WTWY NYC SUMMER GALA 2021

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Metis Project 1

METIS

Project objective

Recommend optimal placement of street teams (**stations, weekdays and times**) that will enable WTWY to gather the most email addresses from those likely to attend the gala, contribute and raise awareness

Assumptions

Focus on May 2019 data as the gala will take place in summer 2021

Resource conscious: Five teams working from morning rush to evening rush hours

Interested in total volume, as well as those passionate about increasing women in tech and supporting inclusivity

Methodology

Cleaning and wrangling the data

Data sources

MTA Turnstile and station location data

Obtained ACS data through NYC Open Data

Methods

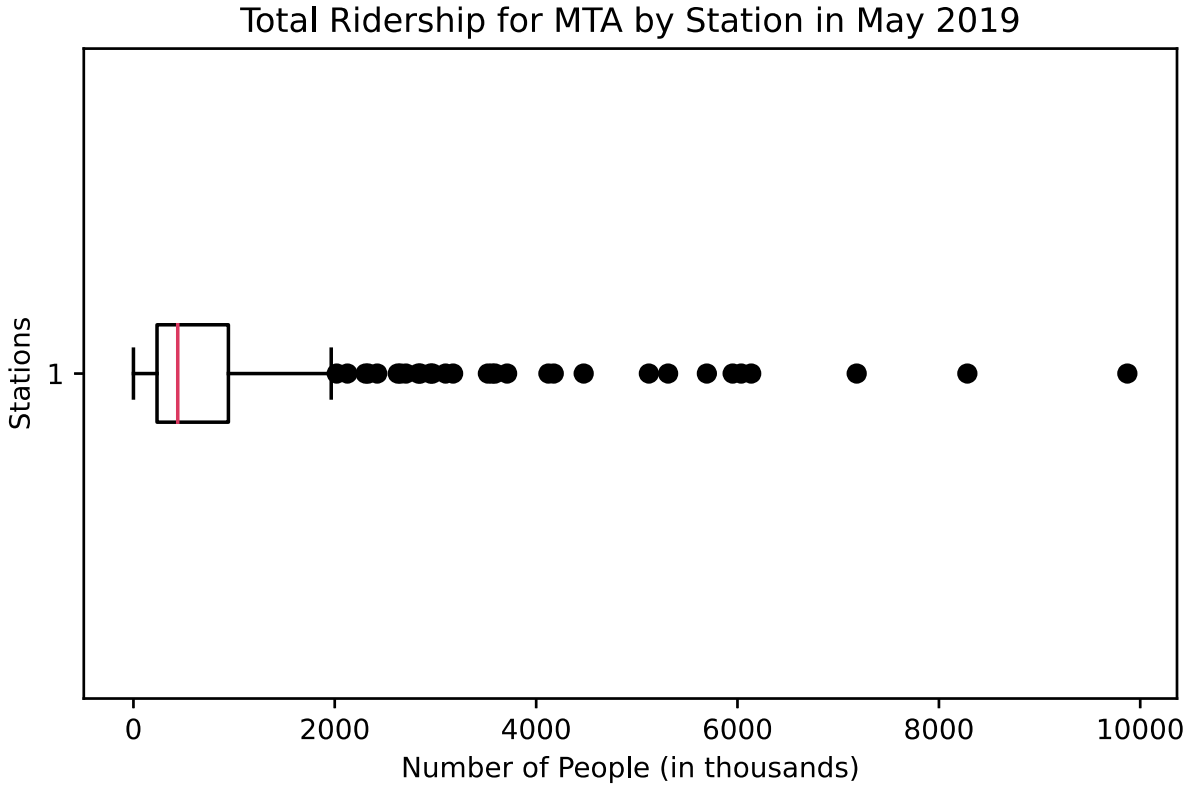
Exploratory data analysis (EDA) including descriptive statistics and plotting

