

# WomenTechWomenYes

## Summer Gala Ticket Sales

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# Objective

- To find the most effective subway stations for WTWY street teams
  - Email sign-ups
  - Gala attendees
  - Raise awareness



# Strategy

To select the optimal subway locations, the team focused on these key areas:

## **1. Traffic Volume**

- High entry & exit volume

## **2. Location**

- Proximity of high volume stations
- High interest areas
  - Near tech companies
  - Near women's health organizations

## **3. Day of Week & Time of Day**

# Tools



**New York City Subway**



**pandas**

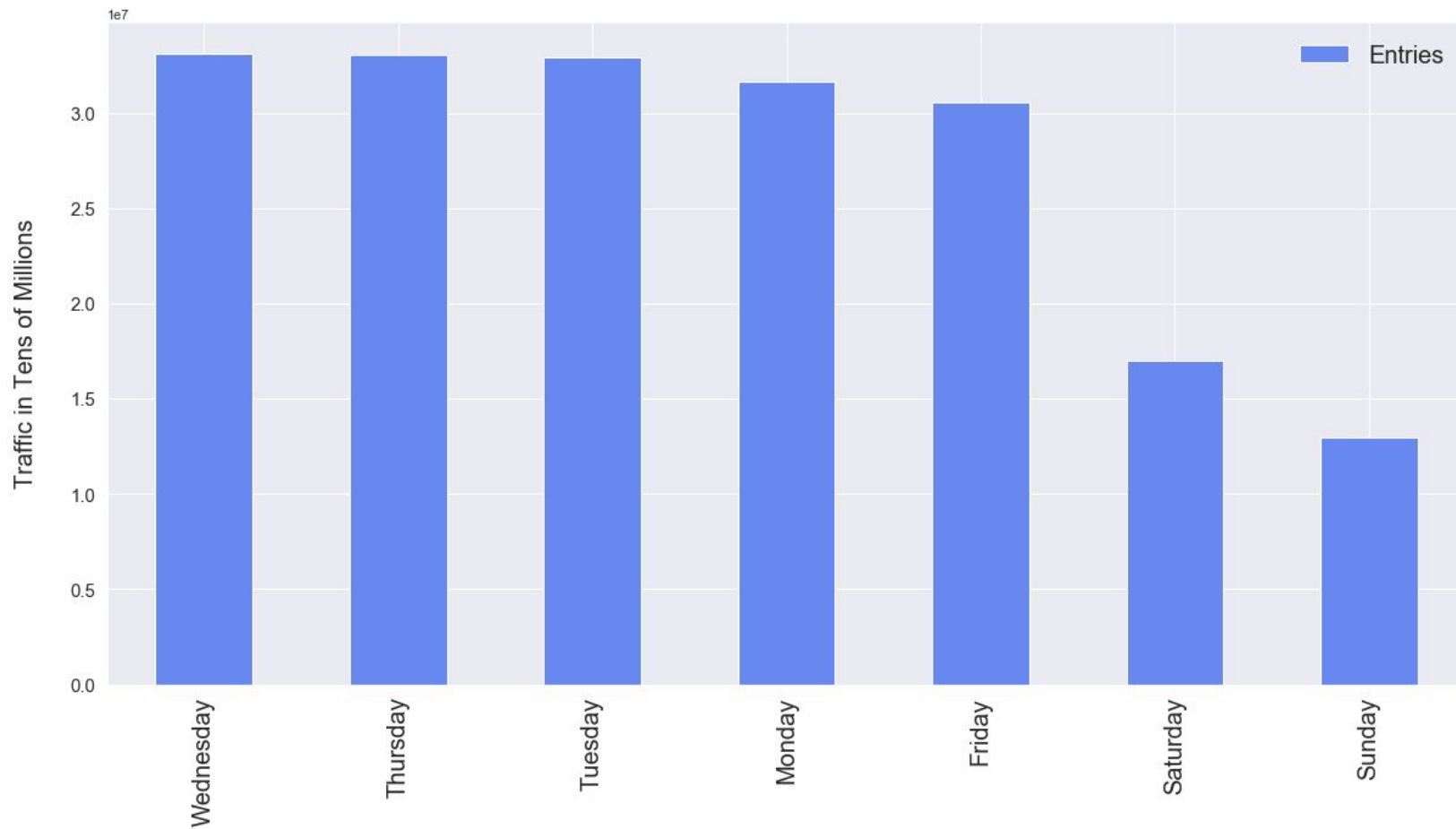
**Seaborn**

# Constraints / Assumptions

- Focused analysis on the time period for the 6 weeks prior to the gala. The current analysis was for the week ending April 5, 2019 to May 16, 2019.
- Prioritized Manhattan subway stations were used in the analysis.
- Weekend traffic was not considered in the analysis in order to capture commuter traffic only.



