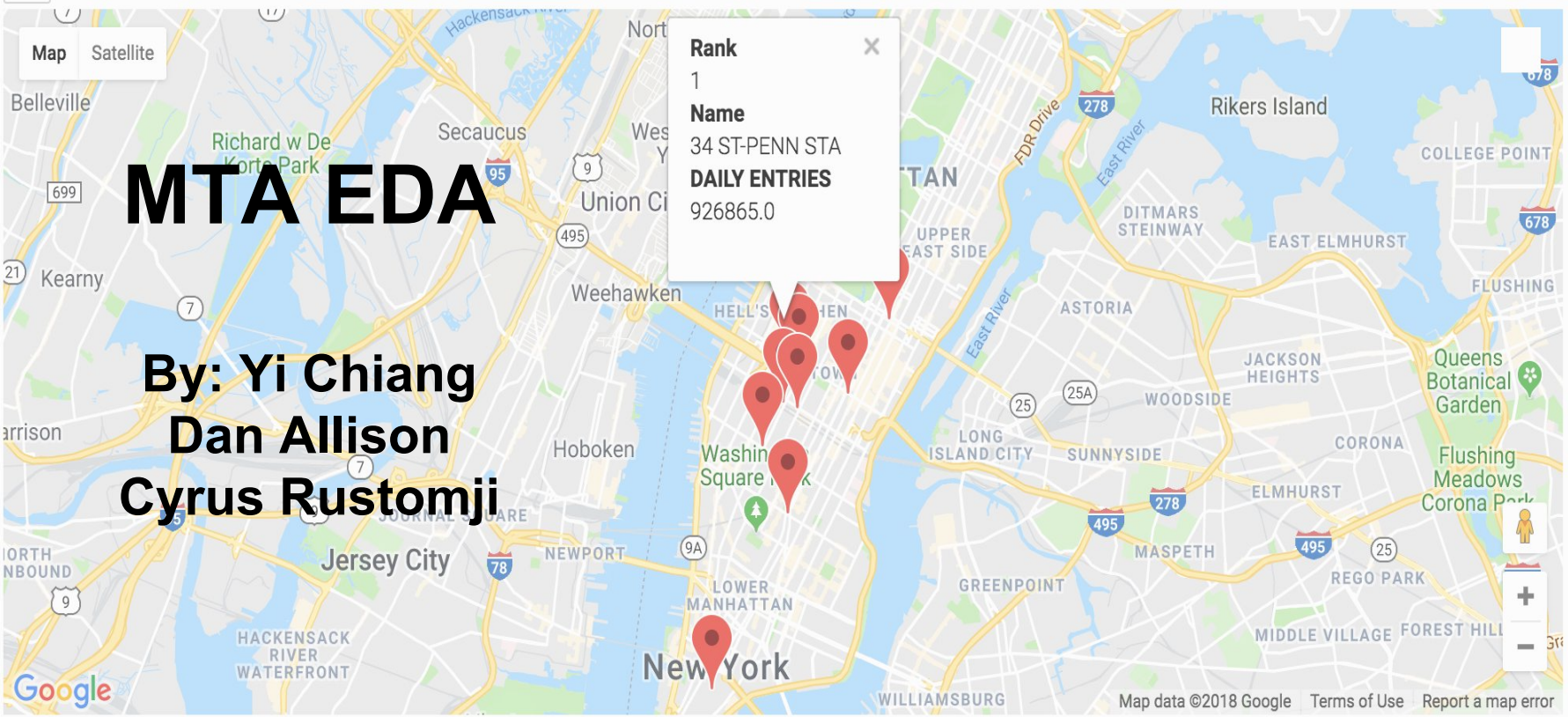
Map
Satellite
Rank
1
Name
34 ST-PENN STA
DAILY ENTRIES
926865.0
MTA EDA
By: Yi Chiang
Dan Allison
Cyrus Rustomji
Belleville
Richard w De Korte Park
Secaucus
Union Ci
Kearny
Weehawken
Hoboken
Jersey City
NEWPORT
LOWER MANHATTAN
New York
HACKENSACK RIVER WATERFRONT
Rikers Island
COLLEGE POINT
DITMARS STEINWAY
EAST ELMHURST
FLUSHING
ASTORIA
JACKSON HEIGHTS
Queens Botanical Garden
WOODSIDE
LONG ISLAND CITY
SUNNYSIDE
CORONA
Flushing Meadows Corona Park
ELMHURST
MASPETH
REGO PARK
GREENPOINT
MIDDLE VILLAGE
WILLIAMSBURG
FDR Drive
East River
Google
Map data ©2018 Google
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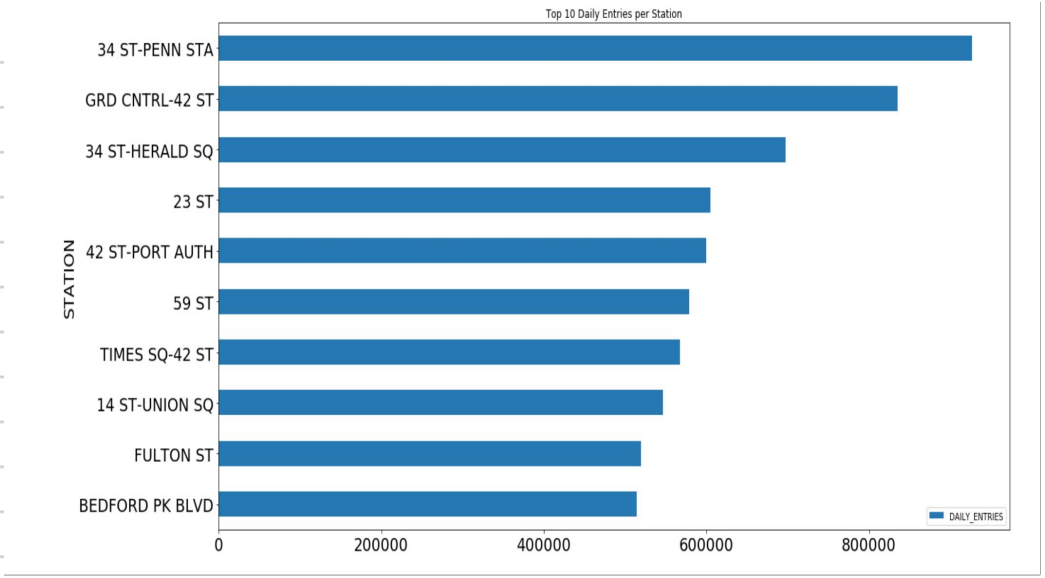
Abstract

