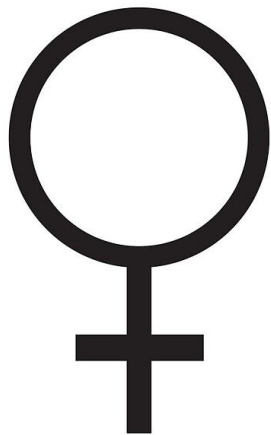


The background of the slide is a photograph of the interior of a subway car. The car has blue seats and silver handrails. There are several advertisements on the walls, including one for "beat yesterday" and another for "The Next Stop Is". A digital display at the front of the car shows the number "7" and the text "THE NEXT STOP IS".

WTWY Street Team Analysis & Optimization

Fred Lam
Lindsay Read
Harry Smith
Lisa VanderVoort

WTWY Annual Gala



Methodology

Data



**New York City
Transit**

March 30-May 31, 2019

Tech & Universities

- Universities: Columbia, NYU, City College of New York, Fashion Institute of Technology, Cooper Union for Advancement of Science and Art
- Tech companies: WeWork, Google, Facebook, Spotify, Amazon

Metrics Examined

Overall

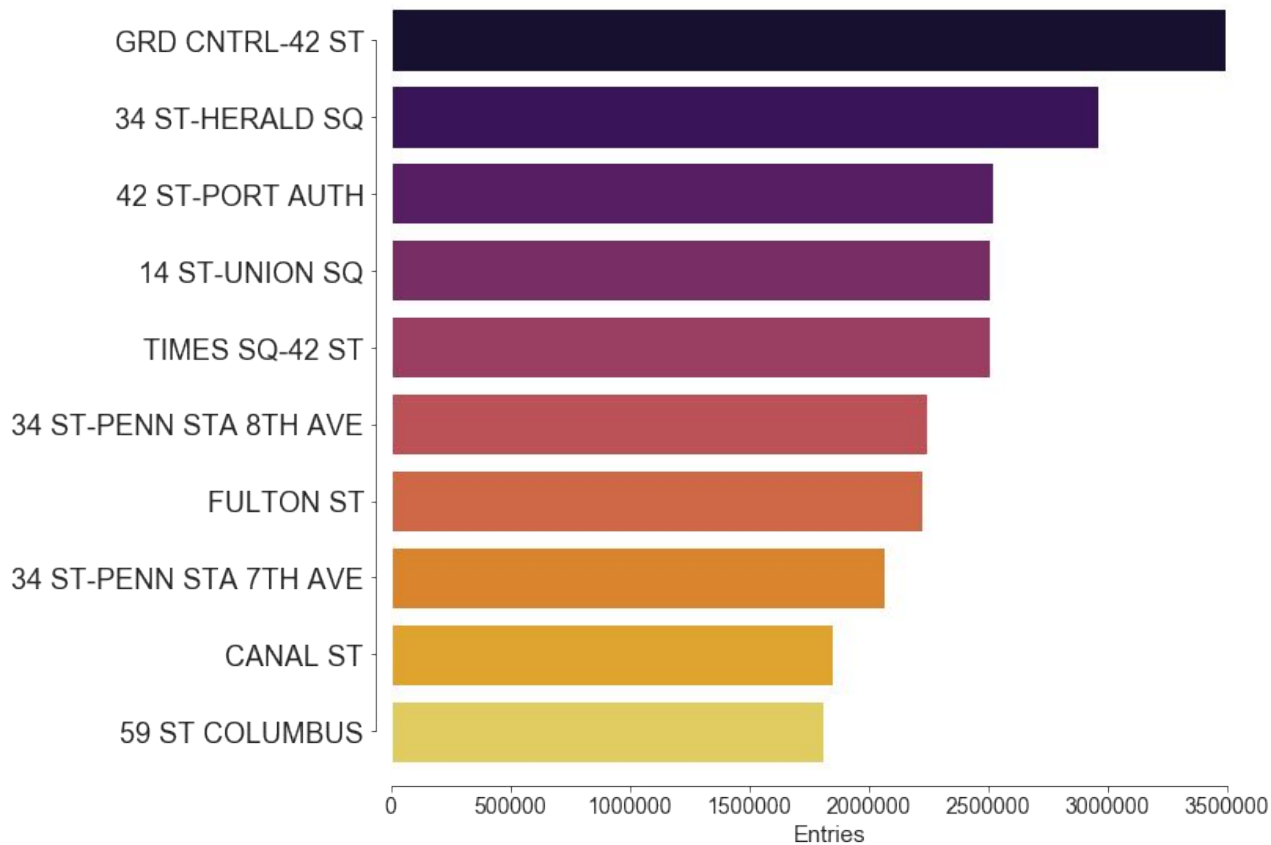


Day of week

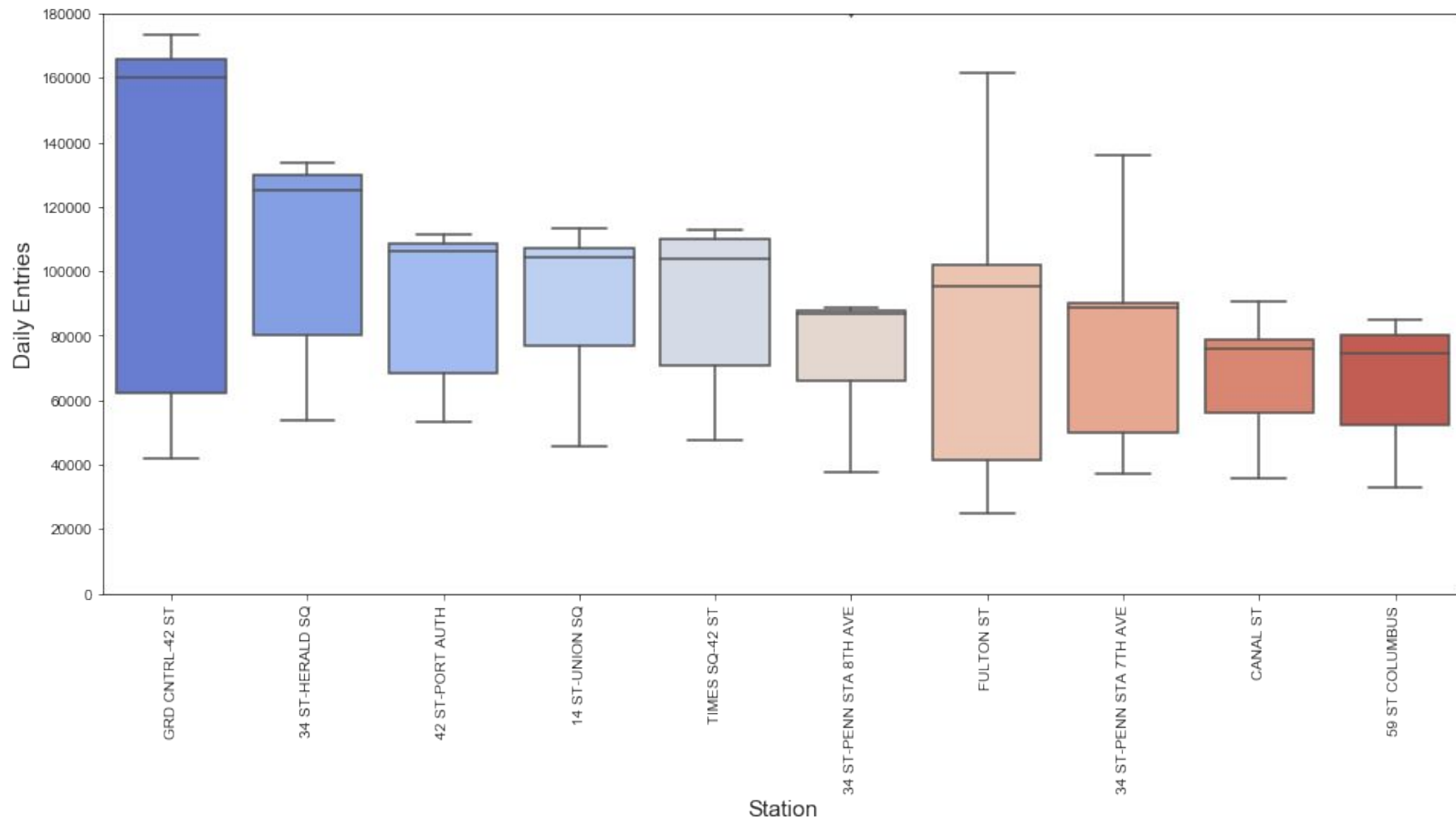


Time of day

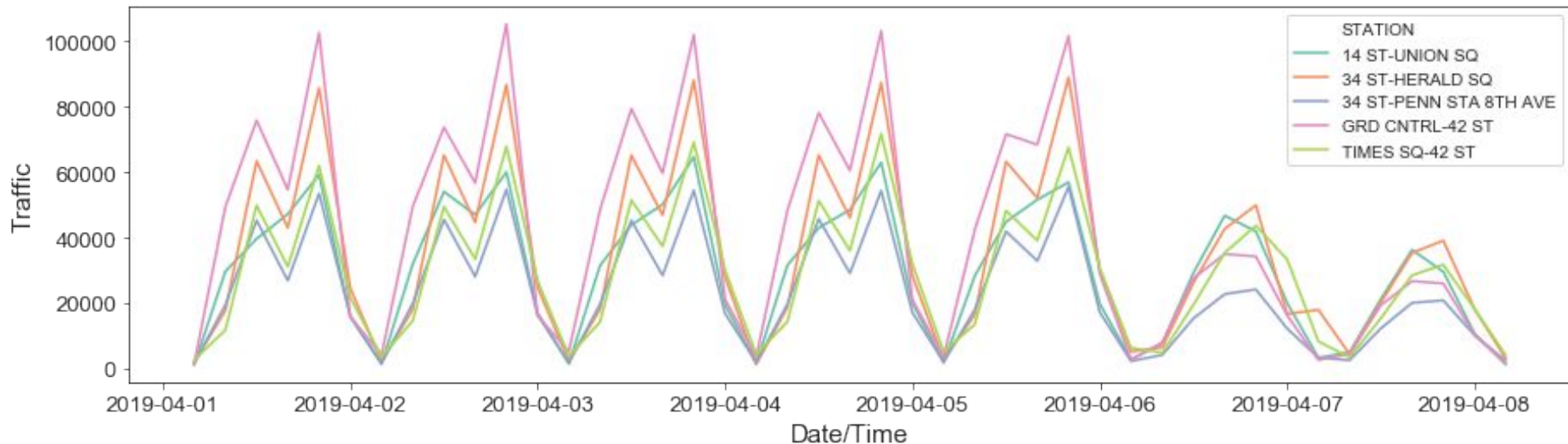
10 Stations with the Highest Total Traffic (Overall)