# NYC Subway Traffic by Day



# Location - Subway Traffic

- Calculated entrance and exit traffic between time periods
- Visualized that total traffic overlayed with subway locations

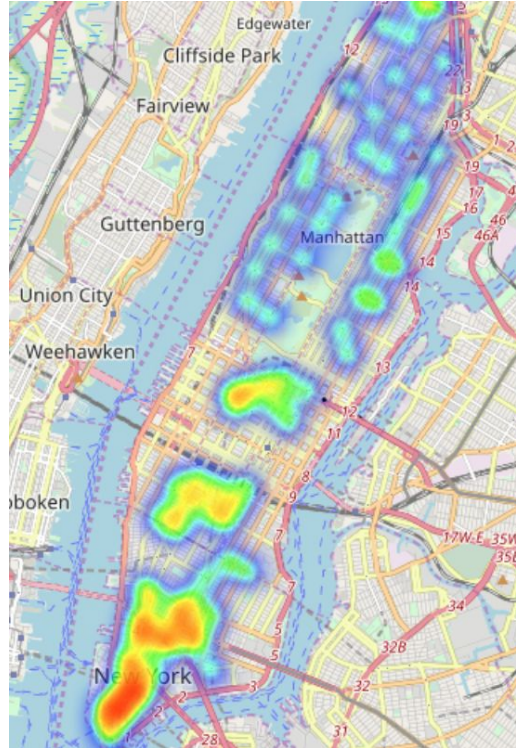


Figure 1: Subway traffic densities

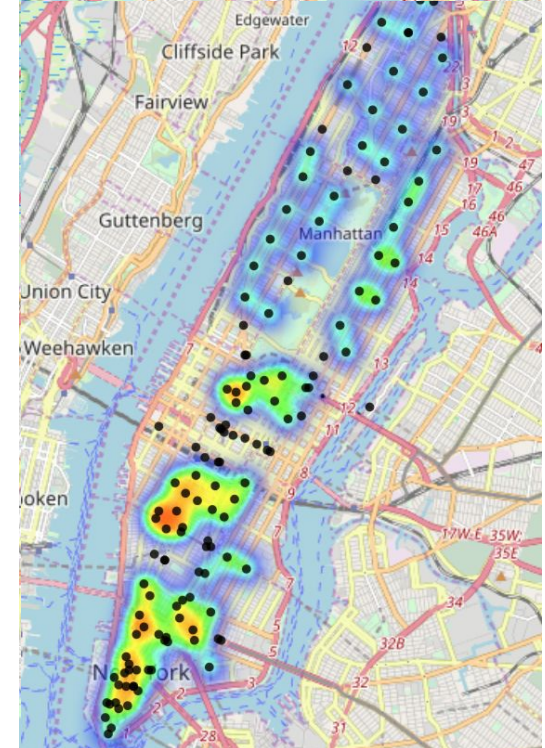


Figure 2: Traffic densities and stations overlay



# Location Tech & Women's Health Companies

- Proximity to tech and women's health organizations
- Commuter traffic to and from areas with high concentration of these organizations
- Maximize potential signups of tech and women's health demographic

