

Project Benson

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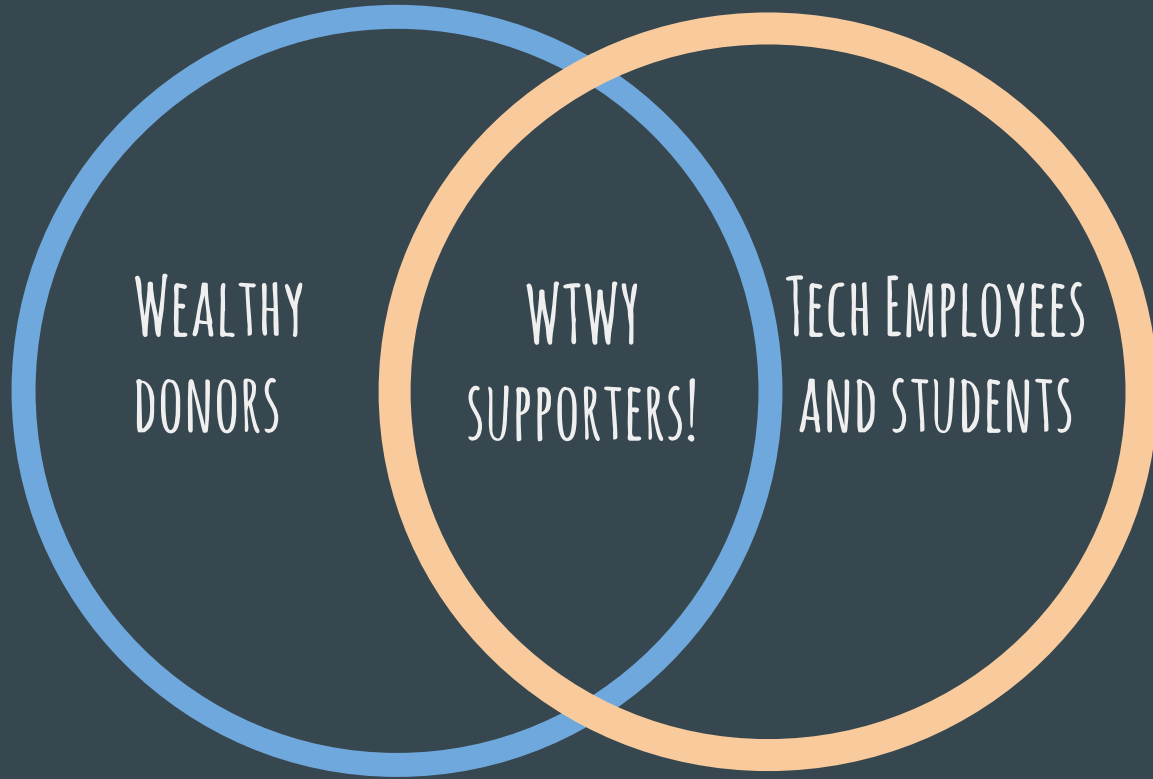
Question:

How do we reach the most people in NYC to contribute to the WTWY Summer Gala?

1. What demographic do we consider to be the most important?
 - a. Neighborhoods
 - b. People
2. What subway stations are these people most likely to be at?
3. Which of these stations will be the busiest?
 - a. What day of the week?
 - b. What hour of the day?

Assumptions

1. Target demographic
 - a. Wealthy people
 - b. People within technology/computer science programs
 - c. Busy stops
2. WTWY
 - a. Gala date is in August
 - b. Limited budget



Rank Median Income Zip Codes

- American Community Survey 2006-2010
- Zip codes with median income > \$70k
- Matched subway stations to zipcodes
- Ranked stops by number of nearby wealthy zipcodes

Subway Stop	# wealthy zipcodes
77 street	5
68 street - hunter college	4
rector street	4
86 street	3
cortlandt street	3
grand central	3
47-50 sts rockefeller center	2
72 street	2
broad street	2
city hall	2
grand central - 42 street	2
jamaica -179 street	2
lexington av/53 street	2
roosevelt island	2
south ferry	2
wall street	2