Desktop research to triangulate and validate findings from the EDA

Results

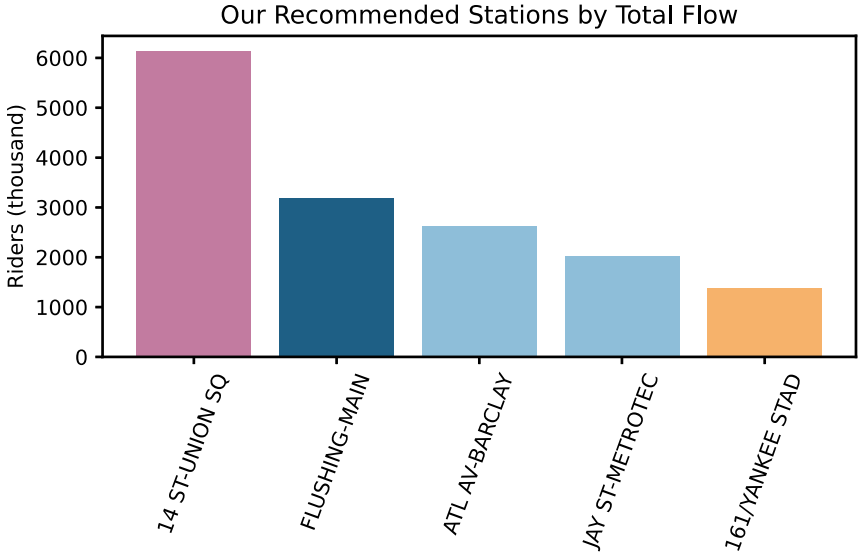
Exploring the data

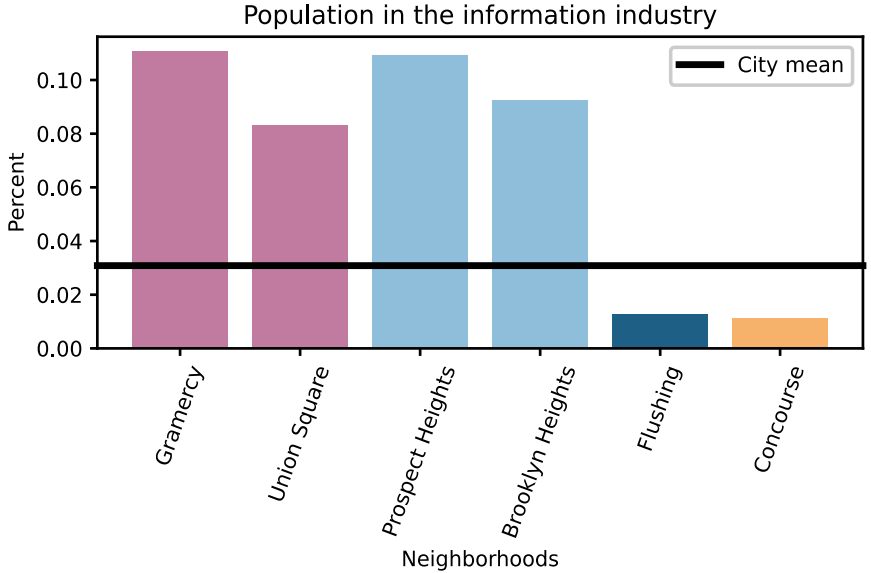
50% of traffic is concentrated just over 10% of stations



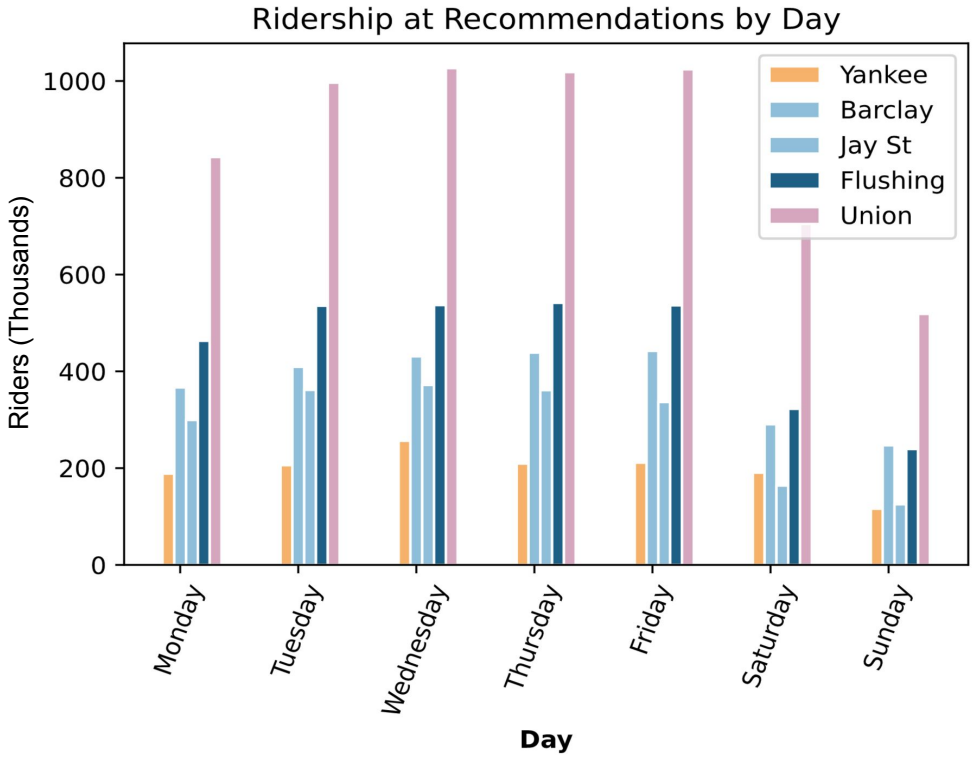
- Goldilocks principle
- Tech
- Awareness
- Financial contributions

Based on this filtering, five stations were selected across Manhattan, Brooklyn, Queens and the Bronx





Deployment analysis



Conclusion

Recommendations from the data

To optimize placement of street teams, we recommend the following stations and days for deployment

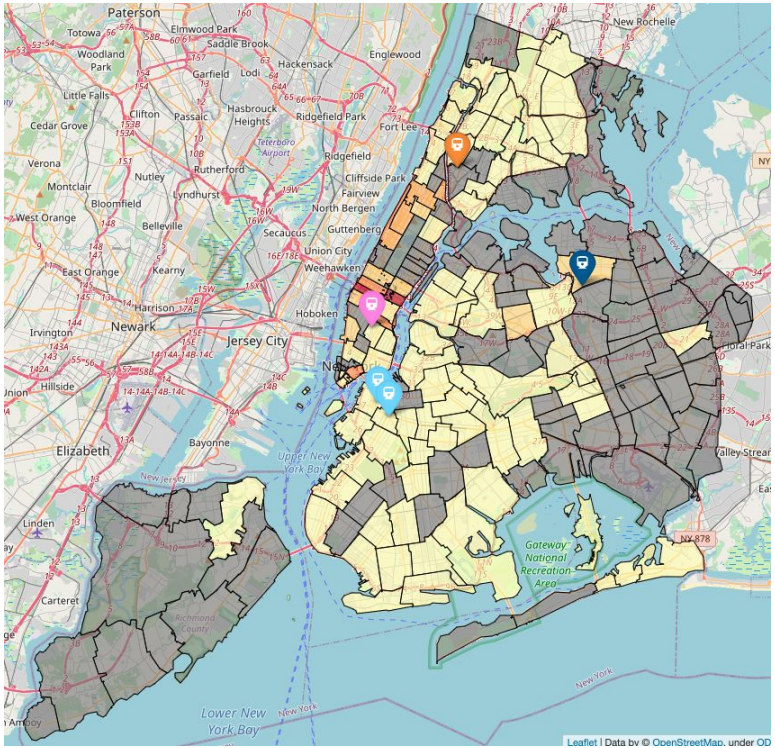
Union Sq/14th St
Any weekday (prioritize Mondays)

Jay St - Metrotech
Tuesday to Thursday

Atlantic Ave/Barclay Center
Wednesday to Friday

Flushing
Monday to Friday

161 St/Yankee Stadium
Wednesdays (Home games)



Ridership within Zip Code

- > 8,000,000
- > 6,500,000
- > 4,000,000
- > 2,500,000
- > 1,500,000
- < 1,500,000

Next Steps

Expand use of ACS data for additional demographics/cross-sectionality (Age, Race etc.)