Our goal is to identify the optimal transit stations to place the WTWY street team. The factors we considered in our investigation are:

Foot Traffic

Which stations have the most traffic?

Rank	Station	Daily Entries
1	34 St-Penn Sta	926,865
2	Grd Cntrl-42 St	835,361
3	34 St-Herald Sq	697,252
4	23 St	604,723
5	42 St-Port Auth	600,254
6	59 St	579,229
7	Times Sq-42 St	567,137
8	14 St-Union Sq	546,984
9	Fulton St	519,745
10	Bedford Pk Blvd	514,473

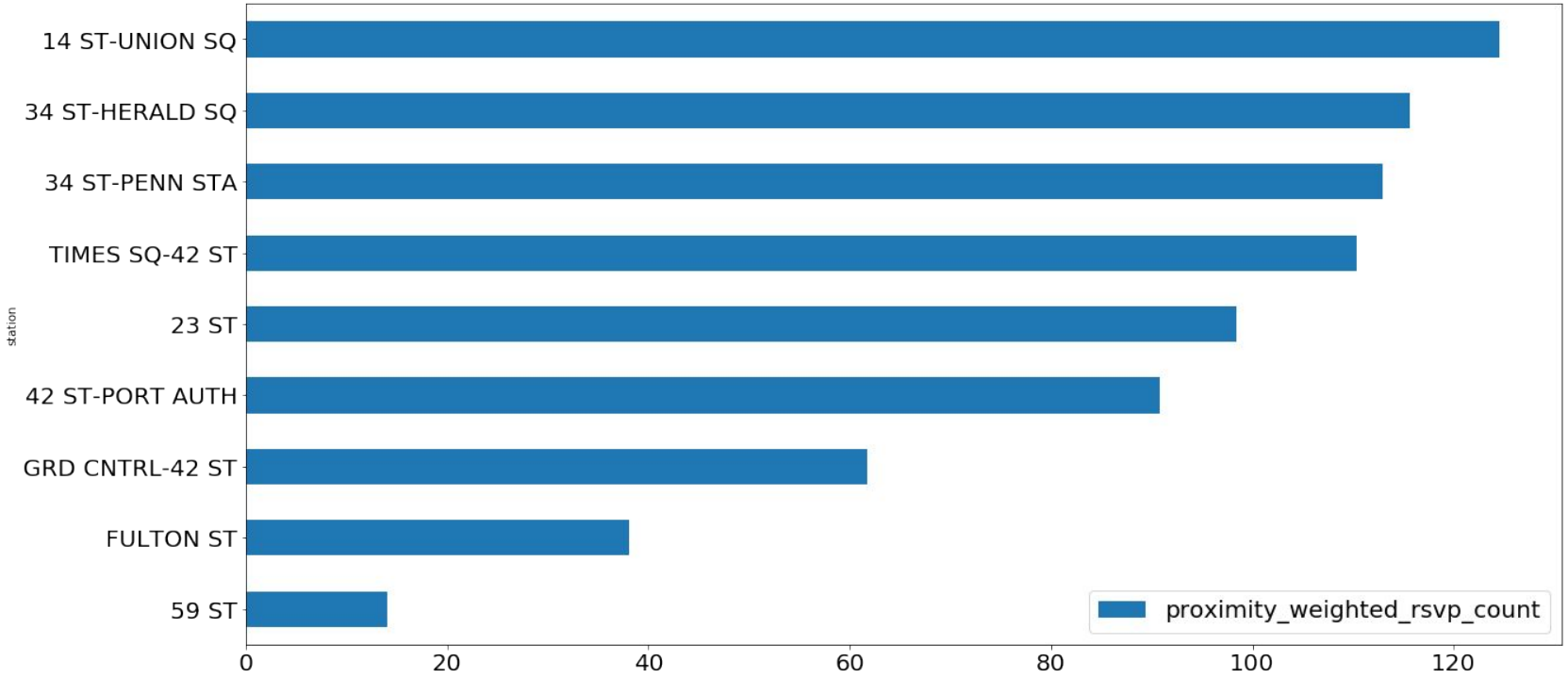


meetup

Women in Tech Meetup Groups

- NYC Women in Machine Learning & Data Science
- Women Who Code NYC
- NY Women in Tech
- Girl Develop It NYC
- League of Women Coders
- Women Investing in Women Entrepreneurs
- Women in Hyper Growth Companies
- Women in Agile New York City
- New York Women in Crypto & Blockchain Investment Club Meetup
- ...

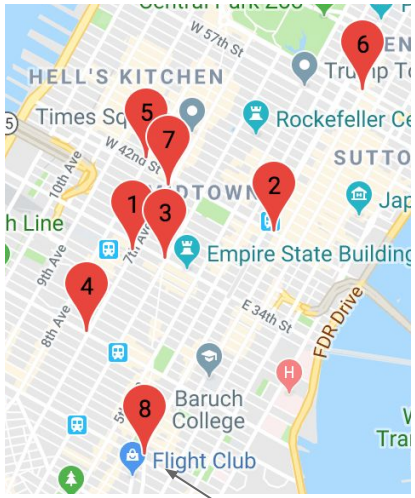
WiT Meetup RSVPs weighted by proximity



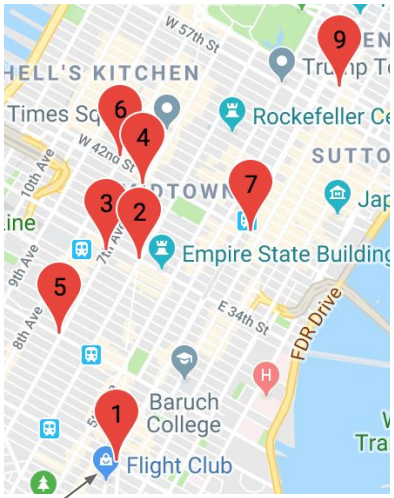
“Yes” rsvp count * max(0, 1 - miles from station)