Top 10 Stations Distribution

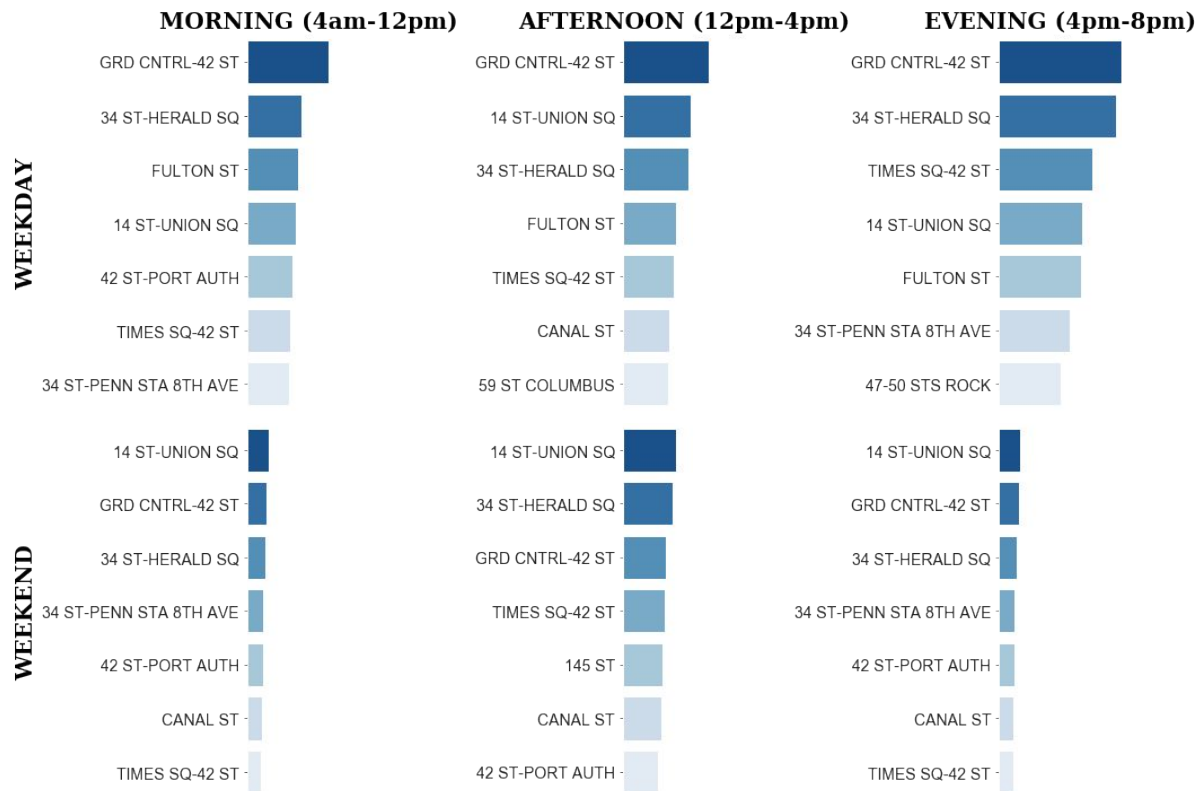


Traffic Over the Course of a Week in April



- Clear pattern throughout the week
- Weekdays spike in the mornings and evenings
- Weekends spike in the afternoon

Top 6 Stations at Different Times



- Grand Central, Herald Sq and Union Sq are often the busiest
- Fulton St is busier on weekdays
- Union Sq is the busiest on weekends
- Times Sq is relatively busier on weekday evenings
- Port Auth and Canal St are both relatively busier on weekends

Stations Within 1km of Large Tech Companies and Universities

Universities:

- Columbia
- NYU
- CUNY City College of New York
- Fashion Institute of Technology
- Cooper Union for Advancement of Science