Identify more neighborhoods for increasing awareness

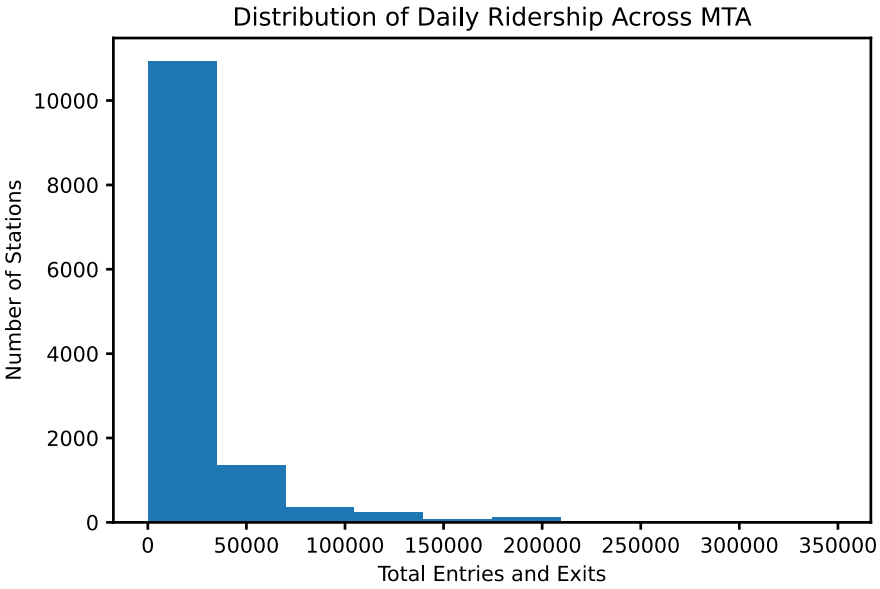
Design and deploy data intake mechanism

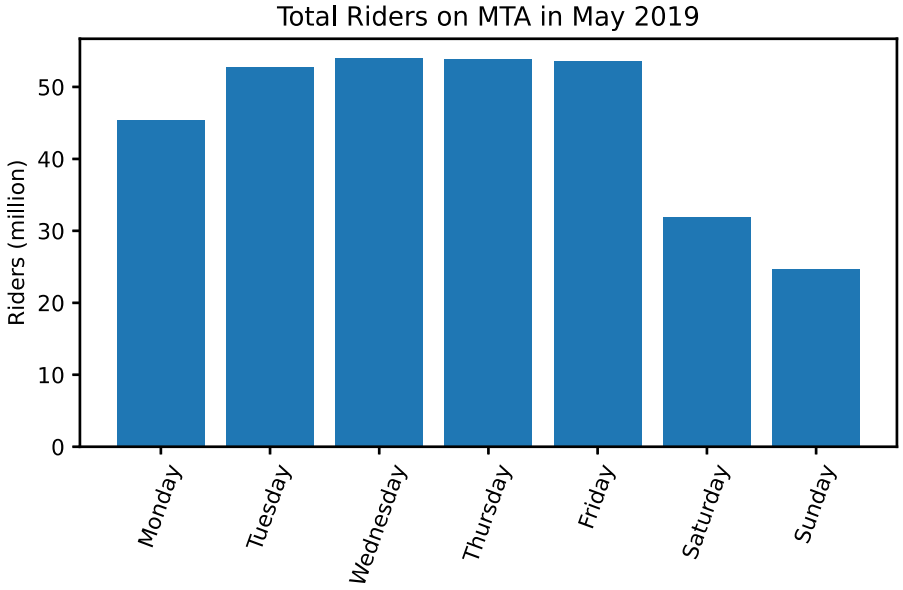
Collect info for Signature Capture modeling and next phase deployment