Traffic vs. Meetup Rank

Rank by Traffic



Rank by Meetup RSVPs



14 St Union Sq

yelp

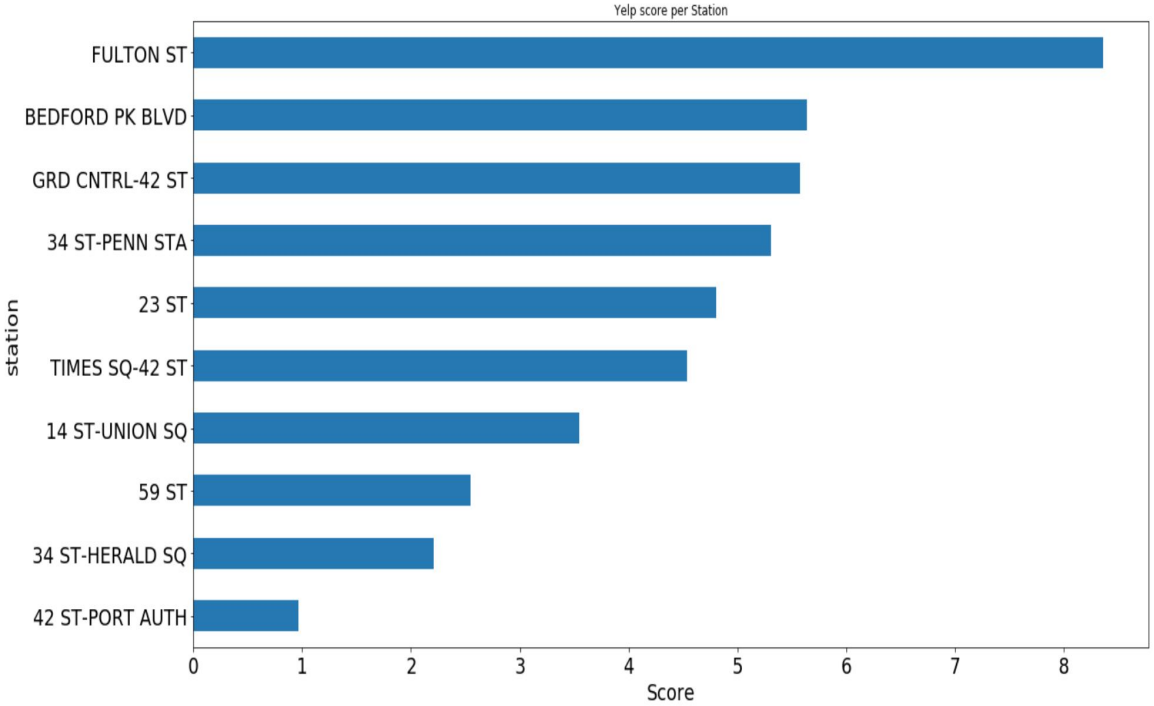
Yelp Score

Score =

(Mean rating of restaurants * 2)

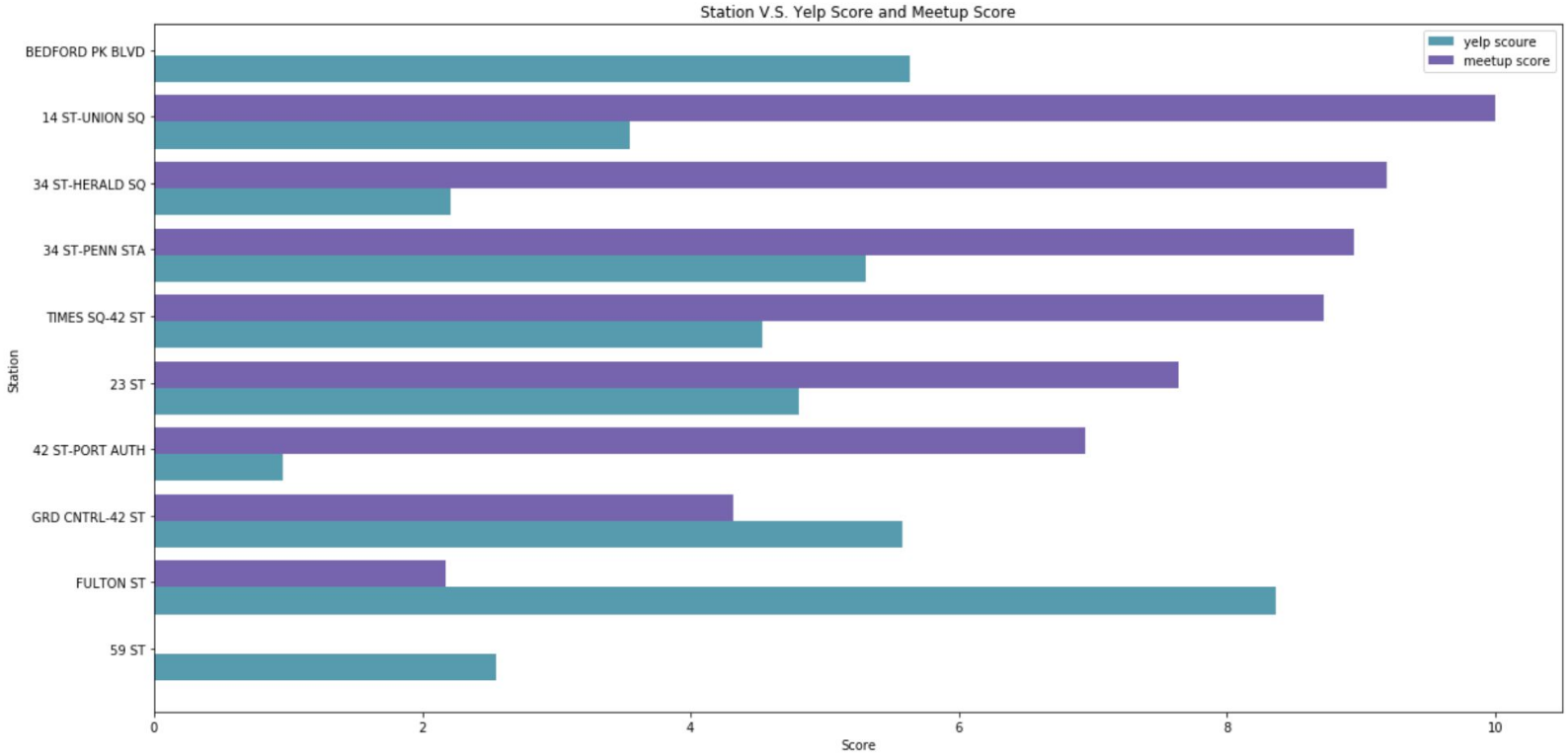
+ (# of restaurants * 4.5)

