRW
0.0
0.5
1.0
1.5
2.0
Total Turnstile Entries (millions)

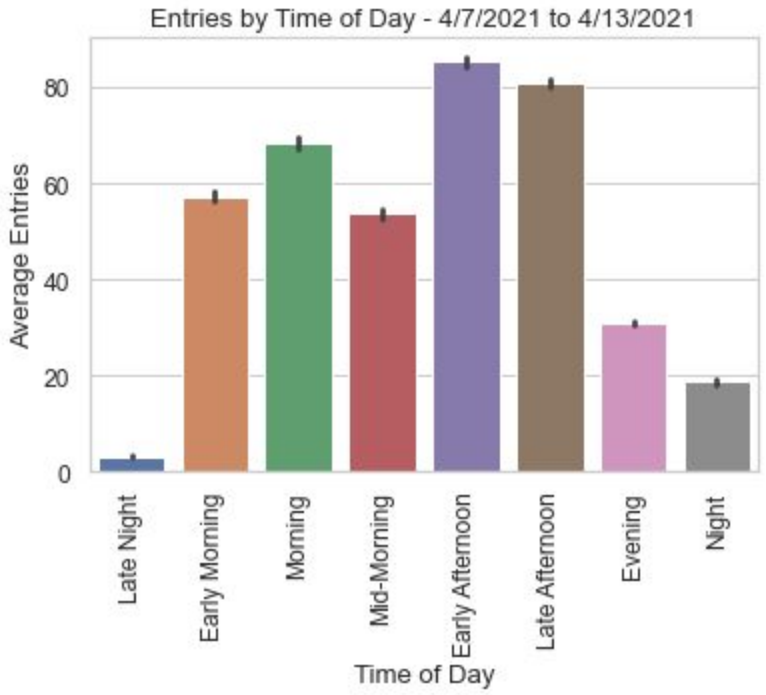

Top 5 Subway Stations - Traffic by Month (2020)
Average Daily Entries (thousands)
12
10
8
6
4
March
April
May
Month
Stations
GRD CNTRL-42 ST 4567S
14 ST-UNION SQ 456LNQRW
42 ST-PORT AUTH 1237ACENQRSW
JKSN HT-ROOSVLT 7EFMR
34 ST-HERALD SQ BDFMNQRW


Top 5 Subway Stations - Traffic by Month (2021)
Stations
14 ST-UNION SQ 456LNQRW
GRD CNTRL-42 ST 4567S
34 ST-HERALD SQ BDFMNQRW
JKSN HT-ROOSVLT 7EFMR
FLUSHING-MAIN 7
Average Daily Entries (thousands)
28
26
24
22
20
18
March
April
May
Month


Top 5 Subway Stations - Traffic by Day of Week - 3/14/2020 to 6/5/2020
Average Daily Entries (thousands)
12
10
8
6
4
2
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Day
Stations
JKSN HT-ROOSVLT 7EFMR
GRD CNTRL-42 ST 4567S
42 ST-PORT AUTH 1237ACENQRSW
34 ST-HERALD SQ BDFMNQRW
14 ST-UNION SQ 456LNQRW


Top 5 Subway Stations - Traffic by Day of Week - 3/13/2021 to 6/4/2021
Average Daily Entries (thousands)
40
35
30
25
20
15
10
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Day
Stations
FLUSHING-MAIN 7
JKSN HT-ROOSVLT 7EFMR
GRD CNTRL-42 ST 4567S
34 ST-HERALD SQ BDFMNQRW
14 ST-UNION SQ 456LNQRW


Entries by Time of Day - 4/7/2020 to 4/13/2020
Average Entries
0
5
10
15
20
Late Night
Early Morning
Morning
Mid-Morning
Early Afternoon
Late Afternoon
Evening
Night
Time of Day


Entries by Time of Day - 4/7/2021 to 4/13/2021
Average Entries
0
20
40
60
80
Late Night
Early Morning
Morning
Mid-Morning
Early Afternoon
Late Afternoon
Evening
Night
Time of Day