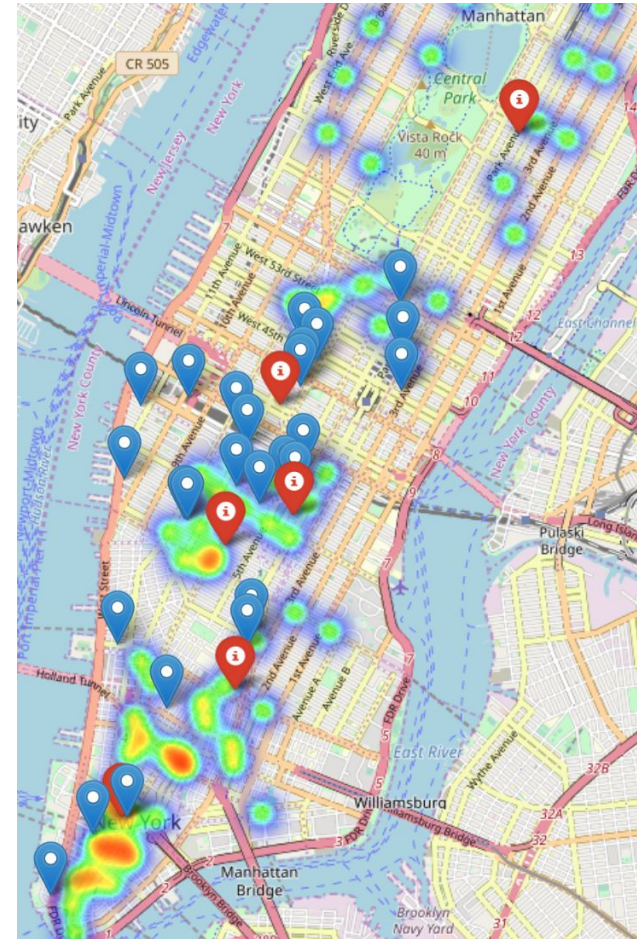
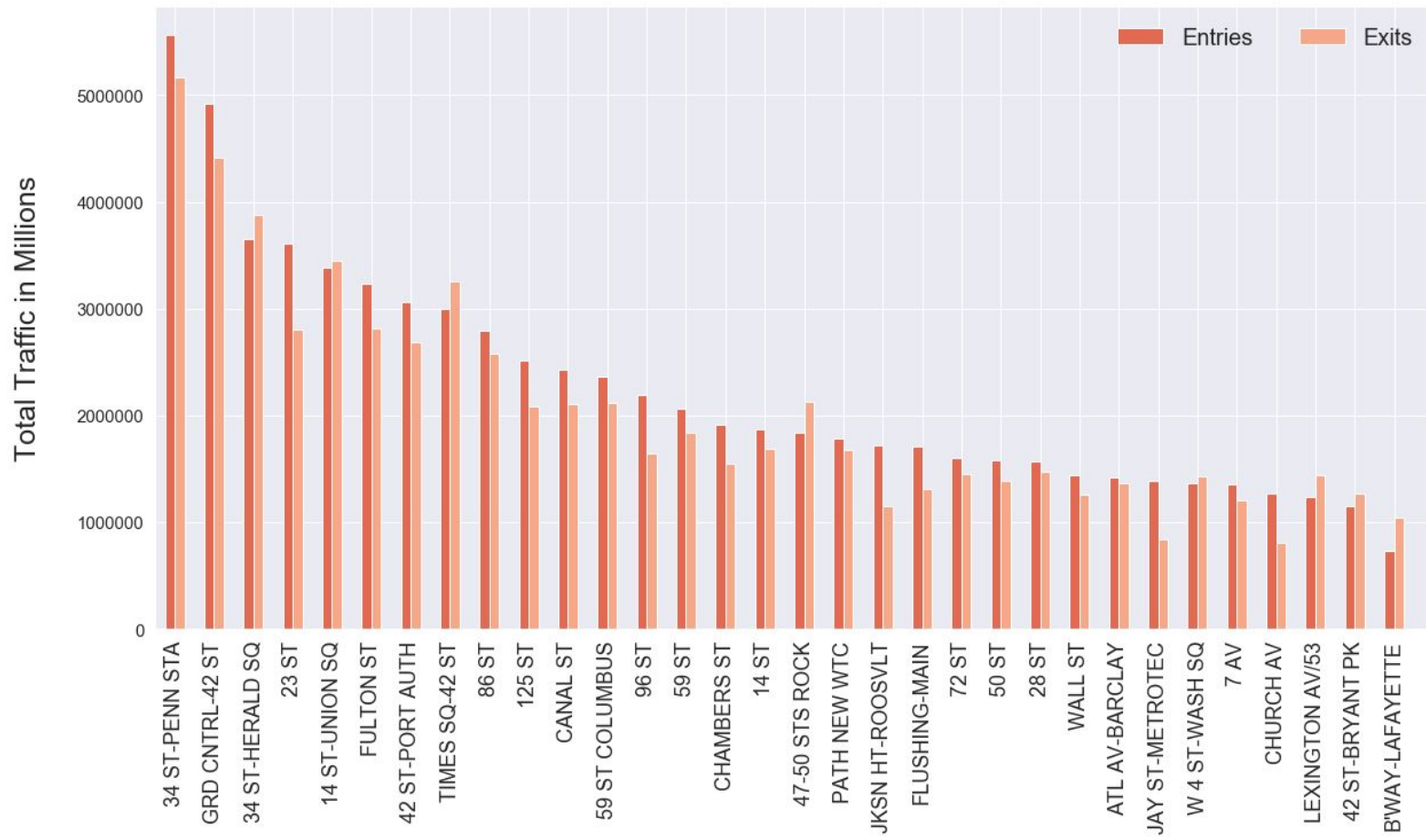