+ (Distance between the station * 3.5)



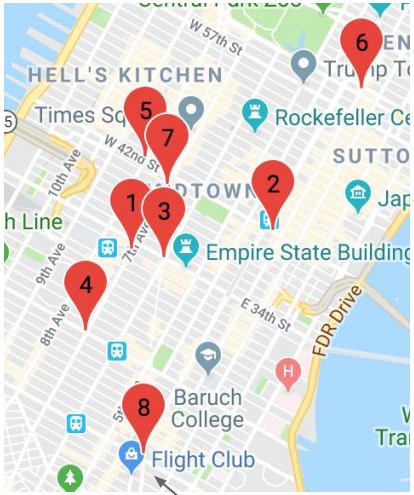
Yelp score and Meetup score

Average proximity weighted rsvp count

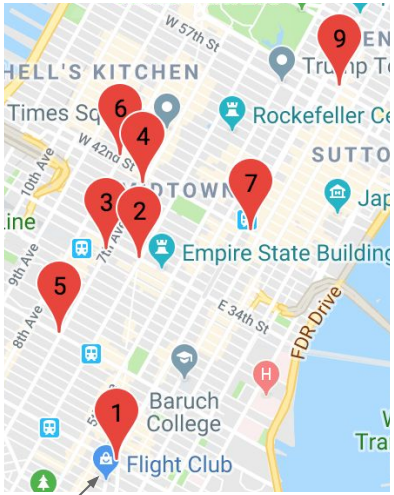


Traffic vs. Meetup vs. Yelp Rank

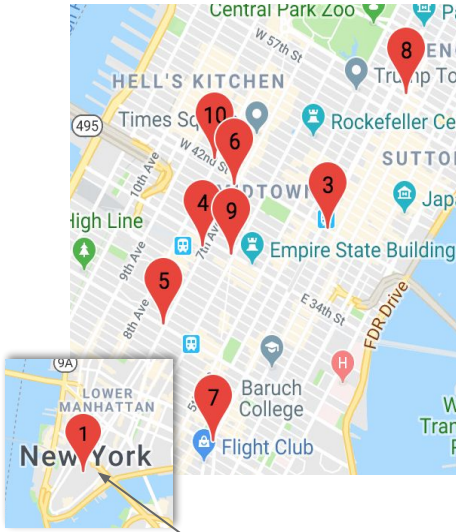
Rank by Traffic



Rank by Meetup RSVPs



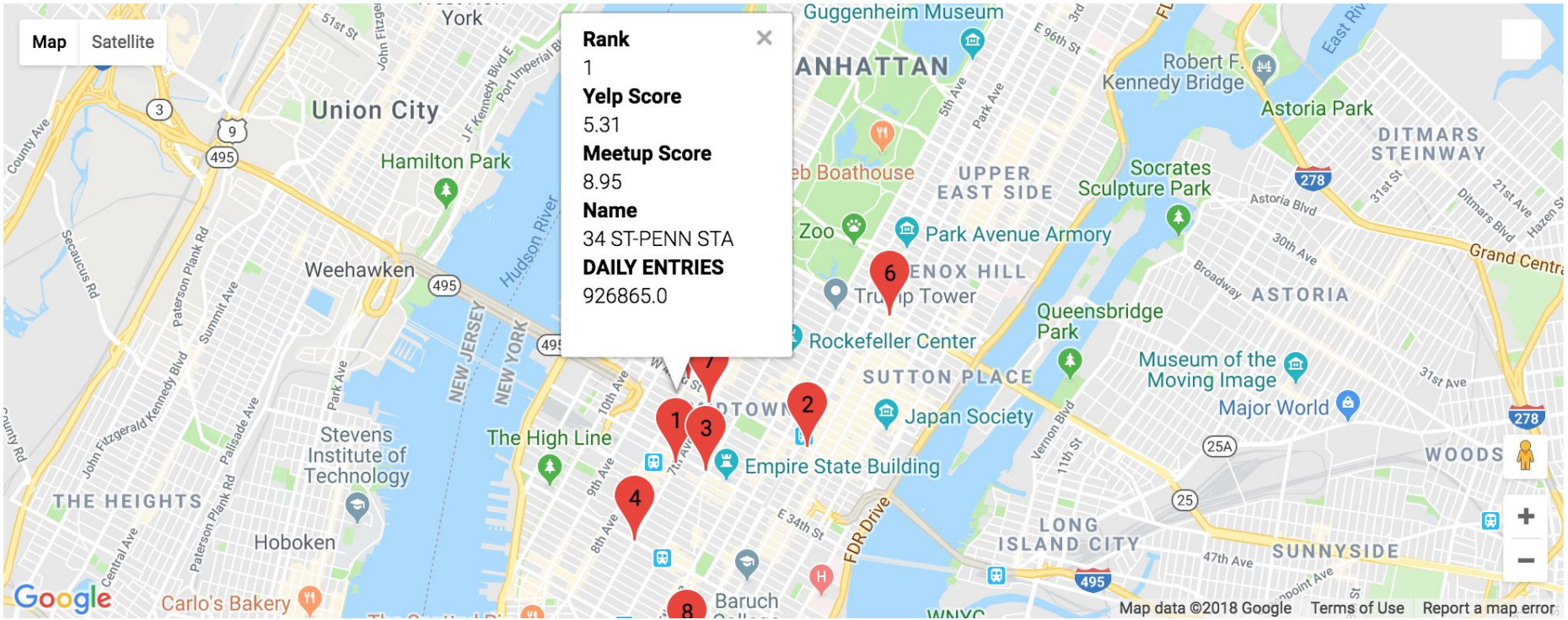
Rank by Yelp Score



14 St Union Sq

Fulton St

Map


Map
Satellite
Rank
1
Yelp Score
5.31
Meetup Score
8.95
Name
34 ST-PENN STA
DAILY ENTRIES
926865.0
Union City
Hamilton Park
Weehawken
Hudson River
NEW JERSEY
NEW YORK
Stevens Institute of Technology
THE HEIGHTS
Hoboken
The High Line
Empire State Building
Guggenheim Museum
UPPER EAST SIDE
Park Avenue Armory
Rockefeller Center
SUTTON PLACE
Japan Society
Queensbridge Park
Museum of the Moving Image
Major World
Astoria Park
Socrates Sculpture Park
ASTORIA
DITMARS STEINWAY
WOODS
LONG ISLAND CITY
SUNNYSIDE
Robert F. Kennedy Bridge
FDR Drive