Tech Companies


Tech Companies/Neighborhoods**								
Chelsea	10001	23 St (FMpath); 23 St (CE); 34 St - Penn (ACElirr); 34 St - Penn (123lirr)						
Flatiron	10011	23 St (NR); 28 St (NR)						
Union Square	10003	14 St - Union (LNQR456)						
Soho	10012, 10014	Prince St (R); Spring St (6); Spring St (CE)			**Retrieved from: https://www.osc.state.ny.us/osdc/rpt2-2015.pdf			
Lower Manhattan	10013	Park Place (23ACE); Wall St (23); Wall St (45)						
Dumbo	11201	High St (AC)						
Downtown Brooklyn	Same ^	Court St - Borough Hall (2345R); Jay St - Metro (ACFR)						
Navy Yard	11251	York St (F)						
Long Island City	11101	Queensboro PI (7NQ); 21 St - Queens (F); Queens PI (EMR)						
LinkedIn	10118	34 St Herald Sq (BDFMNQR)						

Universities

Schools**						
Pace	10038	City Hall (R); Fulton St (2345ACEJZ); Brooklyn Bridge - City Hall (456JZ)				
NYU	10012	8 St - NYU (NR); West 4th (ABCDEFM)				
Barnard (Columbia)	10027	116 St - Columbia (1)				
Stern College (Yeshiva)	10016	33 St (6)			**Retrieved via Google	
City College	10031	137 St - City (1); 145 St (ABCD)				
Hunter College	10065	68 St - Hunter (6)				
Queens College	11367	Not Easily Accessible by Train				
St. John's College	11439	Not Easily Accessible by Train				
LIU Brooklyn	11201	Nevins St (2345); Dekalb Ave (BQR)				

Starting List of Stations

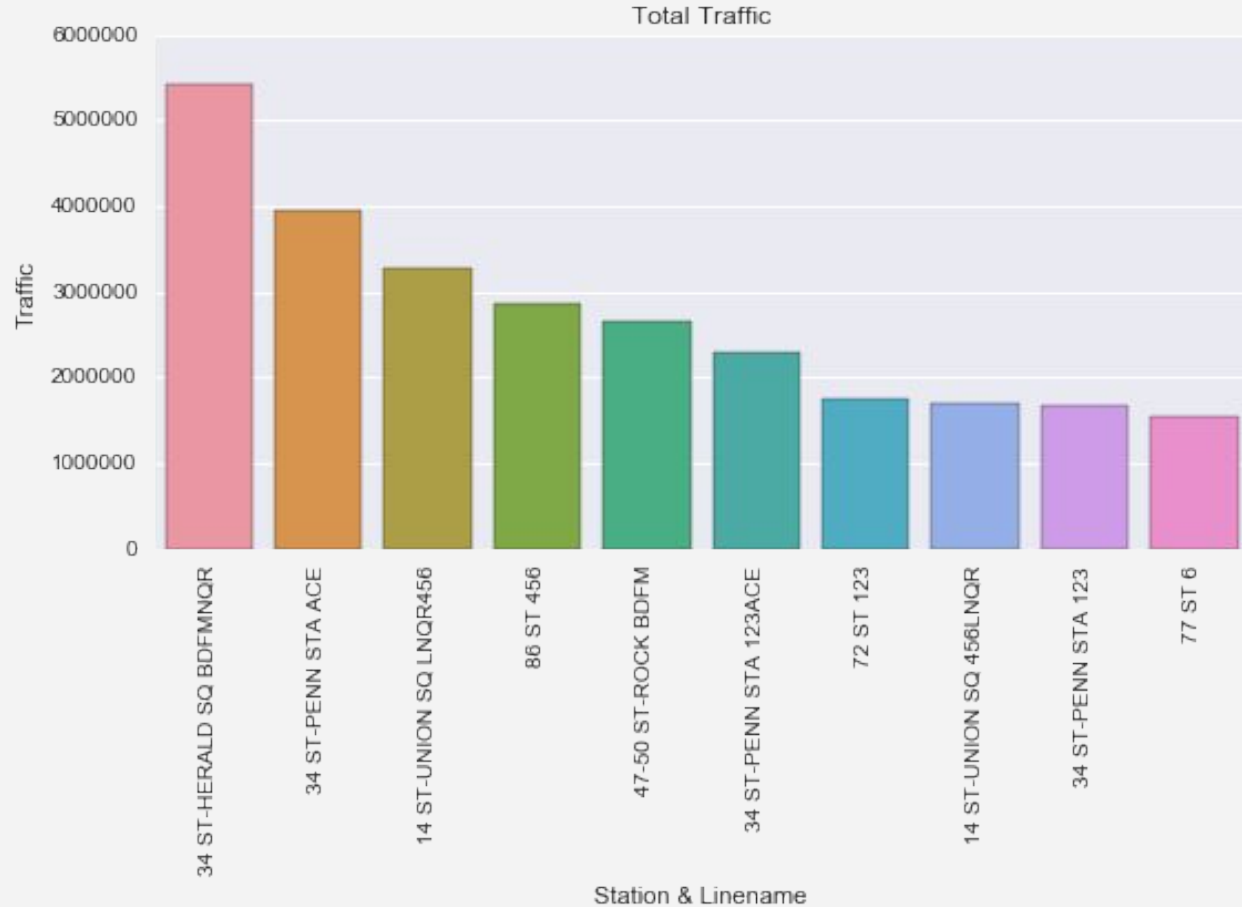
- Identified 31 stations and calculated net traffic over the entire month of July 2015
- ‘Traffic’ column represents all traffic for July ‘15