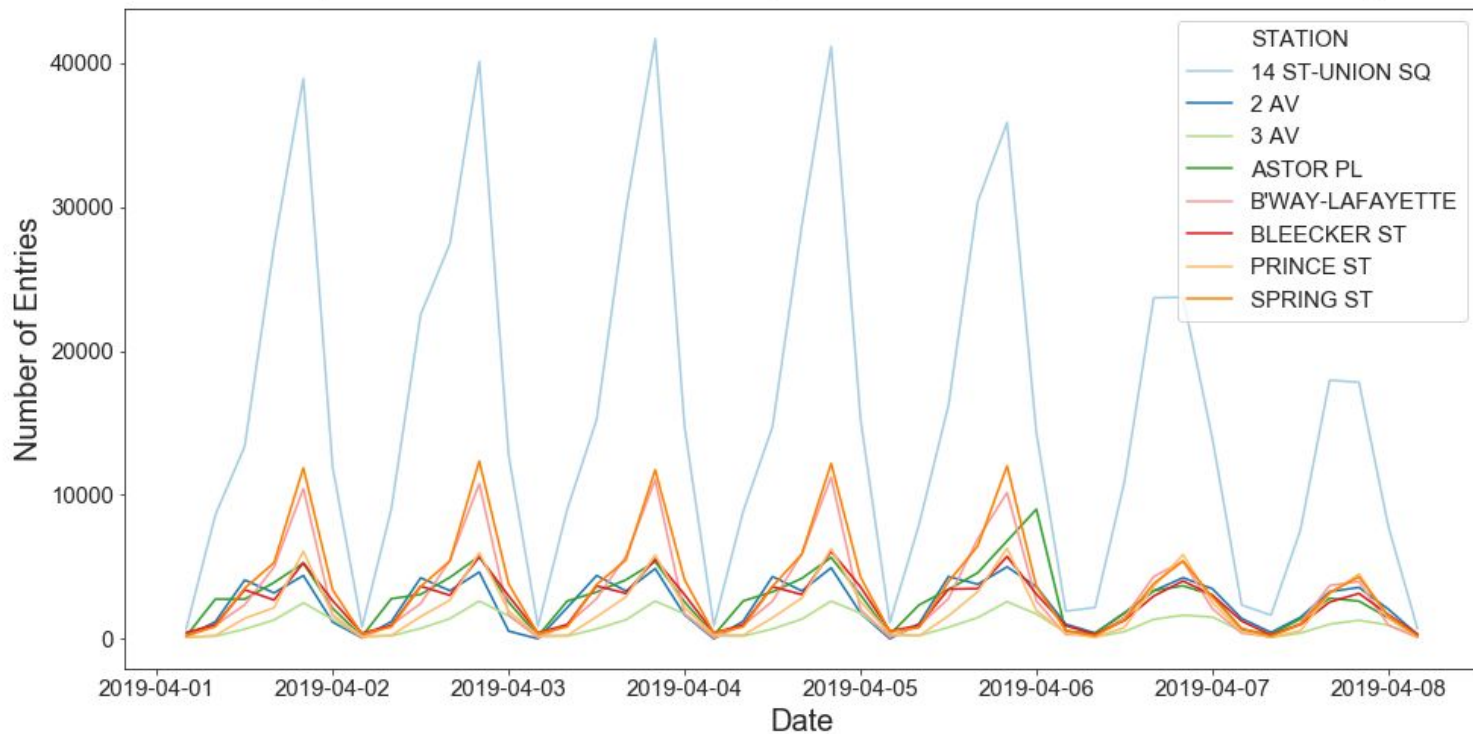
Tech Companies:

- WeWork
- Google
- Facebook
- Spotify
- Amazon

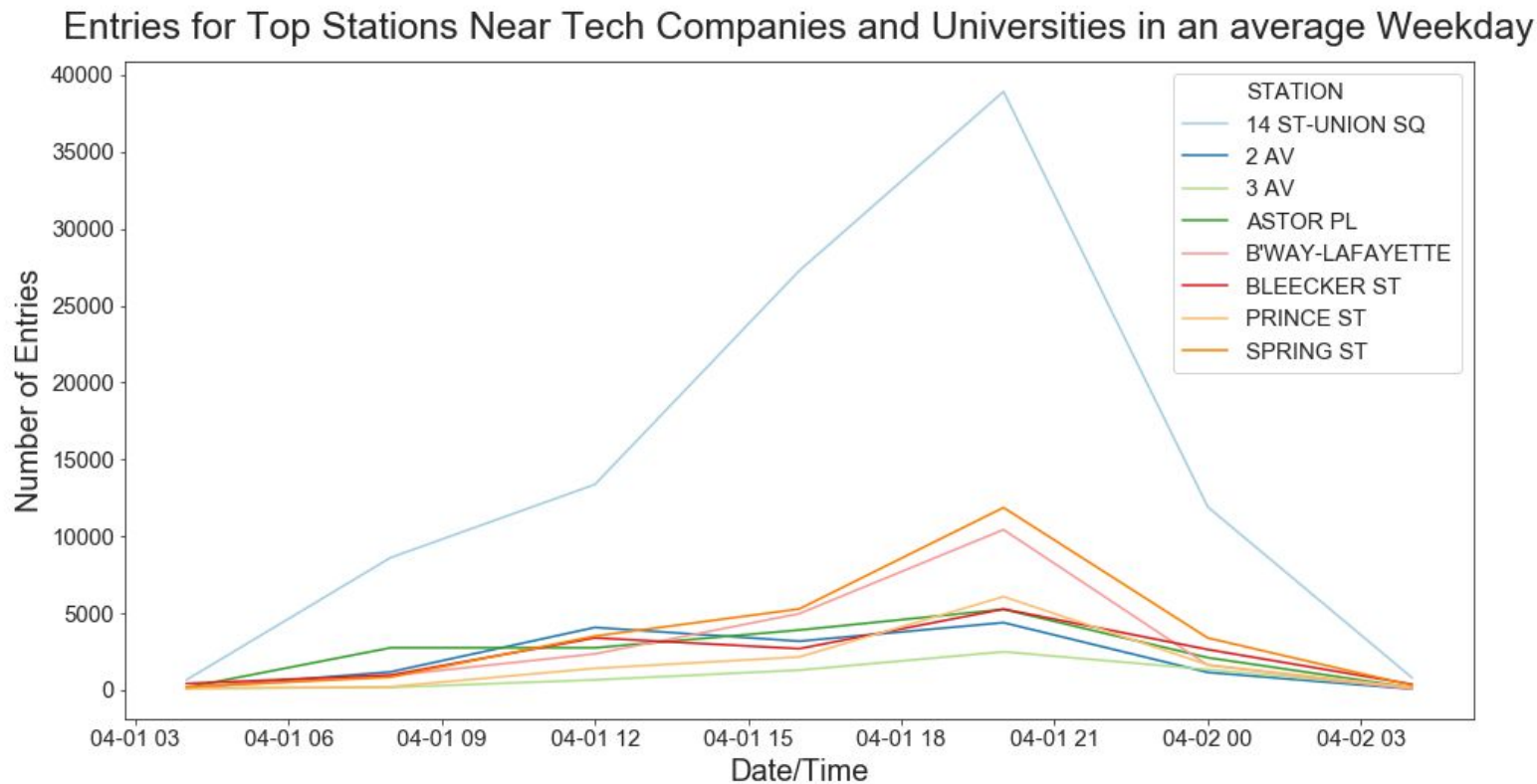
Station Name	Number of Universities or Tech companies within 1km of Station
3rd Ave.	6
Astor Place	4
14th St.-Union Sq.	4
Broadway-Lafayette St.	4
Bleecker St.	4
2 Ave.	4
Spring St.	4
Prince St	4

Stations Near Tech Companies and Universities

Entries for Top Stations Near Tech Companies and Universities in an average Week



Stations Near Tech Companies and Universities



Key Takeaway #1

Prioritize weekdays, since they are the busiest, especially in the evenings. Weekends are still busy in the afternoon.

Key Takeaway #2

Prioritize street teams at
the top 5 busiest MTA
stations overall:

1. Grand Central-42 St
2. 34 St-Herald Sq
3. 42 St-Port Authority
- 4. 14 St-Union Sq**
5. Times Sq-42 St

Top 4 stations closest to
tech/universities:

- 1. 14 St-Union Sq**
2. Broadway-Lafayette St.
3. Spring St.
4. 3 Ave.