Carlo's Bakery
Baruch
Google
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Overall

Final Rank	Station	Daily Entries	Meetup Score	Yelp Score	Total Score
1	34 St-Penn Sta	926,865	8.95	5.31	**18.735**
2	14 St-Union Sq	546,984	10	3.55	**18.55**
3	Times Sq-42 St	567,137	8.72	4.53	**17.61**
4	34 St-Herald Sq	697,252	9.2	2.21	**16.01**
5	Grd Cntrl-42 St	835,361	4.32	5.58	**12.06**
6	Fulton St	519,745	2.17	8.36	**11.615**
7	42 St-Port Auth	600,254	6.95	0.96	**11.385**
8	Bedford Pk Blvd	514,473	0	5.64	**5.64**
9	59 St	579,229	0	2.55	**2.55**
10	23 St	604,723	7.64	4.81	**1**

Total Score = (Meetup Score * 1.5) + (Yelp Score * 1)

Data Source

- **MTA Stops**: New York City Transit Subway
- **MTA Traffic Data:** http://web.mta.info/developers/data/nyct/turnstile/turnstile_180407.txt
- **Meetup**: https://www.meetup.com/meetup_api/docs/find/upcoming_events/
- **Yelp**: https://www.yelp.com/developers/documentation/v3/business_search