Figure 3: Tech companies (blue) and Women's Health organizations (red)



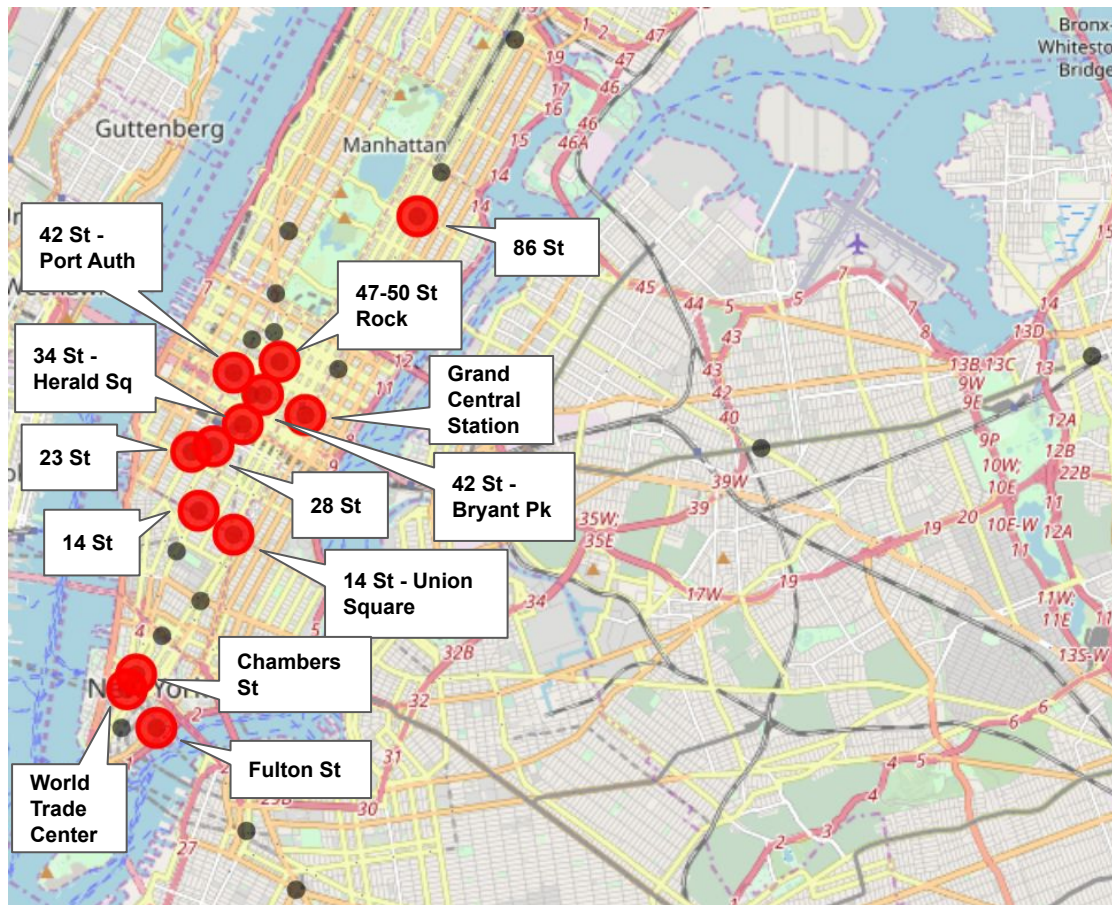
# NYC Subway Traffic by Station

## March 30 - May 16, 2019



# Recommendations

- 14 St
- 14 St-Union Sq
- 23 St
- 28 St
- 34 St-Herald Sq
- 34 St-Penn St
- 42 St-Bryant Pk
- 42 St-Port Auth
- 47-50 Sts Rock
- 86 St
- Chambers St
- Fulton St
- Grand Central Station
- World Trade Center