station	linename	net_entries	net_exits	traffic
34 ST-HERALD SQ	BDFMNQF	2844340	2587280	5431620
34 ST-PENN STA	ACE	2046226	1893490	3939716
14 ST-UNION SQ	LNQR456	1766651	1517637	3284288
86 ST	456	1509946	1362758	2872704
47-50 ST-ROCK	BDFM	1312048	1354337	2666385
34 ST-PENN STA	123ACE	1355076	941289	2296365
72 ST	123	909824	845173	1754997
14 ST-UNION SQ	456LNQR	867120	834179	1701299
34 ST-PENN STA	123	815248	857862	1673110
77 ST	6	793300	740500	1533800
JAY ST-METROTEC	ACF	836609	503339	1339948
BOROUGH HALL/CT	2345R	798632	535646	1334278
WALL ST	23	589699	579042	1168741
68ST-HUNTER COL	6	691348	445443	1136791
28 ST	6	545792	537050	1082842

Total traffic for the month of July '15

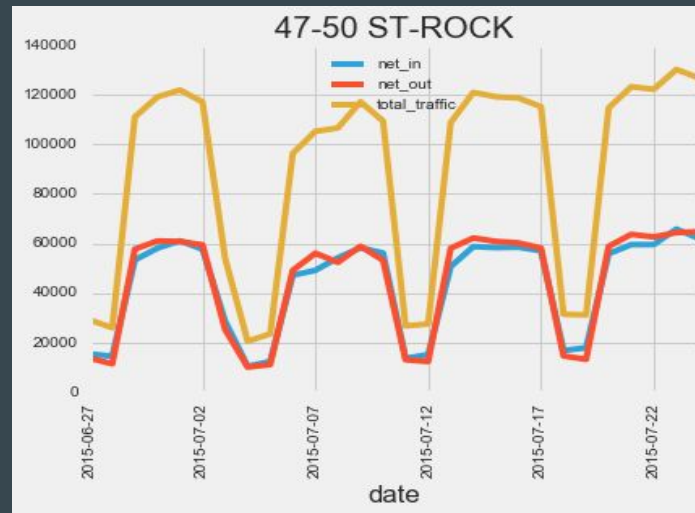
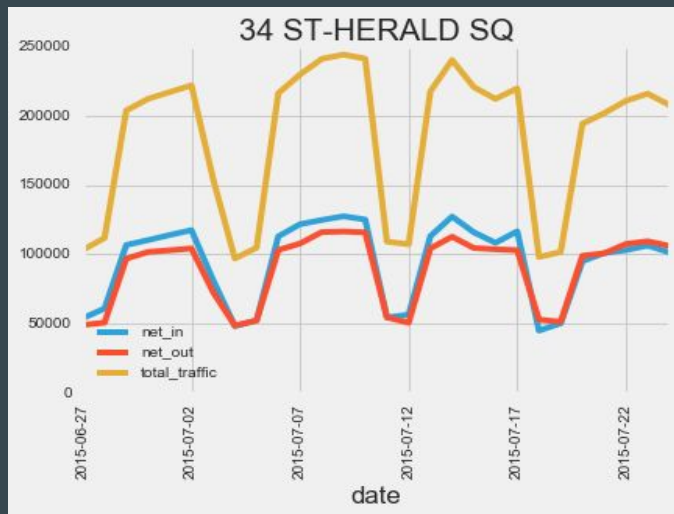
- Identified top 15 stations busiest stations based on monthly traffic
- Made decision to:
 - Exclude Penn Station
 - Combine two Union Square stops