Thank you

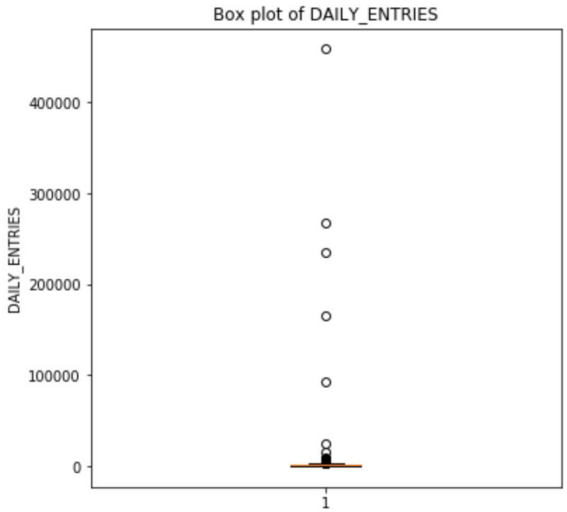
Backup Slides

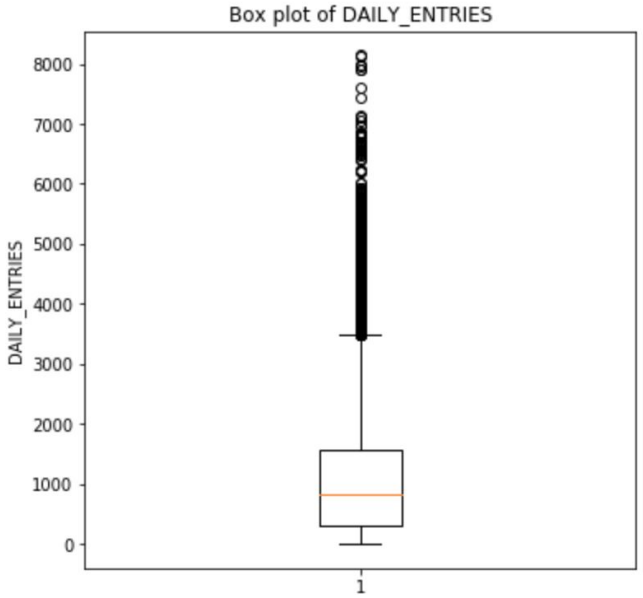
Future work

- Time
- Length
- Did not target certain events (Ex: Women’s March)
- “Gala is in the summer”
- Used only one week

