

---

---

# Analysis of MTA Data

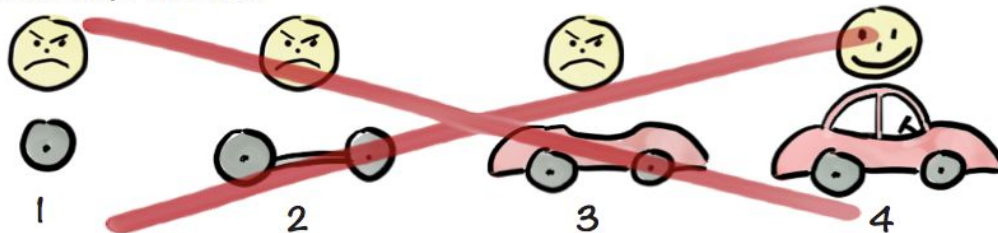
Project 1

Jonathan Liu, Hans Remy, Benjamin Lu

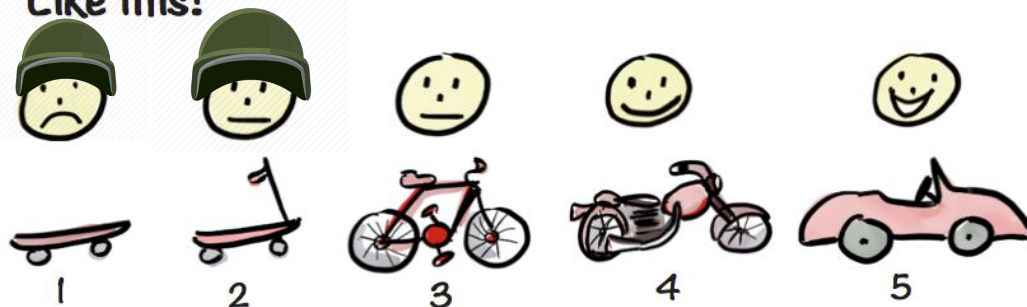
---

# Metis Insights Everywhere

Not like this....



Like this!



Iterate Responsibly and With Safety Measures:

Code hygiene → Road sense

Pickled data file → Helmet

# Objective

“WomenTechWomenYes (WTWY) has an annual gala at the **beginning of the summer each year**. As we are new and inclusive organization, we try to do double duty with the gala both to **fill our event space with individuals passionate about increasing the participation of women in technology**, and to concurrently **build awareness and reach**.

To this end we **place street teams** at entrances to subway stations. The street teams collect email addresses and those who sign up are sent free tickets to our gala.”

# Breaking Down the Objective

Dimension	Focus	Further Analysis
..annual gala beginning of the summer this year	- First 6 months of the year	- Are there noticeable trends month to month? E.g due to weather
..fill our event space.. Build awareness and reach	- Top X stations with highest footfall	- Might the data suggest the profile of such footfall? E.g locals, tourists, students?
..place street teams	- Trended footfall within stations	- Are there particular days that have higher footfall on average? - Within the day, what is the footfall like?