5 busiest wealthy and techy stations

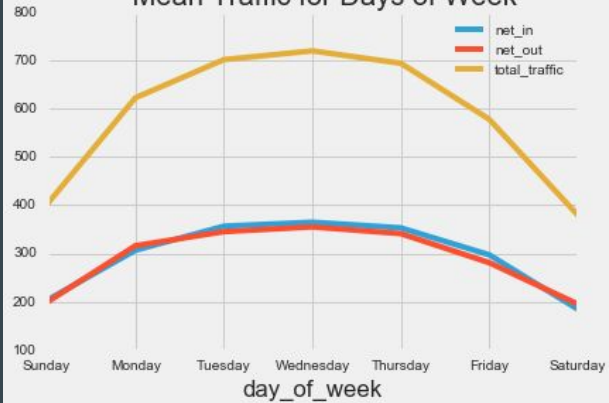
1. 34 Street - Herald Square
2. 14 Street - Union Square
3. 86 Street
4. 47-50 Street - Rockefeller Center
5. 72 Street

Plots of time by traffic per stations for July '15

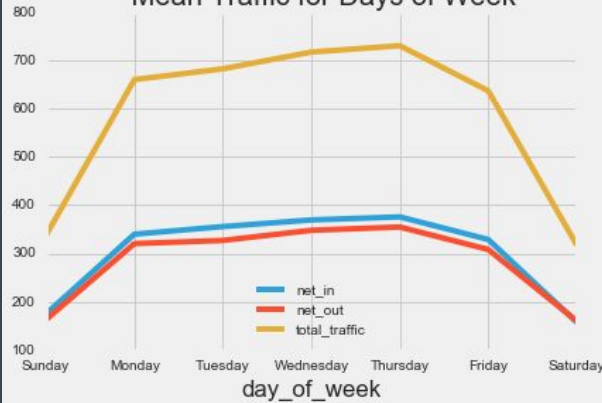


Traffic By Week

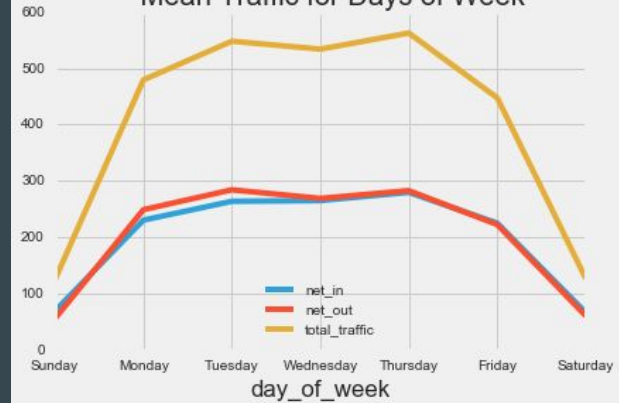
14 ST-UNION SQ
Mean Traffic for Days of Week



34 ST-HERALD SQ
Mean Traffic for Days of Week



47-50 ST-ROCK
Mean Traffic for Days of Week



Traffic by time on the busiest days - 34 St. Herald Sq.



Final Recommendations

Station	Busiest day and block of time	Second busiest day and block of time
47-50 St. Rockefeller Ctr.	Thursday 4 - 8 PM	Tuesday 4 - 8 PM
14 St. Union Square	Wednesday 8 PM - midnight	Tuesday 8 PM - midnight
86 Street	Thursday 4- 8 PM	Wednesday 4 - 8 PM
72 Street	Thursday 4 - 8 PM	Tuesday 4 - 8 PM
34 St. - Herald Square	Thursday 4 - 8 PM	Wednesday 4 - 8 PM