Implement full reporting and dashboarding capability

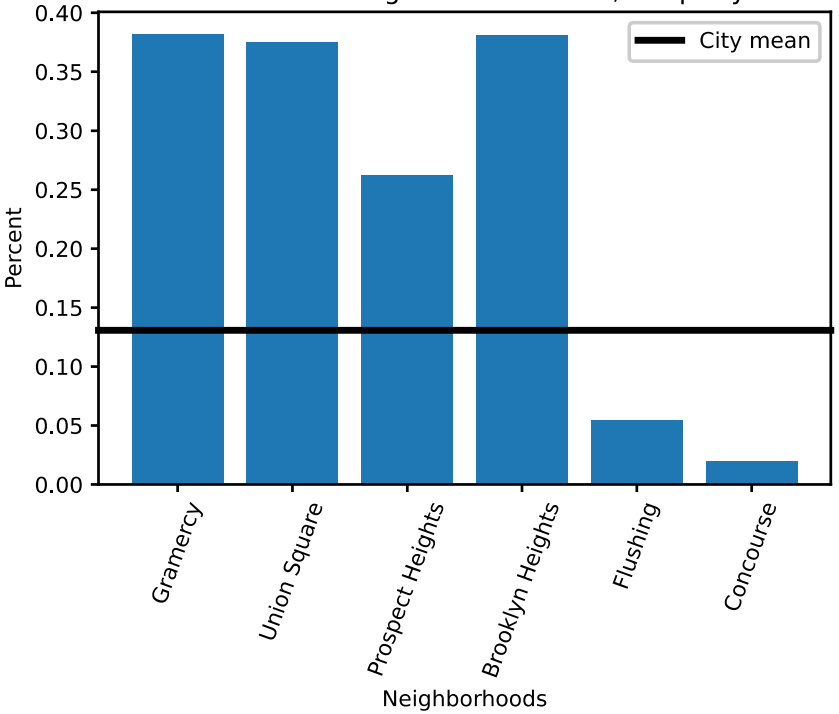
Appendices

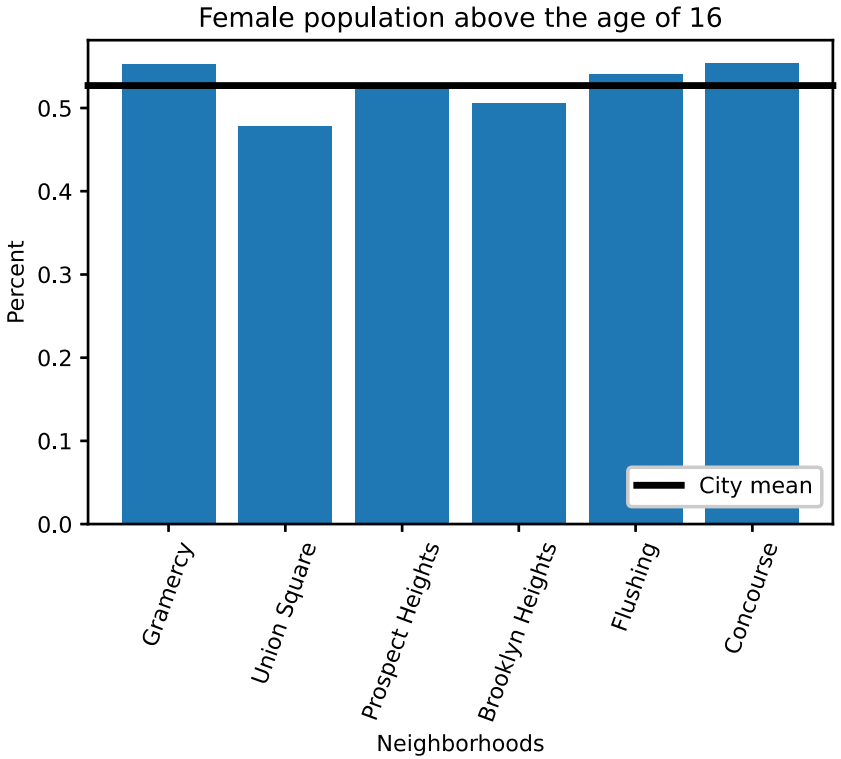