# Recommendations - Day & Time

- Prioritized list of stations and times
- Can be used to set the priorities of the street teams

Station	Start Time	End Time	Weekday
GRD CNTRL-42 ST	4:00 PM	8:00 PM	Thursday
14 ST-UNION SQ	5:00 PM	9:00 PM	Wednesday
34 ST-HERALD SQ	4:00 PM	8:00 PM	Tuesday
14 ST	5:00 PM	9:00 PM	Thursday
PATH NEW WTC	4:00 PM	8:00 PM	Tuesday
47-50 STS ROCK	4:00 PM	8:00 PM	Thursday
42 ST-BRYANT PK	4:00 PM	8:00 PM	Thursday
23 ST	4:00 PM	8:00 PM	Wednesday
42 ST-PORT AUTH	8:00 AM	12:00 PM	Monday
CHAMBERS ST	4:00 PM	8:00 PM	Tuesday
FULTON ST	5:00 PM	9:00 PM	Tuesday
86 ST	4:00 PM	8:00 PM	Tuesday
28 ST	5:00 PM	9:00 PM	Tuesday

# Future Work

- Add Gala location to the considerations
- Improve our understanding of available resources
- Incorporate demographics of current WTWY supporters into the strategy

# Appendix

Delta Entry / Exit of Top 30 Stations by Weekday

Delta Entry = The difference between consecutive entries of any turnstile

Delta Exit = The difference between consecutive exits of any turnstile

	weekday	deltaEntry	deltaExit
6	Wednesday	12515029	11279120
4	Thursday	12483572	11272520
5	Tuesday	12456221	11171322
1	Monday	11987867	10670852
0	Friday	11527266	10561840
2	Saturday	6036634	5870317
3	Sunday	4705682	4460417

	sum	
	deltaEntry	deltaExit
station		
125 ST	2512239	2084396
14 ST	1869313	1688395
14 ST-UNION SQ	3387368	3443652
23 ST	3604025	2802673
28 ST	1572317	1474767
34 ST-HERALD SQ	3650456	3877498
34 ST-PENN STA	5556383	5164238
42 ST-BRYANT PK	1149726	1264427
42 ST-PORT AUTH	3061583	2683637
47-50 STS ROCK	1834640	2122619
50 ST	1582582	1383501
59 ST	2059341	1834433
59 ST COLUMBUS	2362058	2116083
7 AV	1358134	1206534
72 ST	1596387	1448037
86 ST	2797842	2579962
96 ST	2192038	1648574
ATL AV-BARCLAY	1417548	1368551
B'WAY-LAFAYETTE	732438	1039888
CANAL ST	2429787	2110979
CHAMBERS ST	1909381	1552828
CHURCH AV	1273890	803408
FLUSHING-MAIN	1710370	1312974
FULTON ST	3235959	2818776
GRD CNTRL-42 ST	4920152	4416356
JAY ST-METROTEC	1389967	837792
JKSN HT-ROOSVLT	1717401	1153191
LEXINGTON AV/53	1237885	1436436
PATH NEW WTC	1785783	1681047
TIMES SQ-42 ST	2994944	3249647

High traffic stations with Entry and Exit sums

Selected stations sorted by Entry and Exit

	station	deltaEntry	deltaExit
11	GRD CNTRL-42 ST	4920152	4416356
4	34 ST-HERALD SQ	3650456	3877498
2	23 ST	3604025	2802673
1	14 ST-UNION SQ	3387368	3443652
10	FULTON ST	3235959	2818776
6	42 ST-PORT AUTH	3061583	2683637
8	86 ST	2797842	2579962
9	CHAMBERS ST	1909381	1552828
0	14 ST	1869313	1688395
7	47-50 STS ROCK	1834640	2122619
12	PATH NEW WTC	1785783	1681047
3	28 ST	1572317	1474767
5	42 ST-BRYANT PK	1149726	1264427