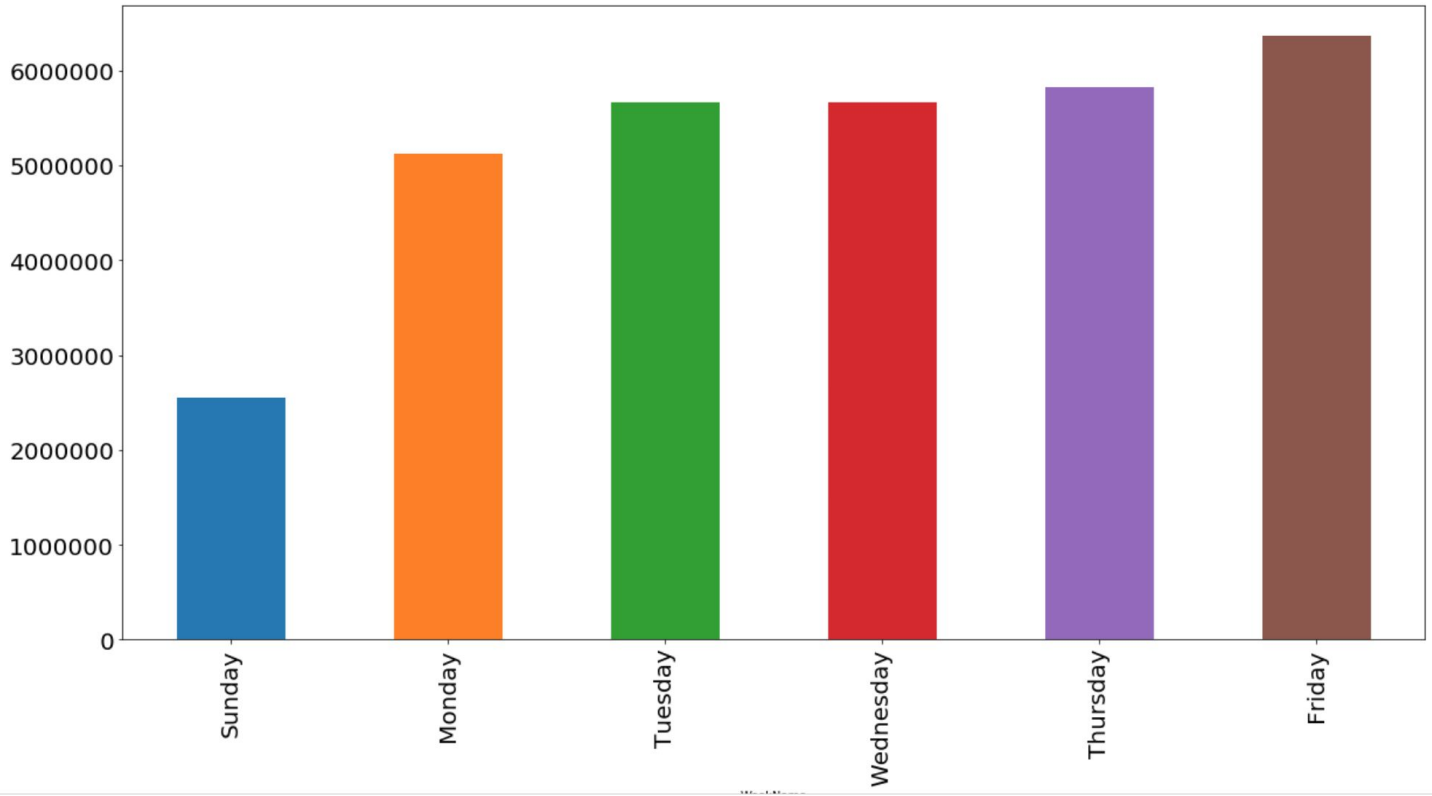
Other EDA

- Outliers
  - Outliers = 2 standard deviation away from mean
  - Replace outliers with mean value



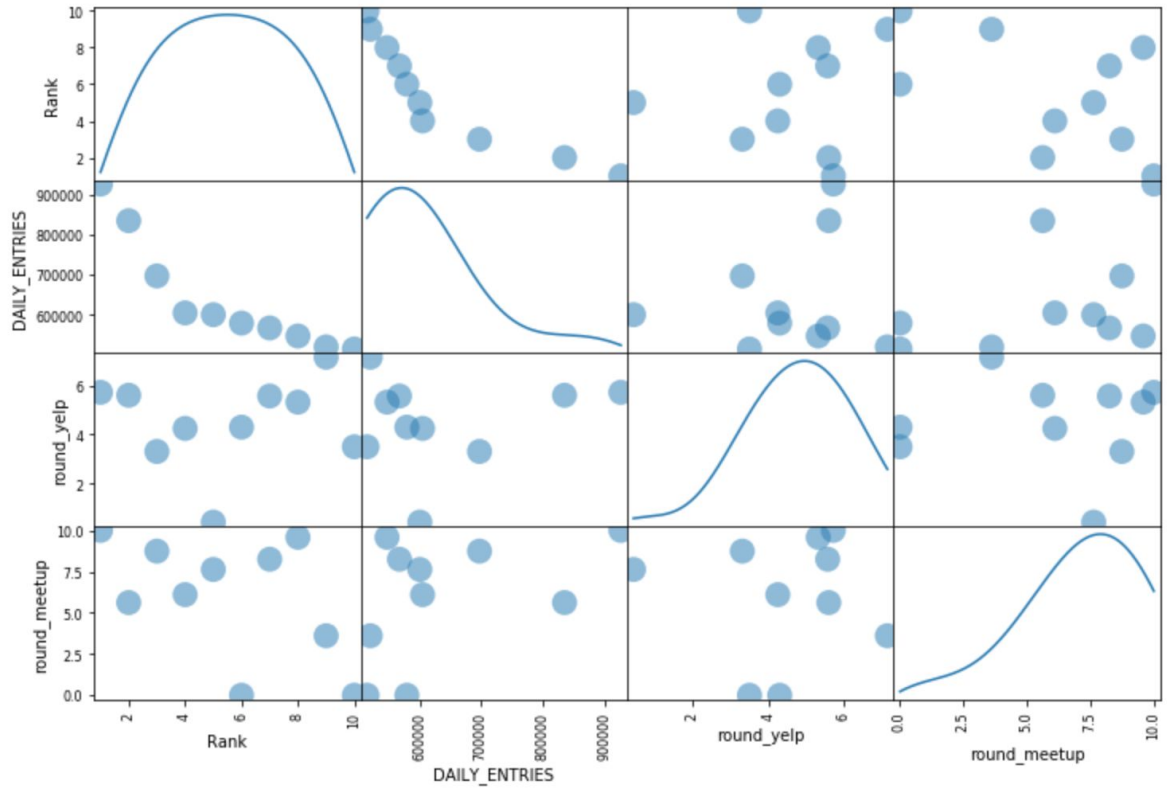


Total Traffic by date



Time of day

When should the street teams arrive?

- Utilize outreach teams from 8 am - 7 pm on the weekdays (Monday - Thursday)
- All teams will be working from from 7 am - 8 am, 11 am - 1 pm, and 4 pm - 6 pm
- All teams will be working 11 pm - 1 am on the weekends (Friday - Sunday)

Scatter Matrix Plot