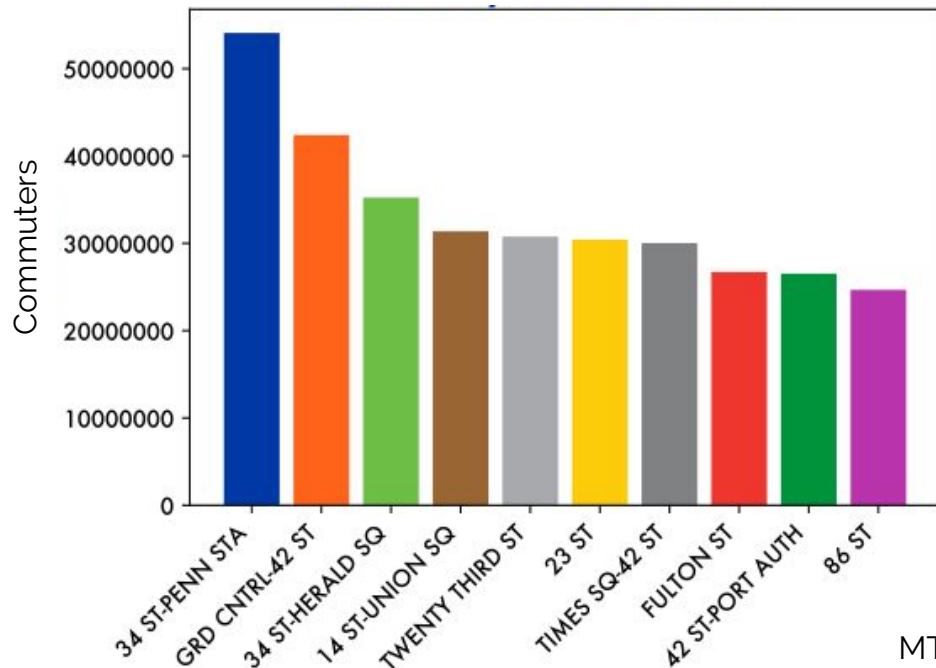
# Preliminary Data Analysis

# Footfall Volume and Consistency

## Footfall Jan to June 2019

Top 3 stations: ~130M footfall (~40%)

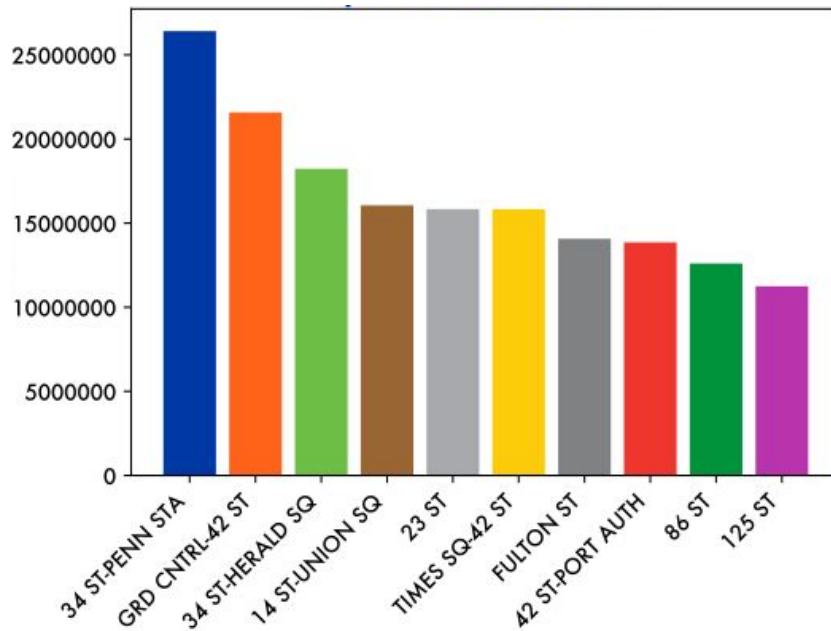
Next 7 stations: ~210M footfall



## Footfall Apr to June 2019

Top 3 stations: ~65M footfall (~40%)