Daily Ridership

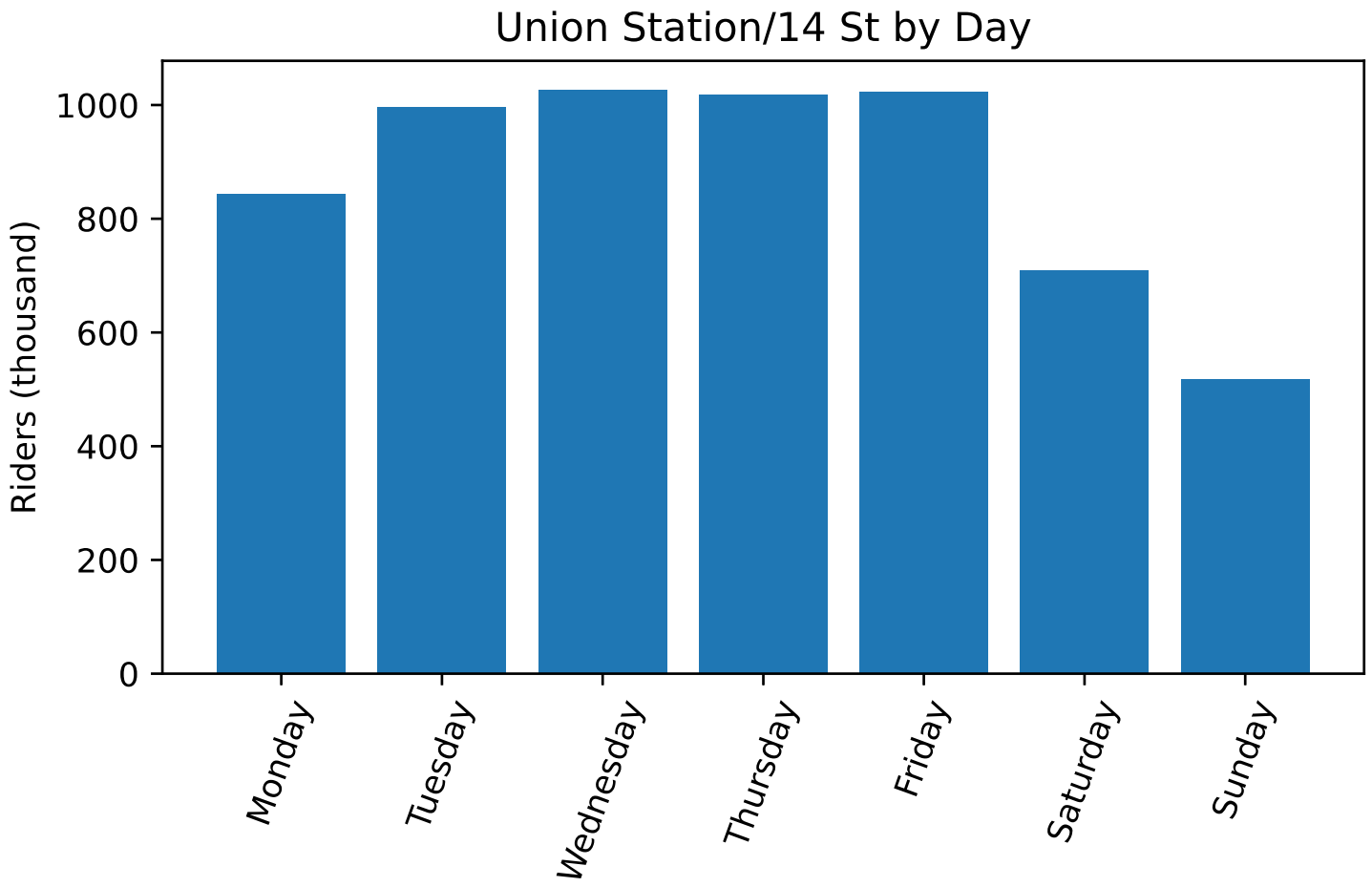


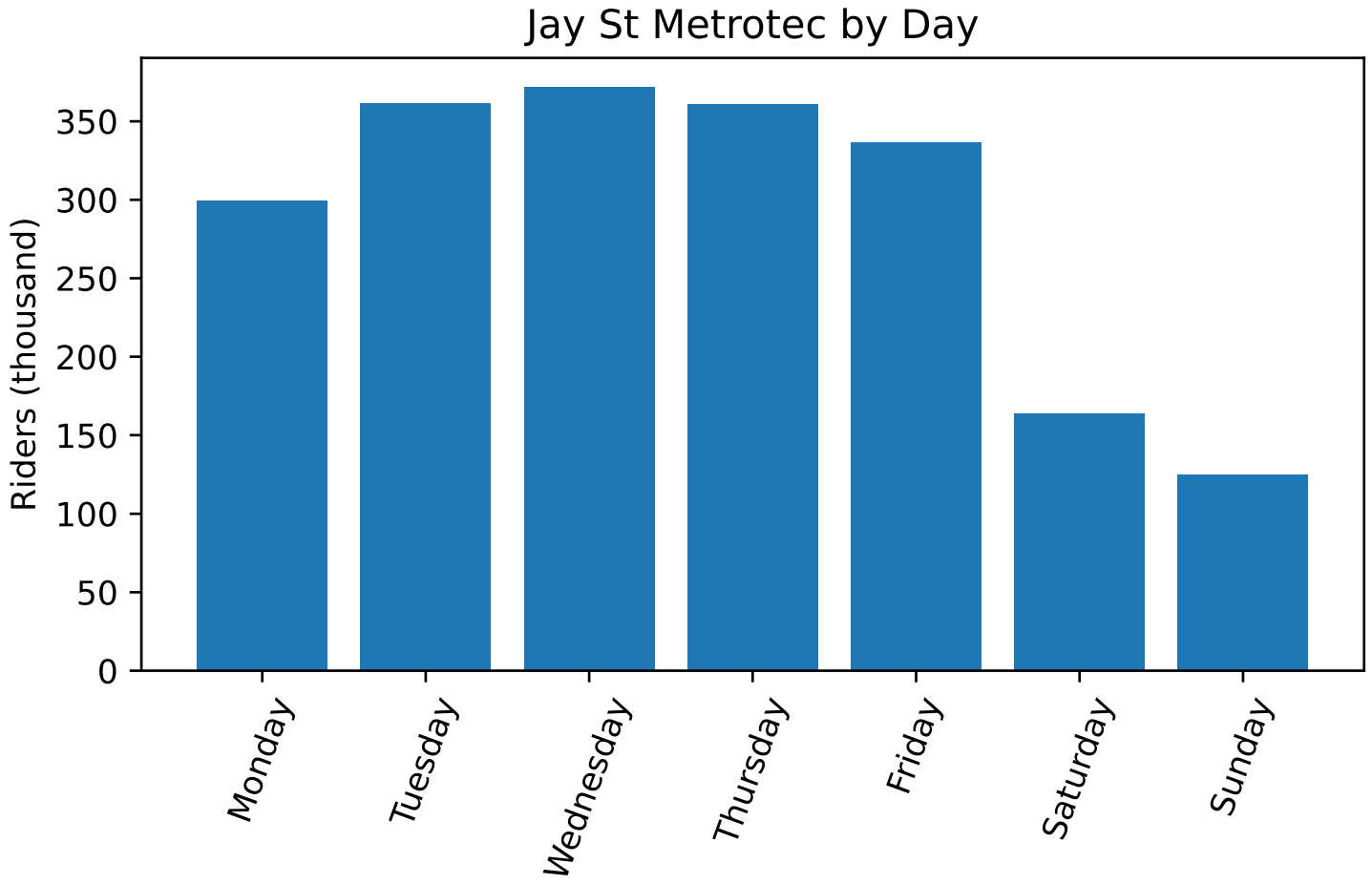