Key Takeaway #3

**14 St-Union Square is
the best!**

1. It is within 1km of tech companies (WeWork and Spotify)
2. It is within 1 km of universities (Cooper Union and the Fashion Institute of Technology)
3. It is one of the busiest stations, including on weekends

Future Work





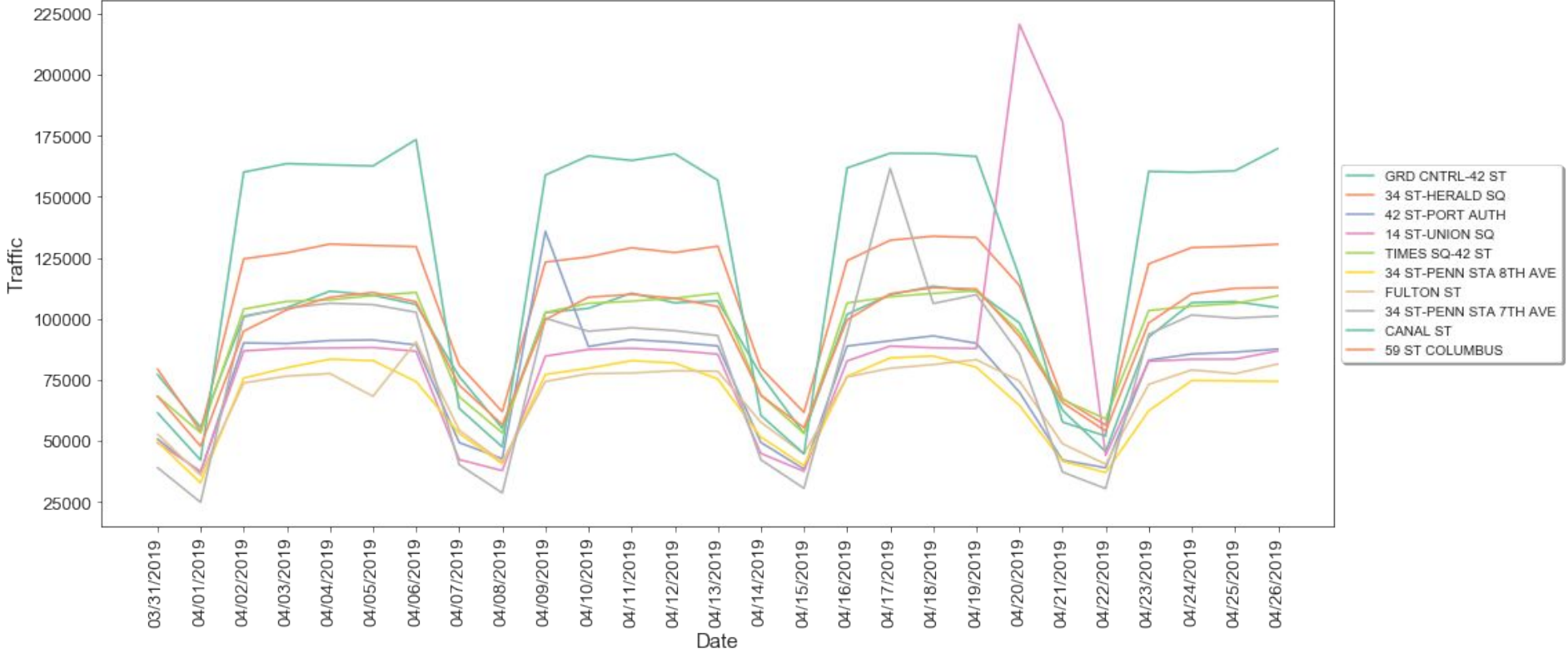
(7) THE NEXT STOP IS

Questions?