Next 7: ~100M footfall

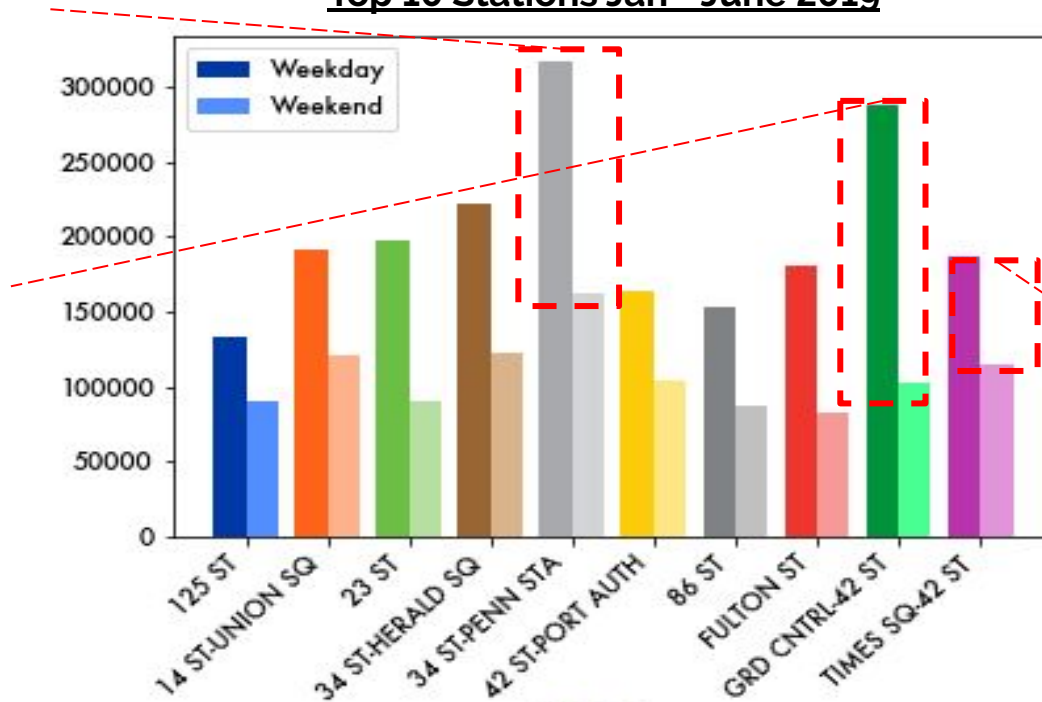


MTA Stations

**Clear and Consistent Footfall across top 10 Stations**

# Footfall Breakdown by Week

Top 10 Stations Jan - June 2019



MTA Stations

Data suggestive of local and tourist commuter patterns

—

# Optimizing Street Teams

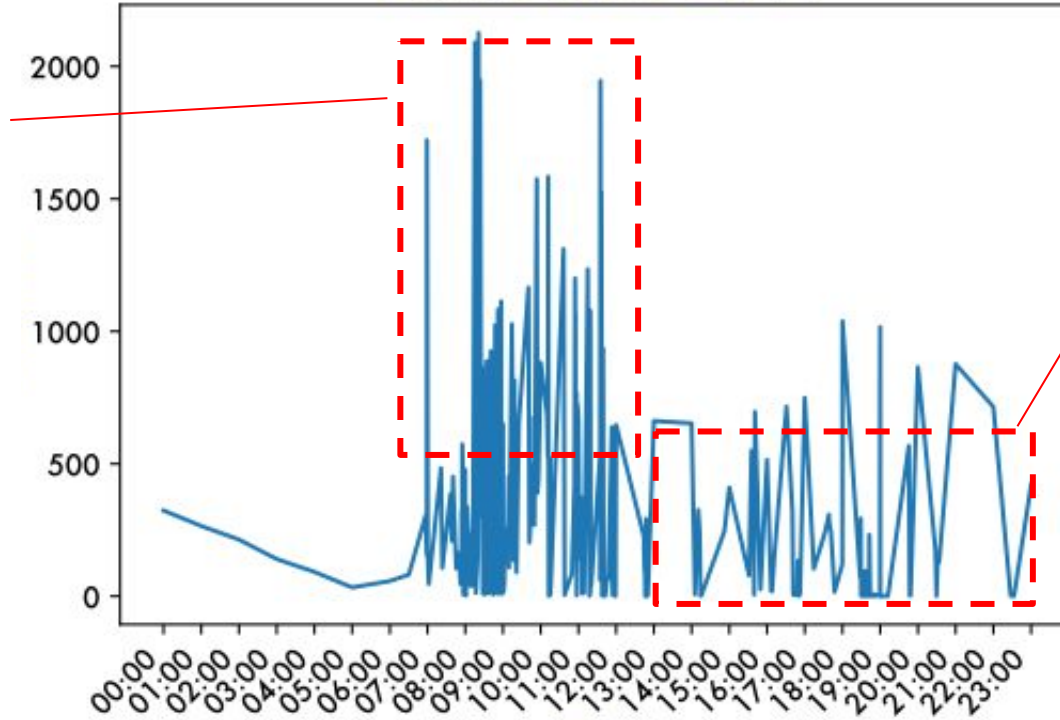


# Tracking 24 Hour Footfall

34 St Penn Station Jan - June 2019

## Notable Spikes in Commuter Traffic

- Might suggest "rushed" commute
- Focus on flier distribution
- Visual publicity
- General mass marketing