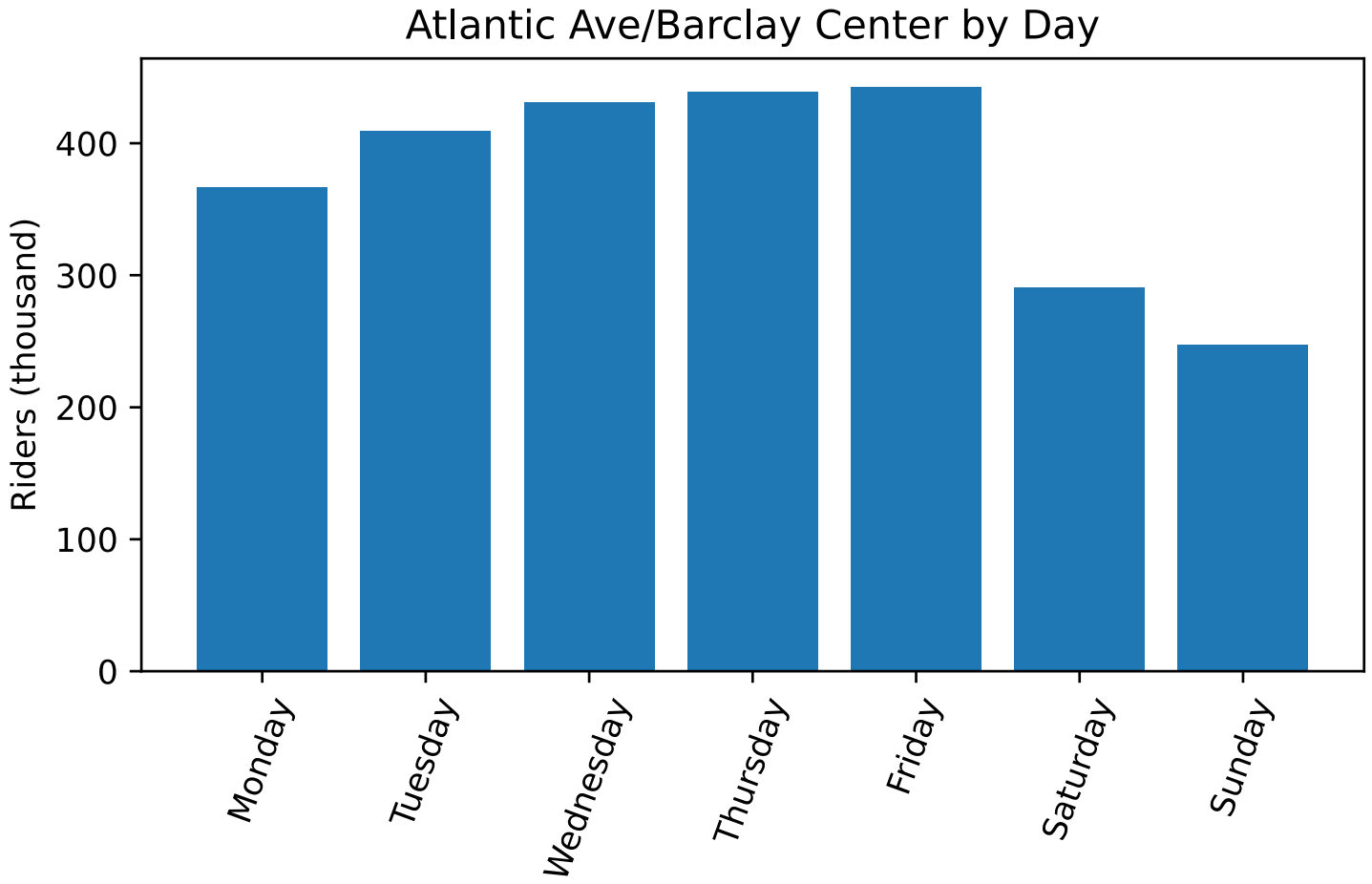
Neighborhood demographics

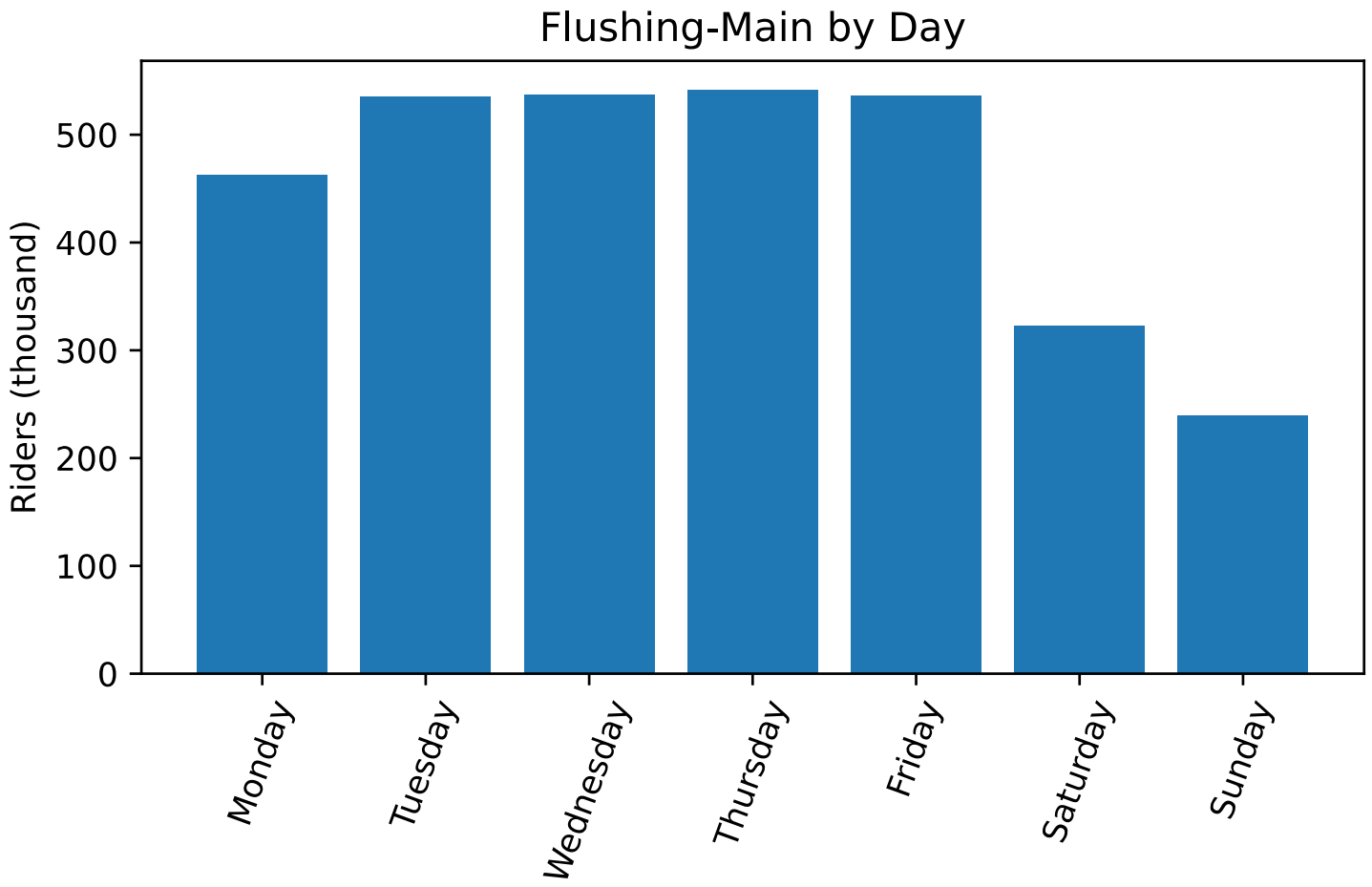


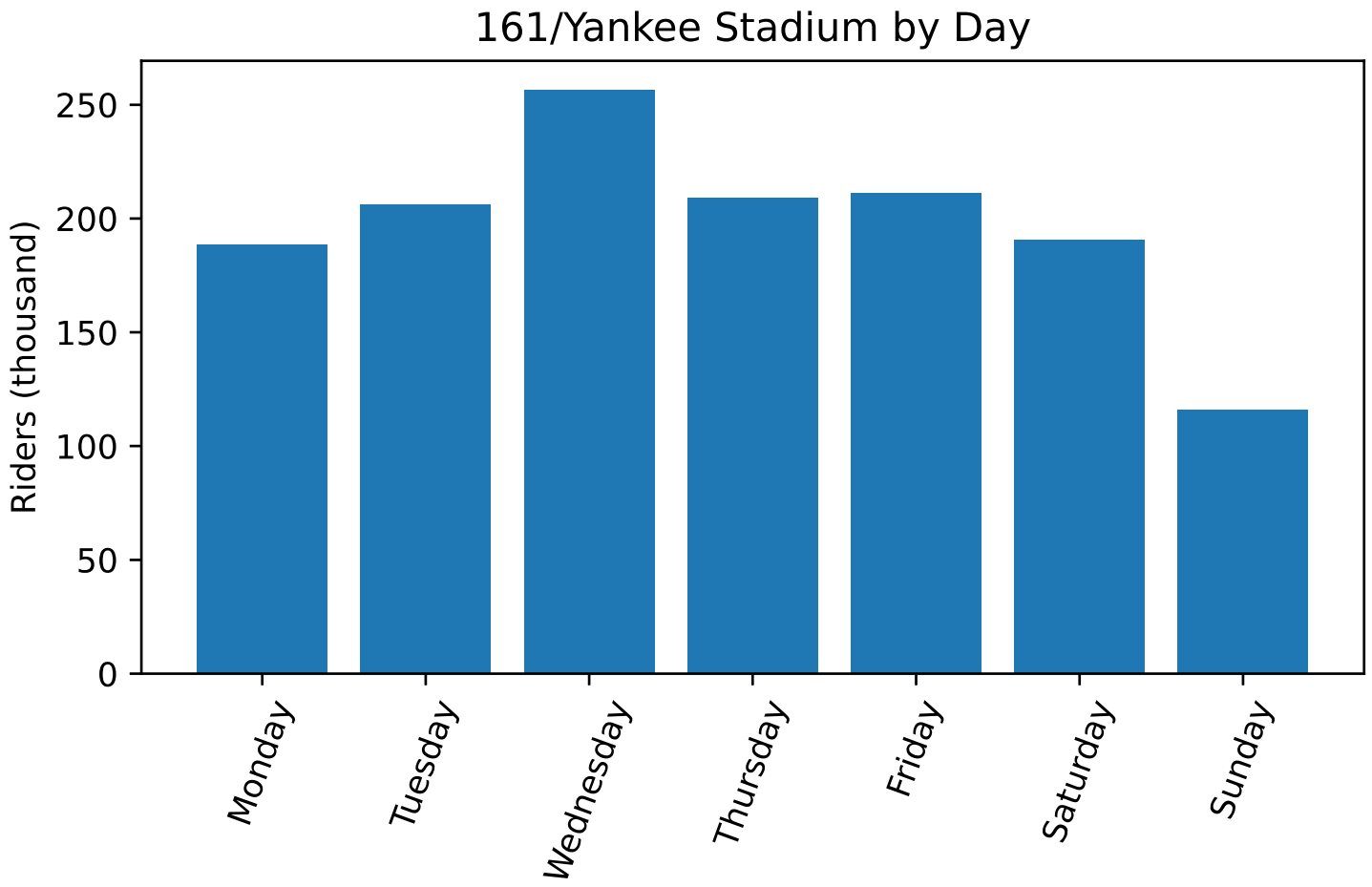



Union Station/14 St by Day
Riders (thousand)
0
200
400
600
800
1000
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