Cleaning the Data

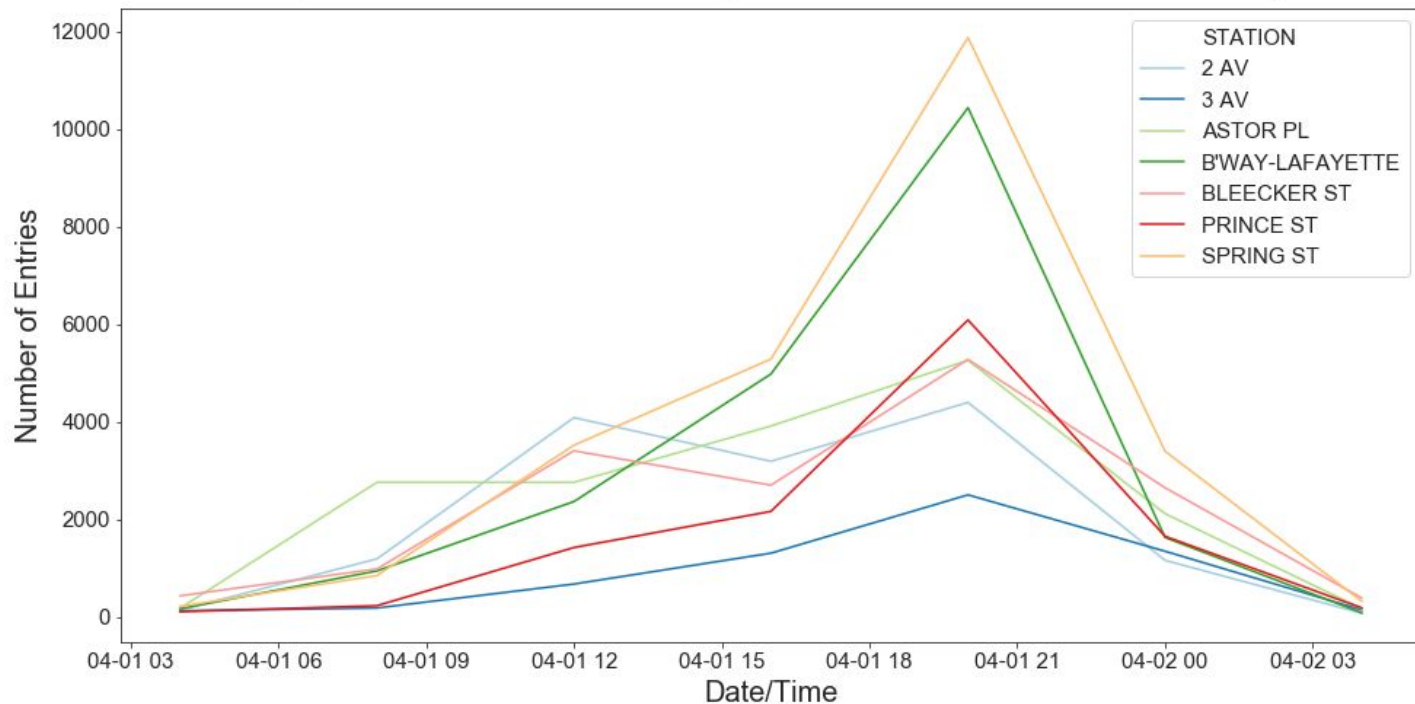
- Set the max counter to be 200,000
- Removed all RECOVR AUD data points since we noticed most weren't consistent with entries before/after
- Kept 42 st port authority and times square 42 street separate (even though both technically the same station) to be more specific with entrances
- Filtered Penn Station to 2 stations (7th Ave and 8th Ave) since they have separate entrances (and can't transfer)
- Separated 23 ST, 125 ST, and 86 ST since they were counted as the same station, but are actually separate stations
 - Only did this for top 10 stations due to time constraints

Appendix: Top 10 Stations: Line plot



Stations Near Tech Companies and Universities

Entries for Top Stations Near Tech Companies or Universities in an average Weekday



Tech Companies Selected

- Selected 5 large tech companies (over 1,000 employees) (WeWork, Google, Facebook, Spotify, Amazon) to use as a sample of tech concentrated areas (due to time constraints)
 - Chosen specifically for having the largest square footage office spaces in NYC (where real estate is at a premium) as representative samples

Universities Selected

- Selected 5 top NYC Universities (Columbia, NYU, CUNY City College of New York, Fashion Institute of Technology, and Cooper Union for Advancement of Science) to use as a sample of people who may be interested in progressive organizations, particularly in the field of technology.