## Easing of volume and traffic intensity

- Might suggest leisurely commute
- One to one engagement
- Interactive booths/panels
- Targeted impact & high conversion rates

Tailor Outreach to Commuter Travel Patterns

# Recommendations

## Macro Strategy

Target 3 busiest stations of **34 St & Penn**, **34 St & Herald Sq**, **Grand Central**

Target **weekdays** for higher **local** footfall

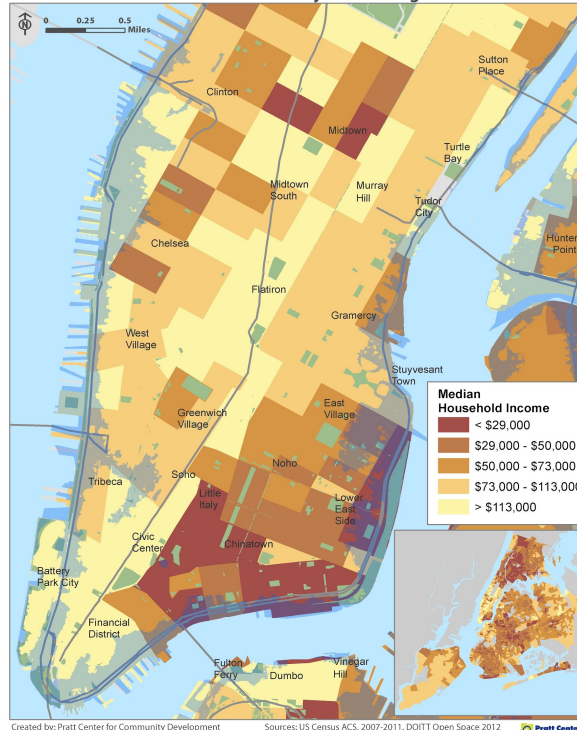
## Micro Strategy

Commuter travel patterns suggest morning might be good for mass outreach; afternoons may be good for tailored engagement

# Further Study



Enhance campaign relevance -  
Factor in station proximity to  
“tech hubs”

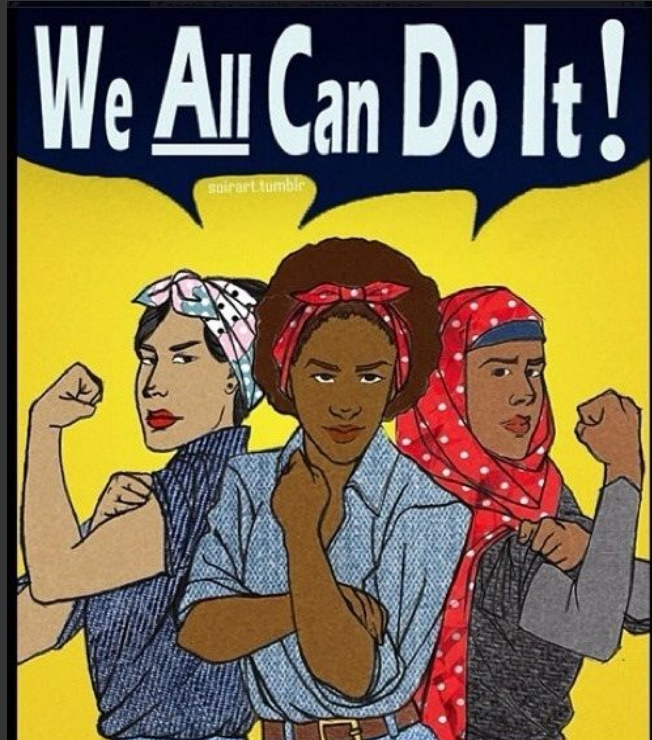


Increase exposure to potential  
donors - Analysis by household  
income data (e.g by zip code)



Optimize street team exit  
placement - Deep dive into  
turnstile data

# Women Tech



# Women Yes!