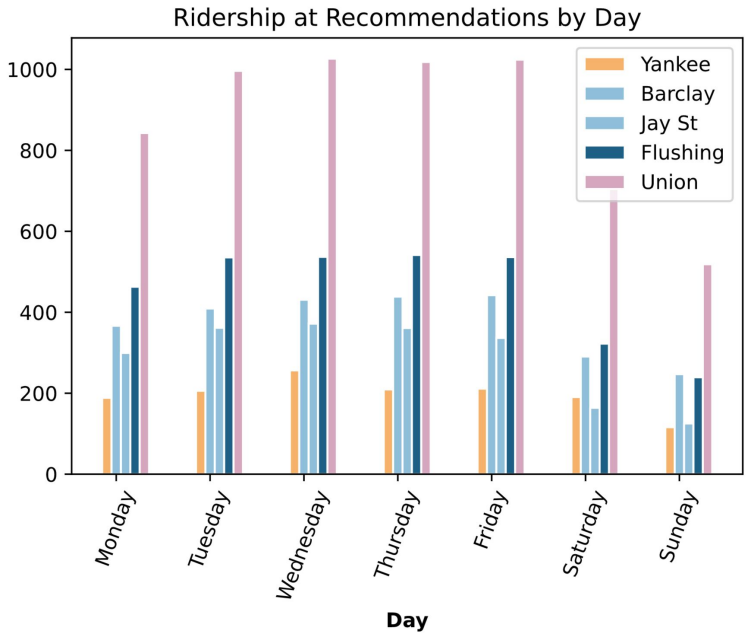
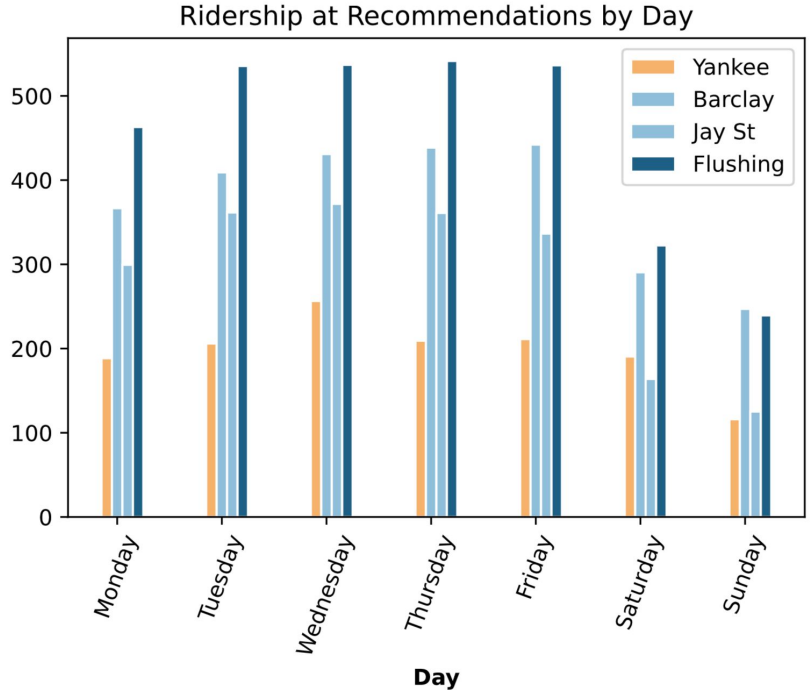

Jay St Metrotec by Day
Riders (thousand)
0
50
100
150
200
250
300
350
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday


Atlantic Ave/Barclay Center by Day
Riders (thousand)
0
100
200
300
400
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday


Flushing-Main by Day
Riders (thousand)
0
100
200
300
400
500
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday


161/Yankee Stadium by Day
Riders (thousand)
0
50
100
150
200
250
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

Percentages of Ridership

STATION	Total Flow	Percentage of Total Flow
34 ST-PENN STA	9872.320102	3.12
GRD CNTRL-42 ST	8283.118839	2.62
34 ST-HERALD SQ	7184.260678	2.27
14 ST-UNION SQ	6136.191787	1.94
TIMES SQ-42 ST	6036.652416	1.91
23 ST	5951.988277	1.88
42 ST-PORT AUTH	5694.885440	1.80
FULTON ST	5310.743000	1.68
86 ST	5119.460362	1.62
125 ST	4472.492055	1.41
CANAL ST	4174.622724	1.32
59 ST COLUMBUS	4121.842578	1.30
59 ST	3711.942976	1.17
14 ST	3591.855937	1.14
47-50 STS ROCK	3561.223523	1.13
96 ST	3520.785867	1.11
FLUSHING-MAIN	3175.033353	1.00
CHAMBERS ST	3099.959710	0.98
72 ST	2971.100427	0.94
PATH NEW WTC	2950.339167	0.93
50 ST	2849.306060	0.90
JKSN HT-ROOSVLT	2830.016824	0.90
28 ST	2706.386044	0.86
W 4 ST-WASH SQ	2653.742824	0.84
ATL AV-BARCLAY	2625.144429	0.83
LEXINGTON AV/53	2421.790559	0.77
7 AV	2330.981724	0.74
WALL ST	2305.276144	0.73
145 ST	2125.586672	0.67
JAY ST-METROTEC	2019.450471	0.64
CHURCH AV	1950.891235	0.62
8 AV	1964.987782	0.62
JAMAICA CENTER	1964.939945	0.62
42 ST-BRYANT PK	1887.376221	0.60
57 ST-7 AV	1903.093088	0.60
77 ST	1778.903168	0.56
72 ST-2 AVE	1772.366412	0.56
BOROUGH HALL	1736.257287	0.55
GRAND ST	1744.043600	0.55
116 ST	1659.862818	0.53
BOWLING GREEN	1656.928735	0.52
JOURNAL SQUARE	1619.230833	0.51
103 ST	1626.619529	0.51
B'WAY-LAFAYETTE	1620.240908	0.51
KINGS HWY	1592.412828	0.50
DELANCEY/ESSEX	1571.644479	0.50
5 AV/53 ST	1564.164618	0.49
33 ST	1554.223197	0.49
KEW GARDENS	1509.818735	0.48
CROWN HTS-UTICA	1438.977101	0.46
DEKALB AV	1382.509226	0.44
86 ST-2 AVE	1379.625588	0.44
161/YANKEE STAD	1378.193338	0.44
66 ST-LINCOLN	1360.824383	0.43
SUTPHIN-ARCHER	1358.735029	0.43
181 ST	1339.704941	0.42
GROVE STREET	1305.558667	0.41
JUNCTION BLVD	1287.724441	0.41
THIRTY THIRD ST	1297.504667	0.41
BEDFORD AV	1310.402588	0.41

Ridership at